

Policy 2520.35C: Next Generation Content Standards and Objectives for Science in West Virginia Schools
 Comment Log
 January 16, 2015 to February 17, 2015

Action Type
 N: No Response - Negative
 NA: Not Accepted + Positive
 A: Accepted o Neutral

Date	Individual/Organization	Comments	Action/ Type	Rationale
§126-44CC-1. General.				
01-15	Gene Stebley Owner Sci Data San Diego CA	<p>I am writing you today to support changes to the climate curricula to include natural causes. My background includes receiving a B.S. Atmospheric Sciences degree including coursework in climatology. I am currently a consultant working in the field of oceanography pertaining to global changes in climate and have knowledge of the physical processes that govern climate.</p> <p>Whatever evidence there is that supports human induced changes to the climate is actually sparse when compared to the geological records of continual cyclical changes in climate over millions of years. There is so little research in natural climate variability compared to anthropogenic causes, that we are missing the opportunity to discover fundamental processes that will dictate the future of our planet.</p> <p>We all want to preserve what we have and protect the environment. Only with further study in all aspects of the climate from all causes will we be able to find credible solutions. We will need to rely on future generations to make these discoveries, and this requires more than a narrow focus on a one size fits all solution.</p> <p>Regards Gene Stebley</p>	N/+	
01-16	Garry Taylor Science Supervisor	In general I am opposed to changing the content standards to be politically correct. It is accepted by 95% of the reputable	N/+	

	Mercer County Schools Princeton WV	scientist in the world that global warming is happening and that the activities of man are a major factor. Denying this is only making us look foolish and putting our students education at risk. If we do not face the future with open eyes we will continue to blame the world for our problems and never seek real solutions.		
01-16	Keith Ross Teacher Bridgeport High Bridgeport WV	I am opposed to changing 9th grade science from physical science to earth and space science. 9th grade science are generally less experienced teachers in a high school and their classes are generally larger. Expecting these teachers to make major changes to their curriculum is an invitation for educational failure. 9th grade students will also have less chemistry and physics preparation for chemistry and physics classes later on in their preparation for their STEM careers. I do not know of any earth science textbooks that incorporate chemistry and physics concepts, practice and application enough to meet the needs of STEM students. I am an experienced and successful (exam passage rate of over 95% for the past 6 years) AP Chemistry and AP Physics teacher who teaches some 9th grade science. I think that it would be possible to develop an earth and space science curriculum that would incorporate enough chemistry and physics, yet it is highly unlikely that it will happen in WV. It would be intriguing to work on a team to develop such a curriculum full time over a couple of years, and, then, develop extensive workshops for teachers to properly implement the program. It does not appear that WV is planning to come anywhere close to this type of development and implementation.	NA/-	Rationale 1: NxG Science Content Standards and Objectives show the interrelations of the science disciplines in preparation for high school science courses.
01-16	Kerry Matthews Jr. Science Department Chair Scott High School Madison WV	Please eliminate changes that were made to the Next Generation Content Standards and Objectives for Science in West Virginia and revert back to the original published Next Generation Science Standards (NGSS). Changes that were made to two performance expectations do not reflect the intent of the original published NGSS document.	A/+	Clerical and syntax errors were corrected to match the NGSS version, http://www.nextgenscience.org/sites/ngss/files/NGSS_Combined_Topics_11.8.13.pdf
01-16	Robin Lilly Teacher	Wake up WV!! The propaganda that is extended through the Common Core Science and Social Studies standards is	N/-	

	Raleigh Co. Schools Beckley WV	ludicrous. Do your research. The Common Core Standards as a whole are nothing but a money scheme that is going to hurt our children the most. And don't forget the data reporting and tracking information on the students, which is not even legal. Please step back and look at the big picture. Who is in charge of WV's educational system? With the common core it will be the feds and Bill Gates.		
01-16	Roy Beven President-elect Washington Science Teacher Association Bellingham WA	The science educators and stakeholders in West Virginia, like here in Washington State, have worked very hard to ensure the state has high quality, forward looking science standards. The WVBE should adopt NGSS as written.	N/+	
01-16	Robert Ruder Mr. Indianapolis IN	<p>I am appalled at the push by the climate radicals trying to push their flawed beliefs on school children.</p> <p>There have been MANY climate scientists that have recanted their previous claims of man-made climate change. These people put a lot on the line retracting their beliefs. They were searching for the truth not personal gain.</p> <p>Students deserve to learn from all the facts and are smart enough to weigh alternative explanations. This is the true essence of scientific learning.</p> <p>It is important that the Board knows that the global warming campaigners they have been hearing from do not represent mainstream opinion in the U.S. or in West Virginia.</p> <p>Sincerely, Mr. Robert F Ruder Indianapolis IN</p>	NA/-	Rationale 2: The West Virginia Department of Education defers to the National Academy of Sciences which has experts with credentials, funding, and time to vet research regarding climate change. The position of the National Academy of Sciences is: "There will always be uncertainty in understanding a system as complex as the world's climate. However there is now strong evidence that significant global warming is occurring ¹ . The evidence comes from direct measurements of rising surface air temperatures and subsurface ocean temperatures and from phenomena such as increases in average global sea levels, retreating glaciers, and changes to many physical and biological systems. It is likely that most of

				the warming in recent decades can be attributed to human activities (IPCC 2001) ² . This warming has already led to changes in the Earth's climate...”
01-16	Karl Priest Mr. retired Kan. Co. math teach Poca WV	<p>Climate change is a reality, but the cause and what to do about it are debatable and highly influenced by politics and worldview. The proposed alterations to the curriculum simply allow students to investigate the matter instead of being indoctrinated.</p> <p>Dogmatic proponents of Climate Change are the same people who fanatically believe in evolution and fear allowing students to study the scientific facts that show evolution is impossible.</p> <p>Please keep the changes.</p> <p>Let the kids think!</p>	NA/-	See Rationale 2.
01-16	Martha Kinney Mrs. Dahlonge Ga	<p>The Board of Education should adopt the extremely minor proposed changes to its climate curriculum to permit students to actively explore all the theories and facts pertaining to the many serious ongoing questions about the climate.</p> <p>Over the last 18 years climate computer models have consistently projected a warmer world than scientific observations record. Global warming has not occurred as projected during the entire lifetime of today's school children.</p> <p>“Climate change” is a highly contentious and hotly debated matter. Scientific data shows nothing extreme about recent weather, sea level, fires, droughts, floods and many other climate-related phenomena, all of which are occurring within historic norms. Nonetheless, exaggerated claims of extreme weather are now routine.</p>	NA/-	See Rationale 2.

		<p>Claims of an overwhelming scientific global warming consensus have been repeatedly and thoroughly debunked. The discussion is far from over. The true mind of science remains open to new data and alternative explanations. Whether and how much of the approximately 1/2 degree C of warming which occurred in the latter half of the 20th century is due to human industry has not been conclusively established. Neither have any of the incredibly expensive "solutions" proposed to address any global warming been shown to be meaningfully effective or worth their tremendous cost.</p> <p>The Board owes every child an open-minded education free of indoctrination.</p> <p>Students can handle ALL the facts!</p> <p>Martha Kinney</p>		
01-16	<p>Randall Patterson Member Meadow Bridge Community Schools Meadow Bridge WV</p>	<p>I think that the Science Standards should be as Mr. Linger amended and that the standards should adhere to open discussion. There are many opinions on Climate Change(Gobal Warming) therefore one group says fact based on their student while another group says fact based on their study. Investigation should be continuous in Science. Thank you</p>	NA/-	See Rationale 2.
01-16	<p>Lea Ann Barnes Teacher Bridgeport High School Bridgeport WV</p>	<p>I am commenting about the changes that are being proposed for science 9 in particular. In May of 2012 a draft of the Next Gen Science Standards indicated that Earth and Space Science was being dropped from the science 9 curriculum. That made sense to me because physical science is chemistry and physics and shouldn't include Earth and space science anyway. In addition to that, one cannot do justice to all four disciplines in one course whether it be block or a regular schedule. Now I find out the curriculum is being changed completely and science 9 will be Earth science and no physical science at all. When these students reach chemistry and physics in the 11th or 12th grade, it will have been</p>	NA/-	See Rationale 1.

		several years, middle school, since having been taught either of these courses. This will be a mistake. Right now Earth science is used as an additional class for students not intending to major in science in college or take any additional post-secondary science training. This roll-out of Next Gen science will require ALL students to take Earth science in the 9th grade. Again, this is a mistake and a disservice, especially to our STEM students. Ninth grade students need a good background to be ready for chemistry and physics. Even if they choose not to take chemistry or physics, there are basic principles taught that will help them with other classes including math and other science courses, including biology, which is a requirement in the 10th grade. Let's not set them up to struggle, or fail, as they progress through their science courses in high school. Please re-think these standards and go back to the 2012 draft. Thank you.		
01-16	Lester Allen Barclay WG 9 5803 Tech Mob Equip Ground Ret Dept. ARMY Tampa fl	Department Of Defence Civ And Soldier Hospital Power Instructor And Military Teacher !!! In defence of True Science	N/o	
01-16	Lester Allen Barclay DA Civilian / SGT ARMY Ret Dept Defence WG 9 5803 Tampa Flori	Department of Defense Employee/ Soldier Hospital Power Instructor and Military Maintenance Instructor Public School/Universities Colleges, Abandonment of true Science endangers us all The BP Oil Gulf of Mexico oil Derrick Disaster is a hideous example of Public College Abandonment of true Science !!	N/o	
01-16	H.M. Professor	I am disgusted that the West Virginia Board of Ed would consider perpetuating our state's history of enslavement to the coal industry by denying fact-based science such as climate change. This corrupt behavior and backward thinking is what gives our state a bad name. I will never enroll a child of mine in WV public schools.	N/+	

01-16	Dennis McAllister BS Physics BS Math, MS Comp Sci Retired Olympia WA	Catastrophic Anthropogenic Global Warming (CAGW). "No amount of experimentation can prove me right; a single experiment can prove me wrong." Albert Einstein.	NA/-	See Rationale 2.
01-17	Elizabeth Fraser Mom and librarian	I am writing on the topic of the science text books and the issue of global warming. As a parent and research educator, I want the text books to return to their original form. I want the issue of global warming to be included as a scientific fact. I realize that WV is a carbon economy, but science is science and economic issues are economic issues. Thank you	N/+	
01-17	Dr. Carole Garrison Professor Ona WV	2014 was the warmest year on record, the polar ice flow is melting, the sea is heating at even higher rates, fracking is not being considered as a cause of the recent uptick in seismic activity in areas not before affected. To what limits is the state legislature willing to let politics, money, and religion rob our state and its children of their future. Politics do not belong in deciding education policy. Rational scientific truths on the reality of global warming ARE indisputable. I am ashamed of this debate. Human activity is the primary cause of global warming, exacerbating any natural cycles. Don't allow WV children to remain ignorant to the threat and the potential solutions. DR. Garrison	N/+	
01-17	Jill Ware Dr. Morgantown West	Comment on Next Generation Content Standards and Objectives for Science in West Virginia Schools: If we want to really do science, both an investigation of verifiability, and the investigation of alternative explanations for Climate change need to be considered. The promotion of the particular theory of climate change advocated by a population of scientists is an invalid form of science, as it is neither deductive, inductive, nor experimental. Even a large group of experts agreeing on a proposed hypothesis is not science. If you want to teach the disciplined practice of Science in West Virginia, the changes proposed to the curriculum offer a better starting point for both objectivity and rational discourse. Don't worry about West Virginia's	NA/-	See Rationale 2.

		reputation as a benighted back-water. We can do science here if we do not allow ourselves to be bullied by people who claim they know better than we do. Remember the Rocket Boys!!		
01-17	Anita Clark grandmother Ms Kila MT	As a former WV resident and current grandmother of young children who remain in WV, I provide the opinion that common core should be withdrawn from any and all curriculum. The radical teachings of this form need to be stopped asap! It is extremely disheartening to see this country once based on truth and unity so decimated. If I had a child in the current school curriculum they would be removed from the classroom and home schooled. We say mountaineers are always free--it's time to stand up and make it a truism! A concerned grandmother from MT	N/-	
01-17	Dennis J. McAllister Retired Olympia WA	Empirical facts refuting hypothesis if Catastrophic Anthropogenic Global Warming (CAGW) are provided.	NA/-	See Rationale 2.
01-18	Teresa Barton science teacher PikeView High School Princeton WV	The state board should have sent the changes they wanted to make back to the committee to adjust, NOT make the changes themselves! Please keep these standards as they ARE in this document aligned with the NGSS. I am a veteran science teacher in the state of 32 years!	N/+	
01-20	Julie Bryan Morgantown WV	Politics and biases cannot be allowed to diminish the education of our nation's students. I urge the committee to adopt the Next Generation Science Standards concerning climate change in their original form.	N/+	
01-20	Dr. Jen Robertson Assistant Professor and STEM Specialist West Virginia University Morgantown WV	I support maintaining the language and standards developed by WVSTA and other educators and scientists. These standards will provide students with the data and skills they need to be informed West Virginia citizens.	N/+	
01-20	Michele Adams 6th Grade Science Teacher	As a 6th grade science teacher with 24 years of experience, I appreciate the language in the original standards. Please leave them as such because experts drafted them, and I trust that	N/+	

	Berkeley County Schools Martinsburg WV	these stakeholders had the knowledge and scientific background to make the standards best for our students.		
01-20	Martha K Burke na NA St. Albans WV	As a retired science classroom teacher of 38 years, I support these standards. It is imperative that the language of the NGSS remains in tact as they were written. Our students in WV deserve standards that support scientific research.	A/+	Clerical and syntax errors were corrected to match the NGSS version, http://www.nextgenscience.org/sites/ngss/files/NGSS_Combined_Topics_11.8.13.pdf
01-20	jim rye professor wvu morgantown wv	adopt	N/+	
01-20	Jeff Ofstedahl STEM Director, k-12, science/engineering teacher Center for Academic Success Sierra Vista AZ	Please keep and adopt the Next Generation Science Standards.	N/+	
01-20	Tina a Rimmer Science Teacher WILLIAMSON WV	The standards were written by science professionals and endorsed by the NSTA and science teachers in this state. Changing the wording to cast doubt on the clear scientific evidence supported by 95% of the scientific community is absurd. Opinion does not fit in science. Investigation is science. You will do these students an disservice when they enter science at the college level and they will be unprepared not to mention angered by the misinformation. I am against the changes proposed by Linger with no scientific proof or justification other than personal belief. There is no room for belief in science only overwhelming scientific proof	N/+	
01-21	Denise McNeel Dr. Marlinton WV	Thank you for listening to and acting on public input about Global Warming content standards. It is wonderful to see democracy work!	N/+	
01-21	Amy Keese Research Assistant Professor West Virginia University BRIDGEPORT WV	I support adoption of the Next Generation Science Standards. I am a professional scientist (physicist) and am raising three children in West Virginia. I would like to see robust science education for my children as well as the benefit of science and society in general.	N/+	

01-21	Julian Martin Self Charleston WV	Please adopt the original science standards that were formulated before changes were made and promoted by Wade Linger and Tom Campbell.	N/+	
01-21	Jodi Giancola Assistant Professor Biology Bridgevalley CTC South Charleston WV	Please do NOT change the science curriculum from the original standards to reflect a board member or few that do not wish to acknowledge the 97% of scientists and research showing that global warming is occurring and that human activities are a large part of that change. The world is round and I'm pretty sure just because I haven't sailed around it personally that we shouldn't change the science curriculum to have students still question whether or not it is round just because I haven't done it and I'm on the board...	N/+	
01-21	Brenden McNeil Assistant Professor of Geography West Virginia University Morgantown WV	Please retain the standards as approved by the National Academies. They are essential for the education of WV children, and their preparation for the climate science curriculum taught at West Virginia University.	N/+	
01-21	Michael Youngren retired Charleston WV -	When I was a kid, late 1940's, it looked to me and my buddy Milton like the Eastern bulge of South America fit pretty close into the hollowed out part of Western Africa. We pointed out our observation to the geography teacher - who called it "a coincidence." By the time I finished high school, the world was abuzz with tectonic plate theory. Turns out Milton and I were on to something. Had the teacher encouraged the idea, Milton might have gone on to astrophysics or something. I might have been able to run my smart phone. I can't imagine no imagination. The damage man has done to his environment is measurable. The damage man's denial can do to imagination is incalculable.	N/o	
01-21	Kathryn A. Stone Mrs. Not applicable Charleston WV	School Boards vis Å vis Progress Recent articles in the newspaper about science standards for West Virginia schools being challenged and altered by the School Board to fit ideological philosophies brings to mind similar antics by the Houston, Texas School	N/+	

		<p>Board of several decades ago. Conservative religious beliefs and/or political agendas factor into these challenges. One wonders if we will ever reach a place where true enlightenment prevails when these same backward arguments keep repeating themselves in spite of irrefutable evidence on the part of scholarly research by scientific communities concerning climate change (the issue in West Virginia now) and the evolution of human kind (the issue of past decades). Sadly, political candidates have been mimicking these sentiments, condemning the EPA and playing the "job card"™. Those of us who want to live in a relatively unpolluted environment where science is given a superior status to "ideologies"™, can only hope for wisdom to prevail among elected officials in our state and elsewhere. If this does not occur, "heaven help us"™!</p> <p>Kathryn A. Stone 26 Birch Tree Lane Chas., WV 25314</p>		
01-21	Brianna Blankenship Teacher WV Schools Gilbert WV	<p>By creating doubt about the causes of climate change, we are doing a disservice to West Virginia students. Climate change is happening and humans are the cause of this climate change. Students should be taught about the true causes of climate change because they are our future, and it is up to them the fix the mistakes made by previous generations.</p>	N/+	
01-22	Marian Keyes Dunbar WV	<p>West Virginia desperately needs well-paying jobs. Such jobs will come from businesses that require a well-educated work force. Please do not compromise nationally-recognized science standards so as not to offend those who find them</p>	N/+	

		inconvenient. Such an action will embarrass us citizens and announce to desirable high tech businesses that the state is inhospitable to its needs.		
01-22	David O'Brien Physical Therapist Charleston WV	I am deeply concerned about the purposed re-wording of the content standards as it pertains to global warming and human contributions to it. The reason for the purposed changes were to encourage debate within the classroom. However, should we be encouraging students to debate an issue where the preponderance of empirical evidence suggests there is nothing to debate and 97% of the scientific community accepts it as a fact. How about we leave debating the validity of known facts to Congress.	N/+	
01-23	David Mitchell Morgantown WV	I support the next generation science standards in their form that has been peer reviewed and vetted by established scientists. We must teach our children the most accurate and up to date scientific concepts to ensure they are ready for higher education and/or informed participation in society. Politics propaganda has no place in science class.	N/+	
01-23	Susan Kelley Ms Citizen Fairmont WV	My computer will not allow me to pull up the complete proposal, so I cannot address specific sections of the proposal; however, I can address the intention to present climate change/global warming as "debatable," or as having two sides. Like gravity, global warming is a fact. It is happening now and pushing humanity, along with much other life on earth, toward extinction at a horrifying rate. This is fact. It is not debatable. You can debate the date at which we will become extinct if we continue on this course. You can debate how quickly the sea is rising, that is, until scientists take their measurements and tell us. Science is a process of observing as closely as possible the reality of our world. Having made these observations, hypotheses are suggested, which are then experimented upon and proved or disproved. Science is a process of discovering and describing reality.	N/+	

	<p>To suggest to children that an overwhelmingly proven fact is worthy of debate is to deny the scientific process. It is to deny reality. It is to make their study of science useless for them.</p> <p>Besides treating education as the Communists do, that is, rewriting fact to support one's own greedy or seedy purposes, another objection I have to denying or, in corporate speak, being skeptical about, climate change, I object very strongly to crippling West Virginia's children in this way. I have fought for years to require foreign languages for West Virginia children. While the HEPC imagines there is a requirement in place, this "requirement" has been watered down to include any "global perspective."</p> <p>There are graduate programs our children will never even be able to apply to because they do not have the requisite languages. Some programs even require four different foreign languages, including Latin or Greek. When we decided our students were too "unprepared" or too "stupid" to be required to study foreign languages, we immediately disqualified them from ever qualifying to attend premiere programs in this country.</p> <p>As we have done with foreign languages, we would do the same if we follow the proposed dumbing down of science in West Virginia. Our students would find themselves laughed out of application procedures. Our state would become known for having students who do not know the purpose or process of science. Knowing a student went through the West Virginia educational system would automatically disqualify them for any serious or rigorous science study at the collegiate level.</p> <p>If we, as a state, give in to corporate-backed education, we hurt our future. We hurt our students and permanently cripple their future. If the West Virginia State Board of Education</p>		
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		<p>approves dumbing down science in our state, you, and only you, would be responsible for letting this happen. You, and only you, will cause our state to be the laughing stock of the world. You, and only you, will bear the responsibility of encouraging stupidity, which would make your service on the Board of Education ironic at best.</p> <p>I am passionate about young people learning to discover the truth of the world. It is important that West Virginia, in particular, raise scientists who can help restore the water, soil, and air of our great state. We have allowed too much wrong in this state. Please do not add to it in generationally irreparable ways.</p>		
01-23	<p>Lisa Kukura Chair UHS-LSIC Morgantown WV</p>	<p>We do need new guidelines for high school science. However, I am not sure this is the proper route.</p>	N/o	
01-23	<p>Lawrence Bissett private individual South Charleston WV</p>	<p>I am greatly concerned about board members, who are not scientists, attempting to apparently skew wording to be compatible with political ideology. Further, no board member should be voting about curriculum content out of concern for specific industries (e.g., coal), religion, or politics. In this regard, I single out specific comments made reportedly by Mr. Campbell and Mr. Linger.</p> <p>I urge the board to objectively consider science education based on the collective wisdom of the scientific community and scientific principles and research. Otherwise, next we might be devolving into issues of whether the earth is round or the validity of the theory of evolution!</p>	N/+	
01-23	<p>Pat Stanton So. Chas. WV</p>	<p>It is very disturbing that one board member attempted to alter the Common Core standards with regard to the teaching of science (specifically climate change and its most likely cause) in our schools. It's unfortunate that a person's personal and political beliefs (perhaps influenced by outside interests?) can prevail in something so vital to our youth and to everyone who lives on this planet, now and in the future. I was gratified</p>	N/+	

		to read that wiser heads had eventually prevailed and that the original science objectives of CC may be restored. I fervently hope that will be the case, and that these standards, which are validated by the vast majority of prestigious scientific groups and knowledgeable scientists throughout the WORLD (as well as those closer to home), will be allowed to remain as they were originally written, rather than become victimized by personal preferences.		
01-24	Rod Shafer WV native---WVU graduate Self Cary NC	<p>I submit the below article as an example of the many educated people (teachers, engineers, scientists, etc.) who do not agree with man made global warming under any name.</p> <p>MIT Climate Scientist Calls Global Warming Crowd a Cult</p> <p>Merriam-Webster defines a cult as “a small religious group that is not part of a larger and more accepted religion and that has beliefs regarded by many people as extreme or dangerous.” Man-made global warming fits the bill as a cult, according to a climate scientist at MIT, Richard Lindzen. Breitbart reported:</p> <p>An MIT professor of meteorology is dismissing global-warming alarmists as a discredited “cult” whose members are becoming more hysterical as emerging evidence continues to contradict their beliefs.</p> <p>During an appearance on this writer’s radio show Monday, MIT Professor emeritus Richard Lindzen discussed the religious nature of the movement.</p> <p>“As with any cult, once the mythology of the cult begins falling apart, instead of saying, oh, we were wrong, they get more and more fanatical. I think that’s what’s happening here. Think about it,” he said. “You’ve led an unpleasant life, you haven’t led a very virtuous life, but now you’re told, you get absolution if you watch your carbon footprint. It’s salvation!”</p> <p>[â€]</p> <p>Last week, after scoffing at Vermont socialist Sen. Bernie Sanders’ call for a Senate vote on global warming, Lindzen was subjected to another barrage of diatribes. At his</p>	NA/-	See Rationale 2.

		<p>listed MIT phone number, Prof. Lindzen received a typical anonymous call:</p> <p>“I think people like you should actually be in jail,” the male caller told him, “because you must know where this is all leading now” the people you support and take your money from to make these outrageously anti-human comments (also “know”™) In other words, you’re a sociopath!”</p> <p>Lindzen chuckled when the voicemail was replayed.</p> <p>This writer asked him if, as has been alleged in some of the warmist blogs, he is taking money from the energy industry.</p> <p>“Oh, it would be great!” he said with a laugh. “You have all these people, the Gores and so on, making hundreds of millions of dollars on this, Exxon Mobil giving \$100 million to Stanford for people who are working on promoting this hysteria. The notion that the fossil-fuel industry cares “they don’t. As long as they can pass the costs on to you, it’s a new profit center.”</p> <p>Lindzen said he was fortunate to have gained tenure just as the “climate change” movement was beginning, because now non-believers are often ostracized in academia. In his career he has watched the hysteria of the 1970’s over “global cooling” morph into “global warming.”</p> <p>I thought that part about Lindzen obviously getting paid to promote “anti-science” was particularly humorous. That’s what liberals always claim when they run out of arguments (did they even have any to begin with?). “Oh, you’re obviously getting paid by Big Oil to say these things.” Like Lindzen said, I wish.</p> <p>People do actually have opinions with no financial strings attached. Just because someone says he doesn’t buy into all the climate alarmism hype doesn’t mean he must be getting paid by the oil industry. The oil industry is doing just fine without having to pay everyday people to say certain things in public.</p>		
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01-24	John J Najmulski Charleston WV	I wish to make my point that when it comes to Climate Change it is the conclusion of the vast (90+%) of reputable world scientists that Climate Change does exist and that it is largely influenced by man made carbon emissions. Why in the world would we wish to say anything contrary to this to our children when we are responsible for educating them. To do anything else would be very irresponsible and also endanger the future of our one and only home, the planet Earth. Please do not allow these standards to be influenced for political and economic gain. Thank you for your time and consideration.	N/+	
01-25	Thomas Stec, PT, EdD Dr. Ripley West	As a concerned member of the community I want to see science, based on the scientific method, remain in the curriculum.	N/o	
01-26	Hans Schreuder Mr Principia Scientific International Ipswich, England	see section 1	N/o	
01-26	Kurt Knoll None Washington WV	I'm to understand that the "Next Generation Science Standards" are being formed in a way that will teach students the intellectually dishonest view point that man-made global warming is "settled science" and will not educate students to the fact that this is an unproven theory and that there are other possibilities for climate variances. While I think educating students regarding these matters is the responsible thing to do, adding political view points and making demonstrably false claims is highly irresponsible. Teaching children that abusing the environment could POSSIBLY lead to unnecessary harm and drastic changes to climate would seem to be a reasonable aim. Teaching them things regarding this issue that can't be proven (and in the case of "global warming" has been disproven) in order to forward a political goal is totally intellectually dishonest and should have no part in any	NA/-	See Rationale 2.

		credible teaching curriculum. That isn't "science," it's faith based ideology.		
01-26	Hans Schreuder Mr Principia Scientific International Ipswich, England	<p>As a climate analyst of eight years and analytical chemist of some 45 years, allow me to point you in the direction of recent reports and studies that use the scientific method to analyse and appraise the current situation of blaming carbon dioxide emissions, especially those coming from human activity.</p> <p>Please bear in mind that there has never ever, as yet, been presented any empirical evidence that can be interpreted as proof that the totality of atmospheric carbon dioxide has any influence upon the climate; quite the reverse: climate influences the level of atmospheric carbon dioxide. The man-made proportion of the total amount of atmospheric carbon dioxide is only around 3%, that's three percent and is the figure detailed in several UN IPCC reports.</p> <p>2. For a detailed report on most climate alarm scenarios presented in the past, please refer to: http://www.climatedepot.com/2011/12/07/climate-depot-special-report-az-climate-reality-check-subprime-science-exposeacute-the-claims-of-the-promoters-of-manmade-climate-fears-are-failing-presented-to-un-summit/</p> <p>3. Here is proof, of many, that there is no magical greenhouse effect on earth, keeping earth warmer that it should be and being enhanced by the increase in carbon dioxide Lunar cooling/heating disproves Greenhouse Effect on earth</p> <p>4. The scientific truth about atmospheric carbon dioxide is that is causes atmospheric cooling and no warming at all is even possible; quite the opposite of what you have been told thus far: http://www.principia-scientific.org/the-four-known-scientific-ways-carbon-dioxide-cools-earth-s-climate.html</p> <p>5. Please immerse yourself in this letter to Aussie Climate Minister Greg Hunt and decide if you have been shown any evidence that would stand up to scientific scrutiny.</p> <p>6. One of the pillars of the UN IPCC science is effectively</p>	NA/-	See Rationale 2.

		<p>overthrown in this report: http://climateofsophistry.com/2015/01/13/kiehl-and-trenberth-debunk-climate-alarm/</p> <p>7. For any further research please refer to http://principia-scientific.org/</p> <p>Please do not hesitate to present me with proof positive that atmospheric carbon dioxide causes global warming or climate change or climate disruption.</p> <p>To teach children about the incorrect use of science is nothing short of a betrayal of trust in the education system.</p> <p>Kind regards, Hans Schreuder Ipswich, England retired analytical chemist retired mMensa climate analyst environmentalist author</p> <p>Financial coordinator http://principia-scientific.org Co-author Slaying the Sky Dragon www.slayingtheskydragon.com Web master of www.tech-know-group.com and www.ilovemycarbondioxide.com The Laws of Thermodynamics: First Law: You can't win. Second Law: You can't break even. Third law: You can't get out of the game. Steven Pollock</p>		
01-26	Julie Rowan-Wolford 6th Grade Science Teacher Hampshire County Schools Romney WV	A few of the standards include phrases like integrate scientific and technical information, cite text evidence, competing design solutions, etc. These do seem like worthwhile endeavors, but I'm very concerned that the current trend seems to be a lack of provision for an agreed upon text (as judged by our math and language departments having no current text books or well designed manual with inclusive organizers, run offs, lesson plan suggestions, etc). This leads	N/o	

		<p>to a reliance on teachers needing to spend hours of personal time to scour the internet, libraries, spend personal funds on procuring materials, etc, necessary for use during the instructional day. It also increases the less than "green" need to run off articles or excerpts instead of using completely recyclable text resources. Additionally, students do need to have some background knowledge about the topic or they are going to be "flying blind" as far as how they might demonstrate that concept or create a model. We so often hear the term "best practices" yet I feel like staff members are increasingly running themselves ragged trying to develop their "text" and resources bank instead of using juried resources for implementation. Teachers need to be able to focus on students, instruction, and providing relevant feedback to students.</p> <p>I think the idea of modeling is a wonderful tool for helping our emergent young scientists develop their understanding of scientific ideas. Students at this level learn material better when they can see and experience what they are reading about. I am concerned, however, that there will be an uneven approach to this since there could potentially be hundreds of teachers with elevated blood pressure all trying to locate resources from heaven only knows where because the appropriate resources aren't in place before the need to have them in the class room. Even then, the organizers, charts, etc might look so different in a testing situation that students who worked very hard all year might still appear to be less than proficient due to the variations in the way it was presented or demonstrated throughout the year and from school to school. Also, there will likely be a need for replacing consumable materials for some labs, demonstrations, or model construction throughout the year which will require a budget or regular resupply of materials to insure all students receive adequate access and instruction. The teachers I know work very hard and are paid to be teachers, not curriculum</p>		
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		<p>developers. It's absurd to ask them to do two jobs for one check and still feel focused in providing the very best student services. The bottom line is this: please provide the resources and tools necessary to implement this course of instruction before requiring these changes. I think many of the ideas presented in the projected CSO's seem very exciting and will provide opportunities for dynamic lessons, but the resources simply need to be in place to make that happen.</p>		
01-26	<p>thomas altmeyer none Wheeling WV</p>	<p>the Achieve standards on science are doctrinaire, ignore reality and should not be adopted</p> <p>Last 5 years “ no major storms hit North America</p> <p>Last 16 years “ no appreciable rise in global temperatures</p> <p>prohibits discussion of “the Global Optimum” and the Little Ice Age which both occurred before industrialization</p>	NA/-	See Rationale 2.
01-26	<p>Nellie Johnson Teacher Bridgeport Middle School Bridgeport WV</p>	<p>Accept the standards in there original form for the improvement of science education in the state.</p>	A/+	<p>Clerical and syntax errors were corrected to match the NGSS version, http://www.nextgenscience.org/sites/ngss/files/NGSS_Combined_Topics_11.8.13.pdf</p>
01-27	<p>deborah shaffer-palmer teacher 1993 Moundsville West</p>	<p>The science scores for the entire state are nothing to brag about. The present method is not effective!! Why do we not help the students by not changing the topic every few days to teach an unrelated topic because a piece of paper says I have to teach too many topics. I have to reteach the previous years content and the new. This is not working for the state why continue? These standards are still vague and need to be more specific in their intention. Among the four teachers at my school we have 4 different feelings of what is to be taught. A fellow teacher even says she does not like a certain set of standards and does not even try to teach them because they are so vague and above the students in math ability. The standards are only set up for range of grades not absolute that</p>	N/-	

		each grade teach each content area. Concentration and repeated vocabulary will promote learning!		
01-27	deborah shaffer-palmer teacher 1993 Moundsville West	The committe should take smaller steps to reach the desired outcomes for the NXGS. I think the organization needs to be looked at for learning to occur. Brain development needs to be evaluated. Judgement skills are not present in the middle school students as well as other skills to meet the criteria as presently presented.	N/o	
01-27	deborah shaffer-palmer teacher 1993 Moundsville West	The committe should take smaller steps to reach the desired outcomes for the NXGS. I think the organization needs to be looked at for learning to occur. Brain development needs to be evaluated. Judgement skills are not present in the middle school students as well as other skills to meet the criteria as presently presented.	N/o	
01-27	Brenda McGinnis Parkersburg WV	Our students and future leaders will not be able to compete in a global environment if they are not given the educational tools necessary to think and reason for themselves. An education should present all facts, points of view, and research material and allow the students to study them to reach conclusions based on that input. Spoon feeding information based on one sided opinion does nothing to promote reasoning and problem solving techniques. In our complex society those qualities will be necessary if we are to remain a country of power and liberty with productive citizens.	N/-	
01-27	deborah shaffer-palmer teacher 1993 Moundsville West	Once again your comment format is not used friendly!! Once again you did not remember the middle school brain is not developed in 7th grade to handle the math for physics and energy 7ps.1g s7ps2 + S7PS4 problems!! 8th graders are not able to handle the math currently so why would you drop this down to a lower grade!!s7ps6 +s7ps7. I am a science teacher not a reading teacher! I have my students read daily but I do not know how to teach them to read and I have them write weekly but I do not feel qualified to grade their writing skills. The English teachers say they do not want to grade my work for writing skills nor give me guidelines on how to grade for	N/o	

		consistency. I need to be educated in how to do this please!!!! PLEASE look at these standards as a wise teacher told me to look at book selection: Think of the worst teacher and what would be best for them.		
01-27	deborah shaffer-palmer teacher 1993 Moundsville West	The science standards allow students to think of science learning not as memorization of disconnected facts but as a holistic understanding of integrated concepts. The standards require students to provide evidence of their learning and will equip students with the critical thinking and analytical skills they need to be successful in college and to compete for today's most rewarding jobs. Students will learn later than middle school how to be competitive for jobs and basic education needs to occur before experimentation and writing can occur with good results. You contradict this when you say The science standards allow students to think of science learning not as memorization of disconnected facts but as a holistic understanding of integrated concepts.	N/o	
01-27	deborah shaffer-palmer teacher 1993 Moundsville West	The science standards allow students to think of science learning not as memorization of disconnected facts but as a holistic understanding of integrated concepts. The standards require students to provide evidence of their learning and will equip students with the critical thinking and analytical skills they need to be successful in college and to compete for today's most rewarding jobs. Students will learn later than middle school how to be competitive for jobs and basic education needs to occur before experimentation and writing can occur with good results. You contradict this when you say The science standards allow students to think of science learning not as memorization of disconnected facts but as a holistic understanding of integrated concepts.	N/o	
01-27	Crystal Allen Teacher Wetzel County Hundred WV	I support the new objectives for chemistry. I like the idea of including the science literacy standard. It is important that our students these days understand that science literature is different from any other discipline literature. For example just because a student knows how to read a fiction book and comprehend the meaning of the text does not mean the	N/+	

		<p>student will be able to read and comprehend science literature. The student may not know the meaning of symbols in the text, there could be domain specific words relevant to the scientific context. I think including this standard will help our students with understanding science text.</p> <p>As for the other standards they match with the current CSOâ€™s that we are using. I have no objection to these current CSOâ€™s. I think they prepare our students to be successful with college courses.</p>		
01-28	Richard Pollack Wheeling WV	Please adopt the standards as written. I feel it is essential for the students primarily, but also for the state competitive standing in the nation, and indeed world.	N/+	
01-28	Chemistry Educator Chemistry Educator Martinsburg WV	<p>1.) While students CAN still take chemistry as their third science, most will opt to against chemistry. This year we have five sections of chemistry and was told when this goes into effect there might be two sections if we are lucky (we have 20-25 STEM students per grade). Other chemistry teachers (in RESA 8) have already been told they will be teaching a lot more of (biology, environmental science, etc.) based on their other endorsements. Clearly most read the new standards as having general physical science REPLACE chemistry as the third science. Since I keep getting feedback that chemistry is not being replaced, perhaps someone needs to finally clarify this to others? Or, am I merely getting the runaround?</p> <p>Other states that adopted NGSS have NOT eliminated chemistry in any form or fashion. Why is WV doing this? Is it that the certification level of chemistry teachers is less than 40% and this is the bandage on the gaping wound?</p> <p>Since chemistry teachers are the ones being eliminated will the state reimburse tuition? The current physical science teachers will move from 9th to 11th grade. Biology will stay. Since chemistry is being replaced will the chemistry teachers be mandated to take more courses? If so, with what money? Especially since WVU is more than willing to teach said courses, but at full tuition.</p>	NA/-	The physical science course is a blend of chemistry and physics. Students will make decisions about 3rd and/or 4 th science courses based on their Personalized Education Plans and the requirements of post-secondary institutions they plan to attend. Chemistry is not being eliminate from the 11th grade.

01-31	Peggy Grantham Charles Town WV	I think the standards are too broad. What materials will be coming to help us develop these concepts? Before we can use higher thinking skills and the Blooms chart, don't the students need to know the basic information concerning the different areas. What happened to matter, electricity, animal and plant kingdoms and their relationship to mankind and each other. I can see two different teachers teaching these concepts in two very different ways and feel that they both have covered the material successfully.	N/o	
02-02	Melissa Menefee Charleston WV	Students have a right to be taught accurate information about the causes and consequences of climate change, so they can help develop solutions to the biggest global challenge their generation will face.	NA/o	<p>Rationale 3: NxG Science Standards and Objectives already require students to do the following across programmatic levels:</p> <ul style="list-style-type: none"> • introduce claims(s) about a topic or issue, acknowledge and distinguish the claim(s) from alternate or opposing claims and organize the reasons and evidence logically; • introduce precise claims(s), distinguish the claim(s) from alternate or opposing claims and create an organization that establishes clear relationships among the claim(s), counterclaims, reasons and evidence; and • introduce precise, knowledgeable claim(s), establish the significance of the claim(s), distinguish the claim(s) from alternate

				or opposing claims, and create an organization that logically sequences the claim(s), counterclaims, reasons and evidence.
02-02	Marilyn Monahan Mom Monahan/Peterman Family Charleston WV	<p>We must ensure our kids learn climate science and solutions in school.</p> <p>In the future, please do not approve standards for K-12 students that deny the scientific consensus on climate change.</p> <p>Students have a right to be taught accurate information about the causes and consequences of climate change, so they can help develop solutions to the biggest global challenge their generation will face.</p> <p>I hope you will refuse to consider any Science Standards that deny or censor the scientific consensus on human caused climate change.</p> <p>If we want our children to have a healthy future, we need climate solutions now.</p> <p>Our kids will suffer the greatest impacts from climate change, and they must have the science education they'll need to develop and innovate solutions.</p> <p>Please adopt Next Generation Science Standards (NGSS) -- comprehensive, research-based, world-class science that includes climate education, without corrupting with political ideology.</p> <p>Please do not allow science and other educational standards to be determined by individual bias, rather than upon the</p>	N/+	

		research-based, peer-reviewed recommendations of credentialed educators.		
02-02	Staci Leech-Cornell 21st CCLC Director/Manager for Explore & Soar The Clay Center Charleston WV	Students have a right to be taught accurate information about the causes and consequences of climate change, so they can help develop solutions to the biggest global challenge their generation will face.	N/+	
02-02	Amy Weintraub Charleston WV	Dear Board Members, I implore you to adopt Next Generation Science Standards (NGSS) as they were originally intended by the authors and by your stakeholder group. That is, that they remain comprehensive, research-based, and grounded in world-class science that includes climate education. Please no political ideology imposed on these standards! My children (Grades 7 and 10) will be among those coping with climate change as adults. Please arm them and their fellow students with the science education they'll need to develop and innovate solutions. Thank you very much! Amy Weintraub	N/+	
02-02	Ellen Archibald citizen Charleston WV	Please implement the NGCS so that WV students will be able to learn of modern scientific standards & research, in order to help our state grow & to compete well with their contemporaries in other states & other countries. Thank you.	N/+	
02-02	Barbara Steinke Charleston WV	Please adopt Next Generation Science Standards (NGSS) -- comprehensive, research-based, world-class science that includes climate education, without corrupting with political ideology. REAL SCIENCE = REAL EDUCATION!	N/+	
02-02	Staci Leech-Cornell 21st CCLC Director/Manager for Explore & Soar The Clay Center Charleston WV	We must ensure our kids learn climate science and solutions in school. I hope you will refuse to consider any Science Standards that deny or censor the scientific consensus on human caused climate change. If we want our children to have a healthy future, we need climate solutions now. Our kids will suffer the greatest impacts from climate change, and they must have the science education they'll need to develop and innovate solutions.	N/+	

02-02	Ellen Allen Pinch WV	<p>We must ensure our kids learn climate science and solutions in school.</p> <p>In the future, please do not approve standards for K-12 students that deny the scientific consensus on climate change.</p>	N/+	
02-02	Clayton Thorne Parent Augusta WV	<p>I am a parent of a Kindergarten student in Hampshire County and I read an article explaining that West Virginia has backed away from Standards that cast doubt on man made climate change. I believe that there is very little effect on our climate that is dangerous to our environment and I do not want my children taught that climate change is a FACT when many of the 'scientific' evidence supposedly claiming climate change is true is very lopsided and doesn't show all the statistics. There is no hard evidence proving climate change is a threat and it should be taught as an opinion not as a fact. My child should be taught how to make his own mind up based on evidence. He should not be taught how to think. Temperatures go up and down all the time and all the ice that has supposedly melted away hasn't happened like predicted. God controls the universe and scientists can't even predict tomorrows weather. Why should I believe they know what it will do years from now.</p>	NA/-	See Rationale 2.
02-02	James Keebler Member ASQ Huntsville MO	<p>I am writing to extend my support for the West Virginia School Board's and the School Board's members' consideration of adopting the proposed science curriculum in West Virginia's Schools. I do this on behalf of West Virginia students.</p> <p>I applaud West Virginia's efforts to provide a balanced and rational approach in these students' learning processes. Providing students with all facets of any issue so that they [the students] can conduct their own objective analysis of a problem or issue is and will be a valuable lesson they can apply in any endeavor.</p> <p>I could attempt a lengthy and arduous argument for or against GW/GWTs' tenets. But I will not subject you to that. Suffice</p>	NA/o	See Rationale 3.

		<p>it to say that West Virginia's students deserve and should be provided the opportunity(ies) to know and learn how to properly analyze anything put before them hopefully with their own [learned] resourcefulness and ability to discern rationally the facts of any issue, problem or conflict they may encounter.</p> <p>Thank you. Sincerely, James H. Keebler MSCE, PE, CRE</p>		
02-02	Kyla Hilton Charleston WV	Please give WV students the facts about climate change so that they may help in finding solutions. Hiding the real science is of help to no one.	N/+	
02-03	Sean Harwell Graduate Assistant Fairmont State University Fairmont WV	Awesome!	N/+	
02-03	leslie bakker associate Professor Emeritus retired nurse faculty charleston wv	Course and classroom science content should be based on evidence- based information at the time, and modified as new scientific evidence becomes available. Content not supported by science evidence should be acknowledged as such, perspectives shared, but acknowledged as that, perspectives. Can you imagine health care if it weren't based on evidence-based practice by providers!? Our children deserve scientific facts, discussion of perspectives. Only then can they grow into critically thinking adults and make informed decisions about the future.	N/+	
02-03	Danette Condon Midwife Hillsboro WV	<p>I address you from my solar powered organic homestead. After 20 years of life experience with solar power and teh ealth effects of organic eating! Please adopt Next Generation Science Standards (NGSS) -- comprehensive, research-based, world-class science that includes climate education, without corrupting with political ideology.</p> <p>Please do not allow science and other educational standards to be determined by individual bias, rather than upon the</p>	N/+	

		research-based, peer-reviewed recommendations of credentialed educators.		
02-03	Rev. Kay Albright Pastor Bridges of Grace United Church of Christ Charleston WV	<p>We must ensure our kids learn climate science and solutions in school.</p> <p>In the future, please do not approve standards for K-12 students that deny the scientific consensus on climate change.</p> <p>Students have a right to be taught accurate information about the causes and consequences of climate change, so they can help develop solutions to the biggest global challenge their generation will face.</p> <p>I hope you will refuse to consider any Science Standards that deny or censor the scientific consensus on human caused climate change.</p> <p>If we want our children to have a healthy future, we need climate solutions now.</p> <p>Our kids will suffer the greatest impacts from climate change, and they must have the science education they'll need to develop and innovate solutions.</p> <p>Please adopt Next Generation Science Standards (NGSS) -- comprehensive, research-based, world-class science that includes climate education, without corrupting with political ideology.</p> <p>Please do not allow science and other educational standards to be determined by individual bias, rather than upon the research-based, peer-reviewed recommendations of credentialed educators.</p>	N/+	
02-03	Sean Harwell Graduate Assistant Fairmont State University Fairmont WV	The new content standards look to be going in the right direction and they are going to be helping students understand climate change.	N/+	
02-03	Ed Weber CHARLESTON wv	<p>Since schools have created "drug-free zones" to mitigate the ill effects of dealers with bad drugs, I suggest they also enact "politics free zones" to mitigate the the illicit effects of bureaucrats with bad science.</p> <p>What next? Creationism?</p>	N/+	

02-04	Dr. Rita Rio Associate Professor of Biology West Virginia University Morgantown West	I support adopting the Next Generation Science Standards as they were written by the National Research Council. The Next Generation Science Standards will have a positive impact on the future of teaching West Virginia students about scientifically supported theories and concepts. This knowledge will certainly increase the competitiveness of our student population at all levels.	N/+	
02-04	Edward Brzostek Assistant Professor West Virginia University Morgantown WV	I support adopting the Next Generation Science Standards as they were written by the National Research Council.	N/+	
02-05	Dr. Ansel Payne Postdoctoral Affiliate American Museum of Natural History Walton WV	<p>Dear Ms. Sizemore--</p> <p>I'd like to throw my support behind your decision to revert to previously proposed Next Generation science standards. West Virginia students deserve the chance to thrive in a twentieth-century economy, one that revolves around a clear-eyed understanding of science and its associated technologies. Adopting rational guidelines and educational standards is an important step toward preparing those students for the future, and I'd like to encourage you to maintain our state's tradition of rigorous and objective science standards.</p> <p>At its heart, the scientific method is a tool for separating truth from fiction, and the truth is not--cannot be--a political issue. Please continue to teach our children about the scientific consensus on climate change, and about the methods that scientists used to discover it. They, not we, will be the ones who deal with the long-term effects of man-made emissions, and we owe it to them to prepare them for that struggle.</p> <p>In short, please put our children and the truth first, and adopt educational standards based on the peer-reviewed research of scientists and the recommendations of professional educators.</p>	N/+	

		<p>Thank you.</p> <p>Sincerely, Dr. Ansel Payne (formerly of Walton, WV; now living in Charlottesville, VA)</p>		
02-05	Hawley Montgomery-Downs Morgantown WV	<p>Ms. Sizemore,</p> <p>As a parent of three children in WV public schools and as a higher education science educator, I am enthusiastic about the WVBoE's adoption of the Next Generation Science Standards as they were written by the National Research Council. I support the original text and spirit of the NRC's standards and am opposed to any changes to them that would diminish the strength of or alter the standards. Thank you for all your work on behalf of the next generations. Thank you for adopting the NRC standards and for leaving them intact.</p>	N/+	
02-05	Daniel Cogswell Shepherdstown WV	<p>I have lived in West Virginia for 43 years. Both my kids are out of WV schools now, however I still want to express my support for keeping the original Next Generation Science Standards and am happy to see the state board revert back to these standards.</p> <p>I think it's presumptuous of the Dept. of Education to alter the text of something that was so carefully worded and vetted by actual experts in the field. To base such changes on a limited understanding of a topic is unacceptable.</p> <p>I understand that most of us are not scientists and these issues are complex. This should be even more reason to leave it to the people who have the most knowledge on a subject, especially when the topic has the level of consensus that climate change has.</p> <p>Science has to trump politics on this issue.</p>	N/+	
02-05	Matthew J. Kessler, DVM Assoc Director, OLAR	This is to strongly support the incorporation of the "Next Generation Content Standards and Objectives for Science"	N/+	

	WVU Morgantown WV	into the curriculum for West Virginia Schools. I have lived and worked in the Caribbean for over 25 years where I have seen first-hand changes in the environment and climate caused by humans.		
02-05	Mary Sue Burns Teacher Pocahontas County Schools Marlinton WV	As a science teacher I am very concerned about insuring that my students and all the students of West Virginia are prepared to be successful in our increasingly complex and global world. The WVBOE did the right thing in restoring the integrity of the climate science addressed in these standards. Our students should be encouraged to debate, but not to deny data and research that is agreed on by 97% of climate scientists. These standards will insure that. The integration of engineering practices will further help our students to solve problems. Overall this will help our students move into the future.	N/+	
02-05	Patricia Jacobson Wheeling WV	My children were all educated in Wheeling's public schools. I am very concerned for the upcoming generations. I urge the adoption of Policy 2520.3C Next Generation Content Standards and Objectives for Science in West Virginia Schools. exactly as recommended by the West Virginia Science Teachers Association. I object strongly to the attempt to change wording regarding the teaching of climate change made by some members of the State School Board. I urge adoption of the original wording as recommended by the WV Science Teachers Association.	N/+	
02-06	Danny Simons Science teacher Harrison county schools Lost Creek WV	Please reconsider your sequencing of the high school science courses. I agree with the idea that the math involved in the physical science course is too difficult for many of the students during their freshman year. However, I'm concerned that by eliminating this course in the sequence of high school science and making it an elective course would have an adverse effect on our upper students. The course is designed to give students a good start into chemistry and	NA/o	The Chemistry and Physics courses begin with the same objectives which are addressed in the Physical Science Courses. Students taking the Chemistry and Physics courses will have the foundational information

		<p>physics their junior and senior years. By making this class an elective course then the students who will be taking such courses will miss out on the background knowledge they should already have going into these classes and the teachers of these courses will have to begin with the basics. I also agree that most student's earth science skills are lacking to the extent that a course needs to be offered with intensive study concerning this. One solution to this might be to offer earth science in the 8th grade, biology in the 9th grade and physical science in the 10th grade. Sequencing the courses in this way would allow students to choose more advanced courses in any of the fields during their junior and senior years while still providing all students with the basic knowledge associated within each of the disciplines. Thank you</p>		<p>and move on to move advanced content.</p> <p>Middle school topics will be addressed in the middle school science courses. Students may double up on science courses when their schedules allow.</p>
02-06	<p>Dr. William T. Peterjohn Associate Professor of Biology West Virginia University Morgantown WV</p>	<p>We should be providing the next generation with an accurate account of our understanding of human-caused climate change since it is our children who will have to deal with the many serious issues it is causing.</p> <p>To do this we must avoid the temptation to inject a false sense of "balance" in the classroom when an overwhelming amount of the evidence supports the same conclusion - our climate is changing and since the middle of the last century human-activities are largely responsible.</p> <p>Of climate experts, 97% agree that human activities are changing the global climate and this assertion is also supported by the thousands of scientists who contribute to the Intergovernmental Panel on Climate Change, the national science academies of 34 countries, most scientific organizations in the United States, Shell Oil, and Pope Francis.</p> <p>We should not allow one or two, unqualified individuals to alter the educational standards that have been crafted by a</p>	N/+	

		<p>broader coalition, and that more accurately reflect the current scientific understanding of this important topic.</p> <p>As a result, I support adopting the Next Generation Science Standards as they were written by the National Research Council.</p>		
02-06	Manetta Calinger Wheeling WV -	I strongly encourage the inclusion of climate change education in West Virginia's Next Generation Science Standards. It is critical that we educate our children concerning the processes and consequences of climate change. It will be critical for their futures to be well-informed as we prepare the next generation of concerned citizens.	N/+	
02-07	Kari Clark Teacher John Marshall High School Glen Dale WV	It has been shown that the human activity of burning fossil fuels in mass quantities has increased the CO2 in the atmosphere. This has increased the earth's ability to hold in heat (The Greenhouse Effect) which is causing the glaciers to melt at a faster rate, which decreases the albedo in those areas, which in turn causes more absorption of solar energy that heats up the earth. Students should understand what this is occurring and what they can do now to slow it down for the future generations.	N/+	
02-08	Anne Smith Middle School science teacher Pocahontas County Schools Green Bank WV	No Comment	N/o	
02-08	Anne Smith Middle School science teacher Pocahontas County Schools Green Bank WV	I believe that Policy 2520.C3, as written, provides a thorough and efficient science education for West Virginia public school students.	N/+	
02-08	Jeffrey Wimsatt Professor & Director WVU, HSC Morgantown West	Re 2520.3 C-Climate change needs to be recognized and taught.	N/+	
02-09	Diana Boston Science Teacher	These are well written by respected science educators and scientists. I recommend that they be adopted as they are written.	N/+	

	WV Lead State Reveiw Team Vienna WV			
02-10	Toni DeVore Chair School of Graduate Education Ohio Valley University Vienna WV	I support the support for Policy 2520.3C for Science K-12	N/+	
02-10	Kathy Jacquez Science Department Chair Fairmont Senior High School Fairmont WV	<p>Science is the systematic observation of natural events and conditions in order to discover facts about them and to formulate laws and principles based on these facts. Or it can be defined as the organized body of knowledge that is derived from such observations and that can be verified or tested by further investigation. (Academic Press Dictionary of Science & Technology) These two definitions both agree that scientific concepts are not based on interpretation that is not widely accepted by others in the scientific community. Every science teacher begins the school year with the parts of the scientific method AND how that method applies to what we know and what we want to learn about our world. The body of knowledge that we consider as science is constantly evolving as new discoveries are made. New scientific concepts are not accepted until they are vetted by repetition of the experimental data by other scientists.</p> <p>Environmental science is difficult for many to understand because there is no one variable that can be separated from the environment and studied as to its effect on the environment. For example, life on Earth could not exist without the greenhouse gasses that surround our planet. These gases trap infrared radiation from the sun and keep the planet warm enough for life as we know it to exist. It only makes sense that if there is a change in the amount of gases that are found in the atmosphere a change in the amount of trapped heat will occur. As in any large system, the regulation of these amounts is dependent upon the amount of gas generated and the ability of the system to react to the amounts. This is simple physics!</p>	N/+	

		<p>Teaching our students that the inhabitants of this planet do not have an effect on this system is absurd. Every living thing in this system constantly exchange gases with the atmosphere during either photosynthesis or respiration. The fact that the human population of the planet is approaching seven billion people means that they are consuming tons of oxygen and producing tons of carbon dioxide with every breath. The fact that as these people industrialize and are comforted by the benefits of electricity and modern transportation methods adds many more tons of carbon dioxide to the atmosphere every second of every day.</p> <p>Let me teach students that there is a cause and effect relationship in their everyday lives that is important to their quality of life and to the generations that follow them. Climate change is real; the scientific data supports this statement. If we do not acknowledge this and find a way to keep the benefits of our modern world without forcing the atmospheric balance of gases to trap even more heat our planet will be a very different place in 100 years. Students have a right to know about these changes and should learn them in a classroom setting where they can also learn the accepted scientific principles that guide them into making informed decisions as adults.</p> <p>Changing 26 words in these science standards seemed inconsequential to those who did the changing. However, as someone who worked on these Standards for several years, I assure you that the committee discussed every single word. We did not take copies of our work away from the meetings as this was not a document that could be placed on public display until it had been placed on comment by the State Board. I am upset that I did not find the changes the first time this was placed on comment, but I trusted that the committee of science educators and working scientist would be considered the experts on interpreting the science issues. I was naïve to believe that our work would NOT be tampered with by the members of the State Board. If the Board</p>		
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		<p>members did not agree with the work that we did, why were the changes made in secret and not at the public State Board meeting where they were placed on comment?</p> <p>I love teaching science. Please pass these Standards so I can continue to educate my students in the systematic observation of natural events and conditions in order to discover facts about them and to formulate laws and principles based on these facts.</p>		
02-10	<p>Leann Sayre science teacher Fairmont Senior High School Fairmont WV</p>	<p>Please adopt these Standards as written by the teachers of WV for the students of WV</p>	N/+	
02-10	<p>Anne Burns science teacher Fairmont Senior High School Fairmont WV</p>	<p>Adopt these Standards, please.</p>	N/+	
02-12	<p>Herman L. Mays Jr. Assistant Professor Marshall University Huntington WV</p>	<p>As a parent of a West Virginia public school student and a professor in public higher education in West Virginia I urge the WVBOE to vote in favor of the Next Generation Science Standards (NGSS) as outlined in policy 2520.3C. Now that changes in the climate change portions of the NGSS have been removed it represents a broad and accurate representation of 21st century science in terms of both subject matter and skills. Attempts by some WVBOE members to dilute scientific content based on the economic interests of industry, political leanings and/or personal ideology have no place in the adoption of educational standards in our public schools. The West Virginia Science Teachers Association (WVSTA) has already weighed in on these standards and they are opposed to any changes introduced after their involvement in vetting the standards, specifically those ideological-driven changes introduced by BOE member Wade Linger with regards to the language on climate change. Educators and experts should drive curriculum content in the public schools. The WVBOE should ask themselves if proposed content standards reflect consensus views of</p>	N/+	

		<p>relevant educators and experts where a consensus exists. Introducing one's own personal views into any content standards is inappropriate, especially when those views run counter to a broad consensus among educators and experts and the BOE board member has little or no expertise themselves in the field of study they are critiquing. This is NOT to say that the WVBOE be a "rubber stamp", rather the board's job is to assess content standards using appropriate criteria, namely whether or not the proposed standards reflect consensus where consensus exists. If they are not experts in a particular field capable in assessing the current state of consensus themselves then there are ample resources in terms of qualified educational professionals, researchers and scholars, both within the state of West Virginia and nationally, who are willing, capable and ready to assist. Now that outside, ideological-driven changes have been removed from the NGSS it does well represent scientific consensus on key concepts, including climate change, and the NGSS as it exists now and as it was vetted by the WVSTA should be adopted.</p>		
02-12	<p>Taylor Smith Policy Analyst - Government Relations The Heartland Institute One South Wacker Drive #2740 Chicago, IL 60606</p>	<p>The Heartland Institute submits the attached public comment with regards to West Virginia Science Standards. Attachment</p>	N/-	Rationale 2.
02-13	<p>Terri Morris Teacher Nettie WV</p>	<p>What reference?</p>	N/o	
02-13	<p>Jodi McMillian Charleston WV</p>	<p>We must ensure that our children learn climate science and solutions in school. It's the job of a school to prepare a child to become a helpful and educated member of society.</p>	N/+	
02-13	<p>Terri Morris Teacher Nettie WV</p>	<p>It's ok.</p>	N/o	

02-14	Carolyn Thomas WV	.	N/o	
02-14	Robin D Nelson Julian WV	<p>I am writing to offer my comments on recently-issued Policy 2520.3C “Next Generation Content Standards and Objectives for Science in West Virginia Schools. Establishing national content standards would, on its face, seem to be a common sense cause. However, many naysayers believe that it could be a veiled effort to control individual thought and values.</p> <p>I submit that the West Virginia Department of Education can remain true to sound educational science standards while leaving room for honest and open academic debate of competing scientific theories and other established alternative viewpoints, especially in those subject matters where the scientific and public debate continues to rage. Our objective should be to make sure that students become proficient in the subject matter by critically evaluating all evidence, including competing scientific theories and other established, alternative viewpoints. If and when the debate is settled, the evidence will overwhelmingly proclaim it.</p> <p>The scientific debate on climate change is not at all settled. Many studies exist that question the veracity of the scientific data used to advance the theory of (mainly) man-made climate change. When bureaucrats declare the debate is settled despite credible scientific data that supports a contrarian viewpoint, it causes both educated and uneducated common sense people alike to feel they are being propagandized. We should allow for competing scientific theories and other established alternative viewpoints to be considered in the curriculum.</p> <p>Scientific theories are just that, theories, and should be presented as such in the classroom. Consider this. Many educated people embrace evolution theory or old-earth theory or (mainly) man-made climate change theory. Conversely, many other educated people embrace creation theory or young-earth theory or (mainly) natural-occurring climate</p>	NA/-	See Rationale 2.

		<p>change theory. I have heard it said that "scientists are 100% sure until they change their minds". The point is this. Science demands critical evaluation of all credible, established theories or viewpoints. Students should be taught to study the evidence; be knowledgeable of the popular scientific theories of the day; but, be permitted to consider (and even embrace) other credible, popular theories.</p> <p>To pretend such competing theories or alternative viewpoints do not exist infers a lack of credibility, or worse yet, even an impossibility that could perhaps (unintentionally) suggest to (especially young) students that such views are nothing more than fictional stories not to be believed. In my opinion, we do a great disservice to all children under our instruction as well as their parents by adopting such an approach.</p>		
02-14	<p>Paul Heckbert software engineer Pittsburgh PA</p>	<p>I heard that some of your school board members proposed adding climate change skepticism to the school curriculum. What a huge mistake that would be! West Virginia has a reputation for being poor, backward, ignorant, and beholden to the coal industry. If you teach denial of global warming, you'll be tarnishing the state's reputation, you'll be stunting the education of the next generation, you'll discourage tourism, and you'll hurt the economy of your state. After Massey Energy killed tens of miners and injured hundreds of others, and Freedom Industries poisoned the water of hundreds of thousands of WV residents, isn't it time to stop letting the coal industry call the shots in your state? Sure, people calling for less coal extraction are easy scapegoats in your state's frustration about declining coal jobs, but the principal reasons for that decline are not a "war on coal" by liberals, but the inevitable mechanization of the mining industry that has been going on for decades, the reality of global warming, and the necessity for all of us to take corrective action if we want to leave our kids a decent world to live in.</p> <p>Climate change is real, it's happening, and most of it is</p>	N/+	

		anthropogenic. Teach it, in order to prepare our kids for the future!		
02-14	A concerned Teacher Martinsburg WV	<p>I think the following says it all regarding "global warming":</p> <p>http://www.telegraph.co.uk/news/earth/environment/globalwarming/11395516/The-fiddling-with-temperature-data-is-the-biggest-science-scandal-ever.html</p> <p>Will I as a teacher be able to use Ian Plimer's tome. Heaven and Earth to provide scientific evidence refuting? Or, will I be forced to teach that which I do not scientifically agree with instead of the true facts?</p> <p>Will we be able to teach about the many ice ages and subsequent warming eras that were NOT caused by humans?</p>	NA/-	See Rationale 2.
02-14	Carolyn Thomas WV	<p>I think the proposed standards are a significant improvement over the current standards for middle school science education and I support the adoption of the new standards with some reservations. If we are going to continue a general science approach in West Virginia middle school, I think 4 topics per year would allow for variety and depth for instruction and learning and be more practical for managing equipment and supplies within schools.</p> <p>Is a staggered roll out a consideration if more topics are to be included? This would allow time for professional development, revising instructional materials and planning budgets and funding to buy or revise instructional materials.</p> <p>As an educator I am committed to providing West Virginia students with the same quality of experiences and education as our neighboring states which out perform us. Has there been any consideration of a partnership or cooperative to align with our neighboring states?</p> <p>There are a few standards which I find to be overly</p>	<p>N/+</p> <p>N/o</p>	

		complicated with limited relevance to middle school students - S.7.PS.9, S.7.ESS.4,S.8.LS.3, and S.8.LS.8 which	NA/o	See Rationale 1.
02-15	Zachary Loughman Assistant Professor of Biology West Liberty University West Liberty West	Given my occupation as a biology professor, as well as my area of expertise (ecology/ zoology/ environmental science) I am in the unique position to witness the impact of West Virginia's cultural association with coal as it pertains to this issue. It has been my experience since the onset of my employment at West Liberty University in 2006 that West Virginia's students are in dire need of solid scientific instruction based on fact. Our students are fundamentally unaware of the role that coal plays in the impairment of the world's ecosystems, as well as its associated biodiversity. ALL significant scientific institutions currently accept climate change as the number one threat to the world's biodiversity, the biosphere as a whole, as well as human populations. It is important that West Virginia's youth be presented information on climate change in the proper framework that views it as the threat it represents to our planet, and NOT be presented in a manner that climate change could be perceived as a falsehood worthy of debate. At present, our students are bombarded with images that portray scientists and government agencies, whose responsibility is to ensure the health of our environment, as agents of destruction and turmoil in the so called "War on Coal". This action by West Virginia's legislature to teach climate change as an issue that is debatable will further aid in the polarization and negative view of scientists by West Virginia's youth. Furthermore, science teachers would be used as pawns to further this action; asking them to teach falsehoods and turn their back on facts is an egregious, unforgivable act that goes against every science teachers best interest, credo and responsibility towards their students.	N/+	
02-16	Andrew Schedl Assistant Professor	It is embarrassing when a national scientific society, the American Geophysical Union, sends an e-mail directed at its West Virginia members urging them to act on a specific	N/+	

	West Virginia State University Institute WV	issue. At West Virginia State University I teach Physical Science I, Physical Science II, Physical Geology and Weather and Climate. Most of the students who take my classes are elementary education and general science education majors. In my classes I tell my students what distinguishes the natural and physical sciences from the social sciences is that in the natural and physical sciences sometimes the scientific community comes to a consensus about the big issues. (Note the present day controversy in the legislature about the ideas of Keynes versus Hayek on economics.) Human caused climate change is one of the subjects where this consensus has been reached. The only ideas which appear in science textbooks are ideas where scientific consensus has been reached. In all my classes students are taught about human caused climate change. Having teachers teach that there is considerable doubt about human produced climate runs contrary to their training.		
02-16	Christina 7th grade science teacher Maloney Morgantown WV	No Comment	N/o	
02-16	Kevin Poe Aerospace Engineer Morgantown WV	<p>S.6.ESS.6 - ask questions to clarify evidence of the factors that have caused the rise in global temperatures over the past century.</p> <p>Many factors contribute to the fluctuations in global temperatures. Temperatures rise and fall. S.6.ESS.6 is not an accurate statement.</p> <p>S.9.ESS.14 - Analyze geoscience data and the results from global climate models to make an evidence-based forecast of the current rate of global or regional climate change and associated future impacts to Earth systems.</p> <p>As I have demonstrated, global climate models often make</p>	NA/-	See Rationale 2.

		<p>incorrect predictions and cannot be relied upon to give accurate forecasts. S.9.ESS.14 is not an accurate statement.</p> <p>S.HS.ENV.17 - Debate climate changes as it relates to greenhouse gases, human changes in atmospheric concentrations of greenhouse gases, and relevant laws and treaties.</p> <p>Greenhouse gasses (specifically CO₂) are a minor contributor to climate (some scientist believe that CO₂ over 300ppm has no additional affect on global temperature) and humans contribute less than 5% of the total CO₂ in the atmosphere.</p>		
02-16	Andrew Schedl Assistant Professor West Virginia State University Institute WV	Please reinstate the original uncompromised standards.	A/+	Clerical and syntax errors were corrected to match the NGSS version, http://www.nextgenscience.org/sites/ngss/files/NGSS_Combined_Topics_11.8.13.pdf
02-16	Shawn Weaver none none Millwood WV	The standards should be adopted as originally written, not with any changes by interest groups.	N/+	
02-16	Cindy O'Brien Morgantown wv	To make a change in wording because "coal miners stand to lose jobs as a result of how climate change is taught in our public schools" shows a lack of understanding about what education is! The goal of education is not to save jobs but to teach problem solving skills so we can live in a changing world, not deny just the changes.	N/+	
02-16	Christina 7th grade science teacher Maloney Morgantown WV	No Comment	N/o	
02-16	Kelly Carter Science teacher	My preference is to go back to teaching science by content area because it is my experience that we spend too much time starting up mountains and stopping only to come back the	N/+	

	Marshall County Schools Wheeling WV	<p>next year and climb back up the mountain a little further. I think we should build on concepts and keep going up the mountain. Its my experience that students dont remember the isolated facts they have learned from year to year and we have to reteach it. Im thrilled that there are less standards and they are more open for creativity and engineering. I find the literary standards a bit redundant as I know students in many schools already have 2 periods of language arts and only 1 period of science everyday.</p> <p>I spent time commenting on the standards developed by my colleagues and respected education specialists the first go around, so to see specifics, refer to the previous comments.</p> <p>I would like to say that I am shocked that the state board of education changed the standards after they were submitted to them. I am appalled that the wording of certain content standards involving climate change was altered I do not want my students moving out into the world with a skewed perspective on real science because some people, who have an influence on what our students learn in science class, find it politically problematic or not congruent with their personal perspectives. I would like to support the work of my science colleagues and ask that you approve the standards as they were presented to you without compromising the integrity of our science education in West Virginia.</p>		
02-16	Uta Hempel Assistant Professor, Dr. Parkersburg WV	I am very impressed by the NGSS and applaud that WV is considering to implement them in their current form. As a professor for Biology at a community college, I see in my daily work how important a solid foundation in STEM is for the students in WV.	N/+	
02-16	michael whitten Truth Seeker retired afcio Peytona W.Va	<p>Astronauts, any space traveller have seen our world. A perspective view, amazing globe, a thin, delicate, fragile ATMOSPHERE. In a very few years- - Depletion occurred. What to Teach ? Teach URGENCY</p> <p>That we start now to save this very thin BLUE of life.</p>	N/+	

02-16	Michelle Withers Associate Professor of Biology West Virginia University Morgantown West	I strongly support adopting the Next Generation Science Standards as they were written by the National Research Council.	N/+	
02-16	Melissa Hill CEO Tri-County Transportation Unit Charleston WV	Taking a holistic and working approach to learning is needed. They must be able to apply these topics at home, school, work, and in the community immediately. Children currently study for the test/topic. The pieces never come together because its not required. WV will need the KSA's for future jobs in STEM. Pipeline, Manufacturing, etc... our future. Please prepare them now.	N/o	
02-16	Tina Cartwright Associate Professor Marshall University Huntington WV	<p>As a first-generation native West Virginian, I am proud to work daily to improve access to innovative and effective science education in my home state. I was honored to serve on the NGSS writing feedback team and provide feedback to the Achieve writing team. The original NGSS that was released by Achieve reflects the feedback that we as West Virginians and scientists provided the writing team. It is critical that we adopt these original NGSS which reflect the current understanding of science by West Virginian science educators and scientists.</p> <p>We as West Virginians need to decide what's best for our West Virginia students. Please do not let outside opinions and politics influence and taint the future of our students. The original NGSS which were approved and written by West Virginia educators and scientists should be adopted by our state.</p> <p>The original NGSS standards provide the best opportunity for our WV students to be competitive for the future of WV which will undoubtedly rely on STEM proficiency of our citizens.</p>	N/+	
02-16	Kevin Poe Aerospace Engineer Morgantown WV	The science of Climate Change is not settled. The most touted claim is that 97% of climate scientists agree on Anthropogenic Global Warming (AGW). This is	NA/-	See Rationale 2.

		<p>demonstrably false. John Cook et al. (Environmental Research Letters 8:024024, 2013) is the origin of the 97% consensus. He examined 11,944 abstracts and he himself says that "66.4% of abstracts expressed no position on AGW" but then he goes on to say, "Among abstracts expressing a position on AGW, 97.1% endorsed the consensus position that humans are causing global warming." That is only using 3896 of the abstracts. In the scientific community, that is called cherry picking your data. Let's say that you surveyed 100 people what condiments they liked on their hot dogs. 67 people didn't have a preference what was on their hot dogs, 32 people like slaw, and 1 person did not like slaw on their dog (yes, there are some people who don't like slaw on their hot dogs). Could you then say that 97% of people like slaw on their dogs? No. Only 32% of people had preference of slaw on their hot dogs. If you go to the Methodology section of his report, he states, "This letter was conceived as a 'citizen science' project by volunteers contributing to the Skeptical Science website". If you make a visit to the Skeptical Science website, their tag line is "Getting skeptical about global warming skepticism". Nope, no bias here (sarcasm). And if you are wondering, yes I did read his report and you can here and see for yourself his flawed analysis: http://iopscience.iop.org/1748-9326/8/2/024024/article If you still think that Cook's report is unbiased, free of opinion, and represents honest scholarly work, read the Conclusion to his report. He complains about a "consensus gap" growing between what he believes is the truth and opposing opinions. Science is not built upon consensus, it is built upon facts. There is a term to describe what he has done: Lysenkoism - the manipulation or distortion of the scientific process as a way to reach a predetermined conclusion as dictated by an ideological bias.</p> <p>Here are a few other items for your consideration:</p>		
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		<p>In the Washington Post, July 9, 1971, Dr. James Hansen (a noted AGW proponent) predicted a coming ice age in 50 years. But now, Dr. Hansen predicts a coming global warming.</p> <p>113 cm (44.5 inches) of snow was measured at Luleå Airport in northern Sweden on February 3, 2015 This broke the town's previous record of 111 cm (43.7 inches) set almost 50 years ago, in 1966. AGW predicts less snow.</p> <p>The seasonal average ice coverage for the Great Lakes is 30% for the first week of February. Ice coverage has been above 30% for 5 of the past 7 years. AGW predicts less ice coverage.</p> <p>US production of soybean will jump 10 percent this year to an all-time high of 3.631 billion bushels, and inventories before the 2015 harvest will be double a year earlier. Russia is awash in grain from a bumper harvest in the growing season just ended. The 2014 grain harvest increased to 105 million tonnes threatening to break a record. AGW predicts our food supply would decrease due to increased CO2.</p> <p>The last major hurricane to hit the United States was Hurricane Wilma, which made landfall on Oct. 24, 2005. This is the longest hurricane drought since records have been kept since 1900. AGW predicts more major hurricanes. (Note: In my opinion, we might see an increase in hurricanes over the next two years, not due to CO2 but due to the Atlantic Multidecadal Oscillation (AMO). The AMO is currently in a warm cycle. The increase in hurricanes will probably be blamed on CO2 when in fact it is due to AMO.)</p> <p>Scientist sometimes get it wrong. The New York Times, June 25, 1950 said, "Most astronomers now concede that the</p>		
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		dark color that comes and goes seasonally on Mars is evidence of some low form of vegetation. Of course we know that is wrong today.		
02-17	Sara Carley-Peña Shepherdstown WV	I believe a great injustice would be done to the children of West Virginia if the science content standards are changed. West Virginia needs to produce students who are as well informed and educated as students from other states. Please do not change the standards in an attempt to appease big business and / or the conservative right political parties.	N/+	
02-17	Mary Ellen Cassidy Adjunct Chemistry Professor Wheeling Jesuit University Wheeling WV	<p>I support the original version of Next Generation Content Standards and Objectives for Science in West Virginia. Adding the words "and fall" to S.6.ESS.6 risks confusion among students between the concepts of weather and climate.</p> <p>The revised wording for S.9.ESS.14 asks students to assess the credibility of computer climate models to predict future impacts on the Earth System. This substantially changes the intent of this learning goal.</p> <p>Problems with the rewritten version include subversion of the standards formation process, lack of understanding of grade appropriate targets, the replacement of "evidence based" with the term "credibility" (subtle, but the message comes through)</p> <p>Hypothesis - The changes were not pushed by a group of qualified climate scientists but by a group that would benefit from sowing doubt on climate change- just an educated guess at this point.</p>	N/+	
02-17	Eva Beto Clarksburg WV	I am both a parent and nontraditional educator. I find that currently there is a large gap in curriculum when it comes to science education. My children are in the second and third grades and have yet to bring home anything pertaining to science in either their school work or homework assignments. This greatly concerns me. My children love science as we have discovered through visiting science centers, reading	N/o	

		books pertaining to science subjects with them, watching educational programming, and doing experiments at home as well as through 4-H and its Science Technology Engineering and Mathematics (STEM) initiative. I hope by having a more hands on curriculum that concepts learned will translate into all areas of their education.		
02-17	David Sturm Substitute teacher Marion County BOE Fairmont WV	I agree with the standards most recently submitted.	N/+	
02-17	P. Perron Ms. Seattle WA	Students need to be part of the discussion about climate change - but they need a foundation to do this. In view of the fact that our world population has grown exponentially, causing irreversible changes on earth, students need to talk and think about this. We slaughter upwards to 170 BILLION animals PER YEAR - the methane is huge and damaging to the zone layer. The deforestation is causing untold damage - historically areas that have been deforested turn to desert, and refelet more sunlight. Sincwe the start of the Industrial Reveolution, humans have spewed unprecedented amounts of fossil fuels into the atmosphere. To continuously ffed the global populations, nitrogen is put into the soil - and released into the air. Nitrogen is also a huge detriment to changing climate. That our climate is changing, and what we can do to abate harm to future generations MUST be talked about in schools. Amercian student do not have to have the ignominy of being the most backward of all advanced nations. You may have budding problem soveres in your midst who can add immeasurably to the resolution of many of the earth's ills. Teach them! Make strategies to get them to think critically! Creatively! Logically! Altruistically! Imaginatively! With vision! Then - with clear vision, to act boldly, with courage and hope. Do not shut down the find potentail of your youth. This is tantamount to highest child abuse, in this teacher's opionion.	N/+	

02-17	<p>Nicolas Zegre Assistant Professor of Hydrology West Virginia University Morgantown WV</p>	<p>As a teacher of higher education, concerned citizen of West Virginia, and veteran of both the US Army and the West Virginia National Guard, I urge you to retain the original content and standards of the Next Generation Science Standards. Climate change has important implications for public and ecosystem health, infrastructure vulnerability, and economic stability and vitality, and national security. The acceptance, understanding, and importance of climate change and specifically warming is not lost to the US Department of Defense. In the 2014 Quadrennial Defense Review, the DOD states:</p> <p>"The impacts of climate change may increase the frequency, scale, and complexity of future missions, including defense support to civil authorities, while at the same time undermining the capacity of our domestic installations to support training activities. Our actions to increase energy and water security, including investments in energy efficiency, new technologies, and renewable energy sources, will increase the resiliency of our installations and help mitigate these effects."</p> <p>"Climate change poses another significant challenge for the United States and the world at large. As greenhouse gas emissions increase, sea levels are rising, average global temperatures are increasing, and severe weather patterns are accelerating. These changes, coupled with other global dynamics, including growing, urbanizing, more affluent populations, and substantial economic growth in India, China, Brazil, and other nations, will devastate homes, land, and infrastructure. Climate change may exacerbate water scarcity and lead to sharp increases in food costs. The pressures caused by climate change will influence resource competition while placing additional burdens on economies, societies, and governance institutions around the world. These effects are threat multipliers that will aggravate stressors abroad such as</p>	N/+	
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		<p>poverty, environmental degradation, political instability, and social tensions “ conditions that can enable terrorist activity and other forms of violence.”</p> <p>Given the role that climate change will play on WV, the region, country and world, it is important that West Virginia's students are rigorously prepared to understand the science behind climate change, and incorporate scientifically defensible data and information in their decision making. By retaining the original standards we can ensure that our students understand how this complex world works to ensure WV students are informed, innovate and contributing members of society.</p>		
02-17	Linda Lilly Teacher Park Middle School Beckley WV	<p>What will be the assessment and accountability measures?</p> <p>Will the WESTEST 2 standardized test still be used?</p>	N/o	
02-17	Stephanie Hysmith Ms Charleston WV	<p>I attended the hearing and was impressed by the passion of science educators who are determined to prepare their students for the reality of dealing with climate change. Wade Linger has no business allowing the fossil fuel industries to mandate or even influence science curriculum. To allow the verbiage proposed by Linger to alter science standards would continue to make West Virginians the laughingstock of the rest of the country. We owe it to our students to make them aware of how our climate is changing for the worst and how we can try to stop the devastation of our earth. I think if students are taught the truth about the effects of fossil fuel-based energy consumption and learn of alternatives, they will do their utmost to turn the tide and bring sustainable energy jobs to West Virginia. They must learn they can enjoy good, clean safe jobs that help our state and our earth. It would be in their best interests to learn how the coal barons have raped this state of its resources, its dignity and the health and safety of its citizens. They should and need to become outraged. It's in the history and must not be denied by science.</p>	N/+	

02-17	Sandra Rodgers Dryfork West	I want the Board of ED. of W.V. to accept the "Next Generation Content Standards and Objectives for Science in West Virginia Schools" without any amendments. Thank you, Sandra Rodgers	N/+	
02-17	Amy Davis Teacher 4th grade Monongalia County Schools Morgantown WV	<p>The standards are very vague. There is going to be a great deal of discrepancy from teacher to teacher and school to school about what exactly is taught. Also, some standards are grouped for several grades and are difficult to find in one grade level. They could be placed at the beginning of each grade level so the teachers don't have to look all over the document for them or miss them.</p> <p>As a 4th grade teacher, and a former middle school teacher, it worries me that biological sciences are not taught until later in the child's development, and do not seem heavy in the elementary years. One of the standards in 4th grade says that students will be able to discuss how information is interpreted through the senses. Without an understanding of systems and basic biological functions this is going to be difficult to teach. I see myself teaching a great deal of back ground information prior to teaching the standards that are required in my grade level.</p> <p>I do like that the standards are open to project based and hands on learning environments. However, I see finding instructional minutes and materials for this type of instruction and learning difficult because STEM isn't looked at as a priority.</p> <p>I think the best things we could do to help students and teachers is to teach the very young students how behavior in science labs looks, sounds, and feels so when they get to 3-5 they are ready to learn more advanced concepts in a laboratory setting. Create a sense of urgency for STEM by allotting instructional minutes for STEM instruction. And give teachers concrete understanding/instruction on what the</p>	N/o	

		standards mean so teachers who are reading specialist and math specialist but not experts or experienced in science are unified in what the standards mean and aren't spending countless hours interpreting them incorrectly.		
02-17	Christine Smith Special Educator Mrs. Hillsboro West	As a Special Educator for the gifted, I support the current version of the Next Generation Science Standards. The students in West Virginia deserve their content standards to be based on the soundest and most current knowledge available. I feel confident that the educators who came together to develop these standards have done their best for our students.	N/+	
§126-44CC-2. Purpose.				
01-16	Lester Allen Barclay WG 9 5803 Tech Mob Equip Ground Ret Dept. ARMY Tampa fl	Don't let Virginia's students down with this Hocumn UN Agenda 21 Global Warming Climate Change To save their Scientific Reputation 9,00 PHD's agree Global warming climate change is false. Astronaut Craig Rucker's CFACT Organization has connections to real Scientist !! http://www.cfact.org/2015/01/13/virginia-land-trusts-transgressions-draw-legal-legislative-scrutiny/?utm_source=CFACT+Updates&utm_campaign=ac39874f28-Watch_Martha_Boneta_on_Stossell_14_2015&utm_medium=email&utm_term=0_a28eaedb56-ac39874f28-270058297	NA/-	See Rationale 2.
01-16	Lester Allen Barclay DA Civilian / SGT ARMY Ret Dept Defence WG 9 5803 Tampa Flori	So the Virginia Public School Administration won't listen to reason, why 900 PHD just decided to save their reputation, from Global Warming Lackless wonders of Scientific STUPIDITY will they ??? If you have a PHD you're not allowed to defend it??? And at that Public schools find no Obligation to Protect their students from Global Warming Climate Change's Obvious FAILURE??	NA/-	See Rationale 2.
01-16	Dennis McAllister BS Physics BS Math, MS Comp Sci Retired Olympia WA	Recent climate experiments show that fundamental aspects of how CO2 is supposed to warm the earth are false.	NA/-	See Rationale 2.

01-17	Dennis J. McAllister Retired Olympia WA	To show how to use the scientific method discover facts that refute or support popular rhetoric.	N/o	
01-20	jim rye professor wvu morgantown wv	adopt	N/+	
01-21	Julian Martin Self Charleston WV	I don't understand what is asked for here. Please clarify.	N/o	
01-24	Rod Shafer WV native---WVU graduate Self Cary NC	To not at least promote dialogue on one of the most contentious issues of the day is to actually shut down debate--exactly what an educational system should not do.	NA/-	See Rationale 2.
01-26	Hans Schreuder Mr Principia Scientific International Ipswich, England	see section 1	N/o	
01-27	deborah shaffer-palmer teacher 1993 Moundsville West	Why break up the areas in science into snippets that have to be retaught each year versus a whole year in the same content in order to promote learning. It worked in the past and the present method DOES NOT WORK!!!! The standards only say certain material will be covered at sometime during the middle school years not a dab each year in many categories. Why not concentrate on one topic and get it thoroughly taught and have time to carry out the timely experiments. Fossils are in 7th and 8th grade really?; why not once and delve deeper and actually learn not get by with something.	N/-	
01-27	deborah shaffer-palmer teacher 1993 Moundsville West	In addition, the new standards focus on student diversity and equity. The standards also build on each other, meaning that material students learn in one year impacts what they learn in the years that follow. Lastly, when students are learning science, they are also enhancing their skills in reading, writing and mathematics. This only happens if they are prepared to enhance their math and writing skills which they	N/o	

		are not!. If students do not have a fraction bar on a calculator they do not know how to handle a fraction let alone when you call it a ratio or a rate such as in motion or density problems. Students also can not perform basic math facts let alone manipulate formulas and solve for answers.		
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02-02	Staci Leech-Cornell 21st CCLC Director/Manager for Explore & Soar The Clay Center Charleston WV	In the future, please do not approve standards for K-12 students that deny the scientific consensus on climate change.	N/+	
02-03	Sean Harwell Graduate Assistant Fairmont State University Fairmont WV	Supporting educators to teach their students should be at the heart of all content standards and it looks like these standards will accomplish that goal.	N/+	
02-08	Anne Smith Middle School science teacher Pocahontas County Schools Green Bank WV	I agree that the effective date should be for the 2016-2017 school year, in order to give school personnel time to be trained in effective implementation of these new standards.	N/+	
02-08	Jeffrey Wimsatt Professor & Director WVU, HSC Morgantown West	Climate change should not be treated as a matter of faith. Science strongly supports its occurrence. It does not matter who or what caused it. It is not a matter for blame. However, we need to teach the facts and be scientifically correct in the curriculum and honest brokers in our coverage of this issue.	N/+	

02-10	Toni DeVore Chair School of Graduate Education Ohio Valley University Vienna WV	With the change in 9th grade science to Earth and Space it will be critical to include materials for that class as well as the Physical Science and Forensic classes.	N/o	
02-12	Amelia Wolfe Teacher (CATS 8) Wood County Board of Education Parkersburg WV	<p>"The period of adoption and the effective date (July 2016) will allow for adoption materials and professional development."</p> <p>I am very concerned about the brief amount of time to transition to the WV-NGSS. I have read the proposed WV-NGSS and I feel teachers are going to need time to digest the new standards. The new standards have been cut and paste from the NGSS, however, key elements have been left out. Professional development is going to be critical for teacher to implement these standards correctly. Secondly, 9th Grade Science will now be Earth and Space Science. Wood County currently teaches Physical Science at the 9th grade level. Time must be permitted to provide teachers and curriculum committees time to review text and resources that best fit the curriculum.</p> <p>Having worked at the national level on the NGSS, it was never the intention for the standards to be adopted and immediately implemented. In fact, Stephen Pruitt from Achieve, told us, educators, states should wait at least three years before the actual implementation. This would give counties time to prepare their teachers and gather sources to roll out the NGSS as smooth as possible.</p>	N/o	
02-12	Amelia Wolfe Teacher (CATS 8) Wood County Board of Education Parkersburg WV	<p>"The period of adoption and the effective date (July 2016) will allow for adoption materials and professional development."</p> <p>I am very concerned about the brief amount of time to transition to the WV-NGSS. I have read the proposed WV-NGSS and I feel teachers are going to need time to digest the new standards. The new standards have been cut and paste from the NGSS, however, key elements have been left out. Professional development is going to be critical for teacher to</p>	N/o	

		<p>implement these standards correctly. Secondly, 9th Grade Science will now be Earth and Space Science. Wood County currently teaches Physical Science at the 9th grade level. Time must be permitted to provide teachers and curriculum committees time to review text and resources that best fit the curriculum.</p> <p>Having worked at the national level on the NGSS, it was never the intention for the standards to be adopted and immediately implemented. In fact, Stephen Pruitt from Achieve, told us, educators, states should wait at least three years before the actual implementation. This would give counties time to prepare their teachers and gather sources to roll out the NGSS as smooth as possible.</p>		
02-13	Terri Morris Teacher Nettie WV	The standards need to reflect the purpose.	N/o	
02-16	Christina 7th grade science teacher Maloney Morgantown WV	No Comment	N/o	
02-16	Kevin Poe Aerospace Engineer Morgantown WV	<p>Humans exhale 40,000 ppm of CO₂ with each breath; ponder that.</p> <p>Canadian researchers working off of Intergovernmental Panel on Climate Change (IPCC) models concluded in 2007 that the Arctic would be ice free by 2015. It is far from ice free. But the Arctic did lose 33% of its ice cover between 1890 and 1940, when CO₂ was lower (at 330 ppm) than it is today at 400 ppm. AGW cannot explain this.</p> <p>World temperatures have remained flat for over 16 years. You may have heard the claim that 2014 was the hottest on record. Was 2014 the hottest year on record? 2014 was hotter than the previously "hottest" year by 0.02C. But what was not mention was that there was a margin of error of $\pm 0.1C$. So therefore, the claim is bogus.</p>	NA/-	See Rationale 2.

		The sun, volcanic activity, and the oceans are the main drivers of climate change, not CO2.		
02-17	David Sturm Substitute teacher Marion County BOE Fairmont WV	I agree with the standards most recently submitted.	N/+	
02-17	Linda Lilly Teacher Park Middle School Beckley WV	I think it is interesting that there is so much emphasis on literacy than specific science content.	N/o	
§126-44CC-3. Incorporation by Reference.				
01-16	Lester Allen Barclay WG 9 5803 Tech Mob Equip Ground Ret Dept. ARMY Tampa fl	<p>Global Warming false Science</p> <p>Unbelievable Liberals in the Media and true Science are diametrically opposed. Because their mind cannot process logical information they are easy targets, like lemmings, for George Soros Illuminati Communist propaganda Global Warming. True Science of Geological History's shows Evidence that Sulfur Dioxide, fall out from our atmosphere, is in each layer of Soil/ Rock proceeded each ICE AGE Especially the last real Ice Age 22,000 years ago have nothing to do with Global Warming! During this ICE AGE the CO2 levels were an astounding 1200 PPM with the sulfur dioxide that caused it showing that today's 400 PPM CO2 is no threat. Stands to reason when volcanic activity produces enough sulfur dioxide to build a glacier of Ice it will also produce substantial amounts of CO2 that obviously are not the cause of Global Warming.</p> <p>This is a sick generation of College people that can't get away from their kindergarten Pre-Primer Chicken Little's book, "The Sky Is Falling". There are 35 active Volcanoes currently in the world that all have contributed to Sulfur Dioxide above the Troposphere in the Antarctic first and now the arctic, which, Buy the way, displaces Ozone. It (Sulfur Dioxide Emissions) started in the Antarctic 5 years ago from a Chilean</p>	NA/-	See Rationale 2.

		<p>Andes mountain Volcano at a high altitude. This Kind of Ozone depletion DOES NOT CAUSE GLOBAL WARMING IT CAUSES GLOBAL COOLING. We have real Scientist that know these things but Liberal Media covers up their ears to their outcries against STUPIDITY. http://en.wikipedia.org/wiki/Last_glacial_period</p> <p>The Obama administration are incredible hypocrite their Green Policies Amount to nothing Read Below Invention lost to humanity by a greedy invention on a DAMN CAR</p> <p>Global warming climate change is false. 9,000 PHD's agree. All fossil Fuel gets burned into our atmosphere at subduction zones of all tectonic plates. That is where Earths Atmosphere comes from. CO2 of last Ice Age, 8,000 years ago, was 1200 PPM compared to todays 388 PPM. CO2 causing Global warming is Hocum.</p> <p>Not using Fossil Fuel solves nothing Because of these Subduction Zones. However we have an Alternative that was squashed by President Obama not using an ARMY Patent. An Invention stopped by Greedy inventors that used it on a car first alarming all Oil producers to put a stop to him, and this invention used on a car. An invention lost to humanity that solves our Desalination of Salt water, Purification of Sewage Water, and creates electricity for our failing Electric Grid. HHO energy from water used by Hitler for all non essential transportation during WWII because of his lack of Fuel. https://www.youtube.com/watch?v=Zu-Hg6ntgqI&index=45&list=PLL5pQFJIwlAvy6vCQ3GmFBthkPZQ6_WfG</p> <p>An invention lost to humanity because of Big oil putting President in office to do nothing about this Patent owned by the ARMY Now. A president put in power not to produce this power but to stop it with failed Environmental inventions of</p>		
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		<p>the past that are proven not to work while He secures USA oil under islamic control. For this reason his Presidency was Bought and Paid for twice by Big Saudi Oil . An invention that solves the EPA ridiculous CO2 restriction by Desalination of salt water and production of Electricity at a fraction of todays caust. LOst forever because of a GREEDY inventor and his car proving it to USF Tampa Florida's Engineering Dept on a DAMN CAR.</p> <p>Sea Level Has Dropped Since the Mini Ice age 12 Century to 18 century !!</p> <p>Vice President Joe Biden is trying to connect the dots of Global warming to Republicans with the rising of the oceans. Not going to do it not on my watch. Democrats know very little about finance why would expect them to understand science. King Henry The 8th 28 June 1491 – 28 January 1547, built a castle on the cost of Southern England Southsea Castle 1544 during a mini ice age. 1544 would have been at the peak of the ice age with the most sea ice causing the water to rise in europe of the times. While it was not a true ice age, the term was introduced into the scientific literature by François E. Matthes in 1939.[2] It has been conventionally defined as a period extending from the sixteenth to the nineteenth centuries,[3][4][5] or alternatively, from about 1350 to about 1850. They have recently found the plans and on the plans it was built right on the water within 6-9 feet. The same castel today is 120 feet from the water.The water has receded since then as well as polar ice. During a ice age or a period of massive ice covering the ocean the sea is higher because Ice is expanded water, ice floats because ice displaces more water than water and when the ice caps are much larger than today they raise the sea level. History proves it. Tell Joe Biden to read Chicken little over again. Sea's oceans have retreated since then so has the water. King Henry 8th's Chastel is proof.</p>		
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		<p>We save our country from an ecological disaster by burning a fuel that was being dumped on the Ground.</p> <p>We the people had nothing to do with it !!!</p> <p>We the people had nothing to do with phony global warming/climate change. The cooling was caused by two volcanoes in Greenland just like it was in 1918' record cold spell. And it will happen again in another 86 years. We had nothing to do with it . We The People of the United States have always cleaned up our own messes. We, with Nikola Tesla's invention of the ignition system with a spark plug and Henry FORD's invention of the automobile cleaned up John D. Rockefeller's environmental disaster of pouring Gasoline on the ground at all his refineries as we burned it in that automobile to keep it out of our groundwater. Since that time 1903 our climate has been getting colder. At that time Mrs. Deland and her Son's fruit industry was all over South louisiana, Alabama, and Georgia all across the southern States westward to mexico, and it stretched all the way to the southern tip of Florida. After the introduction of fossil fuel this industry has moved farther south every year since 1903 because of the climate getting colder. It is no longer frost proof in Frostproof South Florida. It is impossible for God's creation the fruit tree to lie.</p> <p>Stop stalling on Keystone pipeline! Mr. President Mr. Secretary of state John Kerry</p>		
01-16	<p>Lester Allen Barclay DA Civilian / SGT ARMY Ret Dept Defence WG 9 5803 Tampa Flori</p>	<p>Craig Thats why Every chance I can Speak or write I will be convincing Parents If you really Love your Children you will Home School or look for Alternative Private school Education for your Children, or Even Adult Ed !! US Public School has been sick for a long time. Students in college that cannot finish the Degree they chose are allowed to pick up those credits and become Public school teachers. This is why our Students fail, their Teacher is Unmotivated from the start.</p>	N/o	

		When Teaching is a Second hand choice in College Majors, this is what happens.		
01-16	Dennis McAllister BS Physics BS Math, MS Comp Sci Retired Olympia WA	<p>Any one of these four facts is ALL that is necessary and sufficient evidence to refute ALL theories of CAGW:</p> <p>1. Recent analysis of satellite and radiosonde data shows that Outgoing Long Wave Infrared Radiation increases instead of decreases as Co2 increases. (from Earth Radiation Budget Experiment Satellite) http://www.friendsofscience.org/index.php?id=458</p> <p>2. Not only does CO2 lag temperature on a long term scale by 800 years, it also lags on a short time scale. Around Hilo, HI, CO2 increases in the fall after the ocean warms up and decreases in the spring after the oceans cools. (from Hadley CRUT3, http://www.woodfortrees.org/plot/esrl-co2/isolate:60/mean:12/scale:0.2/plot/hadcrut3vgl/isolate:60/mean:12/from:1958 http://climatephysics.com/80/ http://stevengoddard.wordpress.com/2014/04/09/the-disturbing-correlation-between-atmospheric-co2-and-temperature-in-the-20th-century/</p> <p>3. The moisture-holding capacity of the atmosphere and the intensity of hydrological cycles, especially in arid and semiarid regions has decreased (1957-2009), not increased as claimed by the IPCC in 2007. http://www.co2science.org/articles/V17/dec/a21.php</p> <p>4. A recent publication of ocean PH dating from 1890 shows that the ocean PH varies and is now the same as it was 100 years ago. (from NOAA world Ocean database) http://energymakesamericagreat.org/current-energy-commentary</p>	NA/-	See Rationale 2.
01-16	MarthaKinney	<p>Children deserve all the facts</p> <p>The Board of Education should adopt the extremely minor proposed changes to its climate curriculum to permit students to actively explore all the theories and facts</p>	NA/-	See Rationale 2.

		<p>pertaining to the many serious ongoing questions about the climate.</p> <p>Over the last 18 years climate computer models have consistently projected a warmer world than scientific observations record. Global warming has not occurred as projected during the entire lifetime of today's school children.</p> <p>“Climate change” is a highly contentious and hotly debated matter. Scientific data shows nothing extreme about recent weather, sea level, fires, droughts, floods and many other climate-related phenomena, all of which are occurring within historic norms. Nonetheless, exaggerated claims of extreme weather are now routine.</p> <p>Claims of an overwhelming scientific global warming consensus have been repeatedly and thoroughly debunked. The discussion is far from over. The true mind of science remains open to new data and alternative explanations. Whether and how much of the approximately 1/2 degree C of warming which occurred in the latter half of the 20th century is due to human industry has not been conclusively established. Neither have any of the incredibly expensive “solutions” proposed to address any global warming been shown to be meaningfully effective or worth their tremendous cost.</p> <p>The Board owes every child an open-minded education free of indoctrination.</p> <p>Students can handle ALL the facts!</p>		
01-17	Dennis J. McAllister Retired Olympia WA	References supporting the scientific research and data refuting the popular rhetoric on CAGW are provide at the end of the Summary	NA/-	See Rationale 2.
01-17	Dennis J. McAllister BS Physics, BS Math, MS Computer Scientist Retired – Computer Scientist - simulations	<p>Empirical scientific facts REQUIRE changes to new science curriculum</p> <p><u>PURPOSE:</u></p> <p>In support of amendments to the Board of Education’s new science curriculum regarding Catastrophic Anthropogenic Climate Change (CAGW). (References provided at end)</p>	NA/-	See Rationale 2.

		<p><u>Summary:</u> As reported in the 92 page 2009 Senate report, <u>THERE IS NO EMPIRICAL EVIDENCE SUPPORTING CAGW.</u> Data and scientific field experiments show that <u>EMPIRICAL EVIDENCE REFUTING CAGW EXIST</u></p> <p><u>EMPIRICAL FACTS REFUTING CAGW:</u> Outgoing Long Wave Infrared Radiation (OLWIR) is increasing, not decreasing as predicted by the CAGW hypothesis. The moisture holding capacity of the atmosphere and the intensity of hydrological cycles has decreased since 1957, not increased as predicted by the CAGW hypothesis. C. Water evaporation from warm tropical oceans falls as rain, cooling and drying the tropical troposphere and stratosphere providing a negative global warming feedback contrary to the CAGW hypothesis. On every time scale from seasonal to multi-millennial CO2 increases after the oceans and earth warm, never before. Students may be provided the following examples. (1.) CO2 increases around the Big Island in the Fall after the ocean warms and cools in the Spring after the ocean cools. (2.) Global temperature varies in 60 year cycles corresponding to the Jupiter / Saturn Synodic Cycle. (3.) It warmed from 1849 to 1979, cooled until 1912, warmed until 1943, cooled until 1974, warmed until 2002 and has slightly cooled since then while CO2 increased 34%. (4.) It was warmer than now 1, 2, 3.5 and 8,000 years ago. (5.) In the last 8,000 years CO2 increased 57 % while Global temperature decreased 1.5C.</p>		
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		<p>(D) ON ALL TIME SCALES CO2 INCREASES AFTER THE EARTH WARMS, NOT BEFORE: http://www.woodfortrees.org/plot/esrl-co2/isolate:60/mean:12/scale:0.2/plot/hadcrut3vgl/isolate:60/mean:12/from:1958 http://climatephysics.com/80/ http://stevengoddard.wordpress.com/2014/04/09/the-disturbing-correlation-between-atmospheric-co2-and-temperature-in-the-20th-century/</p> <p>(E) OCEAN ACIDITY IS CYCLIC AND THE SAME AS 100 YEARS AGO. http://energymakesamericagreat.org/current-energy-commentary</p> <p>(F) TOO MUCH ICE THREATENS POLAR BEARS http://cnsnews.com/news/article/barbara-hollingsworth/alaskan-polar-bears-threatened-too-much-spring-ice-0 http://www.thegatewaypundit.com/2014/04/brrr-record-thick-ice-threatens-polar-bears-in-beaufort-sea/</p> <p>(G) EXTREME WEATHER EVENTS ARE IN DECLINE http://bobtisdale.wordpress.com/2013/12/15/open-letter-to-the-executive-producers-of-years-of-living-dangerously/testimony of Roger Pielke, Jr. Reinsurer Munich Re Natural Catastrophe Statistics Report 2012: Far Less Global Damage From Weather In 2012! CONCLUSION: The school board must amend its new science curriculum to state the following.</p> <p>(1). Only rhetoric and no empirical scientific evidence supports CAGW.</p>		
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		<p>(2). The hypothesis of CAGW has been refuted by data and several scientific field experiments.</p> <p>(3). It is dangerous and expensive to accept popular rhetoric in place of scientific facts.</p> <p>Respectfully,</p>		
01-20	jim rye professor wvu morgantown wv	adopt	N/+	
01-20	Mr. Scott Soderholm Science Teacher Clay-Battelle High School Blacksville, WV	Attachment	N/o	<p>The physical science course is a blend of chemistry and physics. Students will make decisions about 3rd and/or 4th science courses based on their Personalized Education Plans and the requirements of post-secondary institutions they plan to attend. Chemistry is not being eliminate from the 11th grade.</p> <p>The science courses and objectives have been vetted by teams of programmatic and content specialists. Teachers will add foundational information and experiences where appropriate.</p>
01-21	Julian Martin Self Charleston WV	I don't understand what is asked for here. Please clarify.	N/o	

01-21	Brianna Blankenship Teacher WV Schools Gilbert WV	Based on a study by Green et al., in 2013, 97% of scientists who study global climate change agree that humans are the root cause.	N/+	
01-22	<p>28 Name Thomas Rodd Address Street Address: 3830 Colebank Rd City: Moatsville State / Province: WV Postal / Zip Code: 26405 Country: United States</p> <p>Name Suzanne Covello Address Street Address: 7124 Queen Street City: Middleway State / Province: WV Postal / Zip Code: 25430 Country: United States</p> <p>Name Amanda Pitzer Address Street Address: 498 Laurel Mountain Lane City: Tunnelton State / Province: WV Postal / Zip Code: 26444 Country: United States</p> <p>Name Laura Moul Address Street Address: 904 Florida St City: Milton State / Province: WV Postal / Zip Code: 25541 Country: United States</p>	<p>Please don't compromise science education in WV <u>I support the West Virginia Science Teachers Association and the Next Generation of Science Standards as those standards are implemented in the recently-issued proposed CSO document. I am glad that the State Board has withdrawn the modifications that would compromise those standards in the area of climate science. The current wording reflects the work of dedicated scientists and science educators. West Virginia needs standards that will provide students with the data and skills they need to be informed West Virginia citizens.</u></p> <p>Thank you for your commitment to quality science education in West Virginia</p>	N/+	

	<p>Name Linda Hill Address Street Address: 118 Darden Court City: Martinsburg State / Province: WV Postal / Zip Code: 25403 Country: United States</p> <p>Name Doorothy Montgillion Address Street Address: 1289 Smoke Camp Rd City: Weston State / Province: WV Postal / Zip Code: 26452 Country: United States</p> <p>Name Susan Walter Address Street Address: 207 Heritage Dr City: Shepherdstown State / Province: WV Postal / Zip Code: 25443 Country: United States</p> <p>Name Tania Stricker Address Street Address: 6 Mountaineer Drive Street Address Line 2: Unit A City: Elkview State / Province: West Virginia Postal / Zip Code: 25071 Country: United States</p>			
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	<p>Name Art Glick Address Street Address: HC 67 Box 539BB City: Renick State / Province: WV Postal / Zip Code: 24966- 9509 Country: United States</p> <p>Name Sarah Umberger Address Street Address: 700 E Washington St. City: Lewisburg State / Province: WV Postal / Zip Code: 24901 Country: United States</p> <p>Name Daniel Chiotos Address Street Address: 1603 W Washington St City: Harpers Ferry State / Province: WV Postal / Zip Code: 25425 Country: United States</p> <p>Name Susan Sailer Address Street Address: 415 Fountain View City: Morgantown State / Province: WV Postal / Zip Code: 26505 Country: United States</p> <p>Name Barb Barb Howe Address Street Address: 432 Riley St.</p>			
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	<p>City: Morgantown State / Province: 432 Riley St. Postal / Zip Code: Morgantown Country: United States</p> <p>Name Beth Raps Address Street Address: PO Box 117 City: Berkeley Springs State / Province: WV Postal / Zip Code: 25411-0117 Country: United States</p> <p>Name Sally Egan Address Street Address: 910 Sunset Dr. City: Bridgeport State / Province: WV Postal / Zip Code: 26330 Country: United States</p> <p>Name Charles Wyrstok Address Street Address: 230 Griffith Run City: Spencer State / Province: WV Postal / Zip Code: 25276 Country: United States</p> <p>Name Jo Brown Address Street Address: 454 Washington St City: Morgatown</p>			
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	<p>State / Province: WV Postal / Zip Code: 26501 Country: United States</p> <p>Name JERRY PAYNE Address Street Address: 69 FAIRPLAIN MOBILE HOME PARK City: RIPLEY State / Province: WV Postal / Zip Code: 25271 Country: United States</p> <p>Name Sheena Hall Address Street Address: 303 A Seneca Trail City: Ronceverte State / Province: WV Postal / Zip Code: 24970 Country: United States</p> <p>Name Elizabeth Reeder Address Street Address: HC 85 Box 305 City: Jumping Branch State / Province: WEST VIRGINIA Postal / Zip Code: 25969 Country: United States</p> <p>Name Test Test Address Street Address: 123 Test Ave City: Charleston State / Province: WV Postal / Zip Code: 12345</p>			
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	<p>Country: United States</p> <p>Name Phyllis Law Address Street Address: 137 Loretta Avenue City: Follansbee State / Province: WV Postal / Zip Code: 26037 Country: United States</p> <p>Name Lois Ludwig Address Street Address: 5373 Koontz Dr City: Cross Lanes State / Province: WV Postal / Zip Code: 25313 Country: United States</p> <p>Name John Huerta Address Street Address: Rt 3 Box 131 City: Elkins State / Province: WV Postal / Zip Code: 26241 Country: United State</p> <p>Name Leslie Devine- Milbourne Address Street Address: 649 Virginia Line Rd City: Berkeley Springs State / Province: wv Postal / Zip Code: 25411 Country: United State</p> <p>Name Peter McCumber</p>			
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	<p>Address Street Address: Millan Street City: Westover State / Province: WV Postal / Zip Code: 26501 Country: United State</p> <p>Name Frank Shomo Address Street Address: 116 Teays Meadows City: Scott Depot State / Province: WV Postal / Zip Code: 25560 Country: United State</p> <p>Name Paula Tremba Address Street Address: P. O. Box 114 Street Address Line 2: 1246 Terrapin Neck Rd. City: Shepherdstown State / Province: WV Postal / Zip Code: 25443 Country: United State</p>			
01-22	<p>Name Michael Webb Address Street Address: 175 Grape Island Lane City: St. Marys State / Province: WV Postal / Zip Code: 26170 Country: United States</p>	<p>Please don't compromise science education in WV <u>I support the West Virginia Science Teachers Association and the Next Generation of Science Standards as those standards are implemented in the recently-issued proposed CSO document. I am glad that the State Board has withdrawn the modifications that would compromise those standards in the area of climate science. The current wording reflects the work of dedicated scientists and science educators. West Virginia needs standards that will provide students with the data and skills they need to be informed West Virginia citizens.</u></p>	N/+	

		<p>It becomes a problem when one person on the Board wishes to change wording in a standard. By reconsidering your previous standing and going back to the original statements you confirm that a broad spectrum of knowledge is better than one person's stilted view of things.</p> <p>Thank you for your commitment to quality science education in West Virginia</p>		
01-22	<p>Name Eve Firor Address Street Address: 413 Iris Hill Lane City: Franklin State / Province: WV Postal / Zip Code: 26807 Country: United States</p>	<p>Please don't compromise science education in WV <u>I support the West Virginia Science Teachers Association and the Next Generation of Science Standards as those standards are implemented in the recently-issued proposed CSO document. I am glad that the State Board has withdrawn the modifications that would compromise those standards in the area of climate science. The current wording reflects the work of dedicated scientists and science educators. West Virginia needs standards that will provide students with the data and skills they need to be informed West Virginia citizens.</u></p> <p>misinformation at school leads to ignorance which leads to bad decisions and citizens unequipped to cope with the challenges all adults will face in the 21st century.</p> <p>Thank you for your commitment to quality science education in West Virginia.</p>	N/+	
01-22	<p>Name Carolyn Buzbee Address Street Address: 161 Phil Ave City: Beckley State / Province: West Virginia Postal / Zip Code: 25801 Country: United States</p>	<p>Please don't compromise science education in WV <u>I support the West Virginia Science Teachers Association and the Next Generation of Science Standards as those standards are implemented in the recently-issued proposed CSO document. I am glad that the State Board has withdrawn the modifications that would compromise those standards in the area of climate science. The current wording reflects the work of dedicated scientists and science educators. West Virginia needs standards that will provide students with the data and skills they need to be informed West Virginia citizens.</u></p>	N/+	

		<p>I am an art teacher in Raleigh County and I know how important it is to teach current and relevant topics across the curriculum. Thanks you for listening to the highly qualified teachers when topics that mean something to them arise such as this on climate science.</p> <p>Thank you for your commitment to quality science education in West Virginia.</p>		
01-22	<p>Name Frank & Judy O'Hara Address Street Address: 94 Orchard Street City: Keyser State / Province: WV Postal / Zip Code: 26726 Country: United States</p>	<p>Please don't compromise science education in WV <u>I support the West Virginia Science Teachers Association and the Next Generation of Science Standards as those standards are implemented in the recently-issued proposed CSO document. I am glad that the State Board has withdrawn the modifications that would compromise those standards in the area of climate science. The current wording reflects the work of dedicated scientists and science educators. West Virginia needs standards that will provide students with the data and skills they need to be informed West Virginia citizens.</u></p> <p>John Dewey, American educator and philosopher, writes; "“Scientific principles and laws do not lie on the surface of nature. They are hidden, and must be wrested from nature by an active and elaborate technique of inquiry. ” from Reconstruction in Philosophy</p> <p>Thank you for your commitment to quality science education in West Virginia.</p>	N/+	
01-22	<p>Name JB Witten Address Street Address: Rt 1 Box 113 City: Elkins State / Province: WV Postal / Zip Code: 26241 Country: United States</p>	<p>Please don't compromise science education in WV <u>I support the West Virginia Science Teachers Association and the Next Generation of Science Standards as those standards are implemented in the recently-issued proposed CSO document. I am glad that the State Board has withdrawn the modifications that would compromise those standards in the area of climate science. The current wording reflects the work of dedicated scientists and science educators. West Virginia needs standards that will provide students with the data and skills they need to be informed West Virginia citizens.</u></p>	N/+	

		<p>Science is important if we want our kids to get good jobs in an increasingly competitive Global environment.</p> <p>Thank you for your commitment to quality science education in West Virginia.</p>		
01-22	<p>Name Steve Stathakis Address Street Address: 855 Opekiska Road City: Fairmont State / Province: WV Postal / Zip Code: 26554 Country: United States</p>	<p>Please don't compromise science education in WV</p> <p><u>I support the West Virginia Science Teachers Association and the Next Generation of Science Standards as those standards are implemented in the recently-issued proposed CSO document. I am glad that the State Board has withdrawn the modifications that would compromise those standards in the area of climate science. The current wording reflects the work of dedicated scientists and science educators. West Virginia needs standards that will provide students with the data and skills they need to be informed West Virginia citizens.</u></p> <p>Please make sure that our schools provide the children of West Virginia the knowledge to grow into well-informed, thoughtful, and participating citizens. Compromising science standards to reflect a political agenda rooted in falsehoods is irresponsible and shameful. Do the right thing for our future and make permanent the standards implemented in the recently-issued proposed CSO document.</p> <p>Thank you for your commitment to quality science education in West Virginia.</p>	N/+	
01-22	<p>Name Donna Weems Address Street Address: 320 Dream Catcher Circle City: Morgantown State / Province: WV Postal / Zip Code: 26508 Country: United States</p>	<p>Please don't compromise science education in WV</p> <p><u>I support the West Virginia Science Teachers Association and the Next Generation of Science Standards as those standards are implemented in the recently-issued proposed CSO document. I am glad that the State Board has withdrawn the modifications that would compromise those standards in the area of climate science. The current wording reflects the work of dedicated scientists and science educators. West Virginia needs standards that will provide students with the data and skills they need to be informed West Virginia citizens.</u></p>	N/+	

		<p>Thank you for withdrawing the modifications that would compromise the standards in the area of climate science. I am now still proud of West Virginia's school system.</p> <p>Thank you for your commitment to quality science education in West Virginia.</p>		
01-22	<p>Name Lisa Mitchell Address Street Address: 206 Greenbrier Trl City: Charleston State / Province: WV Postal / Zip Code: 25313 Country: United States</p>	<p>Please don't compromise science education in WV</p> <p><u>I support the West Virginia Science Teachers Association and the Next Generation of Science Standards as those standards are implemented in the recently-issued proposed CSO document. I am glad that the State Board has withdrawn the modifications that would compromise those standards in the area of climate science. The current wording reflects the work of dedicated scientists and science educators. West Virginia needs standards that will provide students with the data and skills they need to be informed West Virginia citizens.</u></p> <p>I applaud your commitment to teaching our youth the facts of science rather than skewing findings and data. It is important for the health of our citizens and environment.</p> <p>Thank you for your commitment to quality science education in West Virginia.</p>	N/+	
01-22	<p>Name Clara Halfin, B A Ed Address Street Address: 483 Location Rd City: Parsons State / Province: WV Postal / Zip Code: 26287-8591 Country: United States</p>	<p>Please don't compromise science education in WV</p> <p>I support the West Virginia Science Teachers Association and the Next Generation of Science Standards as those standards are implemented in the recently-issued proposed CSO document. I am glad that the State Board has withdrawn the modifications that would compromise those standards in the area of climate science. The current wording reflects the work of dedicated scientists and science educators. West Virginia needs standards that will provide students with the data and skills they need to be informed West Virginia citizens.</p> <p>KEEP THE KOCH BROS..."ALEC" AGENDA...OUT OF WEST VIRGINIA'S CLASSROOMS!!!!</p> <p>Thank you for your commitment to quality science education in West Virginia.</p>	N/+	

01-22	<p>Name Virginia L Winston Address Street Address: 1121 Hollida Lane Street Address Line 2: 1121 Hollida Lane City: Martinsburg State / Province: WV Postal / Zip Code: 1121 Hollida Lane Country: United States</p>	<p>Please don't compromise science education in WV <u>I support the West Virginia Science Teachers Association and the Next Generation of Science Standards as those standards are implemented in the recently-issued proposed CSO document. I am glad that the State Board has withdrawn the modifications that would compromise those standards in the area of climate science. The current wording reflects the work of dedicated scientists and science educators. West Virginia needs standards that will provide students with the data and skills they need to be informed West Virginia citizens.</u> Ignorance is NOT bliss. It allows people to make really STUPID decisions. If you don't understand science, you can't understand our world / universe. Thank you for your commitment to quality science education in West Virginia.</p>	N/+	
01-23	<p>Name Wendy Maddox Address Street Address: 5964 Engle Moler Road City: Shepherdstown State / Province: WV Postal / Zip Code: 25443 Country: United States</p>	<p>Please don't compromise science education in WV <u>I support the West Virginia Science Teachers Association and the Next Generation of Science Standards as those standards are implemented in the recently-issued proposed CSO document. I am glad that the State Board has withdrawn the modifications that would compromise those standards in the area of climate science. The current wording reflects the work of dedicated scientists and science educators. West Virginia needs standards that will provide students with the data and skills they need to be informed West Virginia citizens.</u> PLease stop bowing to the coal moguls and do what is intelligent. Teach real science. Thank you for your commitment to quality science education in West Virginia.</p>	N/+	
01-23	<p>Name Geraldine Wilson Address Street Address: PO Box 822 Street Address Line 2: 106 Deer Run Road</p>	<p>Please don't compromise science education in WV <u>I support the West Virginia Science Teachers Association and the Next Generation of Science Standards as those standards are implemented in the recently-issued proposed CSO document. I am glad that the State Board has</u></p>	N/+	

	City: Davis State / Province: West Virginia Postal / Zip Code: 26260 Country: United States	<u>withdrawn the modifications that would compromise those standards in the area of climate science. The current wording reflects the work of dedicated scientists and science educators. West Virginia needs standards that will provide students with the data and skills they need to be informed West Virginia citizens.</u> It's our children's future we are compromising when we don't acknowledge and deal with climate change. Thank you for your commitment to quality science education in West Virginia.		
01-23	5 Name Zachary Loughman Ph.D. Address Street Address: CSC Box 139 Street Address Line 2: West Liberty University City: West Liberty State / Province: West Virginia Postal / Zip Code: 26074 Country: United State Name Doug Gilbert Address Street Address: 127 Birch Hollow City: Morgantown State / Province: WV Postal / Zip Code: 26508 Country: United State Name Patrick Dante Address Street Address: RR 1 Box 445 City: Augusta State / Province: WV	Please don't compromise science education in WV <u>I support the West Virginia Science Teachers Association and the Next Generation of Science Standards as those standards are implemented in the recently-issued proposed CSO document. I am glad that the State Board has withdrawn the modifications that would compromise those standards in the area of climate science. The current wording reflects the work of dedicated scientists and science educators. West Virginia needs standards that will provide students with the data and skills they need to be informed West Virginia citizens.</u> Thank you for your commitment to quality science education in West Virginia.	N/+	

	<p>Postal / Zip Code: 26704 Country: United State</p> <p>Name Kalyan Kasarla Address Street Address: 4 Gold Street City: Edison State / Province: NJ Postal / Zip Code: 08837 Country: United States</p> <p>Name Catherine Rodgers Address Street Address: 215 Middle Fork Lane Street Address Line 2: 215 Middle Fork Lane City: Berkeley Springs State / Province: WV Postal / Zip Code: 25411 Country: United States</p>			
01-23	<p>Name George Bell Address Street Address: PO Box 30 City: Snowshoe State / Province: WV Postal / Zip Code: 26209 Country: United States</p>	<p>Please don't compromise science education in WV <u>I support the West Virginia Science Teachers Association and the Next Generation of Science Standards as those standards are implemented in the recently-issued proposed CSO document. I am glad that the State Board has withdrawn the modifications that would compromise those standards in the area of climate science. The current wording reflects the work of dedicated scientists and science educators. West Virginia needs standards that will provide students with the data and skills they need to be informed West Virginia citizens.</u></p> <p>I have a BS in Environmental Resource Management from Penn State. I fully support teaching of climate science for all West Virginia students.</p> <p>Thank you for your commitment to quality science education in West Virginia.</p>	N/+	

1-23	<p>Zach Anglin WV</p>	<p>Standards Concern</p> <p>The standards look solid from my perspective, however my concern is more of the implementation in the classrooms. The issue I see with Common Core math is that the teacher's don't seem to fully grasp the concepts, or at least not enough to properly instruct the material, coupled with the fact that the parents have no idea what's going on, and either can't or won't do further research to understand the ideas behind the concepts. In the end, we are left with confused and frustrated kids and angry parents. It would be a shame to see all of this time and effort wasted for the science curriculum due to the same mistakes.</p>	N/+	
01-24	<p>Name Clifton Hyre Address Street Address: 115 Wilton Avenue City: Elkins State / Province: wv Postal / Zip Code: 26241 Country: United States</p> <p>Name Angela Nida Address Street Address: 41 Boice Hill Rd City: Creston State / Province: WV Postal / Zip Code: 26141 Country: United State</p> <p>Name Amanda Rowe Address Street Address: 5 Southmoor Dr City: Parkersburg State / Province: WV Postal / Zip Code: 26101 Country: United States</p>	<p>Please don't compromise science education in WV</p> <p><u>I support the West Virginia Science Teachers Association and the Next Generation of Science Standards as those standards are implemented in the recently-issued proposed CSO document. I am glad that the State Board has withdrawn the modifications that would compromise those standards in the area of climate science. The current wording reflects the work of dedicated scientists and science educators. West Virginia needs standards that will provide students with the data and skills they need to be informed West Virginia citizens.</u></p> <p>Thank you for your commitment to quality science education in West Virginia.</p>	N/+	

	<p>Name Nathan Fetty Address Street Address: 46 Meade St. City: Buckhannon State / Province: WV Postal / Zip Code: 26201 Country: United State</p> <p>Name cathyt pardee Address Street Address: 55 Moon Ridge Lane City: burlington State / Province: wv Postal / Zip Code: 26710 Country: United State</p>			
01-24	<p>Regan Quinn 1113 Highland Rd Charleston, WV 25302 Ph: (304) 344-5780</p>	<p>Substantially the same comments were delivered earlier in person before the school board. I support the West Virginia Science Teachers Association and the Next Generation of Science Standards as those standards are implemented in the recently-issued proposed CSO document. I am glad that the State Board has withdrawn the modifications that would compromise those standards in the area of climate science, as it is clearly error for instructors to cast doubt upon the credibility of whether human activities promote global warming.</p> <p>One may refuse to accept the computer models used by climate scientists (which by the way to date have tended to underestimate effects). One may refuse to trust the vast majority of climate scientists who say that anthropogenic warming is real and dangerous. Cast these aside and simple logic and common sense, along with science education basics, still compel the conclusion.</p>	N/+	

		<p>These are the three basic and indisputable facts which show that human-induced warming is all too likely.</p> <p>1) increased CO2 levels in air cause the air temperature to rise</p> <p>2) there are increased levels of CO2 in the atmosphere 3) the sales records of fossil fuel companies show that enough fossil fuel has been sold, and presumably burned, to account for the increased CO2 levels and increased warming. This is the human thumbprint.</p> <p>With knowledge comes responsibility.</p> <p>In a speech in Vatican City on October 29, 2014, Pope Francis said, "Climate change, the loss of bio-diversity, deforestation are already showing their devastating effects in the great cataclysms we witness, and you are the ones who suffer most, the humble, those who live near coasts in precarious dwellings or who are so vulnerable economically that, in face of a natural disaster, lose everything".</p> <p>An editorial in the National Catholic Reporter on May 20th of 2014 carried the lead line, "Climate Change is the church's No. 1 pro-life issue". As stated in that article, "it is long past time that the question turn from whether human activity is causing climate change to what do we do about it" A few weeks ago, I attended a service at my family's church. The priest admonished parishioners that the first duty of a Christian was to love others as one loves oneself, and that each of us therefore had a duty to aid and foster refugees. He spoke about this a bit and when he finished speaking the woman in the pew behind me said one word, "Wow". What refugees did he refer to in this somewhat unusual sermon? I think it most likely he referred to refugees from global warming induced natural disaster and global warming induced war and famine who</p>		
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		<p>exist now in their tens of thousands, and who will exist in millions upon millions in the future if nothing is done.</p> <p>For those who think altruism ought not influence education policy I refer you to the U.S. Department of Defense's characterization of climate change as a "threat multiplier" Quoting from the 2014 DOD's Quadrennial Defense Review,</p> <p><i>Climate change poses another significant challenge for the United States and the world at large. As greenhouse gas emissions increase, sea levels are rising, average global temperatures are increasing, and severe weather patterns are accelerating. These changes, coupled with other global dynamics... will devastate homes, land, and infrastructure. Climate change may exacerbate water scarcity and lead to sharp increases in food costs. The pressures caused by climate change will influence resource competition while placing additional burdens on economies, societies, and governance institutions around the world. These effects are threat multipliers that will aggravate stressors abroad such as poverty, environmental degradation, political instability, and social tensions – conditions that can enable terrorist activity and other forms of violence.</i></p> <p>While carrying out his duties as US Ambassador in Amsterdam in May of 1781, founding father John Adams wrote a letter to his young son John Quincy Adams which included this advice, which is still good advice, and which I hope the board will take to heart.</p> <p>“You will ever remember that all the end of study is to make you a good man and a useful citizen.”</p>		
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		It is to be hoped that climate change education in West Virginia is consistent with the making of good and useful citizens.		
01-25	<p>Name Elizabeth Scott Address Street Address: 114 Shady Ln City: Winfield State / Province: WV Postal / Zip Code: 25213 Country: United State</p> <p>Name Priscilla Rodd Address Street Address: 218 S. Samuel Street City: Charles Town State / Province: WV Postal / Zip Code: 25414 Country: United State</p> <p>Name Carol holmes Address Street Address: 16398 Jerrys Run Road City: Fraziers Bottom State / Province: WV Postal / Zip Code: 25082 Country: United State</p> <p>Name Constance Sloan Address Street Address: 19 countryside lane City: Elkview State / Province: West Virginia Postal / Zip Code: 25071 Country: United State</p>	<p>Please don't compromise science education in WV <u>I support the West Virginia Science Teachers Association and the Next Generation of Science Standards as those standards are implemented in the recently-issued proposed CSO document. I am glad that the State Board has withdrawn the modifications that would compromise those standards in the area of climate science. The current wording reflects the work of dedicated scientists and science educators. West Virginia needs standards that will provide students with the data and skills they need to be informed West Virginia citizens.</u></p> <p>Thank you for your commitment to quality science education in West Virginia.</p>	N/+	

01-26	Hans Schreuder Mr Principia Scientific International Ipswich, England	see section 1		
01-26	<p>Name Courtney LaFollette Address Street Address: 425 Morgantown Avenue City: Fairmont State / Province: West Virginia Postal / Zip Code: 26554 Country: United State</p> <p>Name Janet keating Address Street Address: 126 Shockey Dr City: huntington State / Province: wv Postal / Zip Code: 25701 Country: United State</p>	<p>Please don't compromise science education in WV <u>I support the West Virginia Science Teachers Association and the Next Generation of Science Standards as those standards are implemented in the recently-issued proposed CSO document. I am glad that the State Board has withdrawn the modifications that would compromise those standards in the area of climate science. The current wording reflects the work of dedicated scientists and science educators. West Virginia needs standards that will provide students with the data and skills they need to be informed West Virginia citizens.</u></p> <p>Thank you for your commitment to quality science education in West Virginia.</p>	N/+	
01-26	<p>Name Timothy Nelms Address Street Address: 221 Poplar Dr. City: Morgantown State / Province: WV Postal / Zip Code: 26505 Country: United States</p>	<p>Please don't compromise science education in WV <u>I support the West Virginia Science Teachers Association and the Next Generation of Science Standards as those standards are implemented in the recently-issued proposed CSO document. I am glad that the State Board has withdrawn the modifications that would compromise those standards in the area of climate science. The current wording reflects the work of dedicated scientists and science educators. West Virginia needs standards that will provide students with the data and skills they need to be informed West Virginia citizens.</u></p> <p>Science knowledge accumulates without regard for political desires.....history shows us some embarrassing examples when legislation has been offered as an attempt to change this progress.</p>	N/+	

		Thank You !! for withdrawing these 'modifications' !!! Thank you for your commitment to quality science education in West Virginia.		
01-27	deborah shaffer-palmer teacher 1993 Moundsville West	The science scores for the entire state are nothing to brag about. The present method is not effective!! Why do we not help the students by not changing the topic every few days to teach an unrelated topic because a piece of paper says I have to teach too many topics. I have to reteach the previous years content and the new. This is not working for the state why continue? These standards are still vague and need to be more specific in their intention. Among the four teachers at my school we have 4 different feelings of what is to be taught. A fellow teacher even says she does not like a certain set of standards and does not even try to teach them because they are so vague and above the students in math ability. The standards are only set up for range of grades not absolute that each grade teach each content area. Concentration and repeated vocabulary will promote learning!	N/o	
01-27	deborah shaffer-palmer teacher 1993 Moundsville West	The committee should take smaller steps to reach the desired outcomes for the NXGS. I think the organization needs to be looked at for learning to occur. Brain development needs to be evaluated. Judgement skills are not present in the middle school students as well as other skills to meet the criteria as presently presented.	N/o	
01-27	deborah shaffer-palmer teacher 1993 Moundsville West	The committee should take smaller steps to reach the desired outcomes for the NXGS. I think the organization needs to be looked at for learning to occur. Brain development needs to be evaluated. Judgement skills are not present in the middle school students as well as other skills to meet the criteria as presently presented.	N/o	
01-27	Dennis McAllister	Update: WHY 2014 is only sixth or fourth warmest IAW satellite databases. Only the surface station database indicates that 2014 is the hottest year. Neither satellite global temperature database shows 2014 as the hottest year. In fact, the UAH series has 2014 sixth behind 2007, 2009, 2005, 2010 and 1998. The	NA/-	See Rationale 2.

		<p>NOAA RSS series has 2014 fourth behind, 2005, 2010 and 1998.</p> <p>http://quadrant.org.au/opinion/qed/2015/01/climate-jiggery-pokery/</p> <p>The surface station database is defective in many ways. There are only a few stations. They sparsely cover high altitudes and Latitudes and don't cover large areas at all. Only a small percent meet quality standards. The majority are in urban areas subject to a heat island effect.</p> <p>The US was so concerned about the quality of the US surface station database, that in 2005 they established a new one of 114 pristinely cited temperature stations spread out fairly uniformly throughout the United States. It shows that global surface temperature has decreased in the last decade.</p> <p>http://www.forbes.com/sites/jamestaylor/2014/06/25/government-data-show-u-s-in-decade-long-cooling/</p>		
01-28	Howard Hayden	Attachment	NA/-	See Rationale 2.
01-29	Howard (Cork) Hayden	<p>Please see attached PDF file with my comments on the WVA policy of "climate change" discussion. Hard copy will follow.</p> <p>ATTACHMENT</p>	NA/-	See Rationale 2.
01-29	Nir Shaviv	<p>Attached please find my comments objecting to the "science is settled" nature of the WV BOE proposed revision of the science standards.</p> <p>My thoughts on the WV school board's decision to scrap changes made from the educational goals set by Achieve, by Nir J. Shaviv</p> <p>Recently, the WV school board decided to scrap changes it has made on the <i>Next Generation Science Standards</i> set by Achieve, which if left, would have given exposure to the scientific uncertainties we have in climate change.</p> <p>This recent behavior of both Achieve and the West Virginia school board is very disappointing because of several disturbing implications. In short, it will cause the indoctrination of students by an unproven hypothesis that</p>	NA/-	See Rationale 2.

		<p>was put on the pedestal of a sacred theory. It demonstrates how dogma can tramp those in a weaker position. But by far, from my point of view as a scientist, this behavior takes a big step backwards towards quenching the objective inquisitiveness so much needed in proper scientific education.</p> <p>Before elucidating the above, let me clarify a few common misconceptions about the “theory” of anthropogenic global warming. AGW is not a theory like the big bang theory, or the theory of general relativity, in that it cannot make significant quantitative predictions.</p> <p>While the Big Bang theory can be used to predict the ripples seen in the cosmic microwave background radiation, or the theory of General Relativity than can be used to predict the exact precession of Mercury, AGW theory cannot predict even within a factor of 3 the expected temperature increase following CO2 doubling (as attested by the 1.5 to 4.5°C range appearing in all the IPCC reports). It is also not a theory that made confirmed predictions like the aforementioned theories or other less quantitative ones, such as plate tectonics that was decisively confirmed by GPS measurements of plate motion. In fact, the few predictions that can be made by the AGW theory are inconsistent with the actual observations. Even with the recent hype of 2014 being the hottest year ever recorded, the present average global temperature is well below the range of predictions made in the first IPCC report (the predictions of which should still be valid given that the range of climate sensitivities to CO2 doubling didn’t change), yet frightening scenarios based on the upper part of the range are heralded day in and day out. The reason for this inconsistency is that climate sensitivity is in fact on the low side, and that the standard AGW theory blatantly ignores evidence showing the solar variations are important and explain perhaps half of the 20th century global warming.</p>		
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		<p>Last, one should be aware that there is no measurement that proves climate to be very sensitive to CO2 increase or that 20th century climate change is predominantly because of that (or that climate change over any period in earth's history was governed by changing CO2 levels for that matter).</p> <p>With this in mind, we should now judge Achieves' list of academic goals and the WV school board decisions. To begin with, the large uncertainty in the AGW theory should imply that it should not be taught with the certainty inferred from Achieve's respective goals. Instead, the correct way should be to present an objective list of evidence and allow the students to reach the various possible conclusions and the possible confidence one should have in them. Without presenting all the evidence, including those that are inconsistent with AGW predictions, such as the much smaller warming than expected over the past few decades (the so called warming "hiatus"), or the disregard of evidence clearly showing that solar variations have had a significant impact on 20th century climate change, teaching AGW theory and consequent agenda would simply be indoctrinating the students as if the theory is written in stone.</p> <p>The second disturbing point is that we see in operation Thucydides principle that "the strong can do everything within their power to do so; the weak have to accept everything that they have to accept." Since the WV school board needs the help of Achieve to keep the high education standards that WV students deserve, they feel they have no choice but to accept Achieve's demands that forbid changing even a single word in the education goals. Achieve does so because they believe their truth is better than anything else, and of course because they know they can force the WV board to do so.</p>		
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		<p>The third disturbing point is that the teaching of science in WV will be compromised. Instead of learning how science is carried out, which is to objectively study the evidence and the range of theories that were proposed to explain the data, and only then try to reach conclusions and the confidence in them, the students learn that they should accept as a fact whichever theory they are thrown at by whomever has more authority, without ever raising any doubt. It would be a shame to quench the inquisitive young minds. On the other hand, all this can all be used as an interesting lesson in political science...</p> <p>ATTACHMENT</p>		
01-29	<p>James Dixon 206 W Washington Ave Terra Alta, WV 26764-1225</p> <p>Anthony Ervolina 18 Payne St Salem, WV 26426-1107</p> <p>Cynthia Herndon 847 E Moler Ave Martinsburg, WV 25404-4729</p> <p>Tom Hilgartner 608 Shady Ln Charleston, WV 25314-1637</p> <p>Kathryn Stone PO Box 2203 Charleston, WV 25328-2203</p> <p>Pamela Wells 131 Morris St</p>	<p>Support accurate climate science in WV education</p> <p>I am writing in support of Next Generation Science Standards in West Virginia K-12 education. In particular, I support the standards as-written on teaching climate science. The science is clear on climate change and human impacts on warming.</p> <p>Climate change is impacting communities in West Virginia, and our students deserve to learn about it in school.</p>	N/+	

<p>Huntington, WV 25705-1207</p> <p>Penney Kolb 129 Caddell St Morgantown, WV 26501-6401</p> <p>Delmas Conley 284 Butch Fork Rd Pecks Mill, WV 25547-9533</p> <p>John Maynard 519 Riverview Dr Lesage, WV 25537-9772</p> <p>Teresa Koon 4112 Coopers Creek Rd Charleston, WV 25312-7889</p> <p>Beth Little 214 Black Gum Ln Hillsboro, WV 24946-8666</p> <p>Marian Buckner 104 Wildflower Ln Shepherdstown, WV 25443-4197</p> <p>Jessica Keegin 406 California St Huntington, WV 25704-1230</p> <p>Robert Leach 34 Battlefield Dr</p>			
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	<p>Charles Town, WV 25414-2526</p> <p>Kathleen Durkin 137 Mount Saint Joseph Rd Wheeling, WV 26003-1762</p> <p>Stephanie Somers 54 Lindsey Dr Charles Town, WV 25414-5176</p> <p>Victoria Pendragon 135 Pendragon Ct Paw Paw, WV 25434-8923</p> <p>Thomas Rodd 3830 Colebank Rd Moatsville, WV 26405-8824</p> <p>Michele Martin 103 Jimrose Ln Box 244 Anmoore, WV 26323</p> <p>Neil Krebs HC 69 Box 3 Milam, WV 26838-9404</p> <p>Jane Butler 314 Wild Rose Dr Hedgesville, WV 25427-3345</p> <p>Victor Skaggs 307 McKinney St Fairmont, WV 26554-3040</p>			
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	<p>Kimberly Thomas 247 Basil Ln Gerrardstown, WV 25420-4400</p> <p>Thomas Valencia PO Box 371 Charlton Heights, WV 25040-0371</p> <p>David Sturm 518 Maryland Ave Fairmont, WV 26554-4129</p> <p>Carol Reuther 149 Boone Hedges Rd Wheeling, WV 26003-7727</p> <p>Janie Ives 488 Ives Ln Thornton, WV 26440-7512</p> <p>Maria Marshall 1245 Peacock Ln Fairmont, WV 26554-2423</p> <p>Elizabeth Wiles 66 Eddy Rd Morgantown, WV 26501-7721</p> <p>Carla Barnhart PO Box 6115 Charleston, WV 25362-0115</p>			
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	<p>R. Neal Peterson PO Box 128 Harpers Ferry, WV 25425-0128</p> <p>Mike Kennedy 158 River View Ln Moorefield, WV 26836-8708</p> <p>Michael Donahue 327 Blue Bird Ln Harpers Ferry, WV 25425-5566</p> <p>Joanna Stewart 110 McGrew Dr Elkview, WV 25071-9304</p> <p>Carole Williams 622 Jo Harry Dr Fairmont, WV 26554-3540</p> <p>Betty Ward 4318 Wv Highway 18 Troy, WV 26443-7834</p> <p>Sally Roberts PO Box 5059 Charleston, WV 25361-0059</p> <p>Dianna Arens PO Box 132 Belmont, WV 26134-0132</p> <p>Dale Richardson</p>			
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1548 Willoughby Dr Parkersburg, WV 26101-9337			
Jeffrey Gordon 45 Maple Ave Morgantown, WV 26501-6571			
Victoria Brownlee PO Box 36 Millwood, WV 25262-0036			
Marcia Leitch PO Box 226 Talcott, WV 24981-0226			
Julie Darling 105 Martha Ave Spencer, WV 25276-1913			
Sandy Donahue 327 Blue Bird Ln Harpers Ferry, WV 25425-5566			
Tony Maciorowski 1759 Terrapin Neck Rd Shepherdstown, WV 25443-4159			
Dorothy Montgillion 1289 Smoke Camp Rd Weston, WV 26452-7940			
Shawn Nehler			

	<p>131 Butcher Ct Shepherdstown, WV 25443-4341</p> <p>Michael Klausing 624 Cross Lanes Dr Apt 11 Nitro, WV 25143-1156</p> <p>Andrea Freund 106 Raccoon Ln Gerrardstown, WV 25420-3059</p> <p>WILLIAM ASHWORTH 915 Watts St Charleston, WV 25302-3337</p> <p>Catherine Lambeau 203 1st St Huntington, WV 25705-1703</p> <p>Anita Smith 112 Winfield Rd Saint Albans, WV 25177-1546</p> <p>Molly Pickett-Harner 2 Waterfront Pl Ste 1603 Morgantown, WV 26501-5969</p> <p>Mary Taylor 65 Camelot Dr</p>			
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	<p>Huntington, WV 25701-5302</p> <p>Vicky Davidson 713 Castlegate Rd Charleston, WV 25303-2805</p> <p>Lorrin Pickens 704 Riverview Dr Belmont, WV 26134-9719</p> <p>Deanna Hammonds 98 Trace Rd Newton, WV 25266-9104</p> <p>Dorothy Montgillion 1289 Smoke Camp Rd Weston, WV 26452-7940</p>			
01-29	<p>Mr. Robert A. Mertz 1205 Mulberry Rdg Spencer, WV 25276-8561</p>	<p>I am a retired science teacher. I spent thirty one years teaching Biology, Environmental Earth Science and Wildlife Management classes in the public school systems of three states. My education was first as a Biologist, teaching came later. I have a Master of Science degree in Biology. As a biologist I am concerned with the effects our large human population is having on the sustainability of our Earth's life support systems. Although there are some impressive natural systems that help to stabilize the living environment on our planet, there are limits to how much abuse these systems can withstand. The fossil records show that in the past there have been several major disruptions of these systems. Today the biggest threat to our space ship Earth comes from the activities of us humans. Our continued population growth combined with the crazy notion that there must always be an expanding economy is a sure-fired prescription for disaster. Misguided economic policies are in direct conflict with the</p>	N/+	

		<p>natural limits of Earth. Our finite planet can not provide unlimited resources to allow us to continue on the path we are on.</p> <p>We must make decisions based on sound ecological principles if we are to bequeath our children and grandchildren with a place to live that is both sustainable and interesting. It will be a tragedy of monstrous proportions if our shortsighted way of making decisions degrades the world that our children inherit. The wonderful diversity of living creatures and wild unspoiled natural places must be preserved for them.</p> <p>It seems that we are unaware that the wild natural places are the ultimate infrastructure of the planet. Our present economic systems of continued growth are nothing more than a Ponzi scheme in which our decedents will be left with nothing of value.</p> <p>I am writing in support of Next Generation Science Standards in West Virginia K-12 education. In particular, I support the standards as-written on teaching climate science. The science is clear on climate change and human impacts on warming. I request that you address one of the issues that will affect future generations, including our two sons and our wonderful six year old granddaughter. Please try to throw off the short term considerations and take action that will address the long term welfare of humankind. The welfare of all of our children are depending on us.</p> <p>Climate change is impacting communities in West Virginia, and our students deserve to learn about it in school.</p>		
01-30	Mary A Borchers 1801 Middle Ridge Rd	Support accurate climate science in WV education	N/+	

	<p>Romney, WV 26757-7027</p> <p>Joseph Lambeau 203 1st St Huntington, WV 25705-1703</p> <p>Gary Graham 1821 Hill St Rainelle, WV 25962-1356</p> <p>Susan VanMeter 28 Critton Owl Hollow Rd Paw Paw, WV 25434-8956</p> <p>Carmella Campione, CSJ 137 Mount Saint Joseph Rd Wheeling, WV 26003-1762</p> <p>James Conley 717 29th St Parkersburg, WV 26101-1907</p> <p>Conni Gratop Lewis 4406 Venable Ave Charleston, WV 25304-2534</p> <p>Mark Blumenstein HC 73 Box 11 Alderson, WV 24910-9705</p> <p>Charlie Cornwell 216 Smith St Lavalette, WV 25535-8712</p> <p>Peter Abbrecht</p>	<p>I am writing in support of Next Generation Science Standards in West Virginia K-12 education. In particular, I support the standards as-written on teaching climate science. The science is clear on climate change and human impacts on warming.</p> <p>Climate change is impacting communities in West Virginia, and our students deserve to learn about it in school.</p>		
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	<p>1352 Steamboat Run Rd Shepherdstown, WV 25443-4005</p> <p>Diana Eldridge 101 May Ct Shepherdstown, WV 25443-4226</p> <p>Anne Stroud PO Box 374 Alderson, WV 24910-0374</p> <p>Sara and Robert Caiola PO Box 76 Slanesville, WV 25444-0076</p> <p>Elizabeth Scott 3496 Hurricane Cr Rd Winfield 25213, WV 25213</p> <p>chet dowell 471 Hughes Fork Rd Mount Zion, WV 26151-8047</p> <p>Mary E. Kiefer 824 Lick Creek Rd Apt 205 Danville, WV 25053-6801</p> <p>Nica Sharshon 6783 W Little Kanawha Hwy</p>			
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	<p>Big Bend, WV 26136-8001</p> <p>Amber Bonitatibus 1307 Marshall St Mcmechen, WV 26040-1144</p> <p>Scott Gibson 120 Riverview Dr Saint Albans, WV 25177-1644</p> <p>Craig Etchison PO Box 691 Fort Ashby, WV 26719-0691</p> <p>Margaret Loudon PO Box 1704 Hedgesville, WV 25427-1704</p> <p>Edward Rutledge 333 Bernard St Huntington, WV 25704-1425</p> <p>Lawrence Fraley 5754 Kingwood Pike Reedsville, WV 26547-7170</p> <p>Sherry Bowles 901a Greendale Dr Charleston, WV 25302-3223</p> <p>Sara Young</p>			
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	<p>PO Box 1746 Craigsville, WV 26205-1746</p> <p>Wilfrid W Csaplar Jr 100 Logan Ct Bethany, WV 26032-2016</p> <p>Margaret Meeker 4-115 The Flds Williamstown, WV 26187-1803</p> <p>Sheri Mcguire 110 Lawrence St Morgantown, WV 26508-4133</p> <p>Sharon Hurley 393 Palser Run Rd Normantown, WV 25267-6781</p> <p>Ben Badger 216 Eastland Ave Morgantown, WV 26505-3508</p> <p>Rob Ruggiero 117 Oakmont Dr Charles Town, WV 25414-4092</p> <p>Don Randolph 1000 Purusha Pl Romney, WV 26757-5020</p>			
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	<p>KEITH SMITH 106 Aspen Ln Buckhannon, WV 26201-6514</p> <p>Jennifer Walters 35 Opal Ct Martinsburg, WV 25404-4247</p> <p>bradley cromer 109 Chestnut St Elkins, WV 26241-3566</p> <p>Jeanne Odom PO Box 206 Davis, WV 26260-0206</p> <p>Francis Slider 239 Fluharty Rd Middlebourne, WV 26149-7591</p> <p>Wayne Dunn 968 Chesterville Rd Mineral Wells, WV 26150-6086</p> <p>Eddy Ridgeway PO Box 51 Paw Paw, WV 25434-0051</p> <p>Kathryn Robertson 2690 Pleasant Hill Rd Ireland, WV 26376-8094</p>			
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	Ellen Mueller 21 Crystal Dr Buckhannon, WV 26201-8859			
01-30	Name G. Paul Richter Address Street Address: 112 Fayette St. City: Buckhannon State / Province: WV Postal / Zip Code: 26201 Country: United State	Please don't compromise science education in WV I support the West Virginia Science Teachers Association and the Next Generation of Science Standards as those standards are implemented in the recently-issued proposed CSO document. I am glad that the State Board has withdrawn the modifications that would compromise those standards in the area of climate science. The current wording reflects the work of dedicated scientists and science educators. West Virginia needs standards that will provide students with the data and skills they need to be informed West Virginia citizens. All youth, as citizens and potential voters should be educated in the sciences. Further, peer-reviewed-based science is the only way future politicians, policy-makers, and voters should be educated in the sciences. Thank you for your commitment to quality science education in West Virginia.	N/+	
01-31	Robert Moran RR 2 Box 242 Ridgeley, WV 26753-9619 Montie Van Nostrand PO Box 111 Hacker Valley, WV 26222-0111 Bonni McKeown 12 Arlington Ct Charleston, WV 25301-1802	Support accurate climate science in WV education I am writing in support of Next Generation Science Standards in West Virginia K-12 education. In particular, I support the standards as-written on teaching climate science. The science is clear on climate change and human impacts on warming. Climate change is impacting communities in West Virginia, and our students deserve to learn about it in school.	N/+	
02-01	Merri Morgan 3719 Laurel Creek Road	Support accurate climate science in WV education	N/+	

	<p>Greenville, WV 24945-8100</p> <p>Angela Hughes 2101 Rays Branch Rd Charleston, WV 25314-9175</p> <p>Deven Matlick 24 Matlick Ln Moatsville, WV 26405-8299</p> <p>R Linde PO Box 465 Harpers Ferry, WV 25425-0465</p>	<p>I am writing in support of Next Generation Science Standards in West Virginia K-12 education. In particular, I support the standards as-written on teaching climate science. The science is clear on climate change and human impacts on warming.</p> <p>Climate change is impacting communities in West Virginia, and our students deserve to learn about it in school.</p>		
02-01	William Rosenfeld	<p>This Email is a repeat of my previous Email of January 13th (along with additional material), which you may not have seen since it may have been submitted past the time that you were taking contributions.</p> <p>Science involves challenging, testing, and retesting of results and theories, and then confirming, altering or abandoning hypotheses. It never involves rote nor the antithesis of science -- the suppression of information that refutes one's conclusions. To do so is tantamount to book burning. What is inviolate in scientific research are results and never conclusions or theories, which is why it involves null hypotheses and probabilities. To do the reverse is called faith.</p> <p>The job of the scientist is to make sense of the dissonance that is necessary for good science. Wearing headphones that eliminate disturbing outside noises only deafens the noise but does not eliminate its presence any more than blinders on a horse eliminate the real world.</p> <p>Those who purport to support science refuse to allow teaching of contradictory statistics -- the very essence of</p>	NA/-	See Rationale 2.

		<p>science. Something is bass ackwards when students who thirst for knowledge but are young and so tend to see everything in sharp contrast are having their curriculum determined and taught by adults who should be able to see nuances due to life experiences and yet are unreceptive to knowledge that does not fit into their vision or those with similar vision who they defer to for expertise.</p> <p>I have added another attachment (in addition to the other four) of an article by two renowned physicists who question the now common idea that physics should be based solely on math in order to show that excellent scientists must always be open to question even the most presently accepted theory.</p> <p>My background is scientific. I am a retired periodontist living in Charleston WV. I received my BA (no BS was offered at this university) with biology honors (also with courses in geology and physics) in 1970 at Queens College, my DDS at SUNY at Buffalo (a school with a heavy emphasis on dental research) in 1974, had 2 years in the Air Force as a general dentist, received my certificate in periodontics (with original research) at University of Missouri at Kansas City in 1976, was in the private practice of periodontics until 2005 (from 1980 in Charleston), and was a clinical assistant professor at WVU for most of that time.</p> <p>I suggest a quick way to rate those who try to influence your decision would be to eliminate all those who talk about scientific consensus (science fosters independent and not group thinking), those who demean people as flat-earthers (the people who believed that the earth was flat were in the unquestioning majority) or cite the Scopes monkey trial to show that people don't believe in evolution (evolution actually lost in the trial), cite the "statistic" that</p>		
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		<p>97% of scientists agree with the theory of human caused climate change (I have attached an article that describes the methodology to refute this oft cited article), or who do not cite any articles to support their position but instead just use the term "peer reviewed." Without an actual in depth discussion of the article this term is meaningless. For this reason, the only people who should be appearing in front of your board should be scientists on all sides able to cite the literature about climate science, as is also true for all the sciences.</p> <p>There are hundreds, and probably thousands, of articles that question whether there is global warming and whether there is man-made climate change.</p> <p>I have attached four representative articles for your review. The first is by the famous author Michael Crichton and discusses the previous consensus sciences of eugenics and vernalization. The second is an interview with Freeman Dyson, the physicist who took over Albert Einstein's position at Princeton, who is a strong skeptic of the true believers. The third is by Roy Spencer, Ph.D., a renowned climatologist whose main thrust is satellite data, who shows the failure of all the computer climate models. The fourth is a refutation of the claim of the article that states there is 97% agreement by scientists that humans are responsible for climate change.</p> <p>In addition, below is a link to the webpage that is a list of over 31,487 scientists who disagree with human caused climate change. This site no longer takes names, but please note the original signatory is Edward Teller (no slouch) and that there are many PhD's from West Virginia. http://www.petitionproject.org/</p>		
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		<p>If you need further information to support my position that science should always involve open discussion and debate, please let me know. Our children are our future and if we do not foster critical thinking then our future is bleak. By not allowing scientific theories to be questioned shows that something other than science is involved. I leave it up to you to decide the motivation, and whether this should be how we bring up and educate our children.</p> <p>ATTACHMENT</p>		
02-02	Melissa Menefee Charleston WV	Students have a right to be taught accurate information about the causes and consequences of climate change, so they can help develop solutions to the biggest global challenge their generation will face.	N/+	
02-02	Marilyn Monahan Mom Monahan/Peterman Family Charleston WV	<p>We must ensure our kids learn climate science and solutions in school.</p> <p>In the future, please do not approve standards for K-12 students that deny the scientific consensus on climate change.</p> <p>Students have a right to be taught accurate information about the causes and consequences of climate change, so they can help develop solutions to the biggest global challenge their generation will face.</p> <p>I hope you will refuse to consider any Science Standards that deny or censor the scientific consensus on human caused climate change.</p> <p>If we want our children to have a healthy future, we need climate solutions now.</p> <p>Our kids will suffer the greatest impacts from climate change, and they must have the science education they'll need to develop and innovate solutions.</p>	N/+	

		<p>Please adopt Next Generation Science Standards (NGSS) -- comprehensive, research-based, world-class science that includes climate education, without corrupting with political ideology.</p> <p>Please do not allow science and other educational standards to be determined by individual bias, rather than upon the research-based, peer-reviewed recommendations of credentialed educators.</p>		
02-02	<p>Staci Leech-Cornell 21st CCLC Director/Manager for Explore & Soar The Clay Center Charleston WV</p>	<p>Students have a right to be taught accurate information about the causes and consequences of climate change, so they can help develop solutions to the biggest global challenge their generation will face.</p>	N/+	
02-02	<p>Amy Weintraub Charleston WV</p>	<p>Dear Board Members, I implore you to adopt Next Generation Science Standards (NGSS) as they were originally intended by the authors and by your stakeholder group. That is, that they remain comprehensive, research-based, and grounded in world-class science that includes climate education. Please no political ideology imposed on these standards! My children (Grades 7 and 10) will be among those coping with climate change as adults. Please arm them and their fellow students with the science education they'll need to develop and innovate solutions. Thank you very much! Amy Weintraub</p>	N/+	
02-02	<p>George Boggs 2 Lazy Ridge Rd Elkview, WV 25071-8007</p> <p>Mark Korman RR 1 Box 250 Alderson, WV 24910-9383</p> <p>Jenni Kovich 50 Dud Bennett Rd Leon, WV 25123-9481</p>	<p>Support accurate climate science in WV education</p> <p>I am writing in support of Next Generation Science Standards in West Virginia K-12 education. In particular, I support the standards as-written on teaching climate science. The science is clear on climate change and human impacts on warming.</p> <p>Climate change is impacting communities in West Virginia, and our students deserve to learn about it in school.</p>	N/+	

	Rita Lewis 65 Grannies Crk Newton, WV 25266-9613			
02-02	Len Srigley Truthseeker Great White North	<p>In favor of a balanced climate curriculum Science must invite all points of view to the table. It is only from examining confirming instances for a theory contrasted with the cognitive dissonance of facts that don't fit the prevailing theory that truth can be distilled. That is the history of truth.</p> <p><u>Delusion</u>: a belief held with strong conviction despite superior evidence to the contrary.</p> <p>People are learning that:</p> <ol style="list-style-type: none"> 1. There is <u>no hot spot</u> despite the increasing concentration of CO2 in the atmosphere. Here is <u>another paper</u> that reaches the same conclusion. They keep <u>piling up</u>. Is it <u>hiding</u>? 2. <u>World temperatures</u> have been flat for at least the last <u>16 years</u> despite the rapid rise in CO2 atmospheric concentration since the turn of the last century. Consensus is <u>lacking</u>. 3. <u>Extreme weather</u> is <u>not</u> getting <u>worse</u> despite the rapid rise in CO2 atmospheric concentration since the turn of the last century. Sandy was <u>not</u> due to AGW. 4. <u>Sea level rise</u> (SLR) is <u>not</u> accelerating despite the rapid rise in CO2 atmospheric concentration since the turn of the last century. 5. <u>Water vapor</u> is <u>not</u> increasing in the atmosphere despite the rapid rise in CO2 atmospheric concentration since the turn of the last century. 6. US has been <u>cooling</u> for the last 15 years despite the rapid rise in <u>CO2</u> atmospheric concentration since the turn of the last century. Kinda takes the 	NA/-	See Rationale 2.

		<p>GLOBAL outta GLOBAL warming don't it? Percentage of <u>hot days</u> are on the decrease in the US.</p> <p>7. <u>Himalayan glaciers expanding contrary</u> to prediction and despite the rapid rise in CO2 atmospheric concentration since the turn of the last century.</p> <p>8. The <u>melting</u> Arctic? <u>Greenland</u> is gaining ice mass. We have heard it all <u>before</u>. We are still here and still waiting for the <u>disastrous rise</u> in sea levels despite the rapid rise in CO2 atmospheric concentration since the turn of the last century.</p> <p>9. <u>Antarctica is gaining</u> ice mass. <u>Antarctica is cooling</u> despite the rapid rise in CO2 atmospheric concentration since the turn of the last century.</p> <p>10. As the world warms <u>LWIR increases</u> at the <u>top of the atmosphere</u>. It is supposed to be trapped by increased CO2.</p> <p>11. <u>IPCC Global Climate Models (GCMs) can't</u> predict <u>squat</u> despite the rapid rise in CO2 atmospheric concentration since the turn of the last century. <u>Some</u> warmists are beginning to recognize this. Here is the <u>latest</u>.</p> <p><u>Plants</u> grow better, stronger, faster <u>because</u> of the increasing concentration of CO2 in the atmosphere.</p> <p>The only voice that counts in science is that of Mother Nature and she is saying loud and clear that <u>CO2</u> does not have much if anything to do with climate change. After all, if you have <u>extreme weather</u> in times of lower CO2 concentration and <u>bad storms</u> in times of higher CO2 atmospheric concentration then isn't the correct conclusion that <u>CO2</u> has nought to do with it?</p> <p>People are learning that <u>CO2</u> has nothing to do with the temperature or the climate.</p>		
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		<p>The evidence mounts as a <u>new study</u> shows that tropical storms have decreased in frequency since 1872. Weather was more <u>variable</u> and extreme in the past.</p> <p>Did you realize that <u>deaths</u> due to severe weather trauma are way down because of our early warning systems? Isn't that great?</p> <p>If we are a warming world then why was <u>snow cover</u> at a <u>record level</u> in December 2012? As the world warms are we not supposed to see <u>less snow</u> and more rain in the winter? Why are 2012 winter temperatures so <u>cold</u> in a warming world? <i>4 of the top 5 snowiest years for the northern hemisphere have occurred since 2007/08.</i></p> <p>And the polar bears? They are <u>thriving</u>.</p> <p>People are <u>catching on</u> and <u>more</u> and <u>more scientists</u> are <u>speaking out</u> or <u>recanting</u> on previously accepted <u>CAGW beliefs</u>.</p> <p>To the chagrin of climate change alarmists Mother Nature is an AGW denier.</p> <p>Shouldn't students have an opportunity to consider the data that contradicts the "It's real, it's us, scientists agree" climate alarmist meme?</p> <p>The background music for climate alarmism is Donna Summer's "Who Do You Think You're foolin" and it is GETTING LOUDER.</p>		
02-02	chland	Climate Science Education Should Include Science Not Just Climate Speculation From "Grey Literature" Claiming CO2 Primary Climate Control Knob	NA/-	See Rationale 2.

		<p>Education should be about the facts not speculation proven false by reality. The reality is despite the rise in CO2 there has been an 18 plus year pause in Global Warming which is the exact opposite of what the climate models predicted. Moreover, here are hundreds of peer reviewed and scientific papers in science journals that point to the fact that CO2 is NOT the major control knob of climate change that the below three are articles are pretty representative of. Other papers point to the fact that the past was warmer than today.</p> <p>Below are two recent published articles that shows that the Sun Is the "Climate Pacemaker" aka dominant control knob of earth's climate.</p> <p>http://www.sciencedirect.com/science/article/pii/S0375960114012201</p> <p>http://www.sciencedirect.com/science/article/pii/S0375960114012213</p> <p>Ref: http://www.reportingclimatescience.com/news-stories/article/no-el-nino-until-november-2015-predict-physicists.html</p> <p>Oh and here is another paper that lowers the Climate Sensitivity of CO2 used by the IPCC to claim CO2 has a major impact on Climate.</p> <p>http://link.springer.com/article/10.1007/s00382-014-2342-y</p> <p>Moreover the so called "Gold Standard" of Climatology the IPCC uses NON-PEERED reviewed literature which they call "gray literature" as a foundation for their Catastrophic Climate Change Theory.</p> <p>Speech by Rajendra K. Pachauri – IPCC</p>		
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		<p>“Most of the Committee’s recommendations can be implemented during the fifth assessment process and should be considered at the upcoming Plenary. These include recommendations to strengthen, modify, or enforce IPCC procedures, including the treatment of gray literature, the full range of views, uncertainty, and the review process. PDF – IPCC</p> <p>New Scientist – 26 June 2012 Climate panel adopts controversial ‘grey’ evidence</p> <p>http://www.newscientist.com/article/dn21940-climate-panel-adopts-controversial-grey-evidence.html#.UxihIpx9CHQ</p> <p>Below are some other references showing the past was warmer than the present.</p> <ol style="list-style-type: none"> 1. Brian Fagan, <i>The Little Ice Age: How Climate Made History 1300-1850</i> (Basic Books, New York: 2000), 17. 2. <i>Ibid.</i>, 17-18. 3. <i>Ibid.</i>, 21. 4. <i>Ibid.</i>, 7-9. 5. William J. D'Andrea, Yongsong Huang, Sherilyn C. Fritz, & N. John Anderson, "Abrupt Holocene climate change as an important factor for human migration in West Greenland", <i>Proceedings of the National Academy of Sciences</i>, 108:24 (14 June 2011), 9765-69; reported in "Climate played a big role in Vikings' disappearance from Greenland", <i>Science News</i>, 30 May 2011 <<http://www.esciencenews.com>>. 6. Dale Mackenzie Brown, "The Fate of Greenland's Vikings", <i>Archaeology</i>, 28 February 2000. See also Terese Brasen, "The Viking farm under the sand in Greenland" (2001) <<www.freerepublic.com>>; & 		
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		<p>"Story of Viking Colonies' Icy 'Pompeii' Unfolds from Ancient Greenland Farm", <i>New York Times</i>, 8 May 2001.</p> <p>7. "Times Atlas 'wrong' on Greenland ice", BBC News, 19 September 2011 <<www.bbc.co.uk>>.</p> <p>8. Emily V. Thornbury, "Aelfric's Zoology", <i>Neophilologus</i> (2008) 92:142-3.</p> <p>9. John Steane, <i>The Archaeology of Medieval Britain and Wales</i> (University of Georgia Press, Athens GA: 1985), 174.</p> <p>10. Wolfgang Behringer, <i>A Cultural History of Climate</i> (Polity Press, Cambridge: 2010), 76; & Christian Pfister, Rolf Weingartner & Jürg Luterbacher, "Hydrological winter droughts over the last 450 years in the Upper Rhine basin: a methodological approach", <i>Hydrological Sciences-Journal-des Sciences Hydrologiques, Special issue: Historical Hydrology</i> 51(5) October 2006, 973.</p> <p>11. Cf. note 58 above.</p> <p>12. Brian Fagan, <i>The Long Summer: How Climate Changed Civilization</i> (Basic Books, New York: 2004), 213-228.</p> <p>13. <i>Ibid.</i>, 238-46.</p> <p>14. Bjorn Lomborg, "Bootleggers hijack climate change debate", <i>The Australian</i>, 22 July 2011.</p> <p>15. Carter, <i>Climate: The Counter Consensus</i>, 245-46; & Robert M. Carter, "Climate Change in Natural Context" (typescript, n.d.), 4-5.</p> <p>16. <i>Dimmock v Secretary of State for Education and Skills</i> [2007] EWHC 2288 (Admin). The court held that there was insufficient evidence to support Gore's claims that human-induced climate change had caused the disappearance of snow on Mt Kilimanjaro, the drying up of Lake Chad, Hurricane Katrina, and the bleaching of coral reefs. His claim that global warming will shut down the Ocean Conveyor in the future was</p>		
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		<p>found "very unlikely". His claim that it will cause all the ice of Greenland to melt and sea levels to rise by seven metres in the near future was found to be "distinctly alarmist" and "not in line with the scientific consensus" (because it would take millennia for Greenland's ice to melt and release that much water). Graphs Gore uses in the film to show an exact fit between rising CO2 and rising temperatures were found "not [to] establish what Mr Gore asserts". Finally, the court held that there was no evidence to support Gore's claims that human-induced global warming had forced the evacuation of Pacific nations to New Zealand, or caused polar bears to drown.</p> <p>17.</p> <p>ATTACHMENTS</p>		
02-02	Theresa Schlamowitz Reading, Pennsylvania	science curriculum in favor of a balanced curriculum	NA/o	See Rationale 3.
02-02	Larry Hogan	<p>Science in the classroom</p> <p>Science involves a method of examining ALL the data. Climate is always evolving. All the data must be made available...politics should never be allowed to control what may be learned.</p> <p>The global warming notion has been foisted on the nation to weaken us. Our students will need all the truth (data) to survive.</p> <p>Place no political limits on science.</p>	NA/-	See Rationale 2.
02-02	Earl Hirst Wyoming Mi.	<p>Real climate</p> <p>Please see that the students in WVA. get balanced studies regarding our climate and the supposed climate warming and change.</p> <p>I know that in the last 17 years the climate warming was not as projected by big government trying to impose control over the state issues. Last year was not the warmest ever and we are in a period decline in temp. Sure the</p>	NA/-	See Rationale 2.

		climate changes but I was raised in the state Of Wyoming and it was the climte cycled about every 7 yrs. No body ran around yelling the sky is falling we dealt with it and sur as goodness it would all ways come back to "normal". So please teach the kids responceible science not big govt. nor big buisness science.		
02-02	Bonni	<p>Facts about Climate changes Don't filter the information to kids.. They are the future leaders and it's their country also.</p> <p>This is America. Stop trying to dictate what they learn and from where. With information available today to children why not let them use it.</p> <p>Mother, Grand mother and Great Grand mother..</p> <p>I don't want my kids or their kids brainwashed for the sake of politics!</p>	N/o	
02-02	Judith Brickman CRS Bay Sothebys International Realty Danville, CA 94526	<p>Science Common Core is a great mistake our government is making. Science is a really important subject. I have a daughter who is scientifically into Science. She has worked for Genetech and Glaxo and can always get a great job with her background.</p>	N/-	
02-02	Julien Dufresne	<p>Man made climate change in our schools. With regard to the School Boards upcoming decision with respect to curriculum in West Virginia schools, I would like to voice my opinion in favor of the children being exposed to <u>ALL</u> scientific research data. Data that does not comport that of groups who have a financial stake in the perpetuation of man made climate change should necessarily be included in the students curriculum to ensure the students are availed of all information with which to form lucid, thoughtful, opinions on the topic.</p>	NA/-	See Rationale 2.

		Balanced informative curriculum would seem to be the fair, honest, platform all school children should be exposed to.		
02-02	Janice Thompson	<p>Climate</p> <p>I am not a scientist but I have seen our weather go from bad to worse.</p> <p>But I have noticed:</p> <p>Our seasons aren't as long or as effective for what they need to do. Winters are warm one day and cold the next, not enough to control the insect populations as it once did. Even though the polar caps are melting and raising the oceans depths, we are running out of fresh water. Our natural evaporation system cannot keep up the the rising demand. Purification is a definite problem too!</p> <p>The growing seasons have changed too much too. Soon there may not be enough food because crops don't grow fast enough.</p> <p>GMOs and Fracking are contributing to this problem too. We need to change our behaviors. But how?</p>	N/+	
02-02	Tod Bartholomew Wayne, MI	I'm an interested conservative who wants there to be a balanced approach to the teaching of "climate change". It shouldn't be just a given that these environmental predictions are the "truth".	N/o	See Rationale 3.
02-02	Robert Nichols BA Mathematics BS Electrical Engineering	<p>Comment Re the Science teaching in schools</p> <p>I believe that education should be arranged to teach as fact ONLY those things that have been definitely proven to be fact. E.g. the earth rotates around the sun, not otherwise. Where facts are under dispute the points of view should be presented with data to back up the claims and stress the view that is nearest to proven fact. Example: Evolution has not been proven to be facts but there are strong data to believe it is not true. The student should be exposed to evolution only as another view held by some.. This goes for the problem her being climate. Most, if not all, data proves the view that climate changes due to natural cycles because we have data to show cycles</p>	NA/-	See Rationale 2.

		<p>over hundred of not thousands of years but we have little or no proof that human activities have any appreciable effect on these cycles.</p> <p>The process of education should be a process of teaching the proven and exposure to the other views as just that: other unproven views.</p>		
02-02	Mary Georgopulos former School Business Administrator	<p>Common core science curriculum</p> <p>I am writing today as an opponent of Common Core in a general sense, but I wish to request that you take into consideration my views on global warming as I know that the climate change folks will be applying pressure to accept their theory as fact. Since we only have a little over 100 years of recorded daily temperature data and scientists on both sides of the aisle have not concluded any tangible facts about global warming and carbon footprint perils, I respectfully take the position that there is no way to institute a solid science curriculum that adheres absolutely to these theories. I have read both theories of global warming and global cooling; that the lack of volcanic activity has actually been detrimental to the ozone layer and that coal burning is actually helping to replace to lack of volcanic matter in the air. Given recent cooling temperatures across the globe, the global warming enthusiasts have now changed their tune to "climate change." Since there is no clear consensus in the science community about what is going on with the weather, I hope that you will consider the facts and state those in the curriculum and CLEARLY state the global warming and/or cooling as THEORIES.</p>	NA/-	See Rationale 2.
02-02	Ben Zimmerman	<p>Balanced science curriculum</p> <p>I urge you to do what is best for our country and children who are in school to learn. Teach the truths that are time proven which reflect facts and stop siding with the climate change propaganda. This manmade climate theory is nothing more than a political means to govern our once free and brave country by the untruths of socialist who</p>	NA/-	See Rationale 2.

		would enslave our citizens by regulating everything we do. If you really need to side with something, then at least side with the truth which keeps our country free or else we shall soon be enslaved by government to be used by them at their will.		
02-02	Marty Koval Roger Harder Susan Legere Mb Broderick Thomas Kremser Melissa McCool Selah, WA 98942 c.condon boraborabob@xxxx.xxx Marcella Porter tlw398@xxxx.xxx jean Mark Grimm mgrimm@xxxx.xxx caf330@xxxx.xxx Linda L. Beltz-Martin Dixon, MO.	Protect students' rights to all the facts about the climate The Board of Education should ensure that its science standards permit students to examine and learn from all the data and analysis about global warming. Must students be made ignorant of scientific data which shows that over the last 18 years climate computer models have consistently projected a warmer world than scientific observations record? Global warming has not occurred as projected during the entire lifetime of today's school children. Should the actual recorded data of world temperature, sea levels, storms, droughts, floods and all the rest be banned from our classrooms? Is comparing this data to the pronouncements of highly funded global warming pressure groups heresy? Claims of an overwhelming scientific global warming consensus have been repeatedly and thoroughly debunked. The discussion is far from over. The true mind of science remains open to new data and alternative explanations. Whether and how much of the approximately 1/2 degree C of warming which occurred in the latter half of the 20th century is due to human industry has not been conclusively established. Neither have any of the incredibly expensive "solutions" proposed to address any global warming been shown to be meaningfully effective or worth their tremendous cost.	NA/-	See Rationale 2.

		The Board owes every child an open-minded education free of indoctrination.		
02-02	J. Ferrell	<p>Balanced Climate Curriculum</p> <p>Regarding a WELL ROUNDED education based on substantiated FACTS....</p> <p>Is it heresy for science students to see the observed global temperature data which shows that climate computer models have called for a warmer world than measurements show since last century? How about that weather extremes are historically normal and sea level continues to rise at only 3 mm per year? Must they be shielded from any data inconvenient to the global warming narrative?</p> <p>The true mind of science never stops examining the facts and fears no data, no matter how inconvenient it may be.</p>	NA/-	See Rationale 2.
02-02	Richard G. Nelson	<p>Allow me to disprove one item regarding the melting ice will raise the oceans. I challenge you to take a large glass, fill it with ice cube and add water. Allow the ice to melt. Better put the glass in a bowl to catch the overflow. What, no overflow? The water in the glass is lower? Isn't that a surprise? Point: Ice has more volume than water, due to being frozen water. Ice bergs are larger UNDER the water than is seen ABOVE the water, ergo the waters in the oceans would be lower, not higher, even if climate change or global warming existed.</p>	NA/-	See Rationale 2.
02-02	Joshua Bales	<p>Mad as hell!!!</p> <p>All forms of education should be bias. All information, "facts" and thoughts should be available and discussed. All information, reports and stats from all available resources should be on the table. "Facts"are mostly no more than opinion. So all opinions should be available. Shame on "Common Core".</p>	N/-	
02-02	Janet Shelton Rio Rancho, New Mexico	<p>Honest Science for schools to teach our children and grandchildren</p> <p>We need the truth to be taught in our schools. We don't want our children to be dummed down with the lefts lies. Bill Gates didn't get where he is by being dummbed</p>	N/-	

		down when he attended schools. (It's a sad day when I found out he and his wife are behind these education lies.) Fight for the truth everyday; we pay for this with our tax dollars and haven't even been consulted about how this money is spent. No wonder so many "wise" people are either homeschooling their children or pulling them out of public schools and paying more for private school educations.		
02-02	Debbie Warnock	balanced climate I just want you to know that I am in favor of science promoting the truth and not someone's agenda. I used to think that the classroom was a place to teach people to think. That meant that people asked hard questions and defended their views in good open debate with facts behind them. Now, it seems that if you are not politically correct, you are not allowed to challenge anything. More power to anyone who promotes seeking the truth.	N/o	See Rationale 3.
02-02	Claire Reiss	Education is to teach children how to think, not to be spoon feed into idiots who know only how to follow without, first, putting on a Thinking Cap! If you were educated as you are allowing how the children should be taught by using the Common Core now, you wouldn't be who you are today! You would be as such, only common, value as a person without whose individualities. The State would be in charge of YOUR FREE MIND from the womb to the tomb.	N/-	
02-02	E. S. Myers	science needs to be open-ended Please allow your students to study science as it should be studied. Global warming seems like it might be a huge scam. I remember that they said the east coast would be under water by 2013! I also am old enough to remember that at one time so-called scientists said that we were entering another ice age. I like to read and study how the earth's climate has changed over thousands of years--not just during the past 150. Responsible scientists take samples of the earth's crust at various locations and report	NA/-	See Rationale 2.

		that the earth has always had changes long before there ever was an industrial revolution. Remember Greenland was not always covered with ice and north America was at one time. I do not think our computers are infallible. If they were, I would be under water right now.		
02-02	Judith Lairmore	Science You need to stay away from Common Core. America needs to go back to the way we were taught. I am totally against any form of Common Core. It is another way for the Government to take over our lives and brainwash our children.	N/-	
02-02	DAVID ZAPP	The Board of Education should ensure that its science standards permit students to examine and learn from all the data and analysis about global warming. Must students be made ignorant of scientific data which shows that over the last 18 years climate computer models have consistently projected a warmer world than scientific observations record? Global warming has not occurred as projected during the entire lifetime of today's school children. Should the actual recorded data of world temperature, sea levels, storms, droughts, floods and all the rest be banned from our classrooms? Is comparing this data to the pronouncements of highly funded global warming pressure groups heresy? Claims of an overwhelming scientific global warming consensus have been repeatedly and thoroughly debunked. The discussion is far from over. The true mind of science remains open to new data and alternative explanations. Whether and how much of the approximately 1/2 degree C of warming which occurred in the latter half of the 20th century is due to human industry has not been conclusively established. Neither have any of the incredibly expensive "solutions" proposed to address any global warming been shown to be meaningfully effective or worth their tremendous cost.	NA/-	See Rationale 3.

		The Board owes every child an open-minded education free of indoctrination.		
02-02	Lois Rabalais	Teaching of Science Children need to hear and read all of the data and facts in order to draw scientific conclusions, not just partial information. As a former 4th grade teacher and mother, I would not want to deprive my student of any information. Please consider this in your choosing curriculum for West Virginia.	N/o	
02-02	William M. Slater B. S. Pharmacy	Balanced Science Curriculum I am not insensitive to the strong input you and your colleagues are no doubt receiving from various sources. My purpose in writing this is to encourage you to decide in the direction of a balanced science curriculum, one that looks at the pros and cons of both positions - those that affirm global warming/climate change and those that feel the data present a different picture. Progress in science is not advanced by stifling dissenting viewpoints based on philosophical or political considerations rather than on data. As a point of general information, I currently serve as Clinical Pharmacist in a Level One trauma center in Northern Illinois. I also have 28 years' experience in R&D with a major pharmaceutical company. A significant part of my duties during those years was the review and evaluation of scientific papers, research projects and clinical study results, as well as designing and conducting clinical studies.	NA/o	See Rationale 3.
02-02	Earl J. Wiesen	Common Core Attention Anything this radical Muslim Brotherhood Member, playacting as our President, try's to implement on us American's, turn everything DOWN! His only goal is to destroy America.	N/-	
02-02	Bill	Restore real science to the curriculum.	NA/-	See Rationale 2.

		<p>The global warming narrative has been shown to be nothing more than a scam to line the pockets of Al Gore and his confederates.</p> <p>Students should not be fed propaganda instead of real science. At least they should be exposed to both sides of the argument.</p>		
02-02	McHenry, Milton	<p>Climate</p> <p>According to my best knowledge the climate has been warming and cooling ever since the end of the Ice Age. Man cannot affect or control the climate of Mother Earth. One Volcano injects more gases and particles into the atmosphere in a couple of minutes than all of mankind's endeavors since the beginning of time. Tell or children the TRUTH.</p>	NA/-	See Rationale 2.
02-02	Diane Von Niederhausern	<p>Please do a balanced approach to teaching about the climate. It is coming to light that so much of the "climate change" is a normal part of this planet. It is good to show how to care for the planet without using made up climate reports to do it correctly.</p>	NA/-	See Rationale 2.
02-02	Patricia B Spade	<p>Global Warming/Climate Change</p> <p>Let's not indoctrinate our children. Instead, let's teach them to think for themselves. Give them all the data, then let them make an informed decision. This includes Intelligent Design. Our generation was given a choice, we were taught to thin for ourselves. Too many of today's children cannot think for themselves, hence the poor decisions made by way to many of them.</p> <p>Please stand for what is right, not "politically correct". What is "correct" today, might be considered wrong tomorrow.</p>	NA/-	See Rationale 2.
02-02	William Vail	<p>Weather</p> <p>I am in favor of a balanced climate curriculum. Our students need education, not indoctrination.</p>	NA/o	See Rationale 3.
02-02	soneesl@xxxxx.xxx	Scientific Teachings	NA/o	See Rationale 3.

		Scientific teachings should contain all options and variations of thought, not be slanted in any one direction. Students then should have the right to decide which ones are the truest. in other words , the <u>CURRICULUM SHOULD NOT BE SLANTED!!!!!!</u>		
02-02	Carole DeMarco	Science Curriculum since global warming still has not been proven, please do not put together curriculum which essentially convinces young students that it is a foregone conclusion. Please let the students hear all of the evidence so that they can decide for themselves what makes sense. If we can develop the young minds to think instead of us telling them what the “politically correct” answer is, then they will be enabled with the proper tools to help our future. Thank you for reading this email. Please do the right thing.	NA/-	See Rationale 2.
02-02	Dr Peter Bloemers professor emeritus of biochemistry Radboud University Nijmegen The Netherlands	curriculum Never, never, NEVER indoctrinate students. Give them different views on unsettled issues, with all the pro's and contra's. I have seen so many examples of experiments that could not be published because the prevailing theory was wrong and nobody wanted to change the paradigm. Remember that when facts contradict theories, it is not the facts that are wrong. The case of global warming is a good topic to teach young students the supremacy of facts over theories! Please, make a wise decision.	NA/-	See Rationale 2.
02-02	Robin Smith Hydroponic Developments Ltd 7 Smiths Road - Tauranga New Zealand	Climate I do believe that there is a tendency for school teachers to underestimate children's ability to choose, to sort and to evaluate the information that is being fed to them - just as most intelligent adults are able to do. Unfortunately the media, which nowadays is our predominant method of gaining day to day knowledge is pretty biased as to what 'they' want us to know. This is why it is so very important for the school to provide the full gamut of information so that at an early age your American	N/o	

		students can get into the habit of questioning all matters for themselves - this ultimately leads to a healthy, thoughtful society which our world so desperately needs. For this reason I urge you to accept the proposition that particularly, on the subject of our world that all the presently known information be made available to them - TIA		
02-02	Charles Lincoln	<p>School Science Curriculum</p> <p>I am in favor of a balanced climate curriculum.</p> <p>Is it heresy for science students to see the observed global temperature data which shows that climate computer models have called for a warmer world than measurements show since last century? How about that weather extremes are historically normal and sea level continues to rise at only 3 mm per year? Must they be shielded from any data inconvenient to the global warming narrative?</p> <p>The true mind of science never stops examining the facts and fears no data, no matter how inconvenient it may be.</p>	NA/-	See Rationale 2.
02-02	Kathryn Ubl	<p>I am a 30-yr elementary teacher in Minnesota. I need you to understand that "climate change" is embedded in Common Core textbooks. There have been school days when I had to teach it three times in one day. It was embedded in the reading lesson, the science lesson and the social studies lesson.</p> <p>I am a research librarian too. The science supporting dangerous warming is based on computer models. Garbage in = garbage out.</p> <p>Environmentalism is a religion competing directly with Christianity. Many are taken in because it seems the right thing to do. Conservation of natural resources is the right thing to do.</p> <p>This is not about conservation. It is about the rich getting richer, while the working families will be asked to pay</p>	NA/-	See Rationale 2.

		<p>increased taxes at every level to control a .01% increase in global average temperature.</p> <p>Tell me, where would you stand to determine global average temperature? How many years of these temperatures do you expect it would take to arrive at an accurate average?</p>		
02-02	cws1960	<p>False climate change</p> <p>All this is patently proven false at least open fair and balanced discussion on subject and not government "science "</p>	NA/-	See Rationale 2.
02-02	Doug Maderer}	<p>Protect students' rights to all the facts about the climate {I agree with the following comments EXACTLY! }</p> <p>The Board of Education should ensure that its science standards permit students to examine and learn from all the data and analysis about global warming.</p> <p>Must students be made ignorant of scientific data which shows that over the last 18 years climate computer models have consistently projected a warmer world than scientific observations record? Global warming has not occurred as projected during the entire lifetime of today's school children.</p> <p>Should the actual recorded data of world temperature, sea levels, storms, droughts, floods and all the rest be banned from our classrooms? Is comparing this data to the pronouncements of highly funded global warming pressure groups heresy?</p> <p>Claims of an overwhelming scientific global warming consensus have been repeatedly and thoroughly debunked. The discussion is far from over. The true mind of science remains open to new data and alternative explanations. Whether and how much of the approximately 1/2 degree C of warming which occurred in the latter half of the 20th century is due to human industry has not been conclusively established. Neither have any of the incredibly expensive "solutions" proposed to address any global warming been</p>	NA/-	See Rationale 2.

		<p>shown to be meaningfully effective or worth their tremendous cost.</p> <p>The Board owes every child an open-minded education free of indoctrination.</p>		
02-02	<p>James Macdonald, MS MIT, former chief meteorologist for Travelers Research Center Weather Service. Also member of CT Climate Realists.</p> <p>South Windsor, CT</p>	<p>Teaching kids about our climate----no climate change</p> <p>Anyone who takes the time to look at the data and read the graphs would surely know that global warming is not happening and that the climate models are useless.</p> <p>After getting a masters degree from MIT, I have been a meteorologist for 65 years, retiring as chief forecaster for the Travelers Research Center Weather Service and have been studying global warming/climate change for the past 25 years.</p> <p>Climate change, by the way, as illustrated by the several ice ages in the last half million years, is all about temperature. They want you to think it's something different, but if there is no temperature change, there is no climate change. World temperatures have been flat on average for the past 18 years! In the last 10,000 years following the last ice age temperatures have only wiggled up and down a couple of degrees. In the last 100 years temperatures have only risen 0.6 of a degree C. Temperatures in the Medieval warm period around 900 and AD were warmer than today without any influence by man.</p> <p>Every time we have a storm these days someone yells climate change. I have been on this earth 84 years and have seen all kinds of weather and storms starting with the great New England hurricane that took 600 lives, followed by several other major hurricanes in the 1950's. Major snowstorms, not counting the 1888 blizzard, occurred in 1947, 1961 and the blizzard of 1978 along with storm IGOR that caused the Hartford Civic Center to collapse. In the United States winter temperatures have been cooling and snowfall has been increasing for the past 20 years, more indicative of global cooling than warming.</p>	NA/-	See Rationale 2.

		<p>Historically, warm periods between ice ages last about 10,000 years, about the same length of the present warm period, indicating that we are nearing the next ice age. Now there is something to worry about.</p> <p>If global warming is not a hoax, it certainly is a grand illusion . The climate models, based on the theory of global warming, are failing to stay within the 95% margin of error, meaning that the theory is deficient if not outright wrong. In spite of the recent announcement that 2014 was the warmest year, NASA was only 38% confident that it was by the slimmest of margins, 0.04 of a degree. How do you measure that? They have since walked back that claim, making the original statement overzealous if not fraudulent. The trend in temperatures has remained essentially flat for the last 18 years. Furthermore the more comprehensive satellite temperature measurements show that 2014 was far from the warmest.</p> <p>http://blog.heartland.org/wp-content/uploads/2015/01/Monckton-Figure-3.jpg</p> <p>For a comparison between this and the models, see- http://icecap.us/images/uploads/TWC3.png</p> <p>Other scary predictions based on the models are equally wrong.</p> <p><i>Ocean levels---</i>James Hansen's 1986 prediction of a 30 ft. rise in sea level, swamping Wall Street, turned out to be 2 inches! Sea levels continue to crawl up 2 millimeters per year as they have for centuries since the ice age.</p> <p><i>Ice caps are melting---</i>, after some melting of Arctic ice, it is now on the increase. World ice at near record levels.</p> <p><i>What about carbon dioxide (CO2)?</i> A colorless and odorless gas representing .04% of the atmosphere is increasing , but has already absorbed/depleted most of the available infrared radiation emanating from the Earth in the</p>		
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		<p>narrow band affected, so little more warming can take place. CO2 is necessary for plants to live (taking in CO2 and exhaling Oxygen). Conversely, humans take in oxygen and exhale CO2. Higher levels of CO2 cause plants to grow faster—producing food faster-- which is necessary for an expanding world population. The word “carbon” is used to conjure up visions of soot which CO2 is not. Why do you suppose they try to confuse us?</p> <p><i>Don't 97% of scientists agree that man is causing global warming?</i> A purely made up number by pro-warming people using questionable methods. A real petition of 31,000 scientists opposed the man-made global warming scenario and the Kyoto protocol. Their names are available.</p> <p>So instead of wasting 22 billion dollars a year by the U.S. government to promote global warming, they should suspend all the grants to scientists and institutions and see how many still agree.</p>		
02-02	Cheryl Mick	<p>balanced climate curriculum</p> <p>I am in favor of a balanced climate curriculum.</p>	NA/o	See Rationale 3.
02-02	Billy Griffin	<p>Climate change</p> <p>Please do not indoctrinate our children into believing the global warming side without giving them a fair chance at hearing both side of the argument.</p>	NA/-	See Rationale 2.
02-02	Shirley Pooler	<p>Balanced Climate Curriculum</p> <p>To better reflect the full scientific discussion on climate, students should be exposed to all of the scientific data and analysis on climate, not limited to what warming pressure groups want them to see. That is indoctrination. They need to hear all of the facts to make their own decision. I favor balanced climate curriculum.</p>	NA/o	See Rationale 3.
02-02	<p>Patty Engle</p> <p>6621 Black Mill Rd</p> <p>Albany IN 47320</p>	<p>full science information If we want our children to learn to think for themselves, we must allow them to have all the information instead of politically correct information. That way they can decide to become entrapenures and be a profit to the state instead of begging off the state.</p>	NA/o	See Rationale 3.

02-02	Edward R. Tegland Practicing Geophysicist	Science should be an even balance of available data It is my belief that science at every level should present the historic record as well as recent data. The difference between "model projections" ,"hard" and "soft data". Students should be allowed to clearly understand what the data mean.	NA/-	See Rationale 2.
02-02	william Ballard	Communist Science Core Please see to it that the children in your state are taught a balanced climate curriculum rather than the incorrect climate model pushed by poorly educated environmentalists. Their attempt to indoctrinate the youth with their lies is pathetic and West Virginia should not be part of it.	NA/-	See Rationale 2.
02-02	Darryl Stubblefield	The Question of Knowledge Whether it be in a Court Room or a Class Room, ALL Information must be presented for a proper Opinion or Decision to be reached.	A/o	Rationale 4: The policy introduction ensures students will develop skills to acknowledge and distinguish claim(s) from alternate or opposing claims, support arguments with evidence, and communicate about science related topics/issues in a knowledgeable, clear, and objective manner.
02-02	Roy W. Rising Valley Village, CA	I strongly support your efforts to obtain a balanced curriculum in scientific matters. I case you did not know, NASA tells us that about 95% of "greenhouse gases" is water vapor! Only about 3.6% is CO2. How can changing this small contributor affect anything except the economy?	NA/o	See Rationale 3.
02-02	RichB	The Board of Education should ensure that its science standards permit students to examine and learn from all the data and analysis about global warming. Must students be made ignorant of scientific data which shows that over the last 18 years climate computer models	NA/-	See Rationale 2.

		<p>have consistently projected a warmer world than scientific observations record? Global warming has not occurred as projected during the entire lifetime of today's school children.</p> <p>Should the actual recorded data of world temperature, sea levels, storms, droughts, floods and all the rest be banned from our classrooms? Is comparing this data to the pronouncements of highly funded global warming pressure groups heresy?</p> <p>Claims of an overwhelming scientific global warming consensus have been repeatedly and thoroughly debunked.</p> <p>The discussion is far from over. The true mind of science remains open to new data and alternative explanations. Whether and how much of the approximately 1/2 degree C of warming which occurred in the latter half of the 20th century is due to human industry has not been conclusively established. Neither have any of the incredibly expensive "solutions" proposed to address any global warming been shown to be meaningfully effective or worth their tremendous cost.</p> <p>The Board owes every child an open-minded education free of indoctrination.</p>		
02-02	Susan Ivison	<p>Global warming</p> <p>Our students need to get the whole picture of global warming. There is scientific data for both sides and it needs to be covered in your curriculum!</p>	NA/-	See Rationale 3.
02-02	Sharon Bauerle PO Box 207 Maybee, MI 48159	<p>I sincerely hope that you will give serious thought to providing a balanced climate curriculum for your students. I know that special interest groups seem to be in control, but whatever happened to common sense. Of course, both sides of the issues should be presented without</p>	NA/o	See Rationale 3.

		bias. Otherwise, how will the students learn to reason through problems for themselves?		
02-02	Chryss C. Guiler	<p>Regarding the Revision of Science Teaching Standards I have been reading about the West Virginia Board of Education review of the state's Science Teaching Standards. I hope the Board will take into consideration the idea that children should be taught both sides of the "climate change" issue.</p> <p>Whether or not one is a proponent of anthropomorphic climate change, the subject should be thoroughly debated, especially in classrooms. Children need to learn not only the science of this subject, but why debate matters in general, and thus taught to think for themselves.</p>	NA/-	See Rationale 2.
02-02	Jean O. Schmidt Belmont, NH	<p>Please make certain that the Science Education programs being taught in our schools are BALANCED. They should NOT be slanted to promote someone or a group's point of view.</p> <p>Thank you.</p>	A/o	See Rationale 4.
02-02	James L Waters 80 Deaconess Rd Concord MA	<p>I am an engineer and entrepreneur. I encourage you to present Global Warming as a subject with many views. A CO2 increase will definitely cause an increase in global temperature. I believe the temperature increase will be small and will not cause harm. Climate processes are not well understood The science is not well developed and the climate process is extremely complex Climate computer models are not well developed and cannot be trusted to give an accurate picture of the future climate. The economics of CO2 control is complex. Cutting back on CO2 addition to the atmosphere will cause a substantial reduction in standard of living</p>	NA/-	See Rationale 2.

		<p>especially for the 15% of world population that are very poor. The bad effect will be in the next 20 years.</p> <p>If there is a good effect (reduction in excessive global warming) the benefit will be 50 to 100 years in the future.</p> <p>It is immoral to reduce the standard of living of the poor today to benefit people who will enjoy a much higher standard of living 100 years in the future.</p> <p>IT IS THE EQUIVALENT OF ME ASKING MY GREAT GRANDPARENTS TO REDUCE THEIR STANDARD OF LIVING SO I CAN LIVE BETTER TODAY.</p>		
02-02	Dan Pillsbury LCMC Integrated Management System (IMS) Manager	<p>Common Core & Global Warming - Please protect students' rights to all the facts about the climate</p> <p>Please protect students' rights to all the facts about the climate</p> <p>The Board of Education should ensure that its science standards permit students to examine and learn from all the data and analysis about global warming and form their own opinions based on scientific fact, not theory, conjecture or speculation.</p> <p>Must students be made ignorant of scientific data which shows that over the last 18 years climate computer models have consistently projected a warmer world than scientific observations record? Global warming has not occurred as projected during the entire lifetime of today's school children.</p> <p>Should the actual recorded data of world temperature, sea levels, storms, droughts, floods and all the rest be banned from our classrooms? Is comparing this data to the pronouncements of highly funded global warming pressure groups heresy?</p> <p>Claims of an overwhelming scientific global warming consensus have been repeatedly and thoroughly debunked. This includes research from NASA and other scientific firms.</p>	NA/-	See Rationale 2.

		<p>The discussion is far from over. The true mind of science remains open to new data and alternative explanations. Whether and how much of the approximately 1/2 degree C of warming which occurred in the latter half of the 20th century is due to human industry has not been conclusively established. Nor has the cause or causes (sunspots, increase in water vapor from irrigation in deserts, rotation and wobble of the earth, decrease in earth's magnetic fields, increase in volcanic activity, etc.). Neither have any of the incredibly expensive "solutions" proposed to address any global warming been shown to be meaningfully effective or worth their tremendous cost.</p> <p>The Board owes every child an open-minded education free of indoctrination.</p>		
02-02	earl sawyer	<p>Climate Change Brainwashing</p> <p>The thought of brainwashing our children by trying to make them all think the exact same way is appalling in itself, but to assume YOU have the right thoughts on climate change and the causes to the point you won't even entertain the ideal that you may not be right is something else. I always thought the purpose of school was to teach the children academics in a general sense to the best of the institutions abilities, not to force your opinions onto everyone one else. Are you afraid they may grow up to be smarter than you? Or maybe you are afraid to let children try to think for themselves and make decisions based on the gathered materials at thier disposal. Why would you rob them of the chance for them to learn basic life skills while they are at a level where things could still be corrected without any permanent harm done. Either present all major sides of a particular subject or remove them all together.</p>	NA/-	See Rationale 2.
02-02	Ward Hamlin	<p>Please keep an open mind regarding climate change, and allow students to see the different opinions regarding this subject. Presenting one view only does not give an inquiring young mind the chance to develop ones own</p>	NA/-	See Rationale 2.

		<p>conclusions about this, or any other subject, be it controversial or not.</p> <p>Producing automatons with one point of view should never be the aim of conscientious educators.</p>		
02-02	Richard Spagnuolo	<p>Science in schools how all the facts about the weather (and every other science subject).</p> <p>Do NOT teach "man-made global warming" as a fact. It is only a theory, and a bad one at that!</p> <p>The weather changes on its own through the millennia; that's a fact! DON'T teach a THEORY as a fact!</p>	NA/-	See Rationale 2.
02-02	Tyson Poskochil	<p>Hello, and greetings from a Nebraska native currently residing in the Pacific Northwest. As a concerned American, I wanted to share my opinions regarding the loosely-fringed beliefs behind climate change and global warming. Since my college days in the mid- and late 1990's, I was always warned about the dangers of global warming and the devastating effects it would have if it were not halted. I remember opening a CD album booklet of one of my favorite artists of that era, where it was written, in 1989, that we only had 10 years left to save the planet, or all would be lost. Those ten years went by with nothing, then 20 years passed, and now 25. I still see no significant crisis relating to environmental catastrophes on the horizon, and it always seems as though Mother Nature, in herself, corrects things and finds ways to thrive. Moreover, the past 17 years has seen no warming in the earth's temperature, and have seen no evidence indicating any kind of human-caused disaster in the near future. Moreover, I point to other numerous facts, including:</p> <ul style="list-style-type: none"> - the US dependence on foreign oil, and oil in general, has decreased over the past 15 years, and is projected to continue to do so - other nations, including China, emit far greater 	NA/-	See Rationale 2.

		<p>proportions of harmful gasses into the atmosphere than America</p> <p>- engineering methods for oil and fossil fuel extraction have greatly improved, causing more efficient gains with less environmental impact.</p> <p>Given these and many other points, I would please ask for careful consideration when choosing a curriculum for the next generation of Americans in West Virginia. Although my higher education was disproportionately one-sided and may have been delivered with good intentions, all sides of science with sound evidence should be presented before young learners to allow them to decide, for themselves, what is fact and what is fiction. Manufactured crises, such as that regarding "climate change", only present a sense of fear and false narrative which sidetracks the minds of students and diverts them from reaching their full potential in life, as they become overly concerned, and in some cases altering their lifestyles to an unhealthy means, in an attempt to curb it. Today, more than ever, America needs strong-minded individuals to confront the numerous issues of our day, become effective leaders and examples for our great nation, and be looked upon as the epitome of excellence by others. This begins with a sound education, free of indoctrinating theories and, while still teaching to be good stewards of the land and wonderful resources we've been blessed with, provides for individual responsibility and respect for property, nature, and all life which we hold dear.</p> <p>Thank you for your careful consideration in this matter, especially one as important as this, which impacts our greatest asset - our children.</p>		
02-02	Euclides Solivan Jr.	<p>science teaching standards</p> <p>I understand that West Virginia is revising its science teaching standards to fall in line with proposed national</p>	NA/-	See Rationale 2.

		<p>standards designed to function like a “common core” for science. Global warming campaigners are using these national standards as a chance to indoctrinate school children about climate and to stifle discussion of any scientific data which does not fit the warming narrative. Why not let them decide for themselves after reviewing the empirical data?</p> <p>I would argue that it’s more important to let students be exposed to all of the scientific data and analysis on climate and then let them draw their own conclusions. They will learn more and not be limited to what “global warming” pressure groups want them to see. They shouldn’t be expected to follow someone else’s conclusions blindly. They should have the opportunity to see the actual data for themselves and then derive their own conclusions. For far too long the Global warming campaigners have tried to convince the public of global warming when the actual data does not support this conclusion.</p>		
02-02	Mrs. Priester Paula's rodneypriester	<p>Science Standards</p> <p>Please consider changing the Common Core standards to allow a more balanced view of climate change. The science is not settled in this area because of manipulation of climate data to fit a narrative, erroneous charts showing the earth's warming trend (many believe it is going through a cooling period due to sun phases) and political pressure to push an alarmist view aimed to force more taxpayer money to "fix" what humans have (supposedly) caused. Please allow both points of view to be presented in our schools. Scientists must have open minds to be unbiased in completing scientific work. Please let the children decide for themselves what is true or false.</p>	NA/-	See Rationale 2.
02-02	Tom Hoyle	<p>Climate Science</p> <p>The debate over global warming is far from over. No school should be teaching political propaganda without showing all data and evidence to allow a open debate.</p>	NA/-	See Rationale 2.

02-02	Evelyn Lawrence	Why are you trying to brainwash America's children? We need to let God and nature do their thing.	N/-	
02-02	Connie Marcantel mchinarose1948@xxxxx.xx x	Please be sure that this is not biased. This country got where it is today without all the government interference and I am afraid that this climate change criteria is to stop the growth of businesses that would provide jobs and stop the dependence on foreign oil's. It is ruining the coal industry and the government is trying to take away state lands and make them government lands to get the water rights. By controlling water and health you control a country. You as an educated person should be one of the first to see this.	NA/-	See Rationale 2.
02-02	sylvia thielen	Let's get back to reality. The stuff they are teaching today leaves our kids with little knowledge of anything! In my day we were taught the abc's and the timetables. Science was science and not what some people purported it to be. They are trying to rewrite history as to what they want it to be and not as it actually is and was! There was no passing kids to a higher grade either unless they earned it! No wonder they graduate and face the world without the basics to move forward! No wonder they don't come out to vote and are crippling our country with the lack of leadership ,erosion of our constitution,and the bill of rights! This country is unique to the rest of the world. We stand for liberty,justice,and freedom for all. We are the leader of the free world but we are rapidly becoming a third world country because we are not thinking for ourselves and many are following inept leaders like lemmings who jump over the cliff to utter destruction! We need to remind everyone that this country is based on Judeo and Christian values. That a higher power brought us here and helped us set up this republic and all it stands for! We need to reinsert "under God " in our pledge of allegiance where it belongs! Not allowing our people to carry and read bibles,etc or say prayers is against the very essence of this country. And once our kids go into military	N/-	

		the very idea of not being able to pray or open the holy book is absolutely repugnant! If it wasn't so serious it would be laughable that the religious leaders- chaplains, priests, etc.- the very people whose job it is to guide these military people are not even allowed to have religious books on their desks but must keep them out of sight! How absurd!! We are way past a reality check! All I can say is God help us!!!		
02-02	Barbara	Science curriculum As a former Principal and HS teacher for over 34 years I would beg that you avoid common core like the plague. It is important that the children are exposed objectively to all scientific facts and opposing arguments. They do not need to have subjective arguments rammed down their throats. That's not education. It's brainwashing and we need students who can think for themselves by synthesizing information and apply it. Good luck! BAP	N/-	
02-02	Frank Burkman	Science Our BASIC classes in all Schools in America should have Science, Math, English, History, Reading and Geography? Anything else are called electives and taken and offered in difference Grades if the student wants to take them. Music r Band may be a 4 year elective if student likes it. This is America, so I wish everyone would STOP trying to change us.	N/o	
02-02	Jack Ritchie Degreed Veteran	Global Warming Farce (climate change) Millions of years ago dinosaurs roamed the planet. There were numerous volcanos expelling gases plus as a result of the dinosaurs there were mountains of dinosaur poop releasing massive amounts of methane gas. These dinosaurs reigned supreme for millions of years, intelligent man has reigned only less than 10,000 years, a micro amount compared. Also dinosaurs inhabited every inch of the earth, man inhabits less.	NA/-	See Rationale 2.

		<p>In the course of earth history man is insignificant. Even effects of man are so, look at the nuclear meltdown in Russia years back, now lush vegetation and several endangered species inhabit the area were man is no longer present. Earth has an ecosystem that can reverse anything man could possibly do...including an all out nuclear war. So man could disappear from existence, but a green earth will remain.</p> <p>Climate change affected by man is garbage propaganda with the goal of increasing the wealth of a particular fanatical segment of the population and giving them control over the general population. Educators I hope are not gullible enough to fall for this con.</p>		
02-02	Dave Jennings	<p>Climate Studies</p> <p>It has come to my attention that a group of Global Warming activists are trying to force a one sided climate curriculum into your school system. Your curriculum should be balanced and discuss all of the information and facts about climate. Not just the Global Warming side - which has yet to be proven in my opinion. You really need to ask yourselves "Why is this group of Global Warmests So Intent On Forcing Their Belief System onto small children in the class room?"</p>	NA/-	See Rationale 2.
02-02	Betty Schlotter	<p>It is imperative that students be given all the facts on "global warming". It is now being called "climate change" as the title "global warming" could not be substantiated as actually happening. Guess what, there IS climate change. We know since the earth has been here, that climate does change. It does this every summer winter and fall. It also occurs in cycles and will continue to do so, forever.</p> <p>Both sides of the question must be presented. Scientist who have been recognized as authentic climate scholars' views should be presented so</p>	NA/-	See Rationale 2.

		<p>that this can be a balanced learning process rather than a lesson in indoctrination.</p> <p>This goes for textbooks that are now being revised to show changes in history books as well.</p> <p>A question: Are your student required to pass the same civic's test as new immigrants into this country are required to pass?</p>		
02-02	Herrmann Glockler	<p>Anthropogenic Global Warming</p> <p>I would like to bring to your attention the benefits of CO2 in the air:</p> <p>Please read this text, it paints an entirely different picture of the actual BENEFITS of higher CO2 in the air</p> <p>Herrmann Glockler</p> <p>Carbon Benefits Exceed Costs By Up To 500:1</p> <p>February 18, 2014 by <u>Paul Driessen and Roger Bezdek</u> <u>Comments (1)</u></p> <p><u>inShare</u></p> <p>The Environmental Protection Agency, other <u>government agencies</u>, and <u>various scientists</u> contend that fossil fuels and carbon dioxide emissions are causing dangerous global warming and climate change. They use this claim to justify repressive regulations for automobiles, coal-fired power plants, and other facilities powered by hydrocarbon energy. Because these rules are costing millions of jobs and billions of dollars, a federal Interagency Working Group (IWG) devised the “social cost of carbon” concept – which attaches arbitrary monetary values to the alleged impacts of using hydrocarbons and emitting carbon dioxide. SCC estimates represent the supposed monetized damages associated with incremental increases in “carbon pollution” in a given year.</p> <p>With little publicity, debate, or public input, in 2010, the IWG set the cost at \$22 per ton of carbon dioxide emitted. Then, in 2013 (again with little notice), it arbitrarily increased the SCC to \$36/ton, enabling agencies to proclaim massive, unacceptable damages from “carbon”</p>	NA/-	See Rationale 2.

		<p>and enormous benefits from their regulations. Recently, the Department of Energy used the \$36 formula to justify proposed standards for microwave ovens, cell phone chargers, and laptops!</p> <p>The SCC allows unelected bureaucrats to wildly amplify the alleged impacts of theoretical manmade climate disasters; exaggerate the supposed benefits of rules; minimize their costs; and ignore the value to society of the facility, activity, or product they want to regulate. That is exactly what is happening.</p> <p>Fundamental flaws in the SCC concept and process make the agencies' analyses – and proposed rulemakings – questionable, improper, and even fraudulent and illegal. A new Management Information Services, Inc. (MISI) <u>analysis examines this</u> in detail.</p> <p>1) Executive Order 12866 requires that federal agencies “assess both the costs and the benefits of the intended regulation and, recognizing that some costs and benefits are difficult to quantify, propose or adopt a regulation only upon a reasoned determination that the benefits of the intended regulation justify its costs.” (EO 12866 was issued by President Clinton in 1993.) A recent Office of Management and Budget statement notes that careful consideration of both costs <i>and</i> benefits is important in determining whether a regulation is worth implementing <i>at all</i>. Indeed, any valid and honest benefit-cost (B-C) analysis likewise requires that agencies consider <i>both the benefits and the costs</i> of carbon-based fuels and carbon dioxide emissions.</p> <p>Thus far, the EPA and other government agency analyses, press releases, and regulatory proposals have highlighted only the <i>alleged costs</i> of carbon-based fuels and their supposed effects on climate change. They have never even mentioned the many clear <i>benefits</i> associated with those fuels and emissions.</p>		
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		<p>2) EPA claims the government is “committed to updating the current estimates, as the science and economic understanding of climate change and its impacts on society improve over time.” Given the Obama Administration’s history and agenda, it is highly likely that SCC values will only increase in forthcoming updates – with literally trillions of dollars at stake.</p> <p>3) The IWG methodology for developing SCC estimates is so infinitely flexible, so devoid of any rigorous standards, that it could produce almost any estimates that any agency might desire. For example, its computer models are supposed to combine climate processes, economic growth, and feedbacks between the climate and the global economy into a single modeling framework.</p> <p>However, only limited research links climate impacts to economic damages; and much of it is speculative at best. Even the IWG admits that the exercise is subject to “<i>simplifying assumptions and judgments</i>, reflecting the various <i>modelers’ best attempts</i> to synthesize the <i>available</i> scientific and economic research characterizing these relationships.” [emphasis added] Each model uses a different approach to translate global warming into damages; transforming economic damages over time into a single value requires “<i>judgments</i>” about how to discount them, and federal officials have been highly selective in choosing which “available scientific and economic research” they will utilize. As objective outside analysts have concluded, this process is “close to useless.”</p> <p>4) The differences in the 2010 and 2013 SCC estimates are so large, and of such immense potential significance, as to raise serious questions regarding their integrity and validity – especially since, prior to 2010, the “official” government estimate for carbon costs was <i>zero</i>!</p> <p>Finally, and most importantly, the agencies hypothesize almost every conceivable carbon “cost” – to agriculture, forestry, water resources, “forced migration” of people and</p>		
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		<p>wildlife, human health and disease, coastal cities, ecosystems, and wetlands. But they <i>completely ignore</i> every one of the obvious and enormous benefits of using fossil fuels ... and of emitting carbon dioxide! Just as incredibly, they have done this in complete disregard of EO 12866 ... and the OMB ruling that careful consideration of both costs <i>and</i> benefits is important in determining whether a regulation is worth implementing <i>at all</i>. Had they followed the law and B-C rules, they would have found that:</p> <p>Hydrocarbon and carbon dioxide benefits outweigh the cost by as much as 500 to 1!</p> <p>In other words, the <i>costs</i> of EPA and other restrictions on fossil fuel use <i>exceed their benefits</i> by 50:1 (using the 2013 SCC of \$36/ton of CO₂) or even 500:1 (using the 2010 SCC of \$22/ton). The entire process is obviously detrimental to American lives, jobs, living standards, health, and welfare. Yet it is being imposed in the name of preventing highly speculative “dangerous manmade climate change.”</p> <p>The successful development and utilization of fossil fuels facilitated successive <u>industrial revolutions</u>, launched the modern world, created advanced technological societies, and enabled the high quality of life that many now take for granted. Over the past 200 years, primarily because of hydrocarbon energy, people’s health and living standards soared, global life expectancy more than doubled, human population increased eight-fold, and average incomes increased eleven-fold, economist <u>Indur Goklany calculates</u>. Comparing world GDP and CO₂ emissions over the past century shows a strong and undeniable relationship between world GDP and the CO₂ emissions from fossil fuels. In fact, the fossil fuels that provide the vast bulk of the world’s total energy needs – and from which CO₂ is an essential byproduct – are creating <i>\$60 trillion to \$70 trillion per year in world GDP!</i> That relationship will</p>		
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		<p>almost certainly continue for the foreseeable future. Today, 81% of the world's energy is from fossil fuels. For at least the next several decades, fossil fuels will continue to supply 75-80% of global energy.</p> <p>That means any reductions in United States fossil fuel use or carbon dioxide emissions will be almost imperceptible amidst <i>the world's</i> huge and rapidly increasing levels of both. In fact, the <u>World Resources Institute</u> says 59 nations are already planning to build more than 1,200 new coal-fired power plants – on top of what those nations and Germany, Poland, and other developed nations are already building.</p> <p>However, hydrocarbon use has also helped raise atmospheric concentrations from about 320 ppm carbon dioxide to nearly 400 ppm (from 0.032% of the atmosphere to 0.040%). The Obama administration (wrongly) regards this slight increase as “dangerous.” That is an erroneous, shortsighted perception that improperly ignores the enormous benefits of this increase in plant-fertilizing CO₂. Carbon dioxide truly is “<u>the gas of life</u>,” the basis of all life on Earth. It spurs plant growth and enhances agricultural productivity. Plants use it to produce the organic matter out of which they construct their tissues, which subsequently become sources of fiber, building materials and food for humans and animals.</p> <p>Carbon dioxide added to the atmosphere by humans from 1961-2011 increased global crop production by some \$3.5 trillion, plant biologist and CO₂ expert <u>Craig Idso calculates</u>. Human CO₂ emissions will likely add \$11.6 trillion in additional benefits between 2013 and 2050 – based on actual measurements of CO₂-induced plant growth and crop production, not on computer models, Idso estimates.</p> <p>Carbon dioxide benefits overwhelmingly outweigh the SCC – no matter which government reports are used. In</p>		
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		<p>fact, any estimate for “social costs of carbon” is hidden amid the statistical noise of CO2 benefits.</p> <p>Prodigious amounts of fossil fuels are required to sustain future economic growth, especially in developing countries. If the world is serious about increasing economic growth, reducing energy deprivation, and increasing or maintaining living standards, fossil fuels are absolutely essential. Their benefits far outweigh any conceivable costs, and will continue to do so for decades to come. These undeniable facts must form the foundation for energy, environmental, and regulatory policies. Otherwise, regulations will be far worse than the harms they supposedly redress.</p> <p>Paul Driessen is senior policy analyst for the Committee For A Constructive Tomorrow and author of <i>Eco-Imperialism: Green power – Black death</i>. Dr. Roger Bezdek is an internationally recognized energy analyst and President of Management Information Services, Inc., in Washington, DC.</p>		
02-02	bill	<p>Science</p> <p>I believe students should be taught all data on every subject so they can decide for themselves which leads them to think for themselves. on the issue of climate change whether human influenced or naturally occurring,students must be presented with as much data as possible without political correctness influencing their presentation. freedom from pc will support our freedom of speech.</p>	NA/o	See Rationale 3.
02-02	Gypsy	<p>Climate curriculum</p> <p>I'm in favor of a balanced climate curriculum in the schools</p>	NA/o	See Rationale 3.
02-02	Rebecca J Smith-Miles Manistique, MI 49854	<p>GLOBAL WARMING CURRICULUM FOR GRADE SCHOOL STUDENTS</p> <p>You can take a young mind and form it into anything you want. It is criminal to do so with only ONE side of the argument. Global Warming/Climate Change has been occurring since the Earth was formed; before we monitored weather changes. Is it heresy for science students to see the</p>	NA/-	See Rationale 2.

		<p>observed global temperature data which shows that climate computer models have called for a warmer world <u>than measurements show since last century</u>? How about that weather extremes are historically normal and sea level continues to rise at only 3 mm per year? <u>Must they be shielded from any data inconvenient</u> to the global warming narrative?</p> <p>The true mind of science never stops examining the facts and fears no data, no matter how inconvenient it may be. There is no more important lesson science students need to learn.</p>		
02-02	Joe D Parker	<p>Balanced Climate Curriculum!</p> <p>I am in favor of a balanced climate curriculum. Although there are some who will push for us to stress the need for politically correct concept of climate control. In fact they are saying that we are in an era of overheating. However, there is a lot of scientific data that refutes that concept. So I would recommend that you pursue a balanced approach to this data and allow the student to research and make their own decision. Take care and have a wonderful day in your overheated climate.</p>	NA/o	See Rationale 3.
02-02	Carol M. Kenney	<p>Common Core</p> <p>We don't want "Common Core".</p>	N/-	
02-02	Sam Sandlin	<p><i>I mirror the writing below, from Craig Rucker of CFACT - Committee For A Conservative Tomorrow.</i></p> <p><i>Our students should not be taught government propaganda, nor should they be taught junk science, which Global Warming certainly is. Give them the facts from both sides and let them make up their own minds.</i></p> <p><i>Sam B. Sandlin, III</i></p> <p><i>Sarepta, LA 71071</i></p> <p>The Board of Education should ensure that its science standards permit students to examine and learn from all the data and analysis about global warming.</p> <p>Must students be made ignorant of scientific data which shows that over the last 18 years climate computer models</p>	NA/-	See Rationale 2.

		<p>have consistently projected a warmer world than scientific observations record? Global warming has not occurred as projected during the entire lifetime of today's school children.</p> <p>Should the actual recorded data of world temperature, sea levels, storms, droughts, floods and all the rest be banned from our classrooms? Is comparing this data to the pronouncements of highly funded global warming pressure groups heresy?</p> <p>Claims of an overwhelming scientific global warming consensus have been repeatedly and thoroughly debunked. The discussion is far from over. The true mind of science remains open to new data and alternative explanations. Whether and how much of the approximately 1/2 degree C of warming which occurred in the latter half of the 20th century is due to human industry has not been conclusively established. Neither have any of the incredibly expensive "solutions" proposed to address any global warming been shown to be meaningfully effective or worth their tremendous cost.</p> <p>The Board owes every child an open-minded education free of indoctrination.</p>		
02-02	fdharrisson@xxxxx.xxx	<p>Science and History</p> <p>Are we to say that Barney Haralson or Leif Erickson did not exist? How did they find Newfoundland in 985 AD and settle there in 1000 AD for about 50 years? How about the camps we are finding in Greenland that were established by the Vikings before they were covered with snow and ice for a thousand years? So now we have both global warming and global cooling, all in the earths life cycle. No, we do not teach science that only fits to our agenda. That is stupid and a way to get egg in your face as the Holy Roman Catholic Church found out when they used to preach that earth was flat and the sun rotated around us, any notion otherwise was heresy punishable by excommunication or even death. In my opinion Common</p>	N/-	

		<p>Core preaching is just that, a dumbing down of knowledge and skills to fit a mass agenda by some hierarchy trying to cash in. Any and all science must be vetted and proven before it can be considered as fact, otherwise it is strictly a theory that may or may not be factual. Look at this event. As you know the Holy Scriptures have been considered impossible because of events like the Jews with Moses crossing the Red Sea. Recently divers did in fact find that crossing where the sea had to part and let the people ford across and it occurred at the Sea of Abaca wherein there lies hundreds of Egyptian chariots covered with gold leaf or coral 5775 years ago. The sea there is 400 foot deep except at the ford where an up-cropping bridge exist who's surface is about 100 feet below sea level. There is an original stone marker on the beaches where the ford exist. Miss Robin, history and science can be fun and the truth is a thousand times more interesting than fiction.</p>		
02-02	Barbara Morgan Sacramento, CA	<p>I beg of you to not dismiss the true value of reason. Please do not replace it with the new <i>Common Core</i> curriculum in the sciences or other areas of education for that matter. I pray that <i>Common Sense</i> will prevail in our schools. Not pointing a finger, I live in California, but it seems all too often lately our education system is selling out our childrens future to politcal correctness and agendas that do not favor a strong nation.</p>	N/-	
02-02	Merrilee McDonald	<p>Science It was brought to my attention that the science courses are being limited on information. To fullly learn science all the data must be taught. Otherwise much will be lost and their understanding be minimized. It seems like an easy choice to make. I hope you choose the correct one.</p>	NA/o	See Rationale 3.
02-02	Steve Hawkins	<p>Is it heresy for science students to see the observed global temperature data which shows that climate computer models have called for a warmer world than measurements show since last century? How about that weather extremes</p>	NA/-	See Rationale 2.

		<p>are historically normal and sea level continues to rise at only 3 mm per year? Must they be shielded from any data inconvenient to the global warming narrative?</p> <p>The true mind of science never stops examining the facts and fears no data, no matter how inconvenient it may be. There is no more important lesson science students need to learn.</p>		
02-02	Eddy Kishka	<p>Global warming . Please balance the curriculum on both sides of global warming.i thought science was the Study of multiple sides of an issue. Children shouldn't be subjected to one side of an argument to satisfying one group thank you. Ed k</p>	NA/o	See Rationale 3.
02-02	Charlene	<p>Yes to balanced climate teaching. Please Teach kids how to think!!! And do allow deductive reasoning</p>	NA/o	See Rationale 3.
02-02	Mariah Trepiccione	<p>Protect student's right to all available information The Board of Education should ensure that its science standards permit students to examine and learn from all the data and analysis about global warming. Must students be made ignorant of scientific data which shows that over the last 18 years climate computer models have consistently projected a warmer world than scientific observations record? Global warming has not occurred as projected during the entire lifetime of today's school children. Should the actual recorded data of world temperature, sea levels, storms, droughts, floods and all the rest be banned from our classrooms? Is comparing this data to the pronouncements of highly funded global warming pressure groups heresy? Claims of an overwhelming scientific global warming consensus have been repeatedly and thoroughly debunked. The discussion is far from over. The true mind of science remains open to new data and alternative explanations. Whether and how much of the approximately 1/2 degree C of warming which occurred in the latter half of the 20th</p>	NA/-	See Rationale 2.

		<p>century is due to human industry has not been conclusively established. Neither have any of the incredibly expensive “solutions” proposed to address any global warming been shown to be meaningfully effective or worth their tremendous cost.</p> <p>The Board owes every child an open-minded education free of indoctrination.</p>		
02-02	Claudia Pauloo	<p>CLIMATE CURRICULUM</p> <p>It is of grave concern that American youth be allowed to receive a balanced climate curriculum. I, personally, as a parent and an educated American realize that it is a special political agenda that is pushing the "Climate Warming Propaganda". The real facts and data do NOT agree with the information that is being presented. The young students are needed to be learning how to best understand truth in education not politically motivated propaganda.</p>	NA/-	See Rationale 2.
02-02	Tim Williams	<p>Balance Science for Climate Conditions</p> <p>I support a balance approach to science to freely discuss weather conditions and its cause and effect. The children of our future need to hear both sides of any equation and they should not be subjugated to agenda driven science climate change.</p>	NA/o	See Rationale 3.
02-02	pat sippola	<p>Curriculum</p> <p>Using inaccurate data to try to prove climate change is Not in the best interests of people the world over. Please consider this when making your decision.</p>	NA/-	See Rationale 2.
02-02	Donal A. Dermody, Professor Emeritus, Cornell University	I am totally in favor of a balanced approach here instead of a political one.	NA/o	See Rationale 3.
02-02	Tom Hubisz, Saugus, Ma.	<p>There seems to be so little common sense these days. In light of the push, by so many special interest groups, I ask you to spend time in deep thought. Ask yourself, should the views of any one group be taught as fact? It is best to present all of the facts and allow the individual to render an informed decision. To do otherwise is tantamount to brainwashing. I ask you to consider this</p>	NA/-	See Rationale 2.

		when deciding what curriculum to present to the children who's education is in your hands. Please do not cave to the wishes of specials interests. There science is extremely biased and, therefore, flawed.		
02-02	Samek, Ron	<p>Please look at data, not propaganda</p> <p>The Board of Education should ensure that its science standards permit students to examine and learn from all the data and analysis about global warming.</p> <p>Must students be made ignorant of scientific data which shows that over the last 18 years climate computer models have consistently projected a warmer world than scientific observations record? Global warming has not occurred as projected during the entire lifetime of today's school children.</p> <p>Should the actual recorded data of world temperature, sea levels, storms, droughts, floods and all the rest be banned from our classrooms? Is comparing this data to the pronouncements of highly funded global warming pressure groups heresy?</p> <p>Claims of an overwhelming scientific global warming consensus have been repeatedly and thoroughly debunked. The discussion is far from over. The true mind of science remains open to new data and alternative explanations.</p> <p>Whether and how much of the approximately 1/2 degree C of warming which occurred in the latter half of the 20th century is due to human industry has not been conclusively established. Neither have any of the incredibly expensive "solutions" proposed to address any global warming been shown to be meaningfully effective or worth their tremendous cost.</p> <p>The Board owes every child an open-minded education free of indoctrination.</p>	NA/-	See Rationale 2.
02-02	Art Arrowsmith Port Angeles, WA	<p>True education, NOT Indoctrination</p> <p>Herein I paste the response of CFACT, as it is so incisively explained and much better than I could. I concur whole heartedly.</p>	NA/-	See Rationale 2.

		<p>Here's what CFACT sent in:</p> <p>Subject line:</p> <p>Protect students' rights to all the facts about the climate</p> <p>Email:</p> <p>The Board of Education should ensure that its science standards permit students to examine and learn from all the data and analysis about global warming.</p> <p>Must students be made ignorant of scientific data which shows that over the last 18 years climate computer models have consistently projected a warmer world than scientific observations record? Global warming has not occurred as projected during the entire lifetime of today's school children.</p> <p>Should the actual recorded data of world temperature, sea levels, storms, droughts, floods and all the rest be banned from our classrooms? Is comparing this data to the pronouncements of highly funded global warming pressure groups heresy?</p> <p>Claims of an overwhelming scientific global warming consensus have been repeatedly and thoroughly debunked. The discussion is far from over. The true mind of science remains open to new data and alternative explanations.</p> <p>Whether and how much of the approximately 1/2 degree C of warming which occurred in the latter half of the 20th century is due to human industry has not been conclusively established. Neither have any of the incredibly expensive "solutions" proposed to address any global warming been shown to be meaningfully effective or worth their tremendous cost.</p> <p>The Board owes every child an open-minded education free of indoctrination.</p>		
02-02	John Sammons (formerly of Parkersburg, in the 60's)	<p>Please protect students' rights to <i>all</i> the facts about the climate...</p> <p>The Board of Education should ensure that its science standards permit students to examine</p>	NA/-	See Rationale 2.

		<p>and learn from all the data and analysis about global warming.</p> <p>Must students be made ignorant of scientific data which shows that over the last 18 years climate computer models have consistently projected a warmer world than scientific observations record?</p> <p>Global warming has not occurred as projected during the entire lifetime of today's school children.</p> <p>Should the actual recorded data of world temperature, sea levels, storms, droughts, floods and all the rest be banned from our classrooms? Is comparing this data to the pronouncements of highly funded global warming pressure groups heresy?</p> <p>Claims of an overwhelming scientific global warming consensus have been repeatedly and thoroughly debunked. The discussion is far from over. The true mind of science remains open to new data and alternative explanations. Whether and how much of the approximately 1/2 degree C</p> <p>of warming which occurred in the latter half of the 20th century is due to human industry has not been conclusively established. Neither have any of the incredibly expensive "solutions" proposed to address any global warming been shown to be meaningfully effective or worth their tremendous cost. The Board owes every child an open-minded education free of indoctrination.</p> <p>I hope you will keep an open mind in this ongoing debate, expose students to all the facts, and let them decide what to believe.</p>		
02-02	Leigh Haugen	<p>Global Warming / Climate Change Curriculum</p> <p>In 1999 I sold my company and spent two years on sabbatical traveling with my family. In the course of our travels we had many adventures of scuba diving, horseback riding, whitewater rafting, zip lining, hiking and lots of snow skiing. One thing I noticed was that many of our</p>	NA/-	See Rationale 2.

		<p>guides spoke to us about the environment which included the impacts of manmade Global Warming, and while on a heli-skiing trip in the Northern Canadian Rockies we saw 1st hand the marks left by several retreating glaciers.</p> <p>I made up my mind that for my love of the environment and my children's future I had to get involved and help to alert people and do whatever we could to stop Global Warming.</p> <p>However a funny thing happened on my way to activist nirvana. Not one to get involved in a cause without becoming a subject matter expert I dove into extensive research on the topic determined to gain enough knowledge to convince people to get involved. What I found was shocking. Catastrophic Anthropogenic Climate Change is simply the greatest scam in world history.</p> <p>Research into Climate Change became my hobby and unpaid part-time occupation for almost 15 years now. I can assure you that I am not paid by "Big Oil" and I know what I am talking about. I have spent thousands of hours crawling through thousands of articles from the most obscure and complex peer reviewed scientific research to the high level political speculation.</p> <p>Catastrophic Anthropogenic Climate Change is about money and power, not the environment. If successful implementing their proposed solutions to this scam these people will destroy our economy, our freedom and our future.</p> <p>There are so many nuances and complexities to this subject it is impossible to tell somebody to go read one website or one article and it will 'convince' about the validity of your position. There are two sides to every story and every single aspect of the Climate Change Scam has mountains of articles and data supporting both points of view.</p> <p>Recently I consolidated a very broad collection of research and information that I have compiled over the years which I believe forms a foundation of information capable of</p>		
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02-02	Donna Ferreri Georgetown, TX	<p>Re: Climate Change</p> <p>As an ex-teacher and also someone who worked at SERI, now NERL, our National Lab for all Alternative Energy located in Golden, CO , I find it imperative for students to learn “all” the facts about Climate Change to arrive at true scientific facts for resolving Climate Change issues. Scientific resolutions should be decided only through facts, and not tainted by Politicians, Lobbyists, Business’s/Money/Greed, mostly for personal gain. Do not handicap students by picking and choosing only ideologies that you want promoted...”that” unprincipled action will not benefit solving any scientific findings!</p>	N/+	
02-02	DENNIS SEGO	<p>Balanced Approach</p> <p>Back in the 70s when I was in college we were taught that man was going to be the cause of a new ice age because of his pollution on earth. They would site several notable</p>	NA/-	See Rationale 2.

		<p>Scientist and tons of data to prove their point. A few years ago they started with the man made global warming theory and after billions of dollars to Scientist to prove the theory we have several notable Scientist and tons of data to prove their point. When that data was shown to be questionable they changed the name again to man made climate change. Let's have some intelligence about this, as ignorance breeds more. What Scientist are best at is proving each other wrong. I have worked around and with several. It is not known and both sides of the lesson should be taught. Along with what happens when the Government funds research to indicate what will generate more money for Government.</p> <p>I have a theory to go along with the ones they have put forth in the past. The Earth is capable of handling pretty much anything a man can dish out. It is backed up with several notable Scientist and data. I know you can't teach that because it would be politically incorrect and might cost your system Federal funds.</p> <p>At least let's use some intelligence in educating our students.</p>		
02-02	Larry Cutlip	Please allow your students to learn all the facts about the climate, not just the computer generated projections that are not proving to be true.	NA/-	See Rationale 2.
02-02	ERIC WATSON	<p>We're in favor of a balanced climate curriculum!</p> <p>Is it heresy for science students to see the observed global temperature data which shows that climate computer models have called for a warmer world than measurements show since last century? How about that weather extremes are historically normal and sea level continues to rise at only 3 mm per year? Must they be shielded from any data inconvenient to the global warming narrative?</p> <p>The true mind of science never stops examining the facts and fears no data, no matter how inconvenient it may be.</p> <p>There is no more important lesson science students need to learn.</p>	NA/-	See Rationale 2.

02-02	Ted Dykes	Carbon Dioxide Carbon Dioxide is the food source for green plants. Without plants, animals and humans would starve. Operators of commercial greenhouses add Carbon Dioxide to the air inside their greenhouses because it makes plants grow better. Please look at the attached graphic. ATTACHMENT	NA/-	See Rationale 2.
02-02	Mrs. Mabel Mooney	Students should be given ALL the facts about the climate. Every child should have an open-minded education free of indoctrination.	NA/-	See Rationale 3.
02-02	Jaime Thissen	Curriculum Comment I am writing to you today as a professional scientist. I believe it is very important for students in West Virginia to be exposed to all information on scientific issues and that their learning not be confined to one particular cause or way of thinking. From a professional standpoint, I always look for students to think both critically and for themselves.	NA/o	See Rationale 3.
02-02	Laurence L. Bodley, BSME, MBA	Science curriculum I am a retired mechanical engineer and MBA (Univ. of Chi.). I have great respect for the scientific method. My statistics training as part of my MBA stressed looking at ALL the data. The Challenger disaster could have been averted had this been done. It is highly important that today's students not be fed a stilted line of propaganda that was invented to make a few very powerful individuals exceedingly rich. I strongly urge you to support an unbiased approach not only in science but in all curricula.	NA/o	See Rationale 3.
02-02	<i>David Lash</i>	WV Science Curriculum Standards As a friend of science, it disturbs me greatly to watch the time honored Scientific Method trampled in favor of political correctness. Nowhere is this more evident than in the presentation of so-called "climate change". True scientific investigation is based on gathering empirical data, then developing theories which help organize that data into a coherent understanding of the nature of the	NA/-	See Rationale 2.

		<p>universe. When the preponderance of data changes, theories must also change to accommodate newly observed facts. Unfortunately, the opposite approach has been taken in the case of climate change studies where the theory commonly referred to as “global warming” has been adopted as fact, and every effort made to gerrymander data to support the theory. In fact, empirical data is entirely at odds with the theory. When observed reality is at odds with the prevailing theory, legitimate scientists work towards development of new theories which seek to explain the new data.</p> <p>I hope you will take your responsibility as an educator and custodian of the intellectual future of West Virginia’s students seriously and support teaching the Scientific Method and the derivation of theories from empirically observable and measurable reality. Please resist the pressure brought about by those driving a political agenda that flies in the face of truth and teach our young people to question everything, examine all the facts and draw their own conclusions.</p>		
02-02	Terry Taylor Cave Junction OR	<p>global warming debate taught in classroom</p> <p>I understand that you are receiving public comments concerning the establishment of “common core” science curriculum. It is also my understanding that certain factions are attempting to remove any language that there is some debate as to the cause of global warming. It not only seems to me that all aspects of science should be taught, especially when there is such disagreement amongst the science community. When researching a topic, one will seek information from several sources and weigh the different information by its relevance and credibility. It seems as if leaving a portion of current information out of the mix negates the entire process and leaves an incorrect final opinion. In addition, it is human nature to become cynical of processes that are purported to be factual but have hidden information. I have spoken with people who</p>	NA/-	See Rationale 2.

		<p>have made decisions regarding their goals in life that were made by using information that was purported to be factual but had some options left out by design. When they became aware of the missing information, they became cynical of the entire process and became involved in self destructive behavior as a way to overcome the betrayal that came from making life choices based upon lies. I feel that omitting the debate language concerning the issue of human caused global warming is of such gravity that it can cause that reaction in the student's lives, which is not a good thing for society.</p>		
02-02	Bob HOLLOWAY	<p>Global warming science standards Must students be made ignorant of scientific data which shows that over the last 18 years climate computer models have consistently projected a warmer world than scientific observations record? Global warming has not occurred as projected during the entire lifetime of today's school children.</p> <p>Should the actual recorded data of world temperature, sea levels, storms, droughts, floods and all the rest be banned from our classrooms? Is comparing this data to the pronouncements of highly funded global warming pressure groups heresy?</p> <p>Claims of an overwhelming scientific global warming consensus have been repeatedly and thoroughly debunked. The discussion is far from over. The true mind of science remains open to new data and alternative explanations. Whether and how much of the approximately ½ degree C of warming which occurred in the latter half of the 20th century is due to human industry has not been conclusively established. Neither have any of the incredibly expensive "solutions" proposed to address any global warming been shown to be meaningfully effective or worth their tremendous cost.</p> <p>The Board owes every child an open-minded education free of indoctrination.</p>	NA/-	See Rationale 2.

02-02	Scott Parker	<p>Science Curriculum I am in favor of a balanced climate curriculum in the West Virginia school system.</p> <p>Students should be exposed to all of the scientific data and analysis on climate and not be limited to what warming pressure groups want them to see.</p> <p>Science students need to see that observed global temperature data shows that climate computer models have called for a warmer world than measurements show during last century.</p> <p>They need to see that weather extremes are historically normal and sea level continues to rise at only 3 mm per year.</p> <p>They should not be shielded from any data inconvenient to the global warming narrative!!</p> <p>The true mind of science never stops examining the facts and fears no data, no matter how inconvenient it may be.</p> <p>There is no more important lesson science students need to learn.</p>	NA/-	See Rationale 2.
02-02	<p>Candace Oathout, Director CARE-USA 6000 Bass Lake Rd #120 Crystal, MN 55428</p>	<p>Children need to have all the data</p> <p>There are many scientific theories that collect large amounts of valuable data. If our children are to be taught science, they must be taught the scientific method. They should be exposed to all available data allowing them to apply reason and judgement as they develop understanding of the issue being studied.</p> <p>If their exposure to data is limited to one side or the other, it no longer correct scientific method. It is indoctrination.</p> <p>The role of the scientific method is to teach critical thinking by developing a hypothesis. Then through collecting and analyzing data to determine whether or not the hypothesis is correct. Teaching improper scientific method is worse than not teaching science at all.</p> <p>I find it incredible that there should be any question about what data should be available to students. Please consider what students need to learn in addition to how they learn it.</p>	NA/o	See Rationale 3.

02-02	Ralph E. Warmack, PhD 6347 Vista Verde Drive East Gulfport, FL 33707	<p>Urge the West Virginia Board of Education to amend the curriculum</p> <p>Science without questioning is no longer science. And science never stops examining facts and fears no data, no matter how inconvenient it may be. Science students should be taught to consider all climate data, even if they show that climate computer models have called for a warmer world than measurements indicate, that weather extremes are historically normal, and that sea level continues to rise at only 3 mm per year. They must not be shielded from any data inconvenient to the global warming narrative.</p> <p>We urge the West Virginia Board of Education to amend the curriculum to better reflect the full scientific discussion on climate. Students should be exposed to all of the scientific data and analysis on climate, not be limited to what warming fanatics want them to see.</p>	NA/-	See Rationale 2.
02-02	Mrs. Frances Lafferman	<p>Climate</p> <p>Please make certain that we the people are in favor of a balanced climate curriculum. Do not introduce politics into the subject of science.</p>	NA/o	See Rationale 3.
02-02	David J Sanchez	I am in favor of fact filled information and agA	N/o	
02-02	Michael Davison	<p>Science at School</p> <p>I have studied this whole issue of climate science for 10 years.</p> <p>Global Warming. 4 Feb 2015. - Some thoughts.</p> <p>“The fact that an opinion is widely held is no evidence whatever that it is not utterly absurd; indeed in view of the silliness of mankind a widespread belief is more likely to be foolish than sensible.” - Bertrand Russel</p> <p>Goeballs, in World War 2, successfully convinced a high proportion of the world’s population that Hilter was a great man.</p> <p>“I regard consensus science as an extremely pernicious development that ought to be stopped dead in its tracks.</p> <p>Historically the claim has been the first refuge of</p>	NA/-	See Rationale 2.

		<p>scoundrels. It is a way to avoid debate by claiming that the matter is already settled. Whenever you hear the consensus of scientists agree on something or other, reach for your wallet because you are about to be had.” - Michael Crichton</p> <p>UN IPCC reviewer Dr Don Easterbrook on IPCC report No 5 “It isn’t science at all – it’s dogmatic, political propaganda. The IPCC report must be considered the grossest misrepresentation of data ever published.”</p> <p>Forecasting experts expose IPCC models. – “Our audit of the procedure used to create IPCC scenarios found that they violated 72 of 89 relevant forecasting principles.”</p> <p>“Premeditated murder of science.” Climatologist Dr Tim Bell says the UN IPCC’s 95% certainty is what happens when you have premeditated science.</p> <p>True science constantly probes, doubts, investigates, examines, and welcomes dissent. The IPCC did not invite one single person who did not agree with its pre decided obsession.... This is not science. (Nasty facts, like the world is not getting warm after all were swept under the table.)</p> <p>In spite of overwhelming evidence of nil, or nominal natural warming, we get increasing confidence to 95% consensus in the No 5 IPCC report. (The final straw that will sink the concept.)</p> <p>Spain’s foray into sustainable energy alternatives to minimize CO2 emissions has resulted in electricity prices about 5x the EU average. AWG has gone from the top 2-3 concerns of US public to less than 20th concern.</p> <p>Aussy Carbon Tax figures are out. Australians paid \$14 billion to theoretically reduce global warming by .004%. What a farce.</p> <p>The problem is that local and national governments are wasting trillions of dollars on nonsense. – It just costs us all in eventual standards of living.</p>		
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02-02	P. Owens	<p>GLOBAL WARMING MYTH</p> <p>Any true scientist will look at all data from every angle. Work to verify the data and then interpret that data, test it, retest it to verify all angles. Global Warming enthusiasts have had too much of their data scrutinized and found flawed too many times to assume they are correct. In the battle against the capitalistic economy, accusations are made that all the capitalist people want to take and not give back. Why can't those same people see that those pushing for a global warming count down are doing nothing but pushing their products just like all the others push theirs. Discard the global warming war mongers and keep all the data points of view in play. Keep science real science, not pseudo science. Thank you</p>	NA/-	See Rationale 2.

02-02	Tom Monfort Columbus, GA	I am writing to you concerning the proposed amendments to the curriculum on the climate debate. I believe that it is very important that all scientific data on this subject is made available. Science is not an area than can be limited to the popular mainstream viewpoint that climate change is proven science. When scientific methodology is replaced by an unproven political goal, we will all suffer the consequences of abandoning the search for truth in favor of accepting what we are told is the truth.	NA/-	See Rationale 2.
02-02	Paul Roloff, P.E. <>< AZ Registered Professional Engineer	I understand you are considering adopting the “Common Core” style test. In your class rooms and in your testing please present the scientific data from all sources. That is, not just from those with the global warming point of view based on computer model projections. Please include the scientific data from satellites and other sources to give a truer picture of what actually happening.	NA/o	See Rationale 3.
02-02	Darryl McLellan	There is no more important lesson science students need to learn Is it heresy for science students to see the observed global temperature data which shows that climate computer models have called for a warmer world than measurements show since last century? How about that weather extremes are historically normal and sea level continues to rise at only 3 mm per year? Must they be shielded from any data inconvenient to the global warming narrative? The true mind of science never stops examining the facts and fears no data, no matter how inconvenient it may be. There is no more important lesson science students need to learn.	NA/-	See Rationale 2.
02-02	Gene Coufal	global warming The world has gone through several ice ages and warming spells, man was not there so how could these event have happened if man couldn't cause it? Most important weather can't be accurately predicted for 24 hours much 10,20,30 years or more.	NA/-	See Rationale 2.

		How can anyone say global warming is happening when computer models can't accurately predict the weather? Global warming is a big hoax. Teach real science in school.		
02-02	Garland	Global Warming As A School Subject? Really? Global warming, to its believers, is a religion. I am told that religion cannot be discussed in public schools. You might dispense with the whole subject by asking the skulls-full-of-mush (not the kiddos, the teachers) if they had rather be under a mile-thick sheet of ice (see Ice Age) or live under swaying palms. That should wrap up the global-warming curriculum.	NA/-	See Rationale 2.
02-02	Mary S. Morton Mobile, AL	THE PROPOSED SCIENCE CURRICULUM I wish to voice my concern over the proposed new science curriculum that will limit what students need to know. Please make sure that they get ALL the data and not just the designated by some groups that wish to limit the educational spectrum. I am a retired educator and school counselor. This is of grave concern to me as I see the educational environment being eroded now by the latest frames of thinking. Certainly they deserve to know ALL the facts and not be coerced and limited by the elite in leadership that want to shield them from the truth. Thank you for standing in the gap for our future scientists so they can be prepared for the real world.	NA/o	See Rationale 3.
02-02	Robert C Giargiari, CFS Financial Advisor Northeast Investment Advisors 40 Speen Street, Suite 202 Framingham, MA 01701	Global Warming Hoax Please peruse the following information, before the Global Warming Fraudsters win you over... The Space and Science Research Corporation (SSRC) announces today that a leading media organization, Newsmax Media, Inc., has decided to throw its full support behind SSRC President John Casey and his efforts to get the truth out about what really causes climate change – the Sun! Newsmax began to advertise what it calls “ <u>The Cold Truth Initiative</u> ,” starting this past Friday via a nationwide	NA/-	See Rationale 2.

		<p>promotional campaign. This promotion asks for contributions to its long term “Initiative” to tell the truth about the real causes and effects of climate change and begin an effort to dismantle the “outright sham” of man-made climate change.</p> <p>In exchange for a basic \$5.00 level of contribution, Newsmax is providing a video and three other publications. In addition, Newsmax is giving contributors “for free,” Mr. Casey’s just released climate book, “Dark Winter.” Newsmax values the combined package at \$180.00. Other benefits are provided for higher levels of contribution. One of the stated key objectives of the Newsmax “Cold Truth Initiative” is to <i>“Place a Copy of John Casey’s Book, Dark Winter, in Every Home in America!”</i></p> <p>The Newsmax literature addresses the strong track record of Mr. Casey in his climate change predictions which are unmatched by the leading scientists from the US government and the United Nations Intergovernmental Panel on Climate (UN-IPCC). His climate book has been acclaimed around the world by other scientists with comments like:</p> <p><i>“(John’s) work is quite a revelation ...and his findings add a brilliant page to the history of science.” Dr. Fumio Tsunoda, Professor Emeritus of Geology, Japan’s National Saitama University.</i></p> <p><i>“John Casey approaches problems like a true scientist, who follows Leonardo da Vinci His work “is an important contribution for understanding and facing the environmental challenge, in its multifaceted and often disquieting manifestations.” Dr. Giovanni Gregori, Theoretical Physicist, National Research Council of Italy.</i></p> <p>SSRC President John Casey expands on the importance of this new media ally in his fight to get his fellow citizens prepared for the new cold climate with his own comments:</p> <p><i>“For over seven and a half years now, I have been on a quest to get our people prepared for the new cold climate.</i></p>		
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02-02	Mark Cook Brodnax, Va.	<p>Fairness in science education</p> <p>It was brought to my attention that the curriculum is under review. The subject of global warming is a pure fabrication of fact by people who stand to benefit by telling a big fat lie. The science is not settled and who paid for the studies? Follow the money. I was born in WV. and grew up in Florida. My father was an electronics engineer and made me a critical thinker and study many different disciplines. I was drafted in 1972 where I joined the Navy, was in</p>	NA/-	See Rationale 2.

		engineering and nuclear repair. I was also a gas free engineer with broad knowledge of what was in the air we breath and how to test for toxic substances. CO2 is no more of a threat to global warming than methane from cattle. Teach the facts, not conjecture brought forth by the radical Green movement. The US GOVERNMENT is behind this radical indoctrination in the form of COMMON CORE which is the death of quality education. If the school systems of this country cannot teach the facts as known then maybe it is time to home school our children and in my case, grandson.		
02-02	M. C. Halvorsen	Earth has a long history of climate change. Before man ever appeared Earth had three ice ages that we know of. Earth was cold but gradually warmed up; then turned and got cold but again warmed up; then got cold but warmed up a third time. Earth is in a warming trend and this warming trend will continue until Earth changes and gets cold again. Man may be exacerbating it but did not cause it. To start with a false premise leads to a false conclusion; i.e., if man stops doing certain things, global warming will stop. It won't. Incidentally, Rachel Carson, in 1962, in her book "Silent Spring", stated that there is constant climate change. Back then, no one noticed that statement. If you are going to teach climate change, teach the real history of it.	NA/-	See Rationale 2.
02-02	Greg Baker	Please allow full scientific discussion on climate in schools	A/o	See Rationale 4.
02-02	rodney_carman	Climate change Shouldn't the mind be given the information clearly and unobstructed so it can reach its own conclusion	NA/o	See Rationale 3.
02-02	Richard Lyon	The Board of Education should ensure that its science standards permit students to examine and learn from all the data and analysis about global warming. Must students be made ignorant of scientific data which shows that over the last 18 years climate computer models have consistently projected a warmer world than scientific	NA/-	See Rationale 2.

		<p>observations record? Global warming has not occurred as projected during the entire lifetime of today's school children.</p> <p>Should the actual recorded data of world temperature, sea levels, storms, droughts, floods and all the rest be banned from our classrooms? Is comparing this data to the pronouncements of highly funded global warming pressure groups heresy?</p> <p>Claims of an overwhelming scientific global warming consensus have been repeatedly and thoroughly debunked. The discussion is far from over. The true mind of science remains open to new data and alternative explanations. Whether and how much of the approximately 1/2 degree C of warming which occurred in the latter half of the 20th century is due to human industry has not been conclusively established. Neither have any of the incredibly expensive "solutions" proposed to address any global warming been shown to be meaningfully effective or worth their tremendous cost.</p> <p>In the Obama world of skewed statistics and half truths, the Board owes every child an open-minded education free of bias and indoctrination.</p>		
02-02	<p>Bill Mannion Assoc Prof of Computer Studies and Economics (retired) Alton, NH</p>	<p>Alarmed at reports that student will not see full data or arguments on man-made global warming</p> <p>I am alarmed at reports that students may be denied the opportunity to observe data and arguments, pro and con, on man-made global warming issues.</p> <p>Frequently cited climate models that project warming (such as the infamous, and once popular, hockey-stick model), do not always correlate with the observable data. Please enable students an opportunity to study the data and analyze mismatches with alarmist models.</p> <p>What I ask is a simple prerequisite for effective science teaching: an open attitude to the presentation of data along with presentation of both anthropomorphic climate models and models that refute alarmist projections.</p>	NA/-	See Rationale 2.

		<p>This warming climate debate, also, affords an opportunity to integrate with other disciplines such as economics and history. What an opportunity to present to an economics class a cost analysis on some of the solutions proposed to allay global warming. Might our economics students offer alternatives. In history classes, perhaps offer study material on past cycles of warming and cooling in geographic area comprising our Western Tradition -- the Near East, Mediterranean and Europe. Then, ask and discuss whether these were beneficial periods or bad. In summary, please avoid indoctrinating our students by presenting theory as fact. We have an opportunity to offer students course material comprising data, exciting theories pro and con, a chance for analysis, integration opportunities with other academic disciplines beyond the sciences, and, perhaps, independent studies.</p>		
02-02	Daniel R. Roark	<p>Please do your job and make sure that climate curriculum is balanced and does not constitute propaganda for the Global Warming/Climate Change hoax that is being perpetrated on the whole world. It is the greatest flim-flam to ever be launched on the world, and especially this country.</p>	NA/-	See Rationale 2.
02-02	Gary Alderin Ellenton, FL	<p>Student rights, Round II</p> <p>Good grief Robin. There is nothing to discuss. The man made global climate change group was caught several years ago cooking the books. $E=MC^2$ is not yet settled science and neither is the climate change fraud. The people behind this scam are known and I am bewildered as to why there has been no court action against these liars. This is serious business and they are trying to undo hundreds of years of progress.</p> <p>CO2 is a trace gas and DOES NOT cause the temperature to rise.</p> <p>CO2 is necessary for life to exist.</p> <p>CO2 is exhaled by EVERY mammal on the planet.</p> <p>CO2 is created by rotting vegetation. Try and stop that.</p>	NA/-	See Rationale 2.

		<p>CO2 is produced by the consumption and digestion of food by ALL mammals on the planet.</p> <p>CO2 is produced by WATER creating vapor. Remember that three-fourths of the earth is water. Once again, try to stop that.</p> <p>Sane people are tired of hearing all the voodoo science. Check out all the scientists that clam that global warming is a problem that man can solve and I will show you someone with a government grant to fix the imaginary problem.</p> <p>Russia is tearing the Ukraine apart, the middle east is on fire, Christians are being attacked all over the planet by left wing commie scum, muslims have PROMISED to kill ALL the infidels(about 6 billion people), the president of the United States is, in my opinion (and that of millions of others), a traitor that IS destroying the Country, and a group of lunatics that have reached fraudulent consensus want me and you to live in the stone age. Tell them HELL NO.</p> <p>PLEASE tell them HELL NO.</p>		
02-02	Randy Johnson	<p>Climate curriculum in schools</p> <p>I feel that if there are two contradictory philosophies on a major topic around the world, they should both be discussed in the classroom.</p> <p>Not just one version by a bunch of elitists that "Think" they are more intelligent than ever one else, and would like to take control of the whole world!</p>	NA/o	See Rationale 3.
02-02	Steven Kinstle Durango Wayne, Texas Hill Country	<p>Climate</p> <p>I t kills me how they say “Global Warming” when it’s hot. So I ask them, when it’s cold, and they reply, “It’s Global Warming.” There’s no discussion with these people. Also during the time that we’ve been recording the weather, it’s just a tiny blip on the radar. How do they justify recording temperatures this period, when there’s been millions of years... hotter then cooler, over and over? When I was in high school they were telling us that we were entering</p>	NA/-	See Rationale 2.

		<p>another Ice Age. The last thing: They can't even get a 7 day forecast correctly, but they're gonna tell us what's gonna happen in the next 100 years.</p> <p>So if they're gonna teach Global Warming, they should also teach the alternative that we can't really know what can happen due to the sun, volcanos, and asteroids, etc. Good luck in fighting these morons.</p>		
02-02	David D Vanderhoofven	<p>Balanced Climate Curriculum</p> <p>I am recommending in favor of a balanced climate curriculum.</p> <p>Your West Virginia science curriculum should not take sides in the current political environment. A large number of scientists do not agree with the "Gloom and Doom" position of man-caused climate evolution. Teaching only one-sided "climate science" will damage the children's ability to appreciate the reality of the scientific method.</p>	NA/-	See Rationale 2.
02-02	Derek Tipp New Forest, UK	<p>climate science curriculum</p> <p>Although I am not exactly local to West Virginia, as I live in the UK, I take a keen interest in both science education and in particular the science of climate change. As a former science teacher myself I know how important it is to present controversial matters to students in a balanced way. I was involved in the attempt to prevent the UK government from distributing the Al Gore film "An Inconvenient Truth" to schools, as I believed it exaggerated the facts and was a political film. Although the judge ruled that the film could be shown, he agreed that it had exaggerated the facts and he ruled that it could not be shown without issuing warnings to students about the exaggerations in it. Here is a link to the judgement: http://www.bailii.org/ew/cases/EWHC/Admin/2007/2288.html.</p> <p>I urge you to resist the pressure to present only one side of the climate science controversy and instead to insist that students are presented with clear facts on both sides. Good</p>	NA/-	See Rationale 2.

		students will demand no less, while the less well-informed students deserve a balanced education.		
02-02	Huvi95@xxxxx.xxx	<p>"GLOBAL WARMING"</p> <p>IS A BIG MISREPRESENTATION OF THE AL GORE'S OF THIS WORLD, AND HIS MISINFORMED FRIENDS. GOD IS IN CHARGE. THERE HAVE BEEN MANY WEATHER CHANGES SINCE THE BEGINNING OF TIME. WOULD THEY CALL THE ICE AGE "GLOBAL WARMING" ?? IF HE TRULY BELIEVED HE WOULD BE MOVING FROM HIS ESTATE WITH ALL THE LIGHTING, AND ALL THE ELECTRICITY HE USES ON THE ESTATE !! HE WOULD NEVER AGAIN TAKE HIS "PRIVATE JET" , HE WOULD BUY ONE OF THOSE CARS THAT GO ONLY 300 MILES BEFORE NEEDING A PLUG IN FOR ELECTRICITY SO HE COULD GO ANOTHER 300 MILES. !!! AND WHAT WOULD HE CALL THE ELECTRICITY USE FOR PLUG IN CARS ? I LIVE BY THE BEACH ON THE EAST COAST OF FLORIDA AND HAVE NOT SEEN ANY "HIGHER OCEANS", EXCEPT FOR STORMS ! MANY OF OUR SO CALLED LEADERS THESE DAYS, ARE SO LACKING IN COMMON SENSE AND A BELIEF IN A HIGHER POWER. WHEN COMMON CORE (SO CALLED EDUCATION) MADE IT'S DEBUT, HE SAID THE SCHOOL CHILDREN SHOULD GO HOME AND "EDUCATE" THEIR PARENTS !! AND TOLD STUDENTS "DON'T BELIEVE YOUR PARENTS" !! MOST PARENTS HAVE MORE BRAIN CELLS WORKING THAN HE AND HIS FRIENDS HAVE !! I HAVE A GRANDCHILD IN HER 2ND YEAR OF COLLEGE, AND SHE TRANSFERRED FROM A LARGE UNIVERSITY TO A SMALLER UNIVERSITY (PRIVATE) AND CALLED TO TELL ME SHE IS LEARNING MORE NOW AND NOT BEING "PREACHED" TO ANY LONGER, BUT LEARNING 2</p>	NA/-	See Rationale 2.

		SIDES OF A SUBJECT AND DECIDING FOR HERSELF!! YOUNG PEOPLE ARE NOW BEING INDOCUMENTED TO WHATEVER THE "PROFESSOR" THINKS OR BELIEVES, WHICH IS NOT EDUCATING !! IT IS BRAINWASHING. SO AL GORE, GO HOME AND TURN OFF YOUR ELECTRCITY !!		
02-02	Karen Sensenig	Science You would be causing an enormous disgrace to the students in WV schools if you do not offer a balanced climate curriculum!	NA/o	See Rationale 3.
02-02	Shari Mildon	Curriculum about climate Is it heresy for science students to see the observed global temperature data which shows that climate computer models have called for a warmer world than measurements show since last century? How about that weather extremes are historically normal and sea level continues to rise at only 3 mm per year? Must they be shielded from any data inconvenient to the global warming narrative? The true mind of science never stops examining the facts and fears no data, no matter how inconvenient it may be. There is no more important lesson science students need to learn, than to learn both sides of an argument.	NA/-	See Rationale 2.
02-02	Jean Moodie	climate education Hey, Give our students a fair & balanced curriculum on climate, not just one opinion. Common Core sucks.	N/-	
02-02	Charlie Wheeler	Theory vs. Fact Don't throw the baby out with the bath water. The Board of Education should ensure that its science standards permit students to examine and learn from all the data and analysis about global warming. Must students be made ignorant of scientific data which shows that over the last 18 years climate computer models have consistently projected a warmer world than scientific observations record? Global warming has not occurred as	NA/-	See Rationale 2.

		<p>projected during the entire lifetime of today's school children.</p> <p>Should the actual recorded data of world temperature, sea levels, storms, droughts, floods and all the rest be banned from our classrooms? Is comparing this data to the pronouncements of highly funded global warming pressure groups heresy?</p> <p>"Global Warming/Climate Change" is yet an unproven hypothesis; a tentative statement about the natural world leading to deductions that can be tested while actual global weather records are a matter of known fact. Claims of an overwhelming scientific global warming consensus have been repeatedly and thoroughly debunked.</p> <p>The discussion is far from over. The true mind of science remains open to new data and alternative hypotheses.</p> <p>Whether and how much of the approximately 1/2 degree C of warming which occurred in the latter half of the 20th century is due to human industry has not been conclusively established. Such is not an absolute. Neither have any of the incredibly expensive "solutions" proposed to address any global warming been shown to be meaningfully effective or worth their tremendous cost.</p> <p>The Board owes every child an open-minded education free of indoctrination.</p>		
02-02	Dreux Ste. Marie	<p>Teaching Science</p> <p>When I was in school (back during the Dark Ages), taking Physics or Chemistry or any science class, if an equation didn't predict what actually happened, we changed the equations until they did.</p> <p>Now...(in the field of climate studies) if reality doesn't match what your model predicts, you try to come up with excuses and theories to explain why reality is different from your model. The argument goes like this; our model predicts that $2+2=6$. We've never seen that.</p> <p>Hmmmm...count it again, we must have missed something. Maybe the observations are wrong.</p>	NA/-	See Rationale 2.

		<p>My point is simple, climate change science is not settled science since so much of the observed data don't match what the models predict. In my mind, that means we need more research because we don't yet understand the all the nuance and complexity of our atmosphere and the interactions with the Sun and Earth.</p> <p>Please keep an open mind and ensure that our kids get all the data and interpretations on climate change, not just the "settled science" viewpoint.</p>		
02-02	Allen Barclay Allen	<p>UN Plot to take Dominion from the United States !! (Common Core Communist Propaganda Education of our Children) A page out of the Communist Manifesto !!</p> <p>UN Plot to take Dominion from the United States !!</p> <p>()</p> <p>A Question for every Scientist to answer!!</p> <p>When all emissions from fossil fuel will wind up in our atmosphere any way at the burning of Tectonic Plate Subduction Zone, Why are we forbidden to use it ??</p> <p>And why are we forbidden to use it by false science, UN Agenda 21 Questioning the sovereignty of the United States peoples Dominion to use What God Gave us to use ???</p> <p>During their Washington/ New York March, one of their Crazies broke into the White house to tell the President the SKY IS FALLING !!!???</p> <p>Subject: Time And man's Dominion, to use the things of Earth, God's will for man use. Dominion, his Gift to all of us !!! not just a FEW !!</p> <p>Reason with Me for a Moment in time. Why not use this fuel, that will eventually fill our atmosphere with emissions, after its burned any way, in its final Tectonic plate Subduction zone?? Who are the idiots preventing us from using God's gift to man here??</p> <p>Where's the logic !!!! What will happen if we don't use it now???</p>	N/o	

		<p>Will we not destroy ourselves by listening to UN's Agenda 21?????</p> <p>Dominion belonging to Christ</p> <p>1 Peter 4</p> <p>10 As every man hath received the gift, even so <u>minister</u> the same one to another , as good stewards of the manifold grace of God. 11 If any man speak , let him speak as the oracles of God; if any man minister , let him do it as of the ability which God giveth : that God in all things may be glorified through Jesus Christ, to whom be praise and donion for ever and ever. Amen.</p> <p>Time calculation by God threw Peter=</p> <p>Peters Time Calculation Revealed to him</p> <p>2 Peter 3</p> <p>1 This second epistle, beloved, I now write unto you; in both which I stir up your pure minds by way of remembrance: 2 That ye may be mindful of the words which were spoken before by the holy prophets,and of the commandment of us the apostles of the Lord and Saviour: 3 Knowing this first, that there shall come in the last days scoffers, walking after their own lusts, 4 And saying , Where is the promise of his coming? for since the fathers fell asleep , all things <u>continue</u> as they were from the beginning of the creation. 5 For this they willingly are ignorant of , that by the word of God the heavens were of old,and the earth standing out of the water and in the water: 6 Whereby the world that then was, being overflowed with water, perished : 7 But the heavens and the earth, which are now, by the same word are kept in <u>store</u> , reserved unto fire against the day of judgment and perdition of ungodly men. 8 But,beloved, be not ignorant of this one thing, that one day is with the Lord as a thousand years, and a thousand years as one day. 9 The Lord is not slack concerning his promise, as some men count slackness; but is longsuffering to us-ward, not willing that any should perish , but that all should come to <u>repentance</u>. 10 But the day of the Lord will</p>		
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		<p>come as a thief in the night; in the which the heavens shall <u>pass</u> away with a great noise, and the elements shall melt with fervent heat , the earth also and the works that are therein shall be burned up.</p> <p>Creation time till now = Though I may have got it wrong here, please understand how do you put Infinity together with Mans concept of time? Their Diametrically opposed Completely different. Imagine Infinity a circle drawn with a pencil line, Imagine our time revolves around that line, of that circle, Imagine our life line begins from that line, circling around it till we die, and winding up completing to that line, when we die. One lord day= 1,000 times, 7 = 7,000 time, 365 days=2555000 time, 1,000= 2,555,000,000 since creation age, in Man years since creation age 2,555 million years old. thats 2,555 Million since Genesis and Big Bang Plasma theory. God's Vocal cords speaking, Matter and Antimatter, vibrating together voice Creation of the Universe. Jesus is that Voice, by which the Universe is made from.</p> <p>Not using Fossil Fuel a Huge Logical Mistake Now that I have said that, since water was separated, from dry land and Fossil fuel producing Plants began, in Pangea, named after Pelag Fifth Generation Son from Noah, When the Continental Tectonic Plates began, to separate, to their Subduction zones, after Noah's time a huge deposit of fuel, from that life is deposited in the length of each Tectonic Plate.</p> <p>Should man for some reason, choose to not use these massive deposits of fuel, deposited from the 2nd day of creation, till now, along the length of the tectonic plates, from its formation from magma, to the Subduction zone, that has just now begun to burn, those deposits; should we decide not to use it; will it not destroy our Atmosphere in time, by not using it now, its massive build up beginning to</p>		
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		<p>burn?? Craig Rucker, If we don't use by Burning for energy this build up of lifes fuel, when it finally reaches its Eventual Subduction Zone burning point, will it not SUFFOCATE WORLD populations with these same emissions, Global Warming are worried about???? Read THIS Craig Rucker !!</p> <p>NASA Knows without Burning of Fossil Fuel at Subduction Zones earth has no atmosphere. Without Subduction Zone CO2 replenishing our atmosphere with Oxygen from Photosynthesis of Plants, Forest, and Ocean Plankton, of that CO2 earth atmosphere would dissolve in space the same way Comets lose their mass when in close orbit of our sun !! Since the beginning of time on earth burning fossil fuel, weather it be Subduction Zone burning, or Forest fire burning, has only replenished Earth oxygen supply. Forest cannot reproduce without an under brush fire. Pine combs do not open without these periodic fires !! Florida Forestry's understanding of this is the best in the our nation ! Burning off Under Brush makes a healthier tree, in a healthier Forest. Burning Brings Sap to the Surface in trees making them more healthy, Creates Fertiliser for the soil, Burns plant residue that prevents rainfall from penetrating the soil, and filling the related Aquifers, carbon from forest burning in the aquifer creates a Static Electromagnetic field that draws Rainfall to the area of the Beneficial brush fires, Usually in Spring, providing rainfall all summer, Preventing these Beneficial Brush fires allowed under brush to grow to high, and the resulting forest fire, burns down the entire forest. This happened in Yosemite National forest. Now they do Burn offs in wet weather Spring as Florida Forestry does to build a healthier Forest !! Life on Planet earth would not exist without CO2 from these fires !!! The Yellow and red hues in these fires are Carbon Monoxide and Acid Respectively that combine in the upper Atmosphere with Slow Oxidation to form CO2 and other Beneficial Chemicals to</p>		
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		<p>the Forest. Burning Natural this way prevents Acid Rain that is harmful to the forest. Acid rain is Produced by the Catalytic Converter on your Car Prematurely making CO2 at a low ground level preventing the combination of Carbon Monoxide and Acid at a Higher Altitude causing Acid rain. Catalytic Converters on Cars and Coal electric plants cause Acid Rain because of this. Preventing Normal Burning of Fossil Fuel with a Catalytic Converter, Catalyst of Gold, or Platinum, Causes Acid Rain. BET THE EPA DON'T KNOW THAT !!!!</p> <p>Destructive Behavior rendered by the view at the suffering of many</p> <p>I see this same behavior played out every year, in California Because they refuse, to use Common sense, with Controlled Burning, during safe wet times of the year. Their refusal to do so is to prevent CO2 pollution producing Lung Distress in a few sensitive people, causing a build up of under brush that eventually catches the top of the forest on fire, releasing massive emissions that now during dry season will hert normal lungs.</p> <p>Reasoning by the Few, at the suffering of many, is the UN Agenda 21 Global Warming/ Climate Change, failure to humanity !!!</p> <p>Mans old enemy Satan is at work, taking Dominion away, given to man by God !!!</p> <p>"IN GOD WE TRUST"</p> <p>JOAN OF ARK BAPTIST</p>		
02-02	Donald B. Rice	<p>Teaching about climate</p> <p>As a graduate chemical engineer, former instructor in statistics at the college level, and one involved for decades in the development and use of complex mathematical models, I fully support CFACT's comments on teaching our children about the world's climate.</p>	NA/-	See Rationale 2.
02-02	Timothy Wagner 2458 Shenandoah Shores Rd Front Royal, VA 22630	<p>Students have the right to know all the facts about the climate</p>	NA/o	See Rationale 3.

		<p>It is every child's right and in his best interest to know all sides of the story concerning global warming. As an educator, it is your responsibility to ensure that every child sees all of the facts concerning this issue. To do otherwise is blatant indoctrination. It is vital for every child to learn to make educated decisions by receiving all scientific data regarding this and any other subject.</p> <p>I hope you and the Board will choose to teach children how to think instead of what to think.</p>		
02-02	Don Black Cottonwood, AZ	<p>Climate change</p> <p>Over the past decade and before, scientists have run various studies of the nature of global warming(GW). Not all of these show any correlation to manmade activity, but whenever any scientist tried to publish results that disagree with the progressive idea that GW is caused by burning various fuels, he was given ultimatums, lost his funding, lost his job, was ostracized or punished in some way. Obviously this is not the way science is done, or we would still be living in caves and riding donkeys. To avoid this unpleasant process many of those people went-along-to-get-along, until they retire and no longer need a job, research grants, tenure or respect. At that time they come back in force and write essays, submit papers and complain loudly about the way they have been treated. Just follow the link below to see what they are saying.</p> <p>http://www.globalresearch.ca/more-than-1000-international-scientists-dissent-over-man-made-global-warming-claims/5403284</p> <p>Teaching school children that this is settled science is just plain wrong! Children, as well as everyone else need to see both sides of this story. Science involves free and open discussion, without it science is just nonsense. Please give this matter due consideration when designing curriculums for our young people.</p> <p>In 1887 a group of movers and shakers in New York City determined that the growth of NY should be curtailed</p>	NA/-	See Rationale 2.

		<p>because if it got any larger they could not handle the 400,000 tons of horse manure that would be produced every year.</p> <p>In the mid 1960s a group of movers and shakers stated that by 1985 there would be mass starvation all over the world due to over population.</p> <p>GW is probably just another episode of gloom and doom that crops up in every age in recorded history. We need to look at it, but it's not a reason to destroy the entire economy just in case.</p>		
02-02	Robert P. Carlson	<p>Climate Change</p> <p>Climate change is a wrong idea. Yes, the climate changes, but not according to man's actions. Climate changes as directed by the Lord God.</p> <p>Seasons come and go, and change periodically. Colder and warmer winters, and cooler and hotter summers. Only God can make a tree.</p>	NA/-	See Rationale 2.
02-02	nelsonphilnelson@xxxxx.xx x	<p>Climate science</p> <p>Inevitable global warming is not settled and students should not be lied to that it is.</p>	NA/-	See Rationale 2.
02-02	Dean Albert	<p>Science</p> <p>Students should be exposed to all of the scientific data and analysis on climate, not be limited to what climate change pressure groups want them to see. I am skeptical of groups who change their name from "Global Warming" to "Climate Change" in order for their agenda to go forward. The science debate has not been settled. It has just begun. Which is more accurate, a seven day weather forecast or the observed data after the seven days have past. Computer models are not science but are tools of science and Data is science because it can be observed.</p>	NA/-	See Rationale 2.
02-02	charliewall@xxxxx.xxxx NC	<p>Science</p> <p>Students should be taught the truth about our universe and the science we usually get from our weather people and the books that have been printed with the truth in them about our universe, should be used to do that. Our government is</p>	N/o	

		now taking away the truth that our students need to know and they are being dumbed down. The principals and teachers are responsible for doing right by the students that are entrusted into their care for a good Education.		
02-02	Tonya Lee	Balanced discussion Hi, I am writing to you to encourage you to allow students a fair and balanced discussion of data (even contrary data) that provides opportunity for them to critically think and interpret data in order to form evidence-based opinions and conclusions without interference from pressure groups who want to force only one side of an issue. Please put the true purpose of education first.	A/o	See Rationale 4.
02-02	theo pinson associates	Global climate change Reasonable minded scientists may draw different conclusions from the same sets of data, therefore it would appear that multiple viewpoints should be included in school textbooks concerning the drivers of climate change. For example, the PDO(Pacific Decadal Oscillation) was unheard of 20 years ago, yet today it is considered by many scientists to be a major driver of climate.	NA/-	See Rationale 2.
02-02	Mr. A. Manganaro	As a parent an American and senior citizen, I feel strongly that children should not be herded into a "politically Correct" (I.E. Common Core) climate oriented science program. This country was founded upon and became great on the simple premise that we should all be given the facts and allowed to decide for ourselves which direction to follow. This simple premise promotes diversity of thought, and sparks new ideas that can benefit all citizens. Schools were intended to impart "knowledge" NOT policy. I am 69 years old and only because of the "Old School" ways has this country generated the ambition and genius that the U.S. has come to represent. Once we stifle that, we have nothing but robots clothed in human skin who all think alike.	NA/-	See Rationale 2.

		Progress and greatness simply stops. We will essentially become a third world country, by producing nothing new, simply following the will of others. Don't let this happen.		
02-02	John Cassavaugh	I am John Cassavaugh. I am 82 years old and I have seen the climate (Weather), colder, Warmer, wetter, and drier than 2014 was. Lets teach the children the facts and not use scare tactics to warp their thinking process.	NA/-	See Rationale 2.
02-02	Stephanie Lebron	The true mind of science never stops examining the facts and fears no data, no matter how inconvenient it may be. Shouldn't students be allowed to look at all scientific data, in order to draw conclusions objectively? Is that what science is about? Observable knowledge? If the common core standards are just to turn out "cookie cutter" students who aren't taught to think for themselves nor question things (isn't searching for truth and knowledge important in schools anymore, or are we working towards a more controlled society such as one reads in Orwell's "1984" or Huxley's "Brave New World"), then by all means, don't provide for fuller discussions of climate change/global warming. If you want, on the other had, to grant West Virginian students a better opportunity for learning by being exposed to all of the scientific data and analysis on climate, in a balanced climate curriculum, then don't knuckle under to pressure being brought to bear by warming groups.	NA/-	See Rationale 2.
02-02s	Andrew Tomlin Wilmington, NC	I respectfully request your assistance in assuring West Virginia school curriculum maintains a balanced and scientific approach with respect to climate. Students should not be taught a biased view (one way or the other) without the opportunity of learning differing views, and representative data, on a scientific theory that has been accepted as a political fact when there clearly is evidence to the contrary. Students of science should be taught to analyze data and separate science from politics. Clearly global warming, climate change, climate disruption or the	NA/-	See Rationale 2.

		<p>current politically correct term is not a settled science, but one that remains hotly debated in spite of proclamations of politicians (or scientists working under the pleasure of political discretion).</p> <p>Beyond the currently debated science curriculum, we owe it to our students to look at current political issues from an analytical and scientific perspective. Too much of our politics today are governed by party lines, or “feelings” rather than clear and objective thinking. Please help restore objective thinking and a healthy questioning skepticism to our classrooms.</p>		
02-02	Bobby Tims	<p>Global Warming?</p> <p>This is just another case of the government, federal and U.N., handing picking data to produce results that they want to prove. It may be that 2014 was the highest yearly temperature since records have been kept. What, about 150 years? Climate change has been occurring since the earth's creation. Do we have a comparison through that time period? No, how about just over the last 100K years which should cover the time humans were getting their start to our current liberal controlled media existence. The global climate change is as proven as "No child left behind" and "Common Core" are to our educational system, which sees the US world ranking continually falling, not rising or even keeping our same rank in the world! This reminds me of when I was young and when the news came on they said "It's 10 o'clock, do you know where your children are?". My opinion then was what the hell does it matter to you if I do or don't! Also, it ranks right up there with the school lunch program pushed by Michelle. This program doesn't give kids enough calories plus food that a lot of kids WILL NOT eat. Plus, from what I've seen, some of the offerings were disgusting to look at. Besides, just like the interview yesterday of the President brewing his own beer? Please, there's no way he's doing the brewing, it would interfere with his golfing,</p>	NA/-	See Rationale 2.

		plus against what he said, his wife does not do a garden. She has government employees bring in ready to pick plants on photo days of children. This is common knowledge.		
02-02	Kearn	<p>Students' rights to climate facts</p> <p>The Board of Education should ensure that its science standards permit students to examine and learn from all the data and analysis about global warming.</p> <p>Must students be made ignorant of scientific data which shows that over the last 18 years climate computer models have consistently projected a warmer world than scientific observations record? Global warming has not occurred as projected during the entire lifetime of today's school children.</p> <p>Should the actual recorded data of world temperature, sea levels, storms, droughts, floods and all the rest be banned from our classrooms? Is comparing this data to the pronouncements of highly funded global warming pressure groups heresy?</p> <p>Claims of an overwhelming scientific global warming consensus have been repeatedly and thoroughly debunked. The discussion is far from over. The true mind of science remains open to new data and alternative explanations. Whether and how much of the approximately 1/2 degree C of warming which occurred in the latter half of the 20th century is due to human industry has not been conclusively established. Neither have any of the incredibly expensive "solutions" proposed to address any global warming been shown to be meaningfully effective or worth their tremendous cost.</p> <p>The Board owes every child an open-minded education free of indoctrination.</p>	NA/-	See Rationale 2.
02-02	Carol Sisson	<p>Science has to be looked at from both sides and let the kids decide.</p> <p>We can't let Common Core dictate how science is taught. They are destroying history and getting rid of the</p>	N/-	

		<p>founding fathers of this country also. Google Chrome won't let a student in CT look up both sides of the Abortion issue. How do you teach kids to look at both sides of the issue when Big Business won't let them look up both sides? This is called Communism/Progressive/Socialist form of education. Not the Republic form of government to look up all sides of the issue. Then you form your own opinion and then you can debate the issue. That is the way we learned science many years ago.</p> <p>Have you talked about the Chem Trails or HAARP that is changing the weather daily? That really is the climate change along with destroying this earth and everything on the earth not just the weather.</p>		
02-02	<p>T. J. Wright Estimating Manager 2811 Hydraulic Road Charlottesville, VA 22901</p>	<p>Real Science & Global Warming (or not) Please consider a balanced scientific approach, based on actual satellite & ground sensor readings, (NASA, etc.) as opposed to computer generated models, which have been proven to be wildly inaccurate.</p>	NA/-	See Rationale 2.
02-02	<p>Gonzalo Munevar, Ph.D. Emeritus Professor Lawrence Technological University Southfield, MI 48075</p>	<p>Climate Curriculum I am a recently retired university professor. Back in the 80s and 90s I taught some graduate courses concerning space science at places like Stanford and U.C. Irvine. Of great interest to me was the very appealing hypothesis about CO2 and climate, which served to explain the climate of Venus, for example. A few years ago I was asked by my last university, Lawrence Tech, to develop a philosophy of science course on energy, which of course dealt with the problem of global warming in great detail. Most of the students were engineering or science seniors. I used some standard textbooks to teach the official point of view, but since it was a philosophy class, the students also had to read about the other side. I was shocked by how poor the science of climate had become in the intervening years. Alternative hypotheses were systematically excluded. These were hypotheses that tried</p>	NA/-	See Rationale 2.

		<p>to explain what appear to be natural cycles of warming on the basis, for example, of the combination of two rather short solar cycles. Any references to these hypotheses in the official point of view, if they could be found at all, would completely misrepresent them (as saying, for example, that they claimed that the sun was warming and this accounted for global warming -- not what they said at all). Some of those hypotheses had not only painstaking analysis of CO2 and temperature records going back hundreds of thousands of years but, most importantly, physics experiments performed in government labs in Europe backing them up. I had always thought that it was crucial for science to allow, and confront, contrary evidence and points of view. In every field but climatology, apparently.</p> <p>Contrary evidence was mishandled in a way that took my breath away. Insofar as the human footprint was concerned, there were serious problems with the data. Times with much smaller concentrations of CO2, such as the middle ages had higher temperatures than that of 1998, if I remember correctly. The way to deal with the Medieval High was to eliminate all the inconvenient data by means of selected proxies that led to the "hockey stick" hypothesis. Unfortunately the hockey stick proxies projected temperatures around the 1990s that did not fit the actual ones, so the "trick" was to replace the projections made on the basis of those proxies with the actual temperatures! In any other science you would have been thrown out on the street if you did that. Now to make matters worse, the global warming computer models had predicted a rather steep rise in temperature for the last 18 years or so, but the temperature has actually leveled off. In any other science, computer models serve a heuristic purpose. Only in climatology they are at the heart of the discipline. But they don't work very well! Indeed, cloud</p>		
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		<p>cover is recognized as a crucial factor in climate, but the models cannot even assign it a positive or a negative value! When I took courses in quantum physics, the professors were scrupulous about presenting the point of view of the critics. My physics professors were completely on the side of the most successful science in history, but they felt that dealing with the other side led to a better understanding of modern physics. Climatology cannot even compare to quantum physics, but its proponents demand that the other point of view may not be presented to students. Is this education or indoctrination?</p> <p>This indoctrination, furthermore, sets a very bad example for our future citizens. Instead of pointing out the flaws in the data or ideas of the critics, defenders of the main point of view resort to personal attacks or appeals to authority ("most scientists agree"). In elementary logic courses such moves are identified as instances of fallacious reasoning. The one that takes the cake for me, though, is the claim, unfortunately made by people I voted for, to the effect that 2014 was the hottest year on record. After some rather questionable handling of data, climatologists came up with an increase of 2/100 of a degree for 2014, but the margin of error, as even they acknowledge, is 1/10 of a degree! When you are below the margin of error (let alone so incredibly below) you are not entitled to draw any conclusions. Period. I used to teach that to freshmen at the University of Nebraska at Omaha, where I began my career, a long time ago. Any student doing that would have gotten an F.</p> <p>Do we want our future citizens to learn science as if it were a religious doctrine? And instead of critical reasoning, do we want to instill in them the habit of committing fallacies?</p> <p>Thank you for your patience in reading this long message.</p>		
02-02	Jean M. Onasch Port Charlotte FL	global warming in Common Core	N/-	

		Like so much of the Common Core curriculum (have you SEEN some of the math problems?), the science curriculum will do nothing but harm to young minds. In this case, it is total indoctrination from on high. Shame on you for even considering Common Core, much less this total abrogation of real science.		
02-02	Richard Reitmeyer Henderson, NC	<p>WV global warming teaching standards</p> <p>I believe the WV Board of Education should always promote both sides of a discussion.</p> <p>This is especially true on this subject since there is so much debate as to the facts and conclusions.</p> <p>Since global warming scientists have not been able to create even one model that accurately projects the temps due to their hypotheses, why should children be told that it is settled science?</p> <p>Wouldn't it be better to show both sides and let the possible future scientists in your schools help figure it out.</p> <p>I am especially surprised that a state like WV which depends so much on coal for its economy would allow environmental activists to dictate what's taught in your schools. Clean coal should be a part of the US energy policy rather than eliminated due to improvable hysteria.</p> <p>Although I reside in NC, I wanted to let you know many here are concerned that each state that bows to environmental pressure gives those lobbyist groups more credence and drive to push their beliefs across the nation.</p> <p>This raises energy costs, food costs, and overall living costs for everyone.</p> <p>Please allow WV education texts to provide both sides of the so called global warming debate.</p>	NA/-	See Rationale 2.
02-02	Milton B. Porter Ph.D. Purdue University Retired Lt. Col., USAF Retired Boeing Aerospace Engineer	<p>A Global; Warming Skeptic</p> <p>I am in favor of seeing all the data on global warming. I am not one who believes that is settled that man is a big factor in global warming. In fact, I believe the opposite is true and we are truly shooting ourselves in the foot to believe otherwise. Give the kids all of the data and let</p>	NA/-	See Rationale 2.

	Instructor at SoCal ROC in Aerospace Engineering	them decide. There are thousands of scientists that agree with me		
02-02	ROBERT A. ASHWORTH Sr. Vice President – Technology ClearStack Power LLC 19901 Southwest Freeway Sugar Land, TX 77479	Climate Change Fraud See my response to EPA. I am a chemical engineering graduate from WVU (1960). CO2 doesn't warm the earth, it cools it slightly as does all other gases in our atmosphere. Truth in science is important. No need to kill coal miner jobs for nothing. ATTACHMENTS	NA/-	See Rationale 2.
02-02	David L. Hobson	Climate change As a retired Electronic Engineer with a Masters degree in Engineering, I have been watching the discussion and reviewed the actual data regarding what many call Global Warming for a long time. I believe most of the software predictions being used are very flawed, since actual data from around the world does not substantiate their predictions. Yes, there is local climate change which is occurring all the time, look at Boston and New England today. However, this is not caused by CO2 or any other gas. New England had far worst winter weather 60 years ago. The EPA regulations current and being purposed mainly only hurt the USA economy across the country, without any real benefits. Many of the World countries, like China and India have no current response to the EPA numbers. As has been said, the matter is still open to discussion, however all students need to have all the current facts so they can make up their own minds.	NA/-	See Rationale 2.
02-02	J. Bryan Sperry Pittsburg, Kansas	core curriculum Don't try to fit every child into the same shoe. Diversity is what made this country great.	N/o	
02-02	Sandy Connolly Roland, AR	Climate Science Please allow the students in your state to learn the difference between computer modeling and reality, between projections and what actually takes place, between	NA/-	See Rationale 2.

		normal fluctuations and “climate change.” Please don’t stifle any discussion that helps true science. Silencing people of a different point of view has never been known to help real science develop, and as true science develops, the myths usually clear up on their own.		
02-02	David H. Etchells	All data needs to be available and presented all the time Is it heresy for science students to see the observed global temperature data which shows that climate computer models have called for a warmer world than measurements show since last century? How about that weather extremes are historically normal and sea level continues to rise at only 3 mm per year? Must they be shielded from any data inconvenient to the global warming narrative? The true mind of science never stops examining the facts and fears no data, no matter how inconvenient it may be.	NA/-	See Rationale 2.
02-02	Ralph Parker	global warming! Please be sure the facts you evaluate by are true. So many of the talking points these global warming activist use are just figures that have not been verified. Please check their accuracy	NA/-	See Rationale 2.
02-02	Jerry Heying	Global What! what ever it takes to stop people from thinking there is global warming I am for it!	NA/-	See Rationale 2.
02-02	Frederik Engel	teaching and learning C-Fact encouraged me to respond to their request for some comments on teaching children about "climate change" I am accepting the fact that not every teacher knows everything their is to know even of his or her own teaching specialty. Secondly, most science subjects are taught on well established, factual data bases. We do not argue about $2 \times 3 = 6$. However, the relatively new subject of Climate Science, does not yet benefit from a complete and irrefutable basis of facts and deep understanding of the subject.	NA/-	See Rationale 2.

		<p>When alarm bells were rung in the mid-seventies that our world was going to cool down to an ice-ball in 20-30 years it scared a lot of people. Particularly those with an insufficient knowledge of basic physics and chemistry were ready to listen to the doomsayers of those days. It turned out that the reasoned explanations of eminent physicists, geologists and solar specialists could demonstrate and show that the cooling period was nothing new. It happens with reasonable regularity going back thousands of years. Before long people accepted and went back to their own lives.</p> <p>While we learned a lot of facts in the meantime about our earth and solar system, our political environment changed drastically when some academic scientists and UN politicians decided that CO₂, carbon dioxide, was increasing and would therefore shortly become a global danger by overheating the earth, with all the consequences thereof.</p> <p>Certain scientists started claiming that their computers were predicting the same thing which helped to put pressure on governments, national and international to consider what to do about it. This politically inspired project grew like topsy costing billions of dollars. Now, some 20 years later the old-fashioned scientists who only deal in reproducible facts have concluded that the minute amounts of CO₂ entering our troposphere and atmosphere have no measurable impact on the warming of our earth. The interesting thing is also that since 1998 our sun has entered one of her deep sleep periods, that</p>		
02-02	Steve and Robyn Schmalz	<p>Global Warming Curriculum That Discourages Balance and Debate</p> <p>If your hope is to indoctrinate students into believing certain things, even though the issues are still being debated, then your priority is not educating and stimulating young brains. If you simply WANT to believe that Al Gore is right and, by golly, no one is going to cause trouble</p>	NA/-	See Rationale 2.

		<p>by inserting any other viewpoints, then God help West Virginia's next generation.</p> <p>Please allow for balance so that students can make some educated choices based on scientific variables, not global warming hysteria.</p>		
02-02	<p>Dick Piland 7205 Gold Nugget Drive Niwot, CO 80503</p>	<p>Climate Science in the Classroom</p> <p>I have been studying Anthropogenic Global Warming for many years now. I have found that AGW is not supported by science, rather by politics. I have uncovered very interesting scientific information to suggest that the warming we saw in the 20th century is quite normal. Here is a very small amount of information that I have uncovered, that every student should understand:</p> <ul style="list-style-type: none"> • In recent times, our Earth has been slowly and naturally warming since the Little Ice Age, which many scientists suggest was caused by a solar minimum. Do the students know that the Sun has cycles and that empirical temperature data closely (within 90%) correlates with these cycles? Do the students know that we are heading into the next 206 year cycle of the sun, when sun spot activity will be reduced to a very minimum number and that solar scientists are predicting severe winters and shorter growing seasons for the next 30 years? Actually, this began in 2007. • Do the students understand that there is only one correlation of the Earth's temperature with carbon dioxide and that is that the Earth warms or cools naturally; <u>then</u> carbon dioxide levels rise or fall many years <u>after</u> these temperature cycles have occurred? Arguing that carbon dioxide controls the Earth's temperature is like arguing that lung cancer causes smoking. Do the students understand why carbon dioxide levels follow the Earth's temperature cycles? 	NA/-	See Rationale 2.

		<ul style="list-style-type: none"> • Do the students understand proxy data calculations that go back several centuries and that the Earth has experienced ice ages when the carbon dioxide levels in the atmosphere were several times higher than today? Do the students have an appreciation for how proxy data of the earth's temperature and/or atmospheric gaseous content is collected to study the geological record of Earth? You see if you do not understand the Earth's atmospheric and temperature geological information...you can easily be fooled into thinking that man is the cause of recent warming. • How about Milankovic Cycles? Do the students know that the earth's rotation around the sun varies, from almost circular to an elliptical orbit on a 100,000 year cycle. Do they know what causes this? Do they know that when the earth goes into an elliptical orbit that the solar energy reaching the earth can be reduced by as much as 30%. Do the students know that the earth's axial tilt of about 23 degrees varies on a 41,000 year cycle and that the amount of precession (wobble) varies on a 23,000 year cycle? Do they understand why this is important in the Earth's climate? • Do the students understand photosynthesis and the important role carbon dioxide plays in the life of plants and animals. Do they understand that doubling the amount of carbon dioxide in our atmosphere would only elevate the earth's temperature by 0.6 degrees Celsius, which would be very beneficial to plant life and would help man deal with feeding what will soon be 8 billion people on earth? Do the students understand that plant life and organisms flourish in warmer temperatures; but starve to death or die of exposure in colder environments. • Do the students know that there has been no warming of Earth for some 18 years? Yes, that is correct. No global warming in this century or in their life 		
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		<p>times. Seniors this spring will graduate from High School never having experienced any warming, yet their heads are full of "political misinformation" that man is destroying the earth and that scientist all agree (which is not true) or that the science is settled! If the science were settled, then what caused the 18 year lull in the earth's temperature rise, when carbon dioxide increased by 8% in that period?</p> <p>School systems nationwide have done a very good job of "programming" these young minds with false information. The kids are not being educated properly. <u>It is a national tragedy.</u></p> <p>I could go on forever...but I have already consumed much of your time. YES, start giving students a complete education as to how the Earth's climate actually functions...you are doing them a great disservice to continue down this "AGW path of lies and depiction, and misinformation"!</p>		
02-02	Barbara Bartell Montana	<p>I urge you to think about this issue, whereby students are not being told what is fact and what is theory, and shouldn't all the data be presented, data that is for or against the theory.</p> <p>Isn't that the kind of openness you want when you are trying to learn truths about anything, even as mundane as buying a car! You want to look at everything that is being said about the car, not just one person's belief or if there is even more than one person's input. You want all the data, not just one person's or a small group of people unproven theories.</p> <p>I ask that openness of data for the students of West Virginia.</p>	NA/o	See Rationale 3.
02-02	Dennis Goldberg M.D. retired	<p>Balanced Science PLEASE</p> <p>It is mandatory for the education curriculum to teach Balanced Science thus I invite you to make certain that there is a balanced climate curriculum taught not a one sided one. Remember the children of today are the leaders</p>	NA/o	See Rationale 3.

		of tomorrow and if they are not able to find the truth in their education then there will be falsehood in their leadership.		
02-02	Don Buckingham	our kids need the whole truth	NA/o	See Rationale 3.
02-02	chasggrimes@xxxxx.xxx	<p>Science</p> <p>Global warming aka climate change has been proven to be a false political agenda . However since all public schools are basically under the thumb of the Dept. of Ed. money is talking to sway local educators to push the agenda of climate change. You should have a set personal values to teach science as an educational course and not as a topic of political agenda. Hitler did the same type of political agenda in the schools of Germany , Austria , Poland and other countries that Hitler conquered .</p> <p>Bottom line teach science not political agenda that has ties to the U.N.'s agenda 21 .</p>	NA/-	See Rationale 2.
02-02	Dr. Iris Broyles (former science educator and curriculum development specialist)	<p>Balance in curriculum</p> <p>I hope you will consider the idea that children deserve to be exposed to all data on the matter of climate change. They should have an opportunity to view the studies and learn to analyze them for validity rather than accept that only some results are valid. Allowing political agendas to dictate what students are exposed to is dangerous for education. If we had always been deprived of alternative views, then we would still believe that the earth is flat. Our free and educated society depends on students having the freedom to think for themselves as they consider all relevant facts.</p>	NA/o	See Rationale 3.
02-02	Anita Rickenberg RR 1 Box 105o Ridgeley, WV 26753-9740	<p>Support accurate climate science in WV education</p> <p>I am writing in support of Next Generation Science Standards in West Virginia K-12 education. In particular, I support the standards as-written on teaching climate science. The science is clear on climate change and human impacts on warming.</p>	N/+	

		Climate change is impacting communities in West Virginia, and our students deserve to learn about it in school.		
02-02	Ted Cole	Science Curriculum Please stand for an open discussion of scientific information rather than caving in to the politically correct concept of "settled science" True science, in a sense, is never settled since there is always the possibility of new information!!	NA/-	See Rationale 2.
02-02	carl schuh	common core you need to do something instead of common core.. anything todays kids are getting less capable.. is it the teaching or the method or ?? They cant even balance a checkbook and cant write an essay. but they can tweet..google, Give the parents a choice by letting them spend their state funds on a school of their choice. Public schools are no longer what they used to be.	N/-	
02-02	Marilyn White	I am asking you to support a balanced climate curriculum. Science has always been a discipline where all the facts are researched and investigated. It would greatly benefit our students if they are able to learn all of the facts that surround the Climate Change theory. Both the pro and con facts and allow them to learn to use their own minds to decide what to conclude and apply to their lives. I do believe we need to respect our planet. We do need to live in a way that would benefit our planet. Children deserve to hear all the facts and not just facts that support only one side of the issue. It is for their future they learn these facts and not to be swayed by politicians that are supporting the climate change theory to benefit their political career.	NA/o	See Rationale 3.
02-02	Shelley Frost.	Unscientific Principles I was watching an old episode of Stargate the other day and was shocked to hear something that many people seem to have forgotten, or deliberately eschewed.	NA/-	See Rationale 2.

		<p>The SG1 team landed on a planet where their arrival destroyed the scientific beliefs of the locals. One character explained that their presence rendered his theory (and potentially career) obsolete, but he didn't mind. He claimed that as a scientist it was just as exciting for him to discover his theory was wrong, as to find it was correct. It was all new knowledge.</p> <p>This is very different to recent equivocations about balancing being effective against being right. If you're wrong, what exactly is being effective and why is it needed?</p> <p>Please teach our children to think. Any group which is scared of discussion, or has no answer to questions is highly suspect. When did an evolutionist ever back away from a debate with a creationist? Foolish theories are easily demolished. Perhaps that's what the global warmists fear. They certainly want to hide the facts (satellite data for example) and prevent independent thought. Don't let them.</p>		
02-02	Gene Farr Port Townsend, WA	<p>Politicians, and their friends in the media, are presenting deceptive climate data, half truths and lies to further their desire for more government control of our lives and our economy along with more taxes. We must make sure all students have the true facts so they can reject this propaganda.</p> <p>Burt Rutan (The highly respected aerospace pioneer and entrepreneur) has a great summary of climate facts at http://rps3.com/Pages/Burt_Rutan_on_Climate_Change.htm</p> <p>Here you will see that:</p> <ul style="list-style-type: none"> • Current temperature and CO2 levels are not unusual on any time scale going back 500 million years. • The frequency and strength of US hurricanes and tornados has not increased over the last few decades if fact they have decreased. 	NA/-	See Rationale 2.

		<ul style="list-style-type: none"> • Surface temperature databases are grossly distorted by the “heat island effect” and have been severely manipulated to sell “Global Warming”. • World Health Organization data shows the markedly fewer people are dying each year not only on a per capita basis but in total numbers. • All temperature models, promoted by the UN Intergovernmental Panel on Climate Change, have generated grossly exaggerated predictions when compared to actual global temperatures. • The predicted “Greenhouse Effect” of increased temperature in the earths upper atmosphere has been shown, by actual measurements, to not be occurring. <p>Elsewhere in government and scientific data you will find:</p> <ul style="list-style-type: none"> • The drought back in the 1930s was more severe than the current drought. • Forest fire acreage is up due to Forest Services policies and funding, but the number of firers is down. • Ocean acidification of similar levels has been present in past decades and millenniums. 		
02-02	Traci Grant	<p>Students</p> <p>The Board of Education should ensure that its science standards permit students to examine and learn from all the data and analysis about global warming.</p> <p>Must students be made ignorant of scientific data which shows that over the last 18 years climate computer models have consistently projected a warmer world than scientific observations record? Global warming has not occurred as projected during the entire lifetime of today’s school children.</p> <p>Should the actual recorded data of world temperature, sea levels, storms, droughts, floods and all the rest be banned from our classrooms? Is comparing this data to the pronouncements of highly funded global warming pressure groups heresy?</p>	NA/-	See Rationale 2.

		<p>Claims of an overwhelming scientific global warming consensus have been repeatedly and thoroughly debunked. The discussion is far from over. The true mind of science remains open to new data and alternative explanations. Whether and how much of the approximately 1/2 degree C of warming which occurred in the latter half of the 20th century is due to human industry has not been conclusively established. Neither have any of the incredibly expensive “solutions” proposed to address any global warming been shown to be meaningfully effective or worth their tremendous cost.</p> <p>The Board owes every child an open-minded education free of indoctrination.</p>		
02-02	Jim Wrenn	<p>Climate students need to be given a chance to see all the true facts about climate not just one side. Let them have a chance to research and learn the truth. An All Gore type teaching will only bring chaos and misled people. Thanks for all you can do to keep truth in school.</p>	NA/-	See Rationale 2.
02-02	J. Cheston M Newbold	<p>Climate Change</p> <p>As in all of science, there are two sides, sometimes more, to a question. While there is little doubt that our climate is changing, it always has, there is a great deal of evidence that it is not warming. Enough so that it should be part of the discussion in our schools. Our children should learn to question, to explore with open minds. It seems a crime to close their mind by exposing them to only one side of the argument on global warming, Too much is at stake for all of us to have future generations limited in their education. Perhaps common core has some value, but no system that limits debate has value.</p>	NA/-	See Rationale 2.
02-02	Shawn Hagedorn	<p>Climate change</p> <p>Please don't ever let science and math be handed over to people whose ideology will set the tone of learning. When someone states that it hasn't been this hot since 1905, let's</p>	NA/-	See Rationale 2.

		all hope our children have the freedom to ask "what happened in 1905?" Let's keep science and math about data and facts. We already have data sets being hand picked to "prove" what some want it to prove. This is nothing that should be 'summarized' into someones general belief. Students should be free to explore all sides of an discussion.		
02-02	Sandra Lochinger	As a grandmother and great-grandmother of several rapidly developing children, I take great interest in academic standards. My hope is that your board will provide the platform for energetic debate and open discussion of all scientific data regarding climate. I do not wish to see little robots coming out of our institutes of learning but rather students that have developed the skill of how to learn, debate, question and expound upon fact and data that is well presented in the process of educating them. Your committee holds the keys to allowing full discussion regarding climate. It is my desire that you fully consider the amendments that have been proposed to the curriculum and implement them in the best interest of providing a well rounded education for our future generations.	NA/-	See Rationale 2.
02-02	Janet Farahmand	Science in education It is so sad how liberals have taken over our "public" school system. As a retired teacher, I saw first hand how our books were altering history. I refused to teach anything that had been changed. I applaud you for your efforts to stop further indoctrination - especially on the global warming scare. Its real purpose is to use to part us from our green (money). What we need to be teaching is how to discern (We cannot use the word "discriminate" any longer.) and to speak/ write clearly to get the real meaning across. Keep us informed.	NA/-	See Rationale 2.
02-02	Pete Rigby	Climate change I am one of those folks who believe that while the climate is always changing it is not the result of man's use of fossil	NA/-	See Rationale 2.

		fuels. The agenda from the left wing is built on flawed scientific data that is inconclusive at best. Unless there is a balanced approach and debate to the climate change issue it has no place in school text books. West Virginians are seeing what happens when the government runs amok driving a political agenda at the expense of the people.		
02-02Glenn in Gatineau (Quebec) CANADA	GLOBAL WARMING/CLIMATE CHANGE <u>PROPAGANDA</u> is a powerful tool. The <u>Anthropogenic Hoax</u> continues---and will continue for decades---to <u>bamboozle</u> the human population. <u>Education</u> is <u>not</u> the only answer. (Some of the dumbest people I know have high I.Q's.....and PhD's.) The dearth of WISDOM/COMMON SENSE/INTEGRITY in our population is making us pawns of ideologues/charlatans. Bonne chance in WEST VIRGINIA.	NA/-	See Rationale 2.
02-02	thompson.lj@xxxxx.xxx	Protect students' rights to all the facts about the climate I agree with, and support, the following from Craig Rucker of CFACT. The Board of Education should ensure that its science standards permit students to examine and learn from all the data and analysis about global warming. Must students be made ignorant of scientific data which shows that over the last 18 years climate computer models have consistently projected a warmer world than scientific observations record? Global warming has not occurred as projected during the entire lifetime of today's school children. Should the actual recorded data of world temperature, sea levels, storms, droughts, floods and all the rest be banned from our classrooms? Is comparing this data to the pronouncements of highly funded global warming pressure groups heresy? Claims of an overwhelming scientific global warming consensus have been repeatedly and thoroughly debunked.	NA/-	See Rationale 2.

		<p>The discussion is far from over. The true mind of science remains open to new data and alternative explanations. Whether and how much of the approximately 1/2 degree C of warming which occurred in the latter half of the 20th century is due to human industry has not been conclusively established. Neither have any of the incredibly expensive “solutions” proposed to address any global warming been shown to be meaningfully effective or worth their tremendous cost.</p> <p>The Board owes every child an open-minded education free of indoctrination.</p>		
02-02	Edward Cooper, Aztec, NM 87410	<p>science of climate not politics</p> <p>Ref: Teaching - or indoctrinating? All youngsters need a fair and balanced presentation of FACTS, regardless of subject. First comes learning to understand what is meant by weather, then, what is meant by climate - not the same thing. A few years of measurements - NOT computer predictions - are useful for considering weather trends. However, climate is thousands or hundreds of thousands of years in a normal flux - so far beyond a human life span as to be inconsequential to our few years of not-all-that honest of measuring. Do stay with facts, and stay away from "computer modeling". Good Luck!</p>	NA/-	See Rationale 2.
02-02	's lyonalberryman@xxxxx.xxx	<p>Education</p> <p>The Board of Education should ensure that its science standards permit students to examine and learn from all the data and analysis about global warming.</p> <p>Must students be made ignorant of scientific data which shows that over the last 18 years climate computer models have consistently projected a warmer world than scientific observations record? Global warming has not occurred as projected during the entire lifetime of today's school children.</p> <p>Should the actual recorded data of world temperature, sea levels, storms, droughts, floods and all the rest be banned from our classrooms? Is comparing this data to the</p>	NA/-	See Rationale 2.

		<p>pronouncements of highly funded global warming pressure groups heresy?</p> <p>Claims of an overwhelming scientific global warming consensus have been repeatedly and thoroughly debunked. The discussion is far from over. The true mind of science remains open to new data and alternative explanations. Whether and how much of the approximately 1/2 degree C of warming which occurred in the latter half of the 20th century is due to human industry has not been conclusively established. Neither have any of the incredibly expensive “solutions” proposed to address any global warming been shown to be meaningfully effective or worth their tremendous cost.</p> <p>The Board owes every child an open-minded education free of indoctrination</p>		
02-02	Sarah Haenni	<p>Please allow a balanced discussion!</p> <p>I have been very aware of the work CFACT is doing, and would ask that you consider BOTH sides of the climate argument be allowed in the classroom. Climate science IS important, so it's important we not feed our children the bias of only one set of "facts." I would ask that your science curriculum reflect a balanced perspective and discussion on this subject.</p>	NA/-	See Rationale 2.
02-02	Sue Dawson	<p>Balanced Climate Curriculum</p> <p>We have become aware that a decision is to be made concerning climate curriculum in the West Virginia schools.</p> <p>Just a few thoughts to share:</p> <p>The true mind of science never stops examining the facts and fears no data, no matter how inconvenient it may be. Shouldn't the students be taught facts and not 'persuasions' of a particular group in their science curriculum and be exposed to all of the scientific data and analysis on climate, not be limited to what warming pressure groups want them to see. A balanced climate curriculum for the West</p>	NA/o	See Rationale 3.

		<p>Virginia schools would have a beneficial effect more far-reaching than this particular area of the country at the moment.</p> <p>Thank you for considering these thoughts for the benefit of the science departments in the West Virginia schools and beyond.</p>		
02-02	John F. Gunn	In favor of a balanced climate curriculum	NA/o	See Rationale 3.
02-02	William Hume Bill. California.	Science in schools	N/o	
02-02	John Hoffman	Please do not allow politics to determine what science will be taught.	NA/o	See Rationale 3.
02-02	Larry Krepps	<p>Global Warming statements in text books</p> <p>I encourage the West Virginia Board of Education to not fall in line with the rhetoric of those proclaiming man-made global warming. Though "they" declared that "the debate is over", it has been nearly two decades that we have awaiting the predictions of dire problems.</p> <p>It is always a good idea to "follow the money" on any issue that is being pushed by a specific section of society. Most of the "scientific community" that is pushing man-made global warming are those who directly benefit from government assistance and other grants to pursue their "theory".</p> <p>In the real world, such as a business environment, if I were to continue projecting results that never come to pass, I would not only lose credibility, I would be fired. Certain, but not all, environmental scientists have been predicting dire consequences of man-made global warming for at least 18 years without their predictions coming to pass. Perhaps it is time to pause and reflect.</p> <p>It is inappropriate to teach trusting children things that are unproven to be fact. The global warming theorists have failed to justify their theory by the Scientific Method.</p> <p>The West Virginia Board of Education should not become caught up in the bias or political pressures to include in its</p>	NA/-	See Rationale 2.

		<p>science books theories that are not only not proven, but which have significant evidence to the contrary.</p> <p>Presenting theory in science books is fine, but the theory must be cleared couched as theory only and opposing theories must be given equal standing, without suggesting lack of credibility for one theory and assumption that an opposing theory is correct.</p> <p>"Facts" should be stated in science books only when facts are proven to be facts.</p>		
02-02	Peter	<p>WV Common Core?</p> <p>The Global Liars Club is owned and operated by those free masons who have been screwing the world ever since they captured the ancient pharoahs of Egypt and expanded their gangsterism from there. Any name of the mob will do: Fascist, Nazi, Communist, etc.</p> <p>Global warming is just another piece of crappy-assed "science" designed to confuse and dumb down the folks who are just trying to get by. February 1 here where I live had an AM temperature of just 1 d/F.</p> <p>Planet Earth is slowly approaching the Photon Belt. When we get there, the Pleiadians will return with their half-brother Jesus Christ and save Earth with his 1,000 years of real peace and all those criminals will be removed. Those angels you heard about are the Pleiadian leaders and coaches who will carry out Jesus' mission.</p>	NA/-	See Rationale 2.
02-02	<p>Barbara Denton</p> <p>WV native</p> <p>7793 Woodland Circle</p> <p>Easton, MD 21601</p>	<p>Common core is a disaster waiting to happen for school students. It stifles imagination, truth, balance and true thinking. If a student finds climate change to be illogical they will have no recourse as questioning will not be allowed.</p> <p>Please step up to the plate and let the children of WV see both sides of an issue.</p>	N/-	
02-02	<p>Steve Hitchman</p> <p>32 Saddle Lane</p> <p>Cherry Hill, NJ 08002</p>	<p>Every child is Owed an Open-Minded Education Free of Indoctrination</p>	NA/-	See Rationale 2.

		<p>The Board of Education should ensure that its science standards permit students to examine and learn from all the data and analysis about global warming.</p> <p>Must students be made ignorant of scientific data which shows that over the last 18 years climate computer models have consistently projected a warmer world than scientific observations record? Global warming has not occurred as projected during the entire lifetime of today's school children.</p> <p>Should the actual recorded data of world temperature, sea levels, storms, droughts, floods and all the rest be banned from our classrooms? Is comparing this data to the pronouncements of highly funded global warming pressure groups heresy?</p> <p>Claims of an overwhelming scientific global warming consensus have been repeatedly and thoroughly debunked. The discussion is far from over. The true mind of science remains open to new data and alternative explanations. Whether and how much of the approximately 1/2 degree C of warming which occurred in the latter half of the 20th century is due to human industry has not been conclusively established. Neither have any of the incredibly expensive "solutions" proposed to address any global warming been shown to be meaningfully effective or worth their tremendous cost.</p> <p>The Board owes every child an open-minded education free of indoctrination.</p>		
02-02	Bill and Joan Stroup, Lakeville, Indiana	<p>We urge you to include a balanced science curriculum which includes that students should be exposed to all of the scientific data and analysis on climate, not be limited to what warming pressure groups want them to see.</p> <p>We are in favor of minor amendments to the curriculum which would better reflect the full scientific discussion on climate. students should be exposed to all of the scientific data and analysis on climate, not be limited to what warming pressure groups want them to see.</p>	NA/-	See Rationale 2.

		<p>Do not side with "common core" national standards which would allow indoctrination of school children about climate and would stifle discussion of any scientific data which does not fit the warming narrative.</p> <p>Your decision could affect not only those in your state, but students in our nation. We want all our children to be able to decide on truth, not be "fed" suppositions as if they are truth.</p>		
02-02	Bill and Joan Stroup, Lakeville, Indiana	<p>We urge you to include a balanced science curriculum which includes that students should be exposed to all of the scientific data and analysis on climate, not be limited to what warming pressure groups want them to see.</p> <p>We are in favor of minor amendments to the curriculum which would better reflect the full scientific discussion on climate. students should be exposed to all of the scientific data and analysis on climate, not be limited to what warming pressure groups want them to see.</p> <p>Do not side with "common core" national standards which would allow indoctrination of school children about climate and would stifle discussion of any scientific data which does not fit the warming narrative.</p> <p>Your decision could affect not only those in your state, but students in our nation. We want all our children to be able to decide on truth, not be "fed" suppositions as if they are truth.</p>	NA/-	See Rationale 2.
02-02	Russell Cook	<p>Comment submission: If global warming is settled science, why have its critics been subjected to 20+ years of character assassination attacks?</p> <p>The following is basically a verbatim re-send of the email I sent on January 13th in regard to the global warming teaching situation you had on your hands back then. The question is, whether the point I made then and re-assert now has been addressed.</p> <p>I am not a climate scientist and have never proclaimed I have any expertise to say which science side is right. I'm just a common citizen. There's an acute irony here, since</p>	NA/-	See Rationale 2.

		<p>virtually every enviro-activist you meet has no more science expertise than I do, yet they proclaim to know the science is settled. They tend to base this on just two widely repeated talking points, 'a scientific consensus' and 'industry-corrupted skeptic scientists'. The former talking point is patently ridiculous. Skeptic scientists point out in great detail that there is neither any kind of consensus, nor are science conclusions validated by a 'show of hands'. The latter talking point is a matter that common citizens can look into for themselves, one does not have to be a rocket scientist - or a climate scientist - to undertake basic due diligence on whether the fossil fuel industry has corrupted skeptics.</p> <p>Long story <i>very</i> short, I have been blessed with the luxury of time over the last five years to undertake that very examination of the accusation against skeptics. It was never my intention to prove it false, I merely was confronted with irreconcilable differences in it on the first day I looked into it. Rather than find a nice tidy explanation and irrefutable proof that skeptics received money from industry sources under instructions to lie to the public and fabricate reports they knew were false, I instead found fatal faults in the accusation and in myriad people who promoted it.</p> <p>I've detailed those specific faults in my blog http://gelbspanfiles.com and in about 60 online articles, the links to which are available at the "Archives" section of my GelbspanFiles.com blog. Additionally, the Heartland Institute published my 18 page Policy Brief recently on my work, please see "Media's Smear of Global Warming Skeptics Traces Back to 'Paper-Thin' Evidence Peddled by Al Gore, Ross Gelbspan" (http://heartland.org/press-releases/2014/10/16/heartland-policy-brief-exposing-merchants-smear), and was privileged in July to be an invited private citizen speaker at their 9th International Conference on Climate Change in</p>		
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		<p>Las Vegas this past July, where I briefly spoke on how ordinary citizens can ask tough questions about all aspects of the global warming issue: https://www.youtube.com/watch?v=t6OhfbGHJqo</p> <p>So, if the Board of Education is hit with talking points about the 'industry corruption' of skeptic scientists and skeptic speakers, ask any of the critics who repeat that accusation to point to any physical evidence at their disposal (full context document scans, undercover video/audio transcripts, leaked emails, money-transfer receipts, etc.) which proves skeptic scientists were paid to fabricate demonstratively false science papers, reports, assessments or viewpoints. Don't be surprised if you are met with either a "deer-in-the-headlights" look, or total sidesteps where they hurl no more than guilt-by-association 'evidence'. Arguably, their abject failure to give the public a valid reason to discount what skeptics say is the one thing that could ultimately collapse the entire global warming issue.</p>		
02-02	Bob Windle	<p>A Balanced Climate Curriculum</p> <p>Thank you for allowing additional public comment for a balanced climate curriculum. Students should be exposed to all of the scientific data and analysis on climate, not be limited to what warming pressure groups want them to see. Is it heresy for science students to see the observed global temperature data which shows that climate computer models have called for a warmer world than measurements show since last century? How about that weather extremes are historically normal and that the sea level continues to rise at only 3 mm per year? Must they be shielded from any data inconvenient to the global warming narrative? The true mind of science never stops examining the facts and fears no data, no matter how inconvenient it may be. There is no more important lesson that science students need to learn.</p>	NA/-	See Rationale 2.
02-02	William Huber	Science Curriculum	NA/-	See Rationale 2.

		<p>Thank you for your service to the students of West Virginia. As you consider the proposal to the science curriculum I hope you will allow it to be broad in its scope. Many feel the science is “settled” regarding climate change. Over 9,000 PhD and Masters credentialed scientists have signed off on a statement that this is not a settled matter in science and that in fact the recorded unvarnished data paints a different picture. The credo in science is to seek the facts and let the truth of the matter be found. Is it heresy for science students to see the observed global temperature data which shows that climate computer models have called for a warmer world than measurements show since last century? How about that the reputed weather extremes are actually historically normal and sea level continues to rise at only 3 mm per year? Must they be shielded from any data inconvenient to the global warming narrative?</p> <p>The true mind of science never stops examining the facts and fears no data, no matter how inconvenient it may be.</p> <p>There is no more important lesson science students need to learn.</p>		
02-02	<p>John F. Easterling, DMin, DMiss Professor of Intercultural Studies University of Northwestern- Saint Paul 3003 Snelling Avenue North Saint Paul MN 551133</p>	<p>Teach Science from an objective point of view Good science practices forces us to study different theories and points of view. Global Warming was based on computer model projections from a certain scientific believe that it is happening at a rapid scale. There are trends of global warming, but also cooling trends in the Antarctic as ice in some parts is getting thicker and thicker. Which is it? Global warming or global cooling or constant global change, the causes of which are as diverse as ocean currents causing El Nino or la Nina, Solar Flares, Volcanic Eruptions, Movements in upper jet streams, and many other uncontrollable natural phenomena along with excessive pollutants from two Asian countries with over a</p>	NA/-	See Rationale 2.

		<p>billion plus inhabitants each. America has come a great ways in respecting the use of fossil and nuclear fuels, but some current trends in the “Global Warming/Global Change” group will not be satisfied until we replace all fossil fuels with wind, solar, and other types of renewable energies. It is just as foolish to ban fossil fuels as it is to burying toxic wastes in one’s back yard. The use of wisdom calls for use of intelligence and common sense. Keep in West Virginia schools free from any extremist positions.</p>		
02-02	Joyce Duke	<p>I am distressed by all that I have seen of the common core curriculum. Their facts are mostly based on reports from pseudo scientists who don't mind doctoring the truth to fit their opinions. The global warming theory has been exposed as a hoax by those who doctored the data to fit the elitists desired effect.</p> <p>Their math books must have been written by the same government lawyers who wrote the rules and regulations for the IRS, and makes no sense whatever, and been edited by the yoyo who wrote the Affordable Health Care Act who has finally surfaced and states that they knew all along that it would cost trillions of dollars from the day one and had no qualms about lying to the public to get it passed.</p> <p>What they call sex education would get you or I imprisoned because it sounds more like the pedophiles grooming of the innocent child to view sexual perversion, homosexuality, depravity, etc. as normal. I learned the word "fisting" in relation to sexual activity after my 80th birthday, and I learned it from reading what is being foisted on our children in common core's version of sex education. It is heartbreaking to learn what lowlife trashy filth is being taught our elementary school children and to learn that it is taken to such depths as to force one 2nd or 3rd grade child kiss another of the same sex in front of the class. This is sexual abuse aimed at demoralizing our children and making them think this is normal sexual</p>	N/-	

		<p>behavior. No 3rd grade boy needs to be taught how to put on a condom.</p> <p>Neither do I appreciate that our school children are being taught the Islamic religion, while Christian children are not allowed to pray or mention Jesus on public school grounds. Please help our schools return to educating our children instead of wasting their best learning years by indoctrinating or brainwashing them instead of educating our most important task. Raising an educated and reproductive member of society, who can think for themselves.</p>		
02-02	Richard D. Miller	<p>Global Warming</p> <p>The more I read about global warming the more I am convinced it is a scam for certain individuals and companies to make money at the expense of people. I am a Research Physicist.</p>	NA/-	See Rationale 2.
02-02	Dr. William E. Turner	<p>Science curriculum</p> <p>I would like to take this opportunity to add my voice to those who are urging you to maintain a balanced science curriculum by teaching BOTH SIDES of the global warming debate. The science is far from settled and students deserve the opportunity to evaluate the evidence for themselves. This is how science works.</p>	NA/-	See Rationale 2.
02-02	wrestlerjerry	<p>Global warming classrooms standards</p> <p>The Board of Education should ensure that its science standards permit students to examine and learn from all the data and analysis about global warming.</p> <p>Must students be made ignorant of scientific data which shows that over the last 18 years climate computer models have consistently projected a warmer world than scientific observations record? Global warming has not occurred as projected during the entire lifetime of <u>today</u>'s school children.</p> <p>Should the actual recorded data of world temperature, sea levels, storms, droughts, floods and all the rest be banned from our classrooms? Is comparing this data to the</p>	NA/-	See Rationale 2.

		<p>pronouncements of highly funded global warming pressure groups heresy?</p> <p>Claims of an overwhelming scientific global warming consensus have been repeatedly and thoroughly debunked. The discussion is far from over. The true mind of science remains open to new data and alternative explanations. Whether and how much of the approximately 1/2 degree C of warming which occurred in the latter half of the 20th century is due to human industry has not been conclusively established. Neither have any of the incredibly expensive "solutions" proposed to address any global warming been shown to be meaningfully effective or worth their tremendous cost.</p> <p>The Board owes every child an open-minded education free of indoctrination.</p>		
02-02	Dave Butler Yreka Ca.	<p>global warming and science there of</p> <p>There is more data than what fits neatly into the global warming theory. lets take a look at some of it and present it to the students in our public schools system.</p> <p>They are smart and can figure it out.</p> <p>Lets look at the rising sea levels, more things than melting ice caps and glaciers contribute to that 3mm rise per year, consider sediment from runoff and wind erosion, that alone could be a large part of the sea's rising 3mm per year. Is that every year the same amount of rise? and how do other factors fit into consideration of global warming.</p> <p>Things to ponder?</p> <p>Let our kids do some thinking about this and see what they can conger up. but give them all the factors to work with. Their answers will boggel the mind.</p>	NA/-	See Rationale 2.
02-02	Mark J.Higgs Grantsville, WV	<p>Cirriculum regarding Global Warming/Climate Change</p> <p>I would like to express my views on how Global Warming/Climate Change is presented in the science curriculum. Despite what some are pushing, the "science" of GW/CC has not been settled. I am old enough to</p>	NA/-	See Rationale 2.

		<p>remember that in the 1960's "scientists" were warning us that we were entering another Ice Age with all of the ramifications that it would entail. But, lo and behold, the new Ice Age never materialized. Then in the 1980's Al Gore and others said we were going to have Global Warming. When facts didn't support their hypothesis, they changed their perspective to Climate Change.</p> <p>If one studies history it becomes apparent that the Earth has gone through cycles of warming and cooling independent of the activities of man. Roman historians recorded that when they invaded the British Isles more than a millennia ago, that they found the land lush with vineyards. Today the British Isles are generally too cold to raise grapes.</p> <p>At one time centuries ago, the prevailing thought was that the Earth was flat. Those who believed otherwise were branded as heretics. Now anyone who questions GW/CC is branded in the same irrational manner.</p> <p>I personally believe that the day will come when scientists will agree that the Earth goes through cycles of warming and cooling despite the activities of man. They will just call it "weather."</p> <p>In the meantime both sides of the argument should be allowed and presented in the science curriculum.</p>		
02-02	Richard Mansfield	<p>Climate change</p> <p>Climate change is a natural phenomenon and has been occurring since the beginning of time, WITHOUT ANY INPUT FROM HUMANS, AND IT WILL CONTINUE TO OCCUR . There are no credible data or studies to show that the level of carbon dioxide in the atmosphere has any significant effect on global temperature. In fact, if you</p>	NA/-	See Rationale 2.

		<p>consider the concentration of our "greenhouse gasses" (nitrogen, oxygen, argon and carbon dioxide (the last of which which comprises only 0.04% of our atmosphere), and their thermal conductivities, you can calculate that projected increases in carbon dioxide will have essentially no effect on global temperature. It is time for some scientific facts to be injected into this ridiculous, fear mongering hoax , which is purely being perpetrated for financial gain and political ideologies of the government etc.</p> <p>I challenge you to find any cause and effect studies or data to the contrary. Remember, a correlation between global temperature an atmospheric carbon dioxide concentration is no more convincing than a correlation between the former and the number of TV sets!. Do a little scientific investigation and don't swallow the garbage that is so widespread.</p>		
02-02	Marina Moreps	<p>Student's Rights: NOT to be indoctrinated with quasi science</p> <p>Our kids need to learn after they are given ALL the facts. PLEASE do NOT indoctrinate them with quasi science that gives them results from faulty 'models'.</p> <p>Consider this - the so-called climate predictors, who used a 'model' to predict the latest snow fall on the East Coast, i.e. 5-6 FEET of snow were only off by 4-5 FEET (THAT'S an 80% ERROR). The global climate predictors (the global warming crowd) have been predicting chaos for DECADES using a 'model' they CONFESSED they RIGGED. IF the predictors can't get it right a few days before a storm, what makes you think they can predict years - centuries down the road? GIVE ME A BREAK, but more importantly - give our kids a break.</p> <p>PLEASE don't indoctrinate our kids with FALSE science. Teach them how to research ALL facts and make up their OWN MINDS as to what is true and what is</p>	NA/-	See Rationale 2.

		false. PLEASE. Teach them how to make 'models' and how to TEST those models. Make them thinkers and doers, not a bunch of robots yesers. These are **YOUR** children and grandchildren. Don't you want them to be THINKERS?		
02-02	Evan Pallesen Raleigh NC	<p>The ongoing debate about science standards</p> <p>I wish to address you as a parent and technologist who happens to also be married to a K-12 educator.</p> <p>It is extremely unfortunate that a well heeled international movement has sprung up to try and impose what can only be described as a doctrinaire approach upon climate science, which seeks to keep voters, parents, and their kids ignorant of the real current state of this science - very fluid, and barely formed in spite of the constant strident claims of "settled".</p> <p>The reality is that observed global temperature data fits much better with simple astronomical data and theories than the much touted (and seriously flawed) climate computer models.</p> <p>I encourage you to stand up for openness, frank discussion and teaching of the scientific method, not just politically approved facts. Our kids deserve to be told the truth and taught to think and observe for themselves. The true scientific mind never stops examining the facts and fears no data</p>	NA/-	See Rationale 2.
02-02	Lisbeth Pierce 23908 Bothell Everett Hwy Unit B-104 Bothell WA 98021	<p>Balanced Approach for West Virginia Education</p> <p>We must weigh in with all truth as we know it, and that would include both sides of the global warming debate. Children are not robots to be programmed with inadequate science.</p> <p>The number of expensive, carbon burning planes attending these world summits disparage the "concern" the attendees actually have for the world environment.</p> <p>Only groups with a questionable agenda would fear truth, in my way of thinking.</p>	NA/-	See Rationale 2.

02-02	Rick MANT .	We want and must provide honest and balanced education or it is neither knowledge nor education. There is only education if there is truth.	NA/o	See Rationale 3.
02-02	Jerry Parrillo	Science curriculum I'm writing concerning the proposed new "common core" science curriculum that is being considered for West Virginia schools. I'm sure I don't need to tell you that the jury is still out on the subject of global warming and human effects on global temperatures. The actual climate data does not align with the levels that global warming proponents said it would. The actual amount of measurable global warming has been negligible. Since global warming is still just a theory and not an established fact, children should not be taught that it is a fact. Children (and adults) should be given all the facts on both sides of every issue and allowed to make their own decisions about it. That is what freedom is all about. Giving only one side of an issue is indoctrination. Please deny this request for a new common core curriculum in the interest of proper scientific procedures. Thank you for your consideration.	NA/-	See Rationale 2.
02-02	laurie curtis	Science science must experience all factions not just a few. we need to learn all we can to produce better results	NA/o	See Rationale 3.
02-02	Nancy Selbman	Balanced Climate Curriculum Science is an important part of our overall education. Science is and should remain an "exact" study, weighing all factors in any given situation. You cannot come up with an honest answer to a scientific question if some of those factors are omitted from the equation, anymore than you can come up with a good loaf of baked bread by leaving out the yeast. Give our kids ALL of the equation so that they have all components to consider before coming up with any scientific conclusions.	NA/o	See Rationale 3.

02-02	Roy Underwood	<p>Climate</p> <p>I'm responding to the debate over teaching all sides of science. I'm confused that this is even being debated. Science is either sound and proven or it isn't. Of course there is agenda driven science as well as other politically motivated issues.</p> <p>As a public school it is your duty to be above reproach and let the debate settle this issue. If there is nothing to hide or no hidden agendas then there should be no issue about allowing science take its natural course and show all the facts.</p>	NA/-	See Rationale 2.
02-02	Linda Sills	<p>The climate science debate</p> <p>Here is an important video of some of the world's most educated and brilliant scientists, explaining FACTS..which do not show up in the indoctrination by the left. As it seems the left do not want another opinion to be discussed.</p> <p>http://nation.foxnews.com/2014/07/28/watch-international-conference-climate-change</p>	NA/-	See Rationale 2.
02-02	bschjol@xxxxx.xxx	<p>right to all the facts</p> <p>I agree with what CFACT sent in. Not only students need to have free access to all the facts not just what certain groups want known. Unless all the facts and fiction are available to learn from and study, informed and knowledgeable answers can not be arrived at. All information representing all sides and view points are valuable in finding answers and solutions. Getting only half the picture is almost, if not worse, than no information at all.</p> <p>Here's what CFACT sent in:</p> <p>Subject line:</p> <p>Protect students' rights to all the facts about the climate</p> <p>Email:</p> <p>The Board of Education should ensure that its science standards permit students to examine and learn from all the data and analysis about global warming.</p>	NA/-	See Rationale 2.

		<p>Must students be made ignorant of scientific data which shows that over the last 18 years climate computer models have consistently projected a warmer world than scientific observations record? Global warming has not occurred as projected during the entire lifetime of today's school children.</p> <p>Should the actual recorded data of world temperature, sea levels, storms, droughts, floods and all the rest be banned from our classrooms? Is comparing this data to the pronouncements of highly funded global warming pressure groups heresy?</p> <p>Claims of an overwhelming scientific global warming consensus have been repeatedly and thoroughly debunked. The discussion is far from over. The true mind of science remains open to new data and alternative explanations. Whether and how much of the approximately 1/2 degree C of warming which occurred in the latter half of the 20th century is due to human industry has not been conclusively established. Neither have any of the incredibly expensive "solutions" proposed to address any global warming been shown to be meaningfully effective or worth their tremendous cost.</p> <p>The Board owes every child an open-minded education free of indoctrination.</p>		
02-02	Gerald Brunetto	<p>Balanced Climate Curriculum</p> <p>I am a degreed engineer recently retired. I can recall learning early in my engineering school days that true science and the Scientific Method demand never ending challenges and debate on hypothesis, theory and even scientific law. So, over a decade ago when I heard Al Gore, et. al. stating that the (man made) global warming "debate was over", I was confused. First, I could not recall the debate occurring (never mind ending) and second, ending it did not seem consistent with the standard premiss of science and the Scientific Method. If one side of this debate was demanding that the debate end and that their</p>	NA/-	See Rationale 2.

		<p>position was "scientific law", never to be challenged, this to me belied some possible other motives --- reputation or position, funding, money, ego, politics (heaven forbid), etc.. The mismatch induced me to "check it out" (perhaps the most valuable thing I learned at university) which I have been doing for over a decade. I was not, and still am not, any kind of a "climate" specialist. I am a humble observing neophyte. The principle thing I have found is that, true to my learning, the climate change scientific debate was <u>not</u> over and, in fact, continues "raging " to this day (as it should). Much has been learned on climate change over these years by the scientific community. But, more importantly, the knowledge gained is encouraging and demanding further investigation and study (also as it should). But it is not my intention to try to discuss "climate science" in this e-mail.</p> <p>I understand that you are having a debate concerning the context of the curriculum in your school system on "climate change". I encourage you to develop a program that not only provides arguments on all sides of this subject, but demands that the students themselves investigate the facts, sources and logic or "pros & cons" on all sides, and, further come to some conclusions themselves (if not more than one, "science" is probably not being learned). This can develop students who can seek information, think, relate, challenge and reason, the essence of humanity and what can help them to be successful in their lives, careers, and communitites. Is that not the true purpose of education?</p>		
02-02	Debbe Meade	<p>Global Warming is lining Al Gore's pockets along with the elites what is it doing for your school or the students? I don't believe in global warming or climate change what ever you want to call it. But I believe that our young children need to hear the truth and not a trump up lie from Al Gore and others to line their pockets. Do the</p>	NA/-	See Rationale 2.

		investigation for yourself and see what you come up with. I dare you to !!!!		
02-02	Marshall P. Williams, Ph.D. Hemphill, TX	<p>The Global Warming Hoax</p> <p>I was a college professor for 23 years, so I have seen a bit of education at work. It is imperative that teaching be based on FACTS not on left wing hysteria that "the sky is falling". The whole global warming thing is not supported by the facts, never mind what a gaggle of green climate crazies say.</p> <p>There is no reason for us to cripple our economy in the name of "Global Warming" just to satisfy a small lunatic fringe.</p> <p>Please present the FACTS to students in your state and not computer theories which don't seem to quite work right.</p>	NA/-	See Rationale 2.
02-02	Shelley Alfieri	<p>Balanced Climate Curriculum</p> <p>The Board of Education should ensure that its science standards permit students to examine and learn from all the data and analysis about global warming.</p> <p>Must students be made ignorant of scientific data which shows that over the last 18 years climate computer models have consistently projected a warmer world than scientific observations record? Global warming has not occurred as projected during the entire lifetime of today's school children.</p> <p>Should the actual recorded data of world temperature, sea levels, storms, droughts, floods and all the rest be banned from our classrooms? Is comparing this data to the pronouncements of highly funded global warming pressure groups heresy?</p> <p>Claims of an overwhelming scientific global warming consensus have been repeatedly and thoroughly debunked. The discussion is far from over. The true mind of science remains open to new data and alternative explanations.</p> <p>Whether and how much of the approximately 1/2 degree C of warming which occurred in the latter half of the 20th century is due to human industry has not been conclusively</p>	NA/-	See Rationale 2.

		<p>established. Neither have any of the incredibly expensive “solutions” proposed to address any global warming been shown to be meaningfully effective or worth their tremendous cost.</p> <p>The Board owes every child an open-minded education free of indoctrination.</p>		
02-02	DAVE MASUCCI	<p>KEEP AND EXPAND SCIENCE COURSES IN OUR SCHOOLS !</p> <p>West Virginia school children and children across the nation need your help again and they need it now. West Virginia is revising its science teaching standards to fall in line with proposed national standards designed to function like a “common core” for science. Global warming campaigners see these national standards as a chance to indoctrinate school children about climate and to stifle discussion of any scientific data which does not fit the warming narrative.</p> <p>CFACT recently testified at a meeting of the West Virginia Board of Education in favor of minor amendments to the curriculum which would better reflect the full scientific discussion on climate. We argued that students should be exposed to all of the scientific data and analysis on climate, not be limited to what warming pressure groups want them to see.</p> <p>The Board voted to further consider the matter and is getting close to reaching a decision. They’ve asked for additional public comment.</p> <p>Please take a moment to email your comment in favor of a balanced climate curriculum right away to West Virginia science coordinator Robin Sizemore: robin.sizemore@k12.wv.us.</p> <p>A great many of CFACT’s friends and readers took action and sent in their comments on round one.</p> <p>Time to stand up again.</p>	NA/-	See Rationale 2.

		<p>Is it heresy for science students to see the observed global temperature data which shows that climate computer models have called for a warmer world than measurements show since last century? How about that weather extremes are historically normal and sea level continues to rise at only 3 mm per year? Must they be shielded from any data inconvenient to the global warming narrative?</p> <p>The true mind of science never stops examining the facts and fears no data, no matter how inconvenient it may be. There is no more important lesson science students need to learn.</p>		
02-02	Joan Stephenson	<p>Climate Change</p> <p>I'm in favor of students hearing all the information about climate change so that they can make an informed decision and not just hear one side.</p> <p>From the information I read I don't believe that we have a problem with global warming, and I read information from both sides.</p>	NA/-	See Rationale 2.
02-02	Ralph Ely	<p>I was amazed when I read your students are not being allowed to know all of the facts of Climate Change. You notice I did not say Global Warming. I too used to think we had Global Warming, until I started to use my brain and read Hard Science, only to find the earth has actually been cooling for some 18 years.</p> <p>Are you not charged with teaching your students how to think...not what to think? Perhaps you should do what I did some years back, get your own facts and information. It is beyond words the feeling you get when you find the truth and understand you have been told what to think (as an adult) and not how to think. Once you have done this you will be able to give your students "an honest education."</p>	NA/-	See Rationale 2.
02-02	James Demeter President CTO of Demeter Amplification	<p>Science</p> <p>Science is supposed to be skeptical. A scientist should spend his time trying to disprove a theory. Only after years</p>	NA/-	See Rationale 2.

		of trying to disprove a theory is it tentatively accepted as a possible fact. AGW theory has been the exception to this rule. Political influence and money have corrupted science. it has become as much as a political/ religious belief as it is a scientific theory. A simple look at this theory and supporting data by anyone with a technical background shows many areas where there is very good reason to have a great deal of skepticism. Denying children the right to hears both sides of something a dubious as global warming theory is veery wrong. In ten to twenty years the whole Global warming theory may well find its way to the ash can of history. It would be good to let the children know that it is very possible it might be wrong.		
02-02	Wesley Borchardt	Must students be shielded from any data inconvenient to the global warming narrative? The true mind of science never stops examining the facts and fears no data. I am in favor of a balanced climate curriculum.	NA/-	See Rationale 2.
02-02	Wesley Borchardt	Same comment submitted 1 minute later Must students be shielded from any data inconvenient to the global warming narrative? The true mind of science never stops examining the facts and fears no data. I am in favor of a balanced climate curriculum.	NA/-	See Rationale 2.
02-02	Hank & Macky Patton	science curriculum There should be a balance in the science cirriculum-not just one side on climate change. Otherwise, a disservice is being done to children .	NA/o	See Rationale 3.
02-02	Richard Mook	Balanced Science Curriculum Abandon these efforts to only present one side of scientific issues. The issue of climate is very complex and there is much data and many scientists that dispute the current claims of human caused global warming.	NA/-	See Rationale 2.
02-02	chauvin emmons	Teach ONLY Real Science What kind of a sick perverted society would lie, directly lie to our children?	NA/-	See Rationale 2.

		<p>What kind of leadership are you aspiring to here anyway? Climate Change has happened to this planet before man was a fish in the sea, If you were really interested in the betterment of this country you would be teaching Creative Design & Evolution.</p> <p>If you are only following Terry McAuliffe's orders then my dear ma'am you can go straight to hell.</p> <p>We will fight you tooth and toenail and if we don't get it straight here and now, God will have a few words for you when you get there....</p>		
02-02	Janice Jolly	<p>Climate Change</p> <p>I would like to add my name to the growing chorus to modify the current popular view of Global Warming, or as the current Administration would like to call it, "Climate Change". As a geologist, I have a longer view of the earth's climate changes. We have had many cooling and warming cycles over the earth's history, none of them caused by man's production of carbon dioxide. About 12,000 years ago, the ice extended all the way down to Missouri, its retraction to current levels in Canada left behind the Great Lakes and many visible residues from glaciers. We had a more recent Little Ice Age that extended from 1500's to the mid 1800's. The Thames in England and the Mediterranean froze so that fish died or moved south and birds froze and fell from the sky. Needless to say, this period saw a lot of famine, and there was a big migration to the New World. The warming period that has followed was not caused by man's use of new sources of energy. Aside from this perspective and evidence, recent scientific research has shown that carbon dioxide does not cause global warming. Increases in carbon dioxide follow periods of warming and is a result of it. The current Climate Change enthusiasts are basing their conclusions on faulty data that includes measurement of "average" content of carbon dioxide for the earth measured at a laboratory residing on top of Mauna Loa in Hawaii. It</p>	NA/-	See Rationale 2.

		<p>is a well known fact that volcanoes are a major source of natural carbon dioxide, so it would appear to be very poor science to use this data as an average for the earth. Please watch the following lecture on the subject:</p> <p><u>The Deliberate Corruption of Climate Science</u> Tim Ball, Video Dr. Tim Ball, a climatologist and retired professor at the University of Winnipeg in Canada, is one of the world's leading debunkers of global warming alarmism. He's also an entertaining speaker who knows how to keep an audience in its seats. Dr. Ball just posted on YouTube a <i>two hour</i> presentation that is absolutely delightful to watch. If you never thought you could sit through such a long presentation on climate change, think again, and visit this site! https://www.youtube.com/watch?v=Owm25OHGglk#t=2650</p>		
02-02	James H. Keebler MSCE, PE, CRE	<p>West Virginia School Board's Proposed Science Curriculum I am writing to extend my support for the West Virginia School Board's and the School Board's members' consideration of adopting the proposed science curriculum in West Virginia's Schools. I do this on behalf of West Virginia students.</p> <p>I applaud West Virginia's efforts to provide a balanced and rational approach in these students' learning processes. Providing students with all facets of any issue so that they [the students] can conduct their own objective analysis of a problem or issue is and will be a valuable lesson they can apply in any endeavor.</p> <p>I could attempt a lengthy and arduous argument for or against GW/GWTs' tenets. But I will not subject you to that. Suffice it to say that West Virginia's students deserve</p>	NA/-	See Rationale 2.

		and should be provided the opportunity(ies) to know and learn how to properly analyze anything put before them hopefully with their own [learned] resourcefulness and ability to discern rationally the facts of any issue, problem or conflict they may encounter.		
02-02	Virginia Faye Adkins	Climate Studies! Students should be exposed to all of the scientific data and climate analysis. Balanced climate studies would be more educational.	NA/o	See Rationale 3.
02-02	Chris Fuller Chairman, Institute of Electrical and Electronics Engineers Twin Cities Microwave Theory and Techniques Society 8901 River Ridge Circle Bloomington, MN 55425 952-607-8506	Anthropogenic Global Warming (AGW) I recommend West Virginia allow academic freedom for their students in science education, especially when it comes to the theory that man is the cause of global warming. As someone who has worked in an earth science lab at NASA, I have witnessed first-hand an unscientific intolerance in the earth sciences for any other viewpoint besides AGW. As a leader in a hard science, I am greatly disturbed by how political rhetoric has replaced evidence in the earth sciences regarding AGW.	NA/-	See Rationale 2.
02-02	David Buha	Science standards in West Virginia Students in West Virginia should be educated in the fact that the earth has undergone climate change from warm to cool and back again repeatedly throughout its existence, and that computer models attempting to predict future climate cannot be expected to accurately evaluate all of the elements that contribute to climate change because scientists simply don't know what they all are or to what measure each variable contributes to the overall pattern. If you are indeed a scientist yourself, you should understand that science is not a matter of consensus of opinion; science is provable and subject to replication and confirmation. Satellite temperature measurements are much more reliable and accurate than earth-based measurements and they show much less warming than reported by the climate change alarmists.	NA/-	See Rationale 2.

		Another point that students should be aware of is that regardless of what is happening to worldwide temperatures, there is nothing humans can do to have any significant impact. The only thing we can effectively do is to adjust.		
02-02	James Stanley Monroe, NC 28112	Protects the students' rights to all the facts about climate I agree with CFACT that the students should be exposed to all of the scientific data and analysis on climate and not be limited to what warming pressure groups want them to see	NA/-	See Rationale 2.
02-02	Gould, Laurence	<p>Advocating a balanced climate curriculum in West Virginia schools</p> <p>I understand that you are the West Virginia science coordinator pertaining to a revision of the school science standards in your state. And, since I have studied both sides of the "climate change" issue, I would like to present here why the less-publicized side of the issue should <i>also</i> be presented to students. The less-publicized side consists of the evidence that runs counter to the claims of dangerous anthropogenic "climate change/global warming" (AGW).</p> <p>Over the course of ten years I have been extensively involved in researching (AGW) issues, giving talks on them, and even taught two AGW-related courses (Fall semester 2009 and 2014) at my university. When I was the 2004 Chair of the New England Section of the American Physical Society (NES APS) we had a joint meeting with the New England Section of the American Association of Physics Teachers where experts from both sides of the AGW debate presented their views; followed by an extensive Q&A session. A report of the meeting is in the NES APS Newsletter, Spring 2005, at http://www.aps.org/units/nes/newsletters/upload/spring05.pdf and the slides from each of the four speakers can be found at http://www.aps.org/units/nes/meetings/fall04.cfm</p>	NA/-	See Rationale 2.

		<p>Below are links pertaining to issues related to getting both sides of the AGW aired in the schools.</p> <p>1. Here's a link to my recent article from <i>Energy & Environment</i>; an invited paper, which points up problems in educational methodology regarding AGW: "Systematic and Logical Problems in Global Warming Science" https://db.tt/c9sEnta0</p> <p>2. Here's a link to an article from a British perspective. Title seems harsh but the argument is (I think) well presented with points applicable to all educational systems: MONTFORD Andrew and SHADE John -- - "CLIMATE CONTROL: Brainwashing in Schools" http://www.thegwpf.org/content/uploads/2014/04/Education-reducedportrait-5.pdf</p> <p>Throughout its history science has — despite its detractors — gone on to understand nature. And that is why students need to understand that science requires freedom of inquiry; including inquiry of less-publicized views that are in keeping with the scientific method.</p>		
02-02	Bob Hudgins	<p>balanced climate curriculum</p> <p>What better way to have a future robotic population than to train them early on as to what to believe, conceal the facts and promote only that which suits the establishment seems now to be the order of the day.</p> <p>The Federal Government has set up many failed educational programs and will continue to do so as long as the public allows, Common Core is a perfect example, Michelle Obama's school lunch program is another, no child left behind, etc. I believe the Federal Government has enough on its plate and should leave education to those who know how to educate.</p> <p>True education is: Teach a child how to think instead of what to think.</p>	NA/-	See Rationale 2.
02-02	Joseph Lee ex-Wheeling, WV resident	Present all the facts on Climate Change...aka Global Warming (BS)	NA/-	See Rationale 2.

		<p>Please alter the curriculum to include facts regarding the natural events that have occurred over the centuries.</p> <p>Keep the "Flawed Hockey Sticks" in a trash bin along any Global Warming BS spewed by Al Gore and other climate change Liberals.</p> <p>Allow our children to learn and not BE Told!!</p>		
02-02	Iva Hartwell	<p>teaching science..not global warming</p> <p>I'm a grandparent and concerned for the teachings our grandchildren are receiving in the schools today. In particular, science seems to be attracting the attention of parents and officials alike. I commend teachers, faculty, administration and anyone who deals with the education of our youth. We're definitely dealing with some difficult times, and the job can't be easy. However, I would encourage you to not lean towards the global warming theories, as there are many facts that dispute this belief. Let these young eager minds decide for themselves and stick to the basic fundamentals of science. With so much being politicized today, let's try to keep it from reaching into the classrooms.</p>	NA/-	See Rationale 2.
02-02	Susan Misa	<p>Climate change subject in Science classes</p> <p>All science classes should include all aspects of global changes not just "global warming" but also "global cooling". Especially since neither has been proven either way.</p>	NA/-	See Rationale 2.
02-02	Denise Hughes Georgia	<p>School Science teachings</p> <p>I am just putting in my 2 cents worth. I believe our children should be taught all the scientific data and let them come to their own conclusions. Since they are taught Science and other subjects in more and more depth as they progress in age through school, teach them what we know as TRUTH, be willing to say this could change as scientists learn more and when new information is learned tell them so. Present all arguments especially with creationism and Dawin's theories.</p>	NA/-	See Rationale 2.
02-02	Greg Wisz	Protect students' rights to all the facts about the climate	NA/-	See Rationale 2.

		<p>I am a parent of five children. I want my children to be taught both sides of every story or hypothesis. The media has done a good job of telling us that global warming is a fact, so much so that many people accept it as such. The problem with that hypothesis is that it has not been proven and most of the models that the warming alarmists are using have not even been close to accurate. If you have been around since the late seventies, you will remember that the alarmist were calling for another ice age at that time. We know that did not happen. Now many of the same scientists are calling for global warming. If they were so wrong in the 70's and 80's how can they be believable now? We owe it to our children to teach them proven facts and not mere guesswork. I hope that you will consider giving students both sides of a controversial story that needs much more examination before any meaningful conclusions can be drawn.</p>		
02-02	Jim Showalter	<p>True Science Please continue to resist the move towards common core. Is it heresy for science students to see the observed global temperature data which shows that climate computer models have called for a warmer world than measurements show since last century? How about that weather extremes are historically normal and sea level continues to rise at only 3 mm per year? Must they be shielded from any data inconvenient to the global warming narrative? The true mind of science never stops examining the facts and fears no data, no matter how inconvenient it may be. There is no more important lesson science students need to learn. Please continue to resist the move towards common core. Science needs to follow the facts, and so does faith for that matter but that is another matter entirely.</p>	NA/-	See Rationale 2.
02-02	W R Jackson Jr 55 Burbank Lane Yarmouth, ME 04096	Science in the classroom	NA/o	See Rationale 3.

		<p>I understand your schoolboard is undertaking the problem of how to express the teaching of students particularly in Science. I offer my thoughts.</p> <p>For the world to be filled by a new generation capable of honestly managing their adult decisions as they guide their futures, it is my thought that they must be offered the most honest set of facts and rationale available. I am aware that there are forces loose in our Country that would prefer to lead young minds to a certain conclusion to aid and abet their point of view possibly for power. In the end to mislead a young mind is to jeopardize the quality of the choices each will make for the aggregate of decisions, its civilization, to succeed to the best possible outcome. It is hard to find the honest decision, but teaching to do so is the best a school board can do for the next generation for which those students will be responsible.</p>		
02-02	Gregorio Trevino	<p>High school science core standards</p> <p>All students must be exposed to the different science data available on climate change for them to be able to analyze the facts rationally and let them arrive at their own conclusions. Granted, these are only high school students but the exposure to this kind of science will allow them to see different areas where there is disagreement. Please expose them to both sides of the global warming science (or any science for that matter) so that they may be able to process it without it being skewed one way or the other.</p>	NA/o	See Rationale 3.
02-02	Elaine	<p>Wv</p> <p>I can I have word on WV school policy I live in az</p>	N/o	
02-02	Sue Ann Taylor	<p>Regarding: Protect science in the classroom.</p> <p>Prior to my retirement, I was a Newspaper In Education (NIE) Coordinator at our local newspaper. I started NIE programs at several newspapers in three different states over 30 years and gave many classroom presentations on printing newspapers, using newspapers and giving teacher workshops. Why am I commenting about NIE and science in the classroom? Because knowledge is needed for</p>	N/o	

		<p>everything in today's world. Teachers <i>cannot</i> be expected to teach everything necessary, and parents are falling a tad behind in teaching some of the basics.</p> <p>One of the items I put in our paper weekly was a simple science project that could be done by students at home - with grandma, or a sibling or by themselves. What was accomplished? Usually fun, success in learning by doing, reading and following instructions, and ... I could go on and on... it is education! and not <i>common core education</i>! I am a member of our local Recycling Board. We have a contest each year for Recycling pictures for the next year's calendar. Recycling is important. It is science, useful science. Have your students ever made paper from chopped up wood? Have they ever made a tree out of an old newspaper? I've showed thousands of students how to do it. One classroom made a tree that went across the basketball court to prove that it could NOT be done! I am a judge in local and district science fairs, and help students chosen to go to the state science fair fine tune their displays and presentations. Many projects at local school fairs are taken directly out of a book - or off the Internet. But the student do learn something. And it is something!</p> <p>These some things are needed. Our students (I'm a mom of six and grandmother of twelve) - need to experiment, experience and talk about science - in all of its fields - from biology and medicine to oceanography and outer space / astronomy to archaeology, geology and zoology. It's all needed. We can't leave one group of "scientists" say "and this is what you need to know!" and be done with it... Students need to know there is always more to learn, especially science.</p> <p>PLEASE, don't let one set of scientists write a science program for the entire United States, or for the entire state of West Virginia. (Yes, I was in West Virginia for a while as well.)</p>		
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		I'm not sure if this is what you wanted, but hope it helps. IF I can do anything more (I have forwarded the original e-mail request to science teachers I work with), <i>please let me know!</i>		
02-02	Eric Nikolitch-MI	Open-minded Science Please do not allow the "global warming" activists to control what students learn about climate and the globe. Please allow FULL research and discussion on all angles and evidence from all sides of this and all other scientific issues. No one should be afraid of the facts, whatever they are.	NA/-	See Rationale 2.
02-02	Dave Bodah, concerned citizen Saranac Lake, NY	Balances in science Please consider the damage that a one sided curriculum in the "science" of climate can do to young minds and the economy. I am from NYS and already the new paradigm in education here is taking a toll on this state in terms of economic impact. Emotions have replaced facts (as they are always wont to do) and the teachers here are beginning to rebel against the new "common core" method. Many districts have thrown it completely out because of it's detrimental effects on actual learning. West Virginia still has to follow a common sense route rather than let the pols in DC dictate what tender minds are subjected to. Thank you for your consideration of my views.	N/-	
02-02	Ronald W. Pate, P. Eng.	Protect students' rights to all the facts about the climate Is it heresy for science students to see the observed global temperature data which shows that climate computer models have called for a warmer world than measurements show since last century? How about that weather extremes are historically normal and sea level continues to rise at only 3 mm per year? Must they be shielded from any data inconvenient to the global warming narrative? The true mind of science never stops examining the facts and fears no data, no matter how inconvenient it may be.	NA/-	See Rationale 2.

		There is no more important lesson science students need to learn.		
02-02	John H. Kolar	<p>climate</p> <p>There have been many ice ages through out history. As much as a one mile thick sheet of ice covered much of north America at one time and since has melted and it did not melt because of any man caused reasons. All through history there have been several heating and cooling periods of the earths climate. So please consider all science on both sides of any subject in order to have a truly informed curriculum and not one that may fit a particular agenda. I do believe however that much can (should) be done to help clean up and keep clean the quality of the earths air and water. It must be done in a manner as not to put too much control in government agencies but in incentives for industry and the people themselves. Please keep all politics out of science and any other curriculum except a course on politics and keep that unbiased.</p>	NA/o	See Rationale 3.
02-02	John G. Trulio, Ph.D. (in the physical sciences).	<p>climate change: politicized science is politics, not science</p> <p>How easily academia's beneficiaries of federal contract grants slip from global warming to climate change to man-made climate change. In a court of law they'd be parties in interest and denied any judgmental role. Students should be taught how facts of observation are established in the physical sciences, and that consensus is a political tool, not a scientific one. In regard to climate change, this means that all the evidence must be freely exposed and evaluated, and with particular distrust of persons who, like those dependent on government research contracts, have a financial stake in the outcome. Government loses interest if climate change is not man-made. The case that it is not is quite strong; to omit it would reduce your teaching of science to indoctrination.</p>	NA/-	See Rationale 2.
02-02	Gary & Cindy Perkins of Parkersburg, WV	<p>Protect students rights to all the facts about the climate.</p> <p>Email:</p>	NA/-	See Rationale 2.

		<p>The Board of Education should ensure that its science standards permit students to examine and learn from all the data and analysis about global warming.</p> <p>Must students be made ignorant of scientific data which shows that over the last 18 years climate computer models have consistently projected a warmer world than scientific observations record? Global warming has not occurred as projected during the entire lifetime of today's school children.</p> <p>Should the actual recorded data of world temperature, sea levels, storms, droughts, floods and all the rest be banned from our classrooms? Is comparing this data to the pronouncements of highly funded global warming pressure groups heresy?</p> <p>Claims of an overwhelming scientific global warming consensus have been repeatedly and thoroughly debunked. The discussion is far from over. The true mind of science remains open to new data and alternative explanations. Whether and how much of the approximately 1/2 degree C of warming which occurred in the latter half of the 20th century is due to human industry has not been conclusively established. Neither have any of the incredibly expensive "solutions" proposed to address any global warming been shown to be meaningfully effective or worth their tremendous cost.</p> <p>The Board owes every child an open-minded education free of indoctrination.</p>		
02-02	Francene thegsn@xxxxx.xxx	<p>student learning</p> <p>I recommend teaching children/youth the truth and the questions so they can learn to think.</p> <p>As teachers, it is our job to teach, not indoctrinate.</p>	NA/o	See Rationale 3.
02-02	Mary Rijos	<p>Science curriculum</p> <p>I am writing to urge you to provide the students of West Virginia with all of the current scientific data on climate models and historical changes, to provide them the opportunity to examine all of the facts and encourage</p>	NA/-	See Rationale 2.

		critical thinking. Please do NOT revise the science curriculum to fall in line with the national standards. A balanced science curriculum is critical to encourage our students to delve into science and pursue further study.		
02-02	Linda Martell	science in the classroom Please do not disparage the concept of science with terms like consensus and settled ... they key characteristic necessary for real science to take place is an open mind. Starting with anything as "settled" denies that outright. Too much has been presented regarding the corruption involved in the dissemination of so-called "climate change" for it to have any scientific integrity. Let's keep looking and asking questions on both sides.	NA/-	See Rationale 2.
02-02	Odis R. Phillips	It is well past time for our educational programs to get back to teaching facts and not fiction to our students. When controversial subjects are being addressed both sides should be presented with out favoritism. To present slanted information is stacking the deck and indoctrinating the students to accept the presenters ideas.	NA/o	See Rationale 3.
02-02	Janet Draper jljedraper@xxx@xx	Science curriculum Let's not loose the definition of science and the scientific method. Consensus is not science.	NA/-	See Rationale 2.
02-02	slsaws@xxxxx.xxx	Get rid of common core!	N/-	
02-02	Margaret Remy Meridian MS	balanced science curriculum There is a lot of evidence that the "science" of climate change is skewed and/or inconclusive. With political and media bias, little attention has been paid to research and statistics that disprove the dire predictions of climate change. I urge the school system to not be swayed from presenting evidence on all sides of this discussion. As a grandparent and as a business owner, I have serious doubts about the validity of the common core curriculum's educational benefits and the validity of applying standards	NA/-	See Rationale 2.

		so rigidly across the nation. Our state is one of many who are backing away from common core.		
02-02	Stephen Lord	<p>Science Education</p> <p>The essence of science is that all theories are challengeable. A theory should be able to produce testable hypotheses and should live or die by the result of those tests. That is what Einstein did and his theory of relativity is now accepted as being more correct than Newton's theories. No theory should be exempt from such tests and people are actively working to overthrow Einstein's theory. Thus for our children to learn science they must understand that this is our current best understanding not received dogma and should be able to see all the facts and listen to opposing arguments.</p> <p>The Anthropogenic Global Warming theory is a scientific theory and has postulated a continuous global warming trend due to increase in Carbon dioxide concentration in the atmosphere. Thus the raw data on global temperature history and sea level is critical to validating this theory and should be available and updated annually. Currently this data shows a plateau in temperature and sea level rise which is within the experimental error for the last 18 years. Thus the main testable hypothesis is shown to be wrong. Other theories are therefore needed, which can be modifications of the CO2 theory to account for ocean heat storage etc or completely different theories such as natural variation in long term climate cycles which require different sets of data to go far enough back to observe the cycles. The existence of such cycles is known with periods of warming and cooling prior to the industrial age. A complete theory should in any case explain these prior variations.</p> <p>Thus the global warming controversy offers the opportunity to really teach science by digging into the issues and difficulties of prediction and of measurement or to turn science into a secular religion where only the</p>	NA/-	See Rationale 2.

		“established views are permitted”. The latter is arguably against the First amendment under the establishment of religion clause while the former is definitely protected as “free speech”.		
02-02	Don Broderick	Climate You must be getting a lot of e-mail on this topic, so I will make this one short. Students must be given all the facts and the source for those facts. This is true for climate, or any other subject that the school teaches. To do less is to fail your students.	NA/o	See Rationale 3.
02-02	Larry Prucha BS Math, BSEE, MSEE	Climate Change The global warming proponents are using flawed computer simulations to substantiate their conclusions. Also they say that the green effect is established science, when they have not proven the theory with the scientific method. They think the science is a democratic method, you just need a majority of scientists to verify a theory. That is complete folly. All you need to debunk their theory is to study chaos analysis.	NA/-	See Rationale 2.
02-02	Ray Nathurst	Balanced Science Please support balanced Climate Science.	NA/o	See Rationale 3.
02-02	Joyce Detert Sturgeon Bay, WI	Balance Climate Curriculum It is imperative to present an accurate and balanced view of climate curriculum to high school students. Not to do so is deceptive, destructive, misleading, and encourages students to fudge their own data when doing experiments or writing theses. The TRUTH will prevail.	NA/o	See Rationale 3.
02-02	Everett Lancey	Balance To whom it may concern: I believe our children need a balanced program in science so every discussion needs to show all views and scientific truth. Climate warming needs to hear from all scientists.	NA/o	See Rationale 3.
02-02	Andre S Zivkovic	You are not alone in your fight to bring balance into science lessons. As a Clinical Laboratory Scientist I have watched with unbelieving eyes as this "Climate Change"	NA/-	See Rationale 2.

	MT(ASCP) CLS(NCA) Bs Microbiology, Bs Clinical Laboratory Science	<p>hysteria has grown. At every turn these hucksters and scam artists try to make us believe their "Junk Science" as absolutes, which real scientists know DO NOT EXIST. Their real science is money! Donations, selling carbon credits, more of our tax money, any way to keep producing nothing, trying to control the populous, trying to control private property, all in their quest for wealth, not the environment.</p> <p>I stand beside you in your fight!</p>		
02-02	Jose Pujals	<p>A balanced climate curriculum To whom it may Concern; Freedom in a balanced education cannot be a one way street, that is communism. A balanced education is allowing both sides of the subject to be heard, analyzed and discussed.</p> <p>To allow only one side to be heard will not benefit anyone except the side that is presented and 'Global Warming Alarmists' or 'GWA' do not want to openly discuss these issues. We need to ask why?</p> <p>There has been much lying and deception in this particular scientific community with many scientists losing their jobs because of their lying to the public as well as encouraging other scientists to withhold information to alter the outcomes to side with GWA. There are \$ Billions to be made with this 'Global Warming' business of fear and I believe this is why the GWA do not want any competition in this arena. Money and politics have crept in to alter the findings of these once respectable scientists who have sold their reputation for money or political fame.</p> <p>As a result, if only one group is to present their side, none of the evidence below would come to light for discussion and the information students receive will most definitely be skewed. This is counterproductive to 'teaching' and allowing each student reach their own conclusions based on the best information possible from both sides.</p>	NA/-	See Rationale 2.

		<p>Even John Coleman, co-founder of The Weather Channel, says Global Warming is not factual – it is a hoax. http://theblacksphere.net/2014/08/scientist-faked-data-commits-suicide/# AND http://www.fixthisnation.com/conservative-breaking-news/founder-of-the-weather-channel-slams-global-warming/ “96% of Scientists DON’T believe in Global Warming” http://m4gw.com/96_of_scientists_dont_believe_in_global_warming/ “Climate Change Remains Unsettled, Say 31,072 Scientists” http://www.newsmax.com/Newsfront/climate-change-scientists-petition/2014/05/20/id/572409/ Polar ice is NOT retreating but ADVANCING... “Al Gore Embarrassed by Mother Nature – Polar Ice Caps Grow by 43%” http://survivaljoe.net/blog/al-gore-embarrassed-by-mother-nature-polar-ice-caps-grow-by-43-percent/?utm_source=140921SJ&utm_campaign=140921SJ Alaskan Polar Bears Threatened...By Too Much Spring Ice http://cnsnews.com/news/article/barbara-hollingsworth/alaskan-polar-bears-threatened-too-much-spring-ice-0 “Another Global Warming Skeptic Goes Public” http://teapartyeconomist.com/2014/10/23/another-global-warming-skeptic/ “Liberal professor defects! A Climate Depot exclusive” http://us1.campaign-archive1.com/?u=87b74a936c723115dfa298cf3&id=d331e8bc01&e=bc2f4a5a2c “Upcoming Anniversary: October 1st Will Mark 18 Years of No Global Warming”</p>		
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		<p>http://cnsnews.com/news/article/barbara-hollingsworth/upcoming-anniversary-october-1st-will-mark-18-years-no-global <i>To whom it may Concern; Freedom in a balanced education cannot be a one way street, that is communism. A balanced education is allowing both sides of the subject to be heard, analyzed and discussed.</i></p> <p><i>To allow only one side to be heard will not benefit anyone except the side that is presented and 'Global Warming Alarmists' or 'GWA' do not want to openly discuss these issues. We need to ask why?</i></p> <p><i>There has been much lying and deception in this particular scientific community with many scientists losing their jobs because of their lying to the public as well as encouraging other scientists to withhold information to alter the outcomes to side with GWA. There are \$ Billions to be made with this 'Global Warming' business of fear and I believe this is why the GWA do not want any competition in this arena. Money and politics have crept in to alter the findings of these once respectable scientists who have sold their reputation for money or political fame.</i></p> <p><i>As a result, if only one group is to present their side, none of the evidence below would come to light for discussion and the information students receive will most definitely be skewed. This is counterproductive to 'teaching' and allowing each student reach their own conclusions based on the best information possible from both sides.</i></p> <p><i>Even John Coleman, co-founder of The Weather Channel, says Global Warming is not factual – it is a hoax.</i></p> <p>http://theblacksphere.net/2014/08/scientist-faked-data-commits-suicide/# AND</p> <p>http://www.fixthisnation.com/conservative-breaking-news/founder-of-the-weather-channel-slams-global-warming/</p> <p><i>"96% of Scientists DON'T believe in Global Warming"</i></p>		
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02-02	Al Wigand	<p>globe fraud Please do not teach this fraud to the children who only need to know the facts.. This fraud is pushed on the world by the socialist parties who seek to line there own pockets. Facts don't back up there story. Stop teaching a lie.</p>	NA/-	See Rationale 2.

		thanks		
02-02	John A. Vance Australia	<p>Politically influenced science being taught at Australian schools.</p> <p>I write from Australia where the "science" of global warming/climate change, and environmental issues is being taught as accepted science, whereas one text book teaching climate has actually mentioned "consensus is" about science. If its consensus, then its not science and vice versa.</p> <p>Then it goes on to say that the suns position is stationary in space as planets orbit around it. This is clearly wrong, http://www.orbitsimulator.com/gravity/articles/ssbarycenter.html (Planets are discovered by Stars that are wobbling our suns wobble is across a distance of some millions of kilometers) and shows there is a lot to learn, and that science must be questioned. As a matter of fact, people who question current science create solutions never before thought of.</p> <p>For instance, an Australian Doctor decided that perhaps ulcers were caused by bacteria able to survive the acid environment of the stomach. He was awarded the Noble prize for his discovery that this was indeed what was happening, and saved millions the misery of stomach ulcers.</p> <p>Looking at problems in a different way, making conclusions when the facts suit political aims but haven't been fully understood seems to be happening with climate change heretics.</p> <p>I have investigated further and it seems planetary positions affect solar output, due to gravitational forces, and something called angular momentum perturbation. http://www.landscheidt.info/</p> <p>This is ongoing science and graphs on the site which can now be made to mimic planetary positions as they can be properly calculated, reflecting earths climate in many</p>	NA/-	See Rationale 2.

		<p>thousands of years past. These can partly explain various periods in Earth's climate and heating and cooling.</p> <p>I would hope you take this information into consideration when you decide to look at the type of science that is taught at American schools, as we need to look at ours in a clear honest way, not affected by political influences.</p>		
02-02	<p>James Lindsay 107 Connie Mack Drive East Brookfield, MA 01515 bluesfan101@yahoo.com</p>	<p>Free Debate about Climate</p> <p>I urge you to allow for open and frank discussion in science regarding climate change. This is not a settled issue and attempts to portray it as such are politically motivated and have no place in a balanced curriculum. Let the merits of both sides be discussed and worked on by the students themselves. The truth is not afraid of debate, only those who have something to hide fear discussion. Thank you for your time.</p>	NA/-	See Rationale 2.
02-02	Sharon Aleckson	<p>A Balanced Science Program</p> <p>Students should have the right to hear all sides of the issues relating to Climate Change. Then let them make up their own minds. Teachers should not indoctrinate but educate. Teach students to THINK!!!!</p>	NA/o	See Rationale 3.
02-02	<p>David E. Thompson, PhD Fellow, American Society of Mechanical Engineering</p> <p>Professor Emeritus, Mechanical Engineering Professor Emeritus, Computer Science Dean Emeritus, College of Engineering University of Idaho http://www.engr.uidaho.edu/thompson/</p>	<p>Climate Science</p> <p>I am writing because I don't feel our children should be used as pawns in political matters, and that is exactly what Man-Made Global Warming (MMGW) is all about. It is not about science, it is an agenda. In the short paragraphs below, my approach is different from anything you may have heard, but it is totally science and mathematics. Facts, not feelings.</p> <p>I spent my professional life in Academia, first as a faculty member in Mechanical Engineering (ME) at Louisiana State University, then as Department Chair of ME at the University of New Mexico, and finally as Dean of Engineering at the University of Idaho. My research was in the field of fluid mechanics coupled with biomedical engineering. In this role, I became intimately involved with nonlinear math modeling of complex systems. I</p>	NA/-	See Rationale 2.

		<p>eventually began teaching a graduate course in this field and when I moved to UNM, I published a textbook in this area. This text was entitled <u>Design Analysis: Mathematical Modeling of Nonlinear Systems</u> (Cambridge Press, 1999). In that textbook, I included an introduction to the mathematics of chaotic systems. These are systems which, if you change the initial conditions of the problem by an infinitesimally small amount, the solutions diverge. The time period it takes for this divergence is termed the “Radius of Convergence”.</p> <p>I mention all this because the climate of the Earth is a chaotic system. It’s primary driver is the electromagnetic energy from our Sun. What few realize is that the Sun is a chaotic system as well. So, we have a chaotic system (Earth’s Climate) driven by a chaotic system (the Sun). What this means mathematically is that it is impossible to mathematically model the behavior of the Earth’s climatic system beyond a few days, much less the lengthy predictions that the MMGW advocates are claiming. Let me repeat this, <i>the basic Mathematics of Chaotic Systems shows us that it is impossible to predict the future of a chaotic system</i>. This is basic mathematics, a fact, and not just my own belief. We cannot and never will be able to predict the future climate of the Earth. It is a chaotic system.</p> <p>The whole MMGW house of cards relies on these mathematical predictions. Interestingly, in such modeling, one can easily start the models 10, 20, 30, or more years in the past and if the models are indeed viable, they should then be able to predict the intervening years for which we have data ... right up to the current time. They cannot do this because the Earth’s climate system is chaotic. Yet, their “models” always show the Earth’s temperature increasing. It is obvious that they have biased their models to support their political agenda. This is far worse than unprofessional, it is deceitful, dishonest, and immoral.</p>		
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		<p>The global raw untreated mean temperature data are shown in the figure below along with the note that in spite of all the climate model predictions the Earth has not warmed for the past 17.75 years. Yet, the MMGW advocates proceed to fudge this data, claiming that some data is more important than sea water temperature data and they continue with this unscientific and unjustifiable alteration of the data to support their claim that the Earth is warming. When it is obviously NOT. This is, again, frankly immoral. Yet these same people want to influence West Virginia's curriculum for your children.</p> <p>I would ask that you carefully consider the effects of allowing political dialogue to creep into your curriculum. Politics are not facts. MMGW is definitely not based on sound mathematics and thus is not factual. I would recommend that you eliminate any discussion of man's impact on the climate until there are sound factual and truthful scientific measurements upon which to base such discussion. I feel that the truth about the climate will continue to evolve over the next few years and MMGW will fade as if it never happened. And please have your teachers focus on real facts, not their feelings which many have heard repeatedly in the liberal press. The whole Common Core approach is filled with political propaganda that is not supported by facts. I urge you to protect your children and avoid this trap.</p> <p>I have so much more I could talk about, but I wanted to keep this short and simple. Feel free to communicate with me if you wish further clarification.</p>		
02-02	Florence Case	<p>Science</p> <p>Please allow all your students to be able to get all the facts from true scientists -not yielding to the global warming crowd, the environmentalists, and The "Green" group. They need truth, not propaganda.</p>	NA/-	See Rationale 2.
02-02	Kris Shelton	comment on climate change	NA/-	See Rationale 2.

		<p>To not show both sides is just wrong period. The facts are in and climate change is a scam. NASA gave wrong number and have been caught. First no warming after 1997 Now we have 2/100 of degree increase but that is also the margin of error sense 1930.</p> <p>So this will come out as false and you will be teaching what ? Not the facts. Both sides or just give the facts from other country's also not just our governments. This is a world wide topic so show all sides.</p> <p>Please read below plus I have 4 or 5 more proofs from private and other country's saying the same thing No Global Warming (Change)</p> <p>Global warming false facts</p> <p>I wish all these experts would make up their minds whether we are going to fry or freeze to death already. There is a new report out that we are entering a mini-ice age. This MIT professor is obviously right – climate change whack jobs have turned it into a fanatical religious cult worshipping Mother Gaia, or some such nonsense. Seriously, these people need to a) get a life and b) stop trying to rip the world off for larger and larger sums of money in the hugest ponzi scheme of all time.</p> <p>Dr Richard Lindzen (right) told a Massachusetts-based radio station that people who believe in global warming are becoming more hysterical in their arguments. 'As with any cult, once the mythology of the cult begins falling apart, instead of saying, oh, we were wrong, they get more and more fanatical,' he said.</p> <p>The Daily Mail:</p> <p><i>Climate change alarmists have been likened to a fanatical 'cult' by an MIT professor of meteorology.</i></p> <p><i>Dr Richard Lindzen told a Massachusetts-based radio station that people who believe in global warming are becoming more hysterical in their arguments.</i></p>		
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		<p><i>'As with any cult, once the mythology of the cult begins falling apart, instead of saying, oh, we were wrong, they get more and more fanatical,' he said.</i></p> <p><i>'You've led an unpleasant life, you haven't led a very virtuous life, but now you're told, you get absolution if you watch your carbon footprint. It's salvation.'</i></p> <p><i>According to Howie Carr at Breitbart, the 74-year-old highlighted reports by Nasa that 2014 was the hottest year in recorded history.</i></p> <p><i>He points out that the Nasa climate scientists who made the claim was only 38 per cent sure this was true.</i></p> <p><i>'Seventy per cent of the Earth is oceans, we can't measure those temperatures very well,' he said. 'They can be off a half a degree, a quarter of a degree.'</i></p> <p><i>'Even two-10ths of a degree of change would be tiny but two-100ths is ludicrous. Anyone who starts crowing about those numbers shows that they're putting spin on nothing.'</i></p> <p><i>Dr Lindzen was a lead author of Chapter 7, 'Physical Climate Processes and Feedbacks,' of the IPCC Third Assessment Report on climate change.</i></p> <p><i>But he has previously blasted the IPCC for blaming humans for a global warming trend that appears to have cooled in recent decades – and then glossing over the warming slowdown.</i></p> <p><i>'I think that the latest IPCC report has truly sunk to level of hilarious incoherence,' Dr Lindzen told Climate Depot – a site known for questioning the theory of global warming.</i></p> <p><i>A number of studies have suggested that powerful winds in the Pacific Ocean, which have driven surface heat deep underwater, could be the reason behind the current 'pause' in global warming.</i></p> <p><i>The IPCC has said that rising temperatures will exacerbate poverty and damage land and marine species.</i></p> <p><i>It also claims that the world is in 'an era of man-made climate change' and has already seen impacts of global warming on every continent and across the oceans.</i></p>		
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		<p>climate figures while writing his book seven years ago, Steven Goddard's blog "Real Science" has uncovered another example of it when looking at the National Oceanic and Atmospheric Administration's graph of U.S. surface temperatures.</p> <p>The group, Goddard claims, has been "adjusting" its records by replacing real temperatures with data "fabricated" by computer models. The effect has been to make earlier periods seem cooler, while more recent temperatures have been inaccurately presented as higher to give the impression that the Earth has been warming much more than the actual data suggests.</p> <p>Using actual temperatures, graphs indicate that the United States has been cooling since the '30s, Goddard has shown, according to Booker, even though the official graphs are showing that the the Earth has been warming at a rate equal to more than 3 degrees centigrade per century.</p> <p>"When I first began examining the global-warming scare, I found nothing more puzzling than the way officially approved scientists kept on being shown to have finagled their data, as in that ludicrous 'hockey stick' graph, pretending to prove that the world had suddenly become much hotter than at any time in 1,000 years," Booker wrote.</p> <p>"Any theory needing to rely so consistently on fudging the evidence, I concluded, must be looked on not as science at all, but as simply a rather alarming case study in the aberrations of group psychology."</p> <p>Worth your time to get the facts Here is a UN Speech This year about how climate change and chemtrails https://www.youtube.com/watch?v=L5is16A8pfw&feature=player_embedded UN 2015</p>		
02-02	Ronald Stappenbeck, retired Professor, Rochester Institute of Technology	A scientist is responsible for looking at all the data, not just that a biased group desires	NA/-	See Rationale 2.

		<p>I have followed the discussion in West Virginia relative to your Science Curriculum. Science is the study of all the facts, not just the facts that a particular group would like to make everyone believe.</p> <p>Developing a predictive model is part of Science, but clearly identifying when that model is not accurately predicting is even more critical. Not being willing to discuss the comparison of a model's prediction versus the actual data it is supposed to be able to predict makes you a politician not a scientist.</p> <p>Politician's see the suggestion that global warming is happening as an opportunity to increase taxes and thus have more money to spend. As we all regularly see politicians and special interest groups only present the facts that favor their desired result. Please do not let that be the science standard for the State of West Virginia.</p> <p>Make sure your science curriculum encourages students to investigate all the aspects of a scientific issue. You want them to develop the skills that allow them to question, investigate, evaluate and understand the difference between facts, feelings and prediction. They need to respect the fact that there are times when we really are not sure what is going to happen or what actually caused something to happen.</p>		
02-02	susieq21148@xxxxx.xxx	out with common core. Please tell our students the truth and let them decide which side they want to embrace.	N/-	
02-02	Mabel Hansen,® GRI,CRS.e-Pro,SFR Las Animas CO	Science The students should see a balaced climate curriculum showing all the facts on global warming.	NA/o	See Rationale 3.
02-02	Victoria Laub	Science Please provide a balanced science program for the students. It is nice to hear several versions. Diversity is healthy.	NA/o	See Rationale 3.
02-02	Andy Visser LMHC Certified Employee Assistance Professional	Establish Empirical, not Politically Correct Science Is it heresy for West Virginia science students to see the observed global temperature data which shows that climate	NA/-	See Rationale 2.

	Connections Inc. Employee Assistance Program	<p>computer models have called for a warmer world than measurements show since last century?</p> <p>How about that weather extremes are historically normal and sea level continues to rise at only 3 mm per year? Must they be shielded from any data inconvenient to the global warming narrative?</p> <p>The true mind of science never stops examining the empirical facts and fears no empirical data, no matter how inconvenient it may be.</p>		
02-02	jeanne green	<p>Global warming`</p> <p>Please allow a fair and balanced study of global warming for your students. Let them see for themselves that the whole thing is hoax aimed at controlling America. In the last 16years the planet has actually cooled! Please allow more than the bought and paid for opinions.</p>	NA/-	See Rationale 2.
02-02	kaok9315	<p>Climate vs Science</p> <p>Do Not be pressured by any group to teach one way or another. Next will come how and who to vote for. Or to whom they Must Worship or Die!</p>	NA/o	See Rationale 3.
02-02	Stephanie Wilson	<p>science is important in schools. what bothers me is it has become indoctrination, not education. i support fair & balanced science education.</p>	NA/o	See Rationale 3.
02-02	Douglas Moulden	<p>Have the progressives ruined all of our schools</p> <p>COMMON CORE is bad for our children, now you want to bring it into our science?</p> <p>You must really want to ruin education system. We are saddened hearing this latest news.</p>	N/-	
02-02	Richard Duprey	<p>Climate Change " " As you consider what your children will learn in the near future consider this:</p> <p>What has the government done in the last 50 years that it did not screw up?Everything has been counterproductive and for the most part lies.Climate change has been in operation since creation. Only now has someone decided to use it to enrich himself or as a gigantic power grab over the public. Is there any honesty or common sense left in educational circles? What will be your legacy?</p>	NA/-	See Rationale 2.

02-02	Robert Helms	<p>Science is settled by debate on all sides of the issue. It is not settled by one side.</p> <p>The failure of the computer model of global warming caused by humans should be a warning. Why should the schools decide what is settled science and teach only one view? I believe a balanced view of differing opinions should be used.</p>	NA/-	See Rationale 2.
02-02	Carl Jones Historian and Archaeologist	<p>climate education</p> <p>Please help your children understand Climate Change it is important that they hear both sides of the story. Most of what we hear and see in the news is some reporters take on what the scientists are saying. For example the "hottest year" was a difference of 2 hundredths of a degree based on data that is considered accurate to only a 10th of a degree. Meaning the data does not support the results. One must remember that weather and climate are in constant change. Some hot and cold shifts are short term others are long term and include the short term shifts. The real question is not that there is climate change but what real effect man's activity has on these changes in Climate. After all we are responsible for roughly 2% of the CO2 released into the atmosphere each year. Another big factor is the agenda of the federal government to convince the public that man made CO2 is the major cause of globe warming. Look for a recently released 2009 EPA secret internal memo regarding their efforts to scare the public about CO2, and climate change. So I ask don't let your students be undocmented by Washington propaganda. Part of Education is to teach students to think critically for themselves and here one place to help them do so.</p>	NA/-	See Rationale 2.
02-02	Lee Smith	<p>COMMON CORE</p> <p>Common Core is deleting our history. Distorting our past. Causing our children to believe what our forefathers did was wrong. We are a great nation, Always has been but</p>	N/-	

		Common Core is changing that. Yes we made mistakes but we didn't see them until later. We are not the ones who started wars. But we were not going to let the enemy defeat us. I do not want my grand children to learn about a false nation. I am proud of our past.		
02-02	JULIA DURAN	<p>Concerns about revising the Science Standard</p> <p>I know you don't know me, but I hope you will take just a minute out of your very busy schedule to hear my sincere concerns for your students and your school, regarding revising or altering your Science Teaching Standards. I'm a seriously concerned mom, who after reading about your upcoming decision to revise the West Virginia Science Teaching Standards to the "National Standard", which is similar to the common core standard, regarding the "Global Warming" campaigners, who are pushing to indoctrinate our young students into their political agendas, I wanted to send you an e-mail to encourage you and your voting board to PLEASE think seriously about the revision change, and the <u>limits</u> the National Standard would place upon our children and all future students.</p> <p>Science is not a democrat, or a republican, or a liberal, or any other political party, and should not be based on or limited to their political agendas. Please ALLOW all children the ability to learn SCIENCE in an UNBIASED manner.</p> <p>Please continue to permit all the students the same opportunities we all had growing up, the opportunity to hear ALL sides of the argument, the opportunity to research all sides of the scientific data, and allow them <u>the freedom</u> to be exposed to the statistics on their own, so they can make sound conclusions based on all the data.</p> <p>All the greatest American innovators are those who were free to think outside the box, they were not held down by the so called "National Standards" or "Common Core" way of thinking, so let's continue to provide that freedom and unbiased environment to all our children and</p>	NA/-	See Rationale 2.

		<p>students. Last I checked, America is still the land of the Free.</p> <p>I know you care deeply, and want what's best for all your students, and you want to see them all grow up to be innovative, smart, caring, earth loving people, who can still learn how to care for our planet in a smart, responsible, reasonable way, without being forced into any prejudiced way of thinking.</p> <p>Please don't allow the Fears and political agendas of these "Global Warming" fanatics, to control our schools or our children's minds. We should encourage our students to check out both sides of the argument, as any good unbiased Scientific person would do, examining all the facts, no matter where those facts may take them.</p> <p>In closing, Please let the students, our bright future leaders, have the right to continue to learn and gather research from all the different sources and data out there, without placing these political agenda limitations on them that could stifle their future abilities to make sound decisions as our upcoming future leaders.</p>		
02-02	Larry Parker	<p>Science doesn't even come close to supporting man-made Global Warming; it only supports the Sun as governor of our climate!</p> <p>All one needs to do is look at our recent temperatures to see the Sun's activity governs our climate. The eminent physicist Albert Einstein said it best when he stated "God does not play at dice"! So let your State's students learn real science alongside the stupid curriculum of "Climate Change" !</p>	NA/-	See Rationale 2.
02-02	Dave Enloe	<p>Global Temperature Change</p> <p>Please allow school children and everyone else to be informed of <i>all</i> the facts about global temperatures and the causes and effects of any changes that may be occurring. That is the only reasonable way to handle any scientific study of facts.</p>	NA/o	See Rationale 3.
02-02	cwelkhowell@xxxxx.xxx	core teaching	N/-	

		Drop it!! I have been retired for 20 years and did not use it while there . I have listened to many retired teachers of late and they are against core teaching.		
02-02	Joe Gillen	<p>Climate</p> <p>Is it heresy for science students to see the observed global temperature data which shows that climate computer models have called for a warmer world than measurements show since last century? How about that weather extremes are historically normal and sea level continues to rise at only 3 mm per year? Must they be shielded from any data inconvenient to the global warming narrative?</p> <p>The true mind of science never stops examining the facts and fears no data, no matter how inconvenient it may be.</p>	NA/-	See Rationale 2.
02-02	Robert Kirschke Retired Air Force CMSgt, MPA Public Administration in Health Services Management.	<p>Climate change</p> <p>Please refer them to Dr. Roy Spencer's book "Climate confusion". It should be a reference book on climate. Doctor Spencer was NASA's top climate scientist until they tried to pressure him into man made global warming. He refused as it was primarily a quest for money from the industrialized to the third world countries. He now teaches at the University of Alabama. His book is as easy read and should be given to students for a class on climate change. The only person that can control climate doesn't use money.</p> <p>Our children need to be educated not indoctrinated as the Obama and the left are trying to do.</p>	NA/-	See Rationale 2.
02-02	Jane Jenkins	<p>Climate debate</p> <p>Is it heresy for science students to see the observed global temperature data which shows that climate computer models have called for a warmer world than measurements show since last century? It is all bogus!!! How about that weather extremes are historically normal and sea level continues to rise at only 3 mm per year? Must they be shielded from any data inconvenient to the global warming narrative? The true mind of science never stops examining the facts and fears no data, no matter how inconvenient it</p>	NA/-	See Rationale 2.

		<p>may be. Look how the computer models misses predicting the snow storm out east last week!</p> <p>There is no more important lesson science students need to learn. My opinion is that God is in control of the weather--not man, But I am OK with your teaching the 'global warming theory' as long as you give students both sides of the story. Let them have all the sides and make their own decision.</p>		
02-02	Dodson Cravens <	<p>Core measured</p> <p>Balance in education regarding climate change and all issued. This is important for all children to learn both sides of important issues.</p>	NA/o	See Rationale 3.
02-02	Elaine Ensign Utica, Ohio. 43080	<p>Science News regarding Climate Change</p> <p>Students should have information from all sources, not just global warming advocates, so</p> <p>They can make intelligent and informed decision. It is wrong to promote only one side of</p> <p>An issue.</p>	NA/o	See Rationale 3.
02-02	William Carter Jr	<p>teaching true science</p> <p>Is it heresy for science students to see the observed global temperature data which shows that climate computer models have called for a warmer world than measurements show since last century? How about that weather extremes are historically normal and sea level continues to rise at only 3 mm per year? Must they be shielded from any data inconvenient to the global warming narrative?</p> <p>The true mind of science never stops examining the facts and fears no data, no matter how inconvenient it may be. fanatics are not swayed by updated truth. They only try harder to suppress it.</p>	NA/-	See Rationale 2.
02-02	Dolly Kirchner	<p>I believe that school children should be expose to all information when studying science to do other wise makes them one sided.</p> <p>We are hampering them to stay in a small box of thinking. They should be exploring all areas and even think out of the box.</p>	NA/-	See Rationale 3.

02-02	Sallie Jager	Truth in science There is no point to science without truth!	A/o	See Rationale 4.
02-02	Judy	Climate Curriculum It is imperative that we have a balanced science course on climate. Just focusing on the possibility of global warming is wrong. We need our children to use their minds and do their own research and draw their own conclusions.	NA/-	See Rationale 2.
02-02	Henry M. Hills, III	Protect students' rights to all the facts about climate. The Board of Education should ensure that its science standards permit students to examine and learn from all the data and analysis about global warming. Must students be made ignorant of scientific data which shows that over the last 18 years climate computer models have consistently projected a warmer world than scientific observations record? Global warming has not occurred as projected during the entire lifetime of today's school children. Should the actual recorded data of world temperature, sea levels, storms, droughts, floods and all the rest be banned from our classrooms? Is comparing this data to the pronouncements of highly funded global warming pressure groups heresy? Claims of an overwhelming scientific global warming consensus have been repeatedly and thoroughly debunked. The discussion is far from over. The true mind of science remains open to new data and alternative explanations. Whether and how much of the approximately 1/2 degree C of warming which occurred in the latter half of the 20th century is due to human industry has not been conclusively established. Neither have any of the incredibly expensive "solutions" proposed to address any global warming been shown to be meaningfully effective or worth their tremendous cost. The Board owes every child an open-minded education free of indoctrination.	NA/-	See Rationale 2.
02-02	Sallie Jager	Freedom requires truth!	NA/o	See Rationale 3.

		Without truth there is no freedom, no democracy, no America ! Science is a search for truth!		
02-02	Del Tews	Skewed Information Presented as Science A Board of Education is supposed to provide an environment to enable students to discover how to think and analyze information in order to find the truth of the subject. When skewed information designed to support a pre-concieved conclusion or position is presented as science and scientific information, you are not meeting the objectives of your diuty to your students. You may be meeting your objective of indoctrinating the students, but you are not giving them the opportunity to learn and discover the truth. I respectfully and strongly request that you adopt a science subject carriculum which presents all facts concerning global warming including those facts which do not support a single pre-concieved conclusion. Presenting one side only of a disputed subject is never education. It is indoctrination and the "scientific" data is simply propoganda. Thank you for your time to consider my comments above.	NA/-	See Rationale 2.
02-02	Margaret Avon	Objective science Robin, please encourage the school board to allow teaching based on objective science (based on observation and facts) and encourage the students to think for themselves	N/+	
02-02	Frederik Engel	erroneous transmission in case you received an incomplete part of my e-mail to you, please destroy. It was not yet ready for transmission. I hope to follow up with a completed memo soon,	N/o	
02-02	RACKERBILL@xxxxx.xxx	pushing global warming on our students This may shed some light on why we should not let special interest groups control our children's education for their own purposes. *Where Does the Carbon Dioxide Really Come From? *Professor Ian Plimer could not have said it better! * *If	NA/-	See Rationale 2.

		<p>you've read his book you will agree, this is a good summary. *</p> <p>*PLIMER: "Okay, here's the bombshell. The volcanic eruption in Iceland ..</p> <p>Since its first spewing of volcanic ash has, in just FOUR DAYS, NEGATED EVERY SINGLE EFFORT you have made in the past five years to control CO2 emissions on our planet - all of you. *</p> <p>*Of course, you know about this evil carbon dioxide that we are trying to suppress - it's that vital chemical compound that every plant requires to live and grow and to synthesize into oxygen for us humans and all animal life. *</p> <p>*I know....it's very disheartening to realize that all of the carbon emission savings you have accomplished while suffering the inconvenience and expense of driving Prius hybrids, buying fabric grocery bags, sitting up till midnight to finish your kids "The Green Revolution" science project, throwing out all of your non-green cleaning supplies, using only two squares of toilet paper, putting a brick in your toilet tank reservoir, selling your SUV and speedboat, vacationing at home instead of abroad, nearly getting hit every day on your bicycle, replacing all of your .50 light bulbs with \$10 light bulbs well, all of those things you have done have all gone down the tubes in just four days. *</p> <p>*The volcanic ash emitted into the Earth's atmosphere in just four days - yes, FOUR DAYS - by that volcano in Iceland has totally erased every single effort you have made to reduce the evil beast, carbon. And there are around 200 active volcanoes on the planet spewing out this crud at any one time - EVERY DAY. *</p> <p>*I don't really want to rain on your parade too much, but I should mention that when the volcano Mt. Pinatubo erupted in the Philippines in 1991, it spewed out more</p>		
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		<p>greenhouse gases into the atmosphere than the entire human race had emitted in all its years on earth. *</p> <p>*Yes, folks, Mt. Pinatubo was active for over one year - think about it!!!!</p> <p>* *Of course, I shouldn't spoil this 'touchy-feely tree-hugging' moment and mention the effect of solar and cosmic activity and the well-recognized 800-year global heating and cooling cycle, which keeps happening despite our completely insignificant efforts to affect climate change. *</p> <p>*And I do wish I had a silver lining to this volcanic ash cloud, but the fact of the matter is that the bush fire season across the western USA and Australia this year alone will negate your efforts to reduce carbon in our world for the next two to three years. And it happens every year. *</p> <p>*Just remember that your government just tried to impose a whopping carbon tax on you, on the basis of the bogus 'human-caused' climate-change scenario. *</p> <p>*Hey, isn't it interesting how they don't mention 'Global Warming' anymore, but just 'Climate Change' - you know why? It's because the planet has COOLED by 0.7 degrees in the past few years and these global warming bull artists got caught with their pants down. *</p> <p>*And, just keep in mind that you might yet have an Emissions Trading Scheme- that whopping new tax - imposed on you that will achieve absolutely nothing except make you poorer. It won't stop any volcanoes from erupting, that's for sure. *</p> <p>*But, hey, relax.....give the world a hug and have a nice day.....</p>		
02-02	Brenda Wisniewski	<p>Protect student rights to learn and debate</p> <p>As a young man, my husband took many science classes in school and university, graduating with dual degrees (BA) in chemistry and biology. He later went on to a career in finance with multiple related degrees and certifications.</p>	NA/-	See Rationale 2.

		<p>Why is this relevant? Because the schools taught him to think critically, to question an issue from multiple sides, to debate openly and to understand different points of view. All were vital to developing the ability to analyze, debate, make independent judgements and, most importantly, develop critical thinking.</p> <p>When only one side of an issue is presented, when questioning, analysis and debate are ignored, the ability to think is stifled. We produce automatons willing to go along with whomever has the power, the money and the voice to make the student believe he is right. It will not take long for those who want to stifle debate to create a young group of automatons.</p> <p>How would you feel if your childhood curiosity and desire to learn had been smothered? If you had been told what to think, do and respond? Oh wait, you wouldn't have known because those with influence had told you what to think, believe and act.</p> <p>I'm not taking environmental sides. I am standing up for the rights of my children and grandchildren to hear all sides, debate the issues and make their own decision, whether we're discussion the environment, finance, economy...whatever. I believe that those who are intent on stifling debate are afraid their beliefs and science cannot be defended.</p> <p>Please stand up for our students' right to learn!!</p>		
02-02	edavidgates@xxxxx.xxx	<p>Please add my name to those who advocate for presenting a balanced approach on climate in the oclassroom. Science has not and can not prove that climate change is anything but what we call weather. The purpose of education is to present all views and not "indoctrinate students with " fad science"</p>	NA/-	See Rationale 2.
02-02	Marty Jamieson	<p>Regarding Teaching about Climate and Other Things I am a scientist myself with two master's degrees, and I think students should be taught science without it becoming political science, that is, the opinions of other</p>	NA/-	See Rationale 2.

		scientists <u>who disagree</u> with the "politically correct" position should also be spelled out---such as on the subject of global warming.		
02-02	Timothy Simmons	<p>Warming AND Cooling</p> <p>The Board of Education should adopt the extremely minor proposed changes to its climate curriculum to permit students to actively explore all the theories and facts pertaining to the many serious ongoing questions about the climate.</p> <p>Over the last 18 years climate computer models have consistently projected a warmer world than scientific observations record. Global warming has not occurred as projected during the entire lifetime of today's school children.</p> <p>“Climate change” is a highly contentious and hotly debated matter. Scientific data shows nothing extreme about recent weather, sea level, fires, droughts, floods and many other climate-related phenomena, all of which are occurring within historic norms. Nonetheless, exaggerated claims of extreme weather are now routine.</p> <p>Claims of an overwhelming scientific global warming consensus have been repeatedly and thoroughly debunked. The discussion is far from over. The true mind of science remains open to new data and alternative explanations.</p> <p>Whether and how much of the approximately 1/2 degree C of warming which occurred in the latter half of the 20th century is due to human industry has not been conclusively established. Neither have any of the incredibly expensive “solutions” proposed to address any global warming been shown to be meaningfully effective or worth their tremendous cost.</p> <p>The Board owes every child an open-minded education free of indoctrination.</p> <p>I am a West Virginia resident with school age kid.</p>	NA/-	See Rationale 2.
02-02	Nan Nelson	So discouraging Just another sheep.	N/o	

02-02	Dr John Happs	With reference to the proposal for the West Virginia board to consider changes to its science curriculum in order that a more balanced approach might be undertaken in the teaching of climate change, I have attached a few comments for your consideration. ATTACHMENT	NA/-	See Rationale 2.
02-02	Don L. Robbins	School Curriculum I believe all the facts should be laid on the table for all to see, rather than controlling students like they are not smart enough to figure out how biased things are. Don't limit them!!! Who knows there might be genius among them	NA/o	See Rationale 3.
02-02	Sharon Jeanguenat	I'm asking you to opt for balance in the climate debate. Just as it was with evolution, all theories were to be taught.	NA/o	See Rationale 3.
02-02	Kelly Frederiksen	Science in the classroom I am in favor of a balanced curriculum when the discussion about the climate is implemented into the science books and classroom. I am also in favor of the scientific data being made available so students have the opportunity to become well rounded on the topic and can make an intelligent and informed decision rather than one based upon bias.	NA/o	See Rationale 3.
02-02	Michael Reynolds Aldie, VA	Students should hear both sides of the climate argument The Board of Education should ensure that its science standards permit students to examine and learn from all the data and analysis about global warming. Must students be made ignorant of scientific data which shows that over the last 18 years climate computer models have consistently projected a warmer world than scientific observations record? Global warming has not occurred as projected during the entire lifetime of today's school children. Should the actual recorded data of world temperature, sea levels, storms, droughts, floods and all the rest be banned from our classrooms? Is comparing this data to the pronouncements of highly funded global warming pressure groups heresy?	NA/-	See Rationale 2.

		<p>Claims of an overwhelming scientific global warming consensus have been repeatedly and thoroughly debunked. The discussion is far from over. The true mind of science remains open to new data and alternative explanations. Whether and how much of the approximately 1/2 degree C of warming which occurred in the latter half of the 20th century is due to human industry has not been conclusively established. Neither have any of the incredibly expensive “solutions” proposed to address any global warming been shown to be meaningfully effective or worth their tremendous cost.</p>		
02-02	Dave Bass	<p>I am in agreement with CFACT regarding amending textbooks to include all kinds of science data, including data which does not agree with current climate change proponents. Data is data. Science is science. Speculation and political gain is just this - and has nothing to do with data or science. Please give our next generation of people the chance to use their minds and critically think for themselves, by making sure all sides of an issue are heard, particularly those that have actual scientific data behind their beliefs.</p>	NA/-	See Rationale 2.
02-02	Ruby Fleet	<p>Climate in the classroom Science curriculum should contain only the truth. Where this is in doubt, both sides of all questions should be studied without slant in either direction,,.</p>	NA/o	See Rationale 3.
02-02	Patty Vaughan	<p>Science Standards I would like to comment on the proposed standards that are being considered for the state of West Virginia. I am a science teacher and am alarmed at the political agenda that has controlled the global warming debate. The IPCC has adopted tactics that are not scientific. Science is the process of asking questions, creating a hypothesis to answer the question, and conduct experimentation to test the hypothesis. When the data does</p>	NA/-	See Rationale 2.

		<p>not support the hypothesis, you throw it out and create a new hypothesis. The empirical evidence from satellites does not support the hypothesis that carbon dioxide is causing a rise in temperatures. Over 100 computer models are no longer statistically valid and the science is never settled!</p> <p>The students and teachers need to understand that the scientific process is dynamic and on-going and the current data does not support man-caused global warming. You need to have standards that let the debate always continue.</p>		
02-02	Doug Rogalla	<p>Balanced Climate Science Curriculum I have been personally following the Global Warming debate for many years now. I have even begun my own weather observations by comparing daily temperatures to previously recorded averages. Last year was a very cold. The coldest I can remember. I have done quite a bit of reading to date and have become quite skeptical.</p> <p>The claims of 97% consensus are a massive lie. Only 52% of American Meteorological Society members believe that man is the primary contributor to global warming. So is climate change real? Climate is cyclical and is always changing.</p> <p>I am also following two specific individuals that apply common sense and logic to their observations. They are Joe Bastardi, Meteorologist from WeatherBell.com and environmentalist, Tony Heller who posts a blog called Real Science at https://stevengoddard.wordpress.com/. Some of what they write is quite interesting and thought provoking.</p> <p>The Board owes every child an open-minded education free of indoctrination. The science is not settled. Children deserve the opportunity to learn and explore what really causes climate to change. True science never stops</p>	NA/-	See Rationale 2.

		examining the facts. There is no more important lesson science students need to learn.		
02-02	Alex Czarniecki	<p>Global Warming There are a multitude of facts regarding 'Global Warming'. They include:</p> <ol style="list-style-type: none"> 1. The major contributor to atmospheric warming is 'Water Vapor'. All of the models that predict global warming fail to include this contributor in their analysis. When any of these models is provided known historical data, up to a point in time, they fail to predict the following period's global temperature trends with any accuracy. 2. Carbon Dioxide rises and falls with global temperature change, but it follows the temperature changes by hundreds of years. Therefor it does not cause the temperature changes. 3. The major contributor to global temperatures is the activity of our sun. There are a number of sunspot cycles that have been recorded and collectively they predict the changes in global temperatures that we have been experiencing. Therefor, global temperature changes are not caused by human activity. 	NA/-	See Rationale 2.
02-02	Tracy Lamanec 813 Crawford Road Schenectady, NY 12306	Science requires an open mind. I am a scientist and a global warming skeptic. Though carbon dioxide is a greenhouse gas, human activity is only one of many sources. A much more abundant greenhouse gas is water vapor and we have even less control over it. I urge you to allow students to be educated in science rather than indoctrinated by pseudoscience with a political agenda.	N/+	
02-02	Marjorie Franko, Concord MA	Science We need science in the classroom, NOT indoctrination. Thank you!	NA/-	See Rationale 3.
02-02	T. R. Mader	<p>Climate Change</p> <p>I'm a former legislator in the state of Wyoming. I know you're looking for accurate educational material for your science classes in West Virginia. Well, it's vitally important to get accurate information to students. What the current Administration, the Environmental Protection</p>	NA/-	See Rationale 2.

		<p>Agency (EPA), Non-Governmental Organizations like Sierra Club, Natural Resource Defense Council, Greenpeace, etc perpetuate as "truth" about Climate Change is dishonest - plain and simple.</p> <p>There are two things I would like to offer you:</p> <ol style="list-style-type: none"> 1. Organizations that can provide you accurate, peer-reviewed information on Climate Change are: Heartland Institute, Cornwall Alliance and CFACT. Google these names and you can easily find them. 2. Food for Thought - Attached is my letter to the EPA on their proposed rule on coal-fired power plants. By the way, these proposed rules have been devastating to your state's economy. <p>ATTACHMENT</p>		
02-02	Karen Shoemaker	<p>Balanced curriculum I am writing to express my support for a balanced curriculum in West Virginia concerning the theory of climate change. Science is not settled on this subject and students should have the opportunity to hear all sides of the theory.</p>	NA/-	See Rationale 3.
02-02	Larry McClimans Blue Grass, IA	<p>Educational Standards, Global Warming The Board of Education should ensure that its science standards permit students to examine and learn from all the data and analysis about global warming.</p> <p>Must students be made ignorant of scientific data which shows that over the last 18 years climate computer models have consistently projected a warmer world than scientific observations record? Global warming has not occurred as projected during the entire lifetime of today's school children. Should the actual recorded data of world temperature, sea levels, storms, droughts, floods and all the rest be banned from our classrooms? Is comparing this data to the pronouncements of highly funded global warming pressure groups heresy?</p>	NA/-	See Rationale 2.

		<p>The discussion is far from over. The true mind of science remains open to new data and alternative explanations. Whether and how much of the approximately 1/2 degree C of warming which occurred in the latter half of the 20th century is due to human industry has not been conclusively established. Neither have any of the incredibly expensive “solutions” proposed to address any global warming been shown to be meaningfully effective or worth their tremendous cost.</p> <p>The Board owes every child an open-minded education free of indoctrination.</p>		
02-02	rleeshaf65@xxxxx.xxx	<p>Protect Science In The Classroom</p> <p>I am sending this email because I am in favor of the Balanced Climate Curriculum.</p>	NA/o	See Rationale 3.
02-02	Kevin E. Baldwin	<p>Yes to Balance Please put a balance curriculum in place. I am tired of people presenting lies as truth. The temperature of the earth cycles like everything else and this natural phenomenon should not be used to mislead children or to control peoples lives.</p>	NA/-	See Rationale 3.
02-02	Richard Lee	<p>A good new book is Kehr's , "An Inconvenient Skeptic" Chris Booker's "The Real Global Warming Disaster" is a good place to start for the history of this politicization of climatology. Seems more like Solar cycles and wind creating heating and cooling of the oceans and the consequent (?) thermohaline ocean currents of around 800 year periods.</p>	NA/-	See Rationale 2.
02-02	Larry Grimm, washington pa	<p>climate nonsense I wish more states would take up the cause of our children being subjected to the endless stream of leftist propaganda being forced upon them. .it is indeed heart warming to see any movement in the right direction .</p>	NA/-	See Rationale 2.
02-02	Ron Parks	<p>Climate Science When only certain theories are allowed to be expressed, we have politics, not science. Please allow all the data to be examined in the curriculum.</p>	NA/o	See Rationale 3.
02-02	James Leporte Des Moines, Iowa	<p>Teaching Science The teaching of Science in primary school should be limited to teaching the scientific methods. This involves observation, measurement, and the possible</p>	NA/-	See Rationale 2.

		<p>development of a theory. Then the theory is tested with experimentation and data collection.</p> <p>To just present a conclusion, is propaganda, and has no place in education. The goal is to teach the students to think for themselves. Lacking that, they will be no better off than one who has had no education.</p> <p>There is also no place for the unbalanced selection of data to bias the result in favor of a predetermined outcome, such as is used in the "Climate Change" debate by its proponents. The truth is, there is no consensus, even among the recognized "experts" on climate.</p> <p>NASA has, for the most part, produced good data, but there are those with an agenda, who selectively choose only the data that show the outcome they desire. This have been proven in cases of data manipulation by proponents (of which I am sure you are aware), and the problem of U.S. weather stations not properly sited, (evident to those who have examined this aspect of the problem), and the outright falsifying of records to show additional warming.</p> <p>Give the children the tools and education to do real science, and leave the conclusions for the student to discover for themselves later, when they have more knowledge and experience. It is not for K-12.</p>		
02-02	Barbara Stockwell	<p>Science Curriculum Science Education should never be political nor based on narrow viewpoints. Teaching critical thinking is essential for a quality education. As Dr. Richard Feynman famously said, "If you thought that science was certain --well, that is just an error on your part."</p> <p>Dr. Feynman was very famous for his physics, but in my mind it was his brilliant career as a teacher that made the world a better place.</p> <p>I truly hope that wise decisions will be made in your state and across America regarding the educating of our children.</p>	NA/o	See Rationale 3.

02-02	Monte E. Seehorn 5292 Clarks Bridge Rd. Gainesville, Ga 30506	Curriculum I have over 100 research papers in my files, and the majority are “deniers” in regard to global warming and the “Chicken Little “prognosticators. You will be doing a major disservice to your students if they are not presented both sides of this issue. Let them look at historical records that have not been tampered with or modified.	NA/-	See Rationale 2.
02-02	homesteading64	Global warming I don't live in your state but if it was mine I wouldn't let them teach global warming at all when ask indications are everything about it is false	NA/-	See Rationale 2.
02-02	Michael Houston	<p>Your vote on the warming fiasco The President says the "The science is settled!" I suggest that the President failed his science class and his locked up grades would reveal just how little he knows about science.</p> <p>The fact is that Science is never settled. I point out that the smartest man of his day knew and told others about the suns fixed position in the ether (Copernicus).</p> <p>Eventually an English man said, "It's not a circle, it's an oval." (Newton)</p> <p>That should have settled it, but a little patent clerk in Switzerland said, "Perhaps, perhaps, but these figures show something else entirely." (Einstein)</p> <p>And now in Cern, Switzerland, a group of long-haired geniuses are looking for the "God particle."</p> <p>Now which of those was/is the true scientist?</p> <p>It is clear that Science is <u>never</u> settled. In fact, Science is not a fact, they change.</p> <p>Science is, and always will be, a procedure.</p> <ol style="list-style-type: none"> 1. Observe some system that interests you. 2. Ask a question based on what you observed. 3. What relevant information can you find about this question 4. Construct a hypothesis about what you have found out so far. A hypothesis is a general rule about what you see happening. 	NA/-	See Rationale 2.

		<p>5. Test your hypothesis. Your test should change only one variable.</p> <p>6. Analyze your results and draw some conclusion about what is happening.</p> <p>7. Tell others about your results.</p> <p>What happens next? Someone else tests your "rule" with a different variable. If your rule fails, what then? A "Scientist" starts over.</p> <p>The Believers truly believe in their "Hockey-Stick" data. Even if the temperature is not rising (the last 18 years show a flat line), but the computer models show about a 15 to 20% rise (we should be roasting). The U.S. Weather Department shows no rate of change for "violent" weather activity. The UN reports have been shown to be based on lies.</p> <p>Why?</p> <p>The money for research into normal weather has been shriveling up for a long time. The amount of money for research into "Warming problems and cures" has been expanding, "violently" if I can use such a worn out word.</p> <p>I ask you sir, if you had a son, and two fields were open for his study, which would you direct him toward? The shriveling or the growing?</p> <p>Although I have been a teacher (computer Science) for 20 years, I speak only for myself. After all, the Governor of California believes in this fake science, and the Government, from the President on down can't be wrong, can they?</p>		
02-02	Mary Therese Tiedemann	<p>Balanced climate curriculum</p> <p>I urge your school board to adapt a balanced climate curriculum in all your schools.</p>	NA/o	See Rationale 3.
02-02	James Wilson St. Helens, Oregon	<p>Present both sides Please present both sides of the climate change argument. We are indeed still coming out of the last Ice-Age. Hundreds of billions of dollars</p>	NA/-	See Rationale 2.

		<p>in taxes are demanded in the name of climate change on the basis of models that cannot duplicate past history, much less predict the future.</p> <p>I don't see anyone weighing the good that a rise in temperature brings, only a knee-jerk panic about any kind of change. If recent studies of the human genome are correct, the last Ice-Age nearly took out the human race, not global warming. We live in a time of changing climate.</p> <p>Teach students that, not the politics.</p>		
02-02	Rodger Peabody	<p>Data or Dogma</p> <p>We keep hearing about climate change and how it is due to human activity. I would ask when has the climate ever been truly stable. When George Washington the earth was in a mini ice age. The Delaware river was choked with ice which is shown in a famous painting which portrays that crossing. Today the Delaware river rarely ices over during winter. Does that mean global warming started then, no!</p> <p>When I was a child growing up in North Dakota in the 1940s and 1950s some winters were harsh and cold and some were not. That was just climate variation from year to year. In 1953 we had so much snow that the Red and Red Lake rivers flooded badly enough that the Minnesota and North Dakota National Guards were needed to rescue people from their homes. That was not the worst flood for those two rivers. The worst flood came in the late 1990s. That flood all but destroyed Grand Forks ND and East Grand Forks MN. We were told that snow was due to global warming. Snow isn't warm and the real cause was a minor change in the pattern of the Arctic Jet Stream. That pattern changes to some degree every year, and probably always has.</p> <p>The current popular climate change dogma is based on computer models that contain adjustments (falsehoods) that</p>	NA/-	See Rationale 2.

		<p>depict a degree of global temperature that doesn't exist. It's time to teach about real climate dynamics instead of climate change dogma which is base on a political agenda.</p> <p>I'm 73 years old. I've lived in various parts of the world during a military career. I've never experienced a stable climate. Climate change should be referred to as climate dynamics. The climate has never been truly stable. Teaching should be fact based not dogma based.</p>		
02-02	Jim Ortiz	<p>Science in Truth Is it heresy for science students to see the observed global temperature data which shows that climate computer models have called for a warmer world than measurements show since last century? How about that weather extremes are historically normal and sea level continues to rise at only 3 mm per year? Must they be shielded from any data inconvenient to the global warming narrative?</p> <p>The true mind of science never stops examining the facts and fears no data, no matter how inconvenient it may be.</p> <p>There is no more important lesson science students need to learn.</p> <p>In the 70's we were going to freeze to death because of man made global cooling. Now it's global warming.</p> <p>Teach these kids the truth. That GOD controls the climate, NOT man.</p>	NA/-	See Rationale 2.
02-02	pgantea	<p>Global warming Plese se the pictures I attached. They are from Smithsonian museum. You can see for yourself that in the past ware many warming periods and they ware no caused by humans. Warming is caused by the sun activities.</p> <p>ATTACHMENT</p>	NA/-	See Rationale 2.
02-02	scanderson@xxxxx.xxx	<p>fake science. the global warming scam costs the American people 1.5 trillion a year. use that money on securing our borders.</p>	NA/-	See Rationale 2.

02-02	Robert M. Henes	Climate Change I believe a balanced approach to climate change should take place in the classroom. I believe the science is far from settled.	NA/o	See Rationale 3.
02-02	Bev Firkins	Global cooling Let the students find the truth through the facts that they can find for themselves. Let them do their own research, not just what they are told which may not be true.	NA/-	See Rationale 2.
02-02	Jeff Beck	Curriculum Standards My name is Jeff Beck and I live in California. I am on an email list from CFACT (Committee For A Constructive Tomorrow) and they keep all their readers posted on the latest environmental and energy news as it relates to politics, society and science. That's how I heard about West Virginia's decision to revise its science teaching standards to mirror the proposed national standards, which unfortunately seem to treat the subject of climate politically and not scientifically. I'll be very brief here; when I was young and in school my teachers, the "scientific" community and the media were all completely convinced that we were headed into a new and devastating ice age. We now know how that turned out. Now, these same institutions are just as convinced that the earth is going to warm to the point of destruction (even though there is absolutely no evidence to prove that it is). I really wish that I had been given more accurate and thoughtful information from my teachers back then and that is also my hope for every young person going through the education system today. I urge you to give those in your charge a firm foundation of truth and facts on which to build their lives, rather than joining with those who would seek to engineer our society according to their own emotional eliefs. Thank you for your time, I truly appreciate it.	NA/-	See Rationale 2.
02-02	Larry Luckjohn	Curriculum teach all facts. stay away from "Obama core" The govt. wants to brainwash and control us. global warming is a hoax. God said such things would happen as the world comes to an end. The end is coming soon !!!!	NA/-	See Rationale 2.

02-02	Allen Stevic	Climate curriculum I favor a balanced climate curriculum for the children.	NA/o	See Rationale 3.
02-02	Kris Behmer	<p>Science in the Classroom When I was in high school, my biology teacher apologized when it was time to discuss evolution. If we were offended, we could leave the room. Today, if one protests a discussion of the same topic, they are ridiculed as babbling fools. Evolution is taught as if it were the truth, but Darwin himself posited it as a theory, and a theory is so named because it has not been proven...although more and more proof is presented very day that Darwin was simply wrong about much of his theory.</p> <p>So it is with climate change, global warming or whatever it is being called these days, a theory based upon computer models. I taught math for thirty years, and I know a great deal about plotting data points by hand. I also know that one can construct a multitude of straight lines through any two of these points. Which line is the "correct" one? Sadly, whichever one best fits the result you're looking for. We already know the scientists involved cooked the books on this. What better way to get additional funding, studying something you made up yourself.</p> <p>So, I'll leave you with this tidbit of information that no one has ever been able to refute. The 1930's contained the hottest weather ever recorded in the US during 20th century. Do some checking on the population or the number of exhaust belching cars then. There were a whole lot less of them in the world than there is today. How is it all these less people and machines had more effect on the temperature then than millions more do today?</p> <p>Don't deprive children of the right to hear both sides of any issue. Let them seek the truth by getting the whole story. It goes without saying it's the right thing to do; it's what an education should be all about, not a ton of propaganda, fitting a particular agenda.</p> <p>Keep science open and fair</p>	NA/-	See Rationale 2.

02-02	Gail Stamps	balanced climate data Dear Ms/Mr. Sizemore, All the students at your school should be told both sides of the climate data. They should be able to think for themselves and believe in what they want to believe as far as climate change. My honest opinion is we are in another change of climate and have been there before many times over the centuries. Thanks for doing the right thing here.	NA/-	See Rationale 2.
02-02	Evan Lasky	climate change Students should be exposed to all of the scientific data and analysis on climate, not be limited to what warming pressure groups want them to see.	NA/-	See Rationale 2.
02-03	Sean Harwell Graduate Assistant Fairmont State University Fairmont WV	Awesome!	N/+	
02-03	Pauline M Schaefer Norton, MA 02766	The teaching of Climate Change. I just read in an email from Cfact that you are contemplating including climate change in your Common Core curriculum. I have just discovered that 50% of the US Senate does not believe in Climate Change and was happy to read this as I do not believe either. Climate Change is the biggest money and power grabbing fraud based on scientific theories that have been financed by huge federal grants and puts regulations on the populace that chisel away at our freedoms. We have the scientific know how to fight pollution but not to control the sun, the master of our weather. To teach children the absolute of Climate Change without exploring the nature of the world's weather is a form of proper gander which is dangerous. To control pollution as a health issue can be taught without the fear of destroying mankind which really comes down to politically controlling environmentally based enterprises for financial gain.	NA/-	See Rationale 2.
02-03	shaver58@xxxxx.xxx	global warming standards The science is not settled man made climate change is a hoax. take a look at the geological records that date back to the beginning of the planet instead of the just over a hundred years we have been keeping temperature records and tracking weather!	NA/-	See Rationale 2.

02-03	Pat Orlinski	Science curriculum I'm writing because I am a retired Science teacher, and I want to affirm the need for honest Science, giving students the information they need and deserve to make an intelligent choice about the world around them, in which we all live. We need balance and truth.	NA/o	See Rationale 3.
02-03	Joy Kingman	<p>Protect students' rights to all the facts about the climate</p> <p>The Board of Education should ensure that its science standards permit students to examine and learn from all the data and analysis about global warming.</p> <p>Must students be made ignorant of scientific data which shows that over the last 18 years climate computer models have consistently projected a warmer world than scientific observations record? Global warming has not occurred as projected during the entire lifetime of today's school children.</p> <p>Should the actual recorded data of world temperature, sea levels, storms, droughts, floods and all the rest be banned from our classrooms? Is comparing this data to the pronouncements of highly funded global warming pressure groups heresy?</p> <p>Claims of an overwhelming scientific global warming consensus have been repeatedly and thoroughly debunked. The discussion is far from over. The true mind of science remains open to new data and alternative explanations. Whether and how much of the approximately 1/2 degree C of warming which occurred in the latter half of the 20th century is due to human industry has not been conclusively established. Neither have any of the incredibly expensive "solutions" proposed to address any global warming been shown to be meaningfully effective or worth their tremendous cost.</p> <p>The Board owes every child an open-minded education free of indoctrination.</p>	NA/-	See Rationale 2.
02-03	Rev. Peter Anderson	So called "science" teaching in schools I am concerned about the audacity of people who think that	NA/-	See Rationale 2.

		<p>teaching "science" should be done WITHOUT including FACTS on any given area of study.</p> <p>What is the problem with teaching FACTS in a "scientific" manner that includes the idea of collecting data, assessing the FACTS of that data and coming to a hypothesis or a conclusion based on those FACTS!?!?</p> <p>I was in science classes in school and we did just that... learned by observing FACTUAL processes and coming to our own conclusions.</p> <p>There is SO much misinformation being generated by people professing that "Global Warming" is, in fact, real and man made (at least added to) while even experts like NASA have proven just the opposite is true. European organizations that have tracked weather patterns, sea levels, warming/cooling trends in earth's weather have also come to the conclusion that our planet has NOT gone through a warming trend but instead has been COOLING for over 18 years. If it hasn't...</p> <p>why has this winter been so cold in the Northeast such that <u>70 percent of the Great Lakes</u> are frozen over?</p> <p>There is a huge buildup up snow in Siberia this year like last. Meteorologists believe that portends another brutal winter. About 14.1 million square kilometers of snow blanketed Siberia at the end of October, the second most in records going back to 1967, according to Rutgers University's Global Snow Lab. The record was in 1976, which broke a streak of mild winters in the eastern U.S. In addition, the speed at which snow has covered the region is the fastest since at least 1998.</p> <p>Death Valley Sets New Temperature Record — for <i>Coolness</i></p> <p>Death Valley, Calif., which holds the world record for the highest temperature ever recorded, hit a high of just 89 degrees on Sunday, Aug. 3 — the coolest high temperature on record for the date.</p>		
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		<p>C02 concentration, there has been no warming at all for 12 years 6 months:</p> <p>The 10,000 cold-weather and high-snowfall records set just in the U.S. in the past winter; or the 100-year record cold in London and Moscow.</p> <p>The annual costs of extreme weather, normalized to allow for growth in population and infrastructure over the past half-century, show no trend. And the economic peer-reviewed literature is near-unanimous in finding that it would cost considerably more to try to mitigate global warming today than to adapt to its consequences the day after tomorrow. In fact, it is 10-100 times more costly to act now than to adapt later.</p> <p>The United States has seen record snowfall in the past two or three years.</p> <p>The December snow cover extent in the northern-hemisphere winter of 2012/13 was the greatest in the entire 34-year satellite record, and the snow cover for the entire winter was the fifth-greatest on record.</p> <p>Americans are NOT paying more in insurance premiums due to "global warming". They are paying just about as much as they always did for extreme weather damage, which is why the insurance companies have found it so very difficult to use climate change as a pretext to talk up premiums.</p> <p>Obama trots out the Trots' usual meme that "Ninety-seven percent of scientists, including, by the way, some who originally disputed the data, have now put that to rest. They've acknowledged the planet is warming and human activity is contributing to it."</p> <p>The survey he mentions actually showed less than a third of a sample of almost 12,000 published papers even implicitly endorsing the notion that humans are contributing to global warming. Only 0.3 percent of the abstracts – just 41 out of 11,944 – said humans had caused more than half of "current" warming: no surprise there,</p>		
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		<p>given that there has not been any current warming. And none of the abstracts said warming would be catastrophic. The volcanic eruption in Iceland , in less than ONE week, destroyed EVERY attempt mankind has made to "fix the ozone layer" (forgetting all the while that LIGHTNING creates more ozone than mankind destroys!). Ozone is nature's way of CLEANING the atmosphere!!</p> <p>In short, climate has been changing for 4567 million years; it is changing now; and it will continue to change. Do the math! FACTS carry a LOT MORE WEIGHT than opinions... right or wrong!!</p>		
02-03	Bill Goddard	<p>School curriculum</p> <p>CFACT recently testified at a meeting of your West Virginia Board of Education in favor of minor amendments to the curriculum which would better reflect the full scientific discussion on climate. Please be fair and open to real possibilities/reality in ALL science subjects, and not cave to special interest pressure.</p>	NA/-	See Rationale 2.
02-03	Paul Krause	<p>Global Cooling The earth has entered a 150 year cooling phase. It could be a more severe 3000 year cooling cycle which would be very brutal for humankind. In this cooling cycle food will become more scarce and many could starve. To learn more read "the Twilight Of Abundance" by David Archibald. Please do not propagandize the children and provide balanced education.</p>	NA/-	See Rationale 2.
02-03	<p>Anthony R. Lupo Professor, Univ. of MO</p> <p>IPCC exert reviewer</p> <p>Visiting Scholar, Belgorod State University, Belgorod, Russia</p>	<p>WV Science Standards</p> <p>I am writing this letter in support of others who have written in about the new science standards for West Virginia. I am sure these will be thoroughly vetted and I am sending this in support of that goal.</p> <p>The science of climate is certainly a contentious issue these days. What we do know is that:</p> <ol style="list-style-type: none"> 1. Temperatures (globally) have warmed during the 20th century on the balance, with two rises (early and late) of about 0.5 F each, and a brief period of 	N/+	

		<p>cooling mid century. We also know temperatures have been steady since about 2000.</p> <ol style="list-style-type: none"> 2. A majority of scientists believe human forcing through increased CO₂ has contributed to all or most of the warming since the late 1970's. The media often reports this to be 97%. The American Meteorological Society (July 2014) see Http://www.ametsoc.org/AMS) own survey of weather and climate scientists puts this at about 58%. This leaves a substantial number of scientists who contend natural forcing is a contributor to climate change. 3. The IPCC report (AR5) shows that computer models have over forecast the warming of the early 21st century. 4. These are a few examples of the state of climate science today. <p>While there are those who insist that human control of the climate is as ironclad as say, Newtons laws of motion, I know several serious scientists who, while they believe humans are primarily responsible, they do not discount the contributions of natural forcing in the past, present or future.</p> <p>At the primary and secondary school levels it is hoped that students are provided with the state of science today according to scientists themselves and not the science of the media or activist groups.</p> <p>It is continuously reported that our students lag behind the world in key areas. Having taught outside the US, I don't believe that it is so. I believe US students are taught well in comparison to their peers outside the US. Part of that is providing students a good look at the state of science today as well as teaching them critical thinking skills (which are key for scientists).</p> <p>But I am seeing a small but increasing number of students who are shocked to learn that nature has anything</p>		
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		to do with climate change (at any point in history). While these students are not in the sciences, they are certainly ill informed. It is my hope that this will not be the case in West Virginia. Thank you in advance for your consideration.		
02-03	Sue-Ann Jacobson	Balanced climate curriculum best West Virginian students deserve a balanced climate curriculum.	NA/o	See Rationale 3.
02-03	Cheryl Mulligan	Curriculum I am 52 years old & when I was in school we were warned of a coming mini ice age that would wipe out crops & cause global hunger. I was terrified & since "scientists" said it was DEFINITELY going to happen I was convinced my family would starve. As the years went by & nothing did it faded to the back of my mind. We then moved on to the hole in the ozone that was going to cause massive crop failure, starvation & burn us all to death. By this time I was a bit more skeptical & so wasn't surprised when, once again, these so called "scientists" were proven wrong. Oh, & by the way, the rain forests were not wiped out & subsequently no huge shortage of vital medications has ever materialized. The earth has NOT WARMED in 18 straight years, something climate "scientists" have chosen to ignore & cover up because it does not reinforce their doomsday scenarios & get them HUGE grants from the government. Before you choose to placate leftist billionaires & the politicians who enable them by indoctrinating children into believing climate change will destroy the earth PLEASE consider the damage being done to their young, impressionable minds. Just as I was terrorized into believing in the mini ice age, these children will worry & suffer stress over something that is NOT real. The climate has been changing since the beginning of time & will continue doing so until the end of it. By not presenting the TRUTH, that global warming is a SCAM that is making politicians & their K street whores VERY wealthy on the backs of middle class taxpayers, you are setting them up be patsies that never question why, 40	NA/-	See Rationale 2.

		years later, the ruling class is STILL robbing them blind in the name of saving the planet.		
02-03	walt christen	Climate Debate in Science Class/Curriculum All climate discussions should include both sides of the issue and not be made into a political issue. We need a balanced approach.	NA/-	See Rationale 2.
02-03	Dudley Jones Retired ex Chartered Environmentalist,, Retired Fellow of the Chartered Institution of Water and Environmental Management, etc.	Science and Teaching I am a retired Chartered Environmentalist in the United Kingdom.. I severed my ties with the professional body I had been a Fellow of for many years. This was because it was hi-jacked by extremists with seemingly left wing collective tendencies, who seized control of the once learned society to promote a 'climate change' narrative. I did, for a time, assume that 'the science' was what I was being told, I was not a 'climate change sceptic'. Being an engineer and scientist I needed to see with my own eyes the evidence, whatever that was and from all perspectives. It took me only a few days to find that 'the science' of 'catastrophic man made climate change' was not 'settled'. Indeed, there seemed to be much scientific data showing that the climate was changing normally, as it had for millions of years. Try as I did I could find no scientific evidence that man had more than a nominal, if any, influence. There was, however, a clear and present danger, and much evidence, that activists were seeking to silence those who did not agree with their far left agendas, which were often potentially environmentally dangerous. These people pose a greater danger than Hitler or Stalin ever did. It is vital that young people see the facts, and the uncertainties, and are encouraged to enquire and form their own free beliefs and judgements.	NA/-	See Rationale 2.

		<p>This is why I feel that it is essential that the children and young people of West Virginia, and all states, are given straight, un-tampered with facts, as well as the uncertainties, and are not subject to propaganda and suppression of information.</p> <p>I see, from afar, Obama willfully distorting science, as well as seeking to bring the USA to its knees with EPA regulation.</p> <p>I URGE YOU, PLEASE, FOR THE GOOD OF YOUR GREAT COUNTRY AND THE ECONOMIC AND HUMAN WELLBEING OF YOUR NATION, TO LAY BEFORE ALL STUDENTS BOTH THE WARMIST AND REALIST (SCEPTICAL) SCIENCE.</p> <p>Let them see the computer model outputs and compare them with actual records, and form their own views as to the value, or otherwise of these projections.</p>		
02-03	M.P. (Rinus) Kiel Hof van Portland 87 3162 WK Rhoon	<p>Keep to reality! Although I am not an American citizen, the discussion in your country is also actual here in the Netherlands. Children should not be locked in into a narrow selection of data and interpretations but should see and hear the full picture, as far as possible. Intuition, creativity and imagination will be highly necessary, if we want real progress in science. It is exactly the lack of these facilities which has brought science (and especially physics) in the place where everything has been stagnated, says Louis de Broglie, one of the architects of Quantum Electro Dynamics. The American physicist Lee Smolin said already in 2007 that physics has been stagnated already for 30 years. There are alternative theories, and they are very successful, but almost nobody outside their circles has ever heard of them.</p> <p>In the Netherlands the research director of KNMI, the Dutch meteorological institution, has been fired because he did not believe in the unique power of ever more complicated computer models for climate forecasting. He</p>	N/o	

		<p>did not 'fit into the team' and was dropped in a 'reorganization'.</p> <p>So, you have my sympathy. Keep to reality! Keep out manipulation at all cost!!</p>		
02-03	Michael Evans	<p>Science education Students need to do more than regurgitate propaganda to "learn."</p> <p>They need to understand that scientists bring bias (including research grant bias) to many areas of science, reducing it to 'my opinion' (hypothesis only) instead of what science demands: observational evidence.</p> <p>Case in point- catastrophic Anthropogenic Global Warming aka Climate Change aka Carbon Tax. All a ruse to defraud the public of their money through taxation and legislation.</p> <p>To what scientific, evidence based fraction of a degree Celcius can a tax change the temperature of a local area let alone the whole globe.</p> <p>Scientific debate is being deliberately stifled in many fields through grants only being approved for political propaganda reasons - you only get the money if you say what we want you to say. A la Al Gore and all the socialists in the Democrat Party in the USA, and the Labour/Labor parties of many western democratic countries such as the UK and Australia.</p> <p>The Socialist parties everywhere will look for the Golden Goose of Taxation, the Carbon Tax and promote it regardless of how foolish it is: all plants thrive better when more carbon is in the atmosphere.</p> <p>Scientific fact.</p> <p>And then there is the evidence, or more correctly, lack of evidence for evolution.</p> <p>Science is robust enough to handle challenges and debate and correction and throwing out invalid theories.</p> <p>Unfortunately, educational institutions and politicians with an agenda are not, for political and financial reasons.</p>	NA/-	See Rationale 2.

		<p>Allow full and open discussion in classrooms, without fear of censorship and forced propaganda. Allow the unchallenged deceptions on 'An Inconvenient Truth' to be debated and challenged, as the British High Court demonstrated its deceptions.</p> <p>By the way I have worked in atmospheric research and am insulted by the manipulation of data by many agencies. I am also a High School science teacher who allows the students to form a hypothesis and then investigate and discover the truth of various theories and form their own conclusions, independent of my own.</p>		
02-03	Clifford Fowler	<p>Balance I think it only fair that your students be given all the information about climate change , not just a painted version from the government or any sponsor of common core . Please help your students to see both sides of the issue .</p> <p>Short story , I graduated high school in 1971 , back then the concern was the onset of a new ice age !</p> <p>I am only 60 years old and I live in Texas , it gets hot and it gets cold . I am not yet convinced I have seen either global warming or an ice age.</p>	NA/-	See Rationale 2.
02-03	Lisa Delozier	<p>Science To whom it may concern, science and politics should never mix. The search for truth is paramount. You can not find the truth without exploring both sides of any given subject. Please do not close the door on wisdom.</p>	NA/o	See Rationale 3.
02-03	Juanita Billings	<p>Education standards Our students need to be taught HOW to think, not what to think. Give them the facts and teach them how to analyze them. Truth, in whatever form it takes, must never be altered.</p>	A/o	See Rationale 4.
02-03	Robert Heikkinen	<p>Proposed science curriculum changes Please allow our students to consider different schools of thought and not subject them to a single theories. This is still America, let the children</p> <p>Learn and not be subject to propaganda.</p>	NA/o	See Rationale 3.
02-03	gary woodburn	<p>Indoctrination of children There is evidence that the sun is going through a solar cycle and for the next few years the</p>	NA/-	See Rationale 2.

		sun's intensity is on the wane so the earth's climate will likely cool. Real science requires an examination of both sides of an issue yet there is an attempt to indoctrinate students on only one side of the alleged global warming debate. The real problem is once a federal agency like the EPA is created the czar of the agency looks for ways to expand. The czar hands out grant money to universities for skewed studies that paint a picture of global calamity which requires an expanded EPA. Please teach students to think by examining both sides of issues rather than indoctrinating them on government propaganda!!!!		
02-03	Rhonda Tubbs	Global Warming Please, watch this short, very inciting video, and consider the facts, when making your decision on wether 'climate change' should be pushed on children. http://kingworldnews.com/lord-christopher-monckton1-10-15/	NA/-	See Rationale 2.
02-03	James Weatherford	Keep Climate science objective Please do not "indoctrinate" students with "dictated" science.	NA/o	See Rationale 3.
02-03	Carl Bitzer Kenner, LA	Science Science is settled by facts, not by polls.	NA/o	See Rationale 3.
02-03	lawrence.vicario@xxxxx.xx x	Teaching fairly Let the students have a chance to see the opposing side to the global warming theory. That's fair.	NA/o	See Rationale 3.
02-03	Franco Barbacci	In any situation, to properly take the best personal decision, you have to be able to access all available pros and cons facts/arguments .Please make sure that this basic principle is always adhered to in anything you decide.	NA/o	See Rationale 3.
02-03	John Burks	climate change? Earth's climate is always changing. In the last 100 years the temp has not increased in any real way. The students need to be presented both side and allow them ro decide. The progressive liberals are changing the text books to deliver their desires, especially history books. These changes are designed to produce students who become socialists.	NA/-	See Rationale 2.
02-03	Jane Kinney	Please leave science alone Science is science. Brainwashing kids to try to make them believe as you think is completely wrong. Weather is one thing that can be	NA/-	See Rationale 2.

		depended on to change as it does daily. There is NO proof of global warming and you know that or you would not be scheming to get kids to believe it by "teaching" it in school. Have you no conscience?		
02-03	David F. Drake	Climate Change and Public School Curriculum I urge you to strongly consider a balanced science curriculum be presented to high school students in West Virginia. Public school curricula should not be a political football but present a balanced view toward basic information that young people need to develop critical thinking. Curricula should not be a one size-fits-all approach to educating our future leaders. Special interest groups should not rule curricula development decisions.	NA/o	See Rationale 3.
02-03	Kevin T Casey	Teaching Science Please let science continue to be about facts, whether they support a theory or not.	N/o	
02-03	Ron Downey	Global Warming The students need to see the whole picture if they are going to be able to make the right decisions, not what the left wants them to see. It would be great if we could tell students what we want and have it happen, but that is not reality, smarten up.	NA/-	See Rationale 2.
02-03	Vicki Fenwick-Judy Director, Appalachian Program The Mountain Institute	NGSS public comment As a community member and non formal educator, I'd like to express my support for the West Virginia Next Generation Content Standards and Objectives for Science that were generated from the NGSS WITHOUT revisions. As a lead state partner, it is important for our education system to support our science educators who guided the standard writing process, gathered and delivered feedback from state-level committees and came together to address common issues and challenges.	N/+	
02-03	Ryan E. Harvey, P.E.	Climate Curriculum What many people fail to remember is that there was at least one Ice Age maybe two or three. In order for the ice age(s) to end there would have to had been warming. So to say that humans are causing warming is wrong and it has not even been proven. The climates are on a cycle of both warming and cooling. If it is going to be	NA/-	See Rationale 2.

		<p>taught it needs to state that it is a cycle or both warming and cooling.</p> <p>2nd email 7 minutes later</p> <p>Just looked it up there have been 5 Ice Ages</p>		
02-03	D. Dunton	<p>Science – Balanced I am shocked that anyone has accepted the "common core" and this new idea for teaching science. I hope you and all others will keep teaching science by the truth of what has been proven, not by the ideas of some with power that insist everyone believe as they do. Keep the classroom balanced. Teach our children, not indoctrinate them.</p>	N/o	
02-03	Eric Petersen	<p>No fair subjecting your students to only part of the discussion on climate. All of the scientific evidence concerning "global warming" must be presented to the students.</p>	NA/o	See Rationale 3.
02-03	Melanie Lundholm Stilwell, KS	<p>Truth in Science It is my understanding that you are gathering public comments for a vote regarding science instruction in the classroom. Students should be exposed to all of the scientific data and analysis on climate, and not be limited to just the information presented by any one group or side. Please opt in favor of the whole picture, and let the education of the individuals that make up our country be grounded by truth...not speculation.</p>	NA/o	See Rationale 3.
02-03	Janet Kuchler	<p>Science curriculum Children need to learn the four 'stages' that all scientific facts must pass before any conclusion can be reached. Denying facts because they don't 'fit' a person's view does not support/prove an idea. Truth isn't always what one desires, but truth must be stated.</p>	NA/o	See Rationale 3.
02-03	Florence Davis	<p>Global cooling There is an equal amount of scientific data to predict global cooling as there is to predict global warming. ALL these facts should be presented to school children. Considering how cold this past winter has been, and the size of my heating bill, I lean toward global cooling. I take a great deal of interest in what is taught in school, as my father was a science and math teacher, and</p>	NA/-	See Rationale 2.

		later an administrator, and I will be watching the progress of this debate. Thank you for your consideration.		
02-03	Henry A. Smith	<p>Curriculum, and the science related to Anthropogenic Global Warming</p> <p>Please protect students' rights to all the facts about climate. The Board of Education should ensure that its science standards permit students to examine and learn from all the data and analysis about global warming.</p> <p>Must students be made ignorant of scientific data which shows that over the last 18 years climate computer models have consistently projected a warmer world than scientific observations record? Global warming has not occurred as projected during the entire lifetime of today's school children.</p> <p>Should the actual recorded data of world temperature, sea levels, storms, droughts, floods and all the rest be banned from our classrooms? Is comparing this data to the pronouncements of highly funded global warming pressure groups heresy?</p> <p>Claims of an overwhelming scientific global warming consensus have been repeatedly and thoroughly debunked. The discussion is far from over. The true mind of science remains open to new data and alternative explanations.</p> <p>Whether and how much of the approximately 1/2 degree C of warming which occurred in the latter half of the 20th century is due to human industry has not been conclusively established. Neither have any of the incredibly expensive "solutions" proposed to address any global warming been shown to be meaningfully effective or worth their tremendous cost.</p> <p>The Board owes every child an open-minded education free of indoctrination.</p>	NA/-	See Rationale 2.
02-03	George Burns	<p>Global Warming Teaching Standards</p> <p>Having done considerable research on the whole global warming debate I have concluded that those who claim global warming is a matter of settled science are dead</p>	NA/-	See Rationale 2.

		<p>wrong. To even claim the science is settled is an unbelievably unscientific declaration. To impose global warming propaganda on school children is unconscionable and irresponsible behavior for educational organizations at all levels everywhere. True science is the search for knowledge which is constantly emerging/changing. History is filled with past efforts in which something was declared scientifically settled only to later be proved false. Given emerging data it is likely that the same fate will befall global warming. Do not impose global warming propaganda on innocent, truth seeking, impressionable school students.</p> <p>I will add that I support the submission provided you by CFACT.</p>		
02-03	Dave couturier	The kids need all the science they can get . Not just one side . Themleaft think they are the ones that created the world . The kids me need to know who created thie world.It wasn't the leaft wing.	N/o	
02-03	Clara B. Keeney	Climate I'm in favor of a balanced climate curriculum.	NA/o	See Rationale 3.
02-03	Michele Stevens	<p>use scientific data and analysis on climate</p> <p>I believe that students should be exposed to all of the scientific data and analysis on climate, not be limited to what warming pressure groups want them to see. The irony in climate change propaganda is that at the most recent climate change summit, 1700 private jets were flown there to talk about climate change. Last week, the meteorologist didn't couldn't accurately predict a storm that was coming, but we are supposed to believe the climate change reports for 100 years from now as settled science. I hope that you are in favor of a balance climate curriculum.</p>	NA/-	See Rationale 2.
02-03	TR ruhtenberg@xxxxx.xxx	Climate it will become very cold in the next 50 years, stay as cold for 100years, becomes warm again over 50 years.trust me. tr.	NA/-	See Rationale 2.

02-03	Cory Chase 122 East Avenue Thomas, WV 26292	NGSS As a life-long resident of West Virginia, a graduate of WVU and a current small business owner, I would like to express my support for the Next Generation Science Standards as they were originally proposed by the 26 states (including WV). Please push our state forward into the future of coping with climate change and not denying its existence any longer.	N/+	
02-03	Wade Cooley	<p>Protect students' rights to all the facts about the climate. The Board of Education should ensure that its science standards permit students to examine and learn from all the data and analysis about global warming.</p> <p>Must students be made ignorant of scientific data which shows that over the last 18 years climate computer models have consistently projected a warmer world than scientific observations record? Global warming has not occurred as projected during the entire lifetime of today's school children.</p> <p>Should the actual recorded data of world temperature, sea levels, storms, droughts, floods and all the rest be banned from our classrooms? Is comparing this data to the pronouncements of highly funded global warming pressure groups heresy?</p> <p>Claims of an overwhelming scientific global warming consensus have been repeatedly and thoroughly debunked. The discussion is far from over. The true mind of science remains open to new data and alternative explanations. Whether and how much of the approximately 1/2 degree C of warming which occurred in the latter half of the 20th century is due to human industry has not been conclusively established. Neither have any of the incredibly expensive "solutions" proposed to address any global warming been shown to be meaningfully effective or worth their tremendous cost.</p> <p>Not to mention the fact the earth FROZE COMPLETELY, BURNED COMPLETELY, and was COMPLETELY FLOODED. And all this happened</p>	NA/-	See Rationale 2.

		BEFORE man " POLLUTED THE ATMOSPHERE" and MULTIPLE TIMES I might add. I could continue on as I learned all this in SCIENCE CLASS and much more; in public school no doubt, CAN YOU BELIEVE THAT. The Board owes every child an open-minded education free of indoctrination.		
02-03	Carrie Fenwick 300 Summers Street, Suite 1500 P. O. Box 2107 Charleston, WV 25328-2107	Science Standards As a community member, I'd like to express my support for the West Virginia Next Generation Content Standards and Objectives for Science that were generated from the NGSS WITHOUT revisions. It is important for our education system to support our science educators who guided the standard writing process, gathered and delivered feedback from state-level committees and came together to address common issues and challenges.	N/+	
02-03	Thomas Hoeh	both sides Our schools should allow children to examine both sides of an issue, rather than trying to indoctrinate them with one side of a subject that is so controversial. We don't want to be like the Nazie's of WW2 or radical Islam of today. The science of man made climate change or (global warming) is far from settled. It is just that those scientists that have data that differs from the politically correct version are refused a seat at the table of discussion. Don't do the same to our children.	NA/o	See Rationale 3.
02-03	<i>Richard Brunner</i>	Climate Change Curriculum Students should be exposed to all of the scientific data and analysis on climate, not be limited to what warming pressure groups want them to see. We need our students exposed to a balanced climate curriculum right away. There is too much fraud involved in the data we keep seeing by people with an agenda and personal gain forcing their opinions on our students. Science students need to know about the observed global temperature data which does not agree with climate	NA/-	See Rationale 2.

		<p>computer models calling for a warmer world. This climate data has been doctored for years. Students must not be shielded from any data inconvenient to the global warming narrative.</p> <p>The true mind of science never stops examining the facts and fears no data, no matter how inconvenient it may be. There is no more important lesson science students need to learn.</p>		
02-03	Henry Lee Thompson	the whole idea of global warming is base onthe bending of facts not the hockey curve 2014 being thewarmest year on record give me true facts& i might believe	NA/-	See Rationale 2.
02-03	Jean-Paul	<p>Balanced teaching When a group of people monopolize a branch of science, it is generally to fool the general populace for economic and power gain. That is a fact. I have researched hoaxes and myths over the last 50 years in the USA. ALL OF THEM were perpetrated to fool the people for capital gain. You may have heard of some of them.</p> <p>The global warming fools are of the same league. They are not interested in science, they are interested in power and money. Their computer models use a KNOWN technique labeled GIGO. This is an actual acronym used by computer technicians and operators. It stands for Garbage In Garbage Out. Which means if one puts erroneous data into a computer model, erroneous conclusions will emerge. The Global Warming scammers use this technique. They use ground based measurements near urban areas to get their warming numbers. Satellite observational data, which scientists use, show that the Earth is currently in a cooling cycle.</p> <p>As for science, check out who the global warming pundits are. They are usually NOT scientists. They are politicians! And politicians generally cannot be believed, as they mislead people for power and/or monetary gain.</p> <p>I am deeply concerned over this misuse of science, and now of schools. We cannot survive as a society if our most</p>	NA/-	See Rationale 2.

		<p>important resource, our children, is corrupted by unscrupulous people bent on gaining power and money by perpetuating falsehoods. Schools SHOULD NOT decide on a narrow band of teaching dogma. Schools should present ALL the information that is available, scientific and society wise, so children are presented with ALL data available. NOT just what a few, incorrect people, want to present as gospel.</p> <p>Global Warming is a hoax. There is NO scientific data to back it up!</p>		
02-03	Floyd Gunter	<p>Re Global warming This is about 1 year old but it seems the weather is following a similar pattern to last winter and in all likelihood there will be much more severe cold and stormy weather in the northeast yet in 2015; Friday, 10 January 2014 Global Warming Alarmists, Looking Ridiculous, Double Down Global warming alarmists are facing an increasingly skeptical public as their hysterical “climate-change” predictions continue to be exposed as wildly inaccurate. Still, the Obama administration, the Communist Party USA, radical Senate Democrats, the establishment media, and other proponents of discredited United Nations theories on alleged “catastrophic man-made global warming” are not throwing in the towel just yet. Instead, they are doubling down on the alarmism, putting the slowly dying alarmist juggernaut into overdrive. The White House and alarmist U.S. lawmakers, of course, are desperately fighting to keep the last bit of climate hysteria from melting away. With polls showing that most Americans do not believe the UN’s global warming theories, global warmists in Washington, D.C., understand that their bid to empower the UN, create a planetary climate regime by 2015, and impose carbon taxes on the</p>	NA/-	See Rationale 2.

		<p>public appears close to failure — hence the increasingly shrill tone.</p> <p>At this point, however, critics and independent scientists, many of whom are now forecasting global cooling, say the alarmists are simply making fools of themselves. Indeed, 2013 proved to be a spectacularly devastating year for proponents of UN global-warming theories as the implosion of their claims and predictions accelerated — often in deeply embarrassing ways. That has not stopped them yet, though.</p> <p>Time magazine, for example, is facing worldwide ridicule for blaming the recent “polar vortex” that brought record cold temperatures across America on man-made “global warming” — after having linked the exact same phenomenon to alleged “global cooling” in 1974. In an article headlined “Another Ice Age?” appearing almost four decades ago, Time said “scientists” had found evidence of “global cooling” in an expansion of the “circumpolar vortex.”</p> <p>Forty years later, senior editor Bryan Walsh claimed: “it may well be that global warming could be making the occasional bout of extreme cold weather in the U.S. even more likely.” Skeptical researchers were quick to lambaste Time for the absurdities and contradictions. “At least the 1974 version made sense,” noted Real Science. “Bryan Walsh’s 2014 version makes a complete farce out of science.”</p> <p>Of course, even the world’s premier global-warming alarmists have rejected the notion that “global warming” theories predicted record cold — much less that alleged “global warming” had anything whatsoever to do with the record-setting freeze that swept across much of the United States this week. Still, that did not stop countless media outlets and taxpayer-funded alarmists from making the claim</p>		
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02-03	dw weisen57@xxxxx.xxx	I believe children should be exposed to both sides of the climate debate You might be interested in the article below. 2014 was similar. Thanks for your consideration. http://m4gw.com/eleven-global-warming-stories-from-2013-you-probably-never-heard-of/	NA/-	See Rationale 2.
02-03	Andrea York	Science Teaching Standards Comment When revising your science standard, please keep the curriculum open to all types of scientific data and analysis on all topics including climate. Please do not allow your science curriculum to follow the “common core” standards. This will limit & stifle your children’s opportunity to learn & grow from proper examination of all facts and all the data, even if it does not support an outcome that they want. I live in a state that has ‘common core’ standards and it is a tragedy that my state adopted this standard. It limits the creativity of children, limits their opportunity to learn a wide variety of subjects, and limits the options they have to learn in different methods. I am one of the lucky one’s where our school has decided to exceed anything common core as set. But not everyone in my state is as lucky as we are to have a school that is intent on giving the kids the best opportunities to learn & grow and make their own decisions about ideas & science based on ALL the data & facts. I hope you decide to reject the common core standards and make your own standard that will far & away exceed anything you could imagine.	N/-	
02-03	Linda Evans	Science It is important that the science curriculum be expanded to exclude only common core curriculum.	N/-	
02-03	Immincmike@xxxxx.xxx	Climate Curriculum An objective approach to the above subject is always best. Make sure both sides are equally represented.	NA/o	See Rationale 3.
02-03	Bruce Brotnov Lewiston, ID 83501	Classroom science Please consider all science evidence for global temperatures and not biased information just because that is all the government pays for.	NA/-	See Rationale 2.

02-03	Maxine Erickson	Education Like Common core , it leaves God out of the equation and our Children are falling behind the nations in knowledge, as those over the Education system are dumbing America down on purpose. Wake up America. Our nation was once on top as God was above all, now look at us, getting what we deserve as He lets us have what they desired..no God in charge. We have brains and must start thinking again. Climate change is such a farce, and yes, we need to be careful of pollution, but what I see with this climate change going on has to many holes in it.	N/-	
02-03	Michael and Terry Poor	The subject of science in our schools It is very important to teach children scientific facts, not current politically correct theory. In the future our children will be adults competing with former students from other countries where they are likely being taught scientific facts. In order for our future adults to succeed in their endeavors, they require a solid educational foundation. Please help lay that much needed foundation by making sure that our children are being taught a balanced climate curriculum, not currently popular science fiction.	NA/-	See Rationale 2.
02-03	Jan Hulverson	Protect students' rights to ALL the facts about the climate We need ALL truth to be taught to our students, something the core programs discriminately determines to pick and choose to best fit a certain agenda. Science is just that: a look at ALL the facts, not censoring to satisfy the agenda of some. We must teach our children to think and reason based on ALL the facts, that means the facts regarding ALL climate statistics and data. The same principle should apply to evolution vs creation, as well. At age 55 I remember going to school and being taught the "theory" of evolution; now they teach students it is a "process" which is a totally erroneous term for this concept in the field of science. No one has been able to truly prove what supposedly happened "billions of years ago." In fact,	NA/-	See Rationale 2.

		<p>there is evidence that is being suppressed from our students that has proved some evolutionists theories are incorrect i.e. the geological column and circular reasoning to support so-called age of fossils/sedimentary/rock formations.</p> <p>You have a responsibility to do what is RIGHT, not what appeases some.</p>		
02-03	<p>Dr Peter C Farrell Founder & Chairman ResMed, Inc. 9001 Spectrum Center Blvd. San Diego CA 92123</p>	<p>Climate change Climate change is a non-scientific term since the climate has always changed and always will. Climate alarmists morphed away from the concept of global warming, which is a falsifiable hypothesis (if the CO2 goes up and temperature doesn't then you have a problem Gunga Din) and, since global temperatures have been stable for almost 2 decades, despite a 25% increase in total anthropogenic CO2 in the troposphere during that time, one would think that the various global circulation models ought to be considered in complete disarray, if not completely thrown under the bus.</p> <p>I will ask my assistant, Elaine, to send you a copy of a talk I gave some years ago at Stanford and then to the MIT Club of San Diego on the false precepts of global warming and I also suggest that you read a transcript of an invited talk by the polymath author, Michael Crichton, given in 2003 to staff and students at Caltech on global warming. The talk entitled 'Aliens cause Global Warming' is easily accessible on the internet. It is utterly brilliant and totally skewers the concept of scientific consensus, which is in any case an oxymoron, since science has nothing to do with consensus and depends only upon one person being right with irrefutable, reproducible and verifiable data. My view on global warming due to anthropogenic CO2 is quite simple: it is a giant scam perpetrated on the community by progressives who wish to redistribute wealth and stop technologic progress. It is a religion which is not based upon circumspect science and is an excellent</p>	NA/-	See Rationale 2.

		<p>analogy to eugenics which was also based upon group think, as opposed to science.</p> <p>If we throw Enlightenment principles under the bus there is no plan B.</p>		
02-03	C. Stewart El Paso , Texas	<p>Science in the classroom Please add my vote for balanced teaching on climate. Globing warming is a hoax. God is in control. It is climate “change”. It has been going on since God created the world.</p> <p>I will be praying for common sense for your leaders!</p>	NA/-	See Rationale 2.
02-03	John and Paula Volentine Riverton, WV	<p>Science curriculum We believe that the children of West Virginia would be best served by being taught all of science, not just the global warming campaigners' agenda. Teaching</p> <p>ALLl the data concerning a scientific field is real science, anything else is propaganda.</p>	NA/-	See Rationale 2.
02-03	Elaine Amador Peter Farrell	<p>Climate change Per Dr. Farrell’s email, attached please find his presentation.</p> <p>Climate change is a non-scientific term since the climate has always changed and always will. Climate alarmists morphed away from the concept of global warming, which is a falsifiable hypothesis (if the CO2 goes up and temperature doesn’t then you have a problem Gunga Din) and, since global temperatures have been stable for almost 2 decades, despite a 25% increase in total anthropogenic CO2 in the troposphere during that time, one would think that the various global circulation models ought to be considered in complete disarray, if not completely thrown under the bus.</p> <p>I will ask my assistant, Elaine, to send you a copy of a talk I gave some years ago at Stanford and then to the MIT Club of San Diego on the false precepts of global warming and I also suggest that you read a transcript of an invited talk by the polymath author, Michael Crichton, given in 2003 to staff and students at Caltech on global warming.</p>	NA/-	See Rationale 2.

		<p>The talk entitled ‘Aliens cause Global Warming’ is easily accessible on the internet. It is utterly brilliant and totally skewers the concept of scientific consensus, which is in any case an oxymoron, since science has nothing to do with consensus and depends only upon one person being right with irrefutable, reproducible and verifiable data. My view on global warming due to anthropogenic CO2 is quite simple: it is a giant scam perpetrated on the community by progressives who wish to redistribute wealth and stop technologic progress. It is a religion which is not based upon circumspect science and is an excellent analogy to eugenics which was also based upon group think, as opposed to science.</p> <p>If we throw Enlightenment principles under the bus there is no plan B.</p> <p>ATTACHMENT</p>		
02-03	Tom Melrose	<p>Climate change education</p> <p>I am a retired geologist and have no axe to grind on the climate change issue. However, I am well aware of climate history which places us in a post glacial period of gradual warming. There are periods where we experience short colder conditions but the trend remains. Man made contributions to climate change are extremely small, not enough to overcome the cold periods..</p> <p>The environmental extremists are a mixed bag including many scientists who are not qualified to render "scientific" opinions on the subject and others who are receiving attractive grants to conduct research promoting man made warming. I am sure these people will try to manipulate global warming education in your education system and nation wide</p>	NA/-	See Rationale 2.
02-03	Dale Eklund	<p><u>Thank you</u> for allowing the two words ‘and fall’ in the climatology portion of your science curriculum. <u>Thank you</u> for the changes and new adopted versions to the curriculum. I agree whole heartedly that our kids should</p>	NA/-	See Rationale 2.

		<p>be allowed and able to debate various aspects of scientific theory. Questioning and challenging standard consensus can be the launching pad for young inquisitive future scientists. <u>Thank you</u> for a common sense approach to the scientific method in that if a student is so compelled, he or she should be able to express in a vigorous, intellectual, and yes, skeptical manner their view in response to what's being presented. I just have one comment concerning the authors of the original curriculum and that is, why should a topic so vast as the earth's climate history be limited to this last century? There were historical climate events known as the 'Medieval Warming Period' and 'The Little Ice Age', but that's just scratching the surface.</p>		
02-03	<p>Joe Bindeman Project Manager Wayne County Department of Technology (not Wayne County WV)</p>	<p>Time to Protect science in the classroom I agree with CFACT that students should be exposed to all of the scientific data and analysis on climate, not be limited to what warming pressure groups want them to see. Is it heresy for science students to see the observed global temperature data which shows that climate computer models have called for a warmer world than measurements show since last century? How about that weather extremes are historically normal and sea level continues to rise at only 3 mm per year? Must they be shielded from any data inconvenient to the global warming narrative? The true mind of science never stops examining the facts and fears no data, no matter how inconvenient it may be.</p> <p>There is no more important lesson science students need to learn.</p>	NA/-	See Rationale 2.
02-03	<p>Kay Schleifer Wind Gap, PA</p>	<p>Global Warming I am 86 years old. In my lifetime I have experienced cool summers and hot summers, mild winters and bitter winters. There was nothing I or anyone else could do to change that. You can't stop a moving train by standing in front of it.</p>	NA/-	See Rationale 2.

		Children need to learn about the weather for the the last thousand years. They need to know about the mastadon that was found in Siberia with grass in its stomach when there is no grass in Siberia now. They need to learn how the sun, moon and oceans affect climate, not light bulbs. Children should be taught everything about the science of climate not the politics of climate.		
02-03	Leo Hill	Education... It was city government school requirements that left me totally ignorant when entering society...LH...	N/o	
02-03	Rod And Temple	Science curriculum standards I would just like to interject that in all aspects of education, and especially science, we should be focused on teaching our next generation how to think critically and not WHAT to think. We do not want students who just react to the world around them, we want to develop their abilities to be proactive. I believe this is essential to raising up strong leadership for our country and in the world.	N/o	
02-03	Richard C. Janzow 1500 Sheridan Road, 8F Wilmette, IL 60091	Balanced science curriculum, West Virginia schools We educate our children when we present all of the available data regarding scientific matters. Children need to know that science is never settled, it is constantly updated as new information becomes available. They also need to realize that real science is about ideas that are verified by ongoing experimentation and observation. You do your duty when the curriculum you approve stresses this balanced scientific view regarding the observed climate change.	NA/o	See Rationale 3.
02-03	David McEwen	core curriculum Teachers have a responsibility as great as doctors to do what is best for their charges. Presenting alternative views on many issues, not just "Global Warming", will stand the students better than a jingoist indoctrination.	NA/-	See Rationale 2.
02-03	David S. Gray Spring Creek, NV	True Science West Virginia is revising its science teaching standards to fall in line with proposed national	NA/-	See Rationale 2.

		<p>standards designed to function like a “common core” for science.</p> <p>Global warming campaigners see these national standards as a chance to indoctrinate school children about climate and to stifle discussion of any scientific data which does not fit the warming narrative.</p> <p>The true mind of science never stops examining the facts and fears no data, no matter how inconvenient it may be.</p> <p>There is no more important lesson science students need to learn.</p> <p>Please allow teaching of data that supports all sides of the "Climate Change" debate.</p>		
02-03	Lynn Hemmis	Science Curriculum Public school students should be exposed to all the scientific data regarding climate change—not just the data supporting the “theory” of global warming. Students should always be encouraged to think for themselves—not just taught what to believe.	NA/o	See Rationale 3.
02-03	mulljn@xxxxx.xxx	climate change Please do not limit the input of information by those who deliberately lie to advance there position. The latest case of is the claim that 2014 was the warmest ever. Simply not true. Another is the statement that the warming due to CO2 will result in crop losses and other disasters. Again , NOT TRUE! Your students must get the whole story an not one side.	NA/-	See Rationale 2.
02-03	Joyce Jacobsen	Science standards Real science looks at all the facts. Pseudo science looks at only what supports predetermined outcomes. So I support letting students hear all the facts on both sides of an argument and teaching them to apply reasoning skills to come to a conclusion.	NA/-	See Rationale 2.

		I am a retired social worker--66 years old--and feel our youth needs to have an open mind to consider all sides of a problem.		
02-03	Charles Haag 14387 Denne St. Livonia, MI 48154	<p>Teaching Global Warming This subject should be taught as a theory, not true science. Scientific conclusions are based on fact and not consensus.</p> <p>The models are so bad they couldn't accurately predict a snowstorm 3 days out and it resulted in shutting down New York for no reason. How can we trust them to predict 100 years from now?</p> <p>The term is out there so we should deal with it honestly (it's a theory) and not attempt to brainwash innocent children with the idea that it is a fact.</p>	NA/-	See Rationale 2.
02-03	Maxine Erickson	<p>Education Like Common core , it leaves God out of the equation and our Children are falling behind the nations in knowledge, as those over the Education system are dumbing America down on purpose. Wake up America. Our nation was once on top as God was above all, now look at us, getting what we deserve as He lets us have what they desired..no God in charge. We have brains and must start thinking again. Climate change is such a farce, and yes, we need to be careful of pollution, but what I see with this climate change going on has to many holes in it.</p> <p>Same message emailed 32 minutes later</p>	N/-	
02-03	Catherine George	Common Core Science I am writing to you about why you should not allow common core to take over the science curriculum. They have taken over History and being married to an American born, Christian middle eastern family, has been fairly disappointing. Common Core experts say that Islam is a religion of peace. They are killing people from all around the world, they are hanging our Christian and non-Christian brothers and sisters,	N/-	

		<p>including children, by hanging them upside down on a cross, beheadings, and now by fire. How truthful are they and our school boards being about this rather vicious group. Muslims are flooding our governments and our school boards and before you know it, we will be living under sharia law. Look it up so you can see how "well" they treat women, especially educated women like yourself!</p> <p>Science...common core, otherwise known in California as communist core, retards the learning of OUR kids, not the government kids. Remember a couple of years ago the video of the democrat that stated on public television that our kids are not our own, but the property of all Americans. Sounds just like Hitler of Germany! Really. So the government is trying to indoctrinate our children to lies about our climate. There is climate change, it's call Summer, Fall, Winter, and Spring. There is now more ice in the polar ice caps than ever before, check out the real science on line! There are also more scientists whom have been silenced who disagree with global warming, or climate change, than agree. Allowing the lies to be permanently a part of K-12 curriculum is akin to lying to our kids about anything. Are we not raising our kids to be truthful and honest? Why should we allow the opinions of the few to dictate to the majority what we know is false?</p> <p>This is your time to stand up to the left, to the climate change agents of the world. We in California support you and what you are trying to do, but you have to do your job for the kids; they are counting on you. And, if you are able to win in West Virginia, you will be the focal point for the rest of us in our great nation; our AMERICAN nation. I will pray that your decision will be about the kids, and the not left. Do the right thing and do not allow climate change to change the lives of our future.</p>		
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02-03	David M. Sipe, Ph.D.	<p>Please allow balance in the classroom - over climate change Please allow balance in your WV classrooms over climate change.</p> <p>The 'consensus' is misleading. Many US scientists doubt that CO2 is affecting earth's climate or the pH of it's waters.</p>	NA/-	See Rationale 2.
02-03	Bill Maroe	<p>Balanced climate curriculum</p> <p>I implore you to choose a wise tact on instructing our children in the truth about our climate. I have been around for almost 60 years and have seen how agendas become over zealous.</p> <p>Back in the late 1970's there was much banter about the up and coming next "ice age". Many of the people espousing that idea are at the forefront of supposed "global warming". It is clear that they who promote the idea are reaping the financial fruits of their trumpeting.</p> <p>Given the amount of time that man has been keeping accurate records compared to the age of this atmosphere, it is ludicrous to make the exaggerated claims that are being bandied. Unless there is a supreme being that these people are communicating with that has seen the same situation play out, I am more inclined to believe that these global warming denizens are driven by greed and money making opportunities.</p> <p>This is not to say that our children shouldn't be taught about economy in ecology and the most efficient use of energy; in how it's produced and consumed. There are technologies that are far more efficient (liquid salt or thorium reactors) than the nuclear and oil energies of today. If it were me, I'd be trying to get those tykes excited about innovation.</p>	NA/-	See Rationale 2.
02-03	Leonard Zody	<p>Climate Change</p> <p>As an Electrical Engineer please don't fall into the trap of thinking humans can control the Universe. Our climate has been changing since the start of time and will change until the end of time.</p>	NA/-	See Rationale 2.

02-03	B. K. Jennings, M.D.	Science is a method of enquiry. Please do not miseducate the children of America by allowing certain interest groups to claim that climate science is "settled." A balanced approach is absolutely necessary in order to provide children with the sense of wonder that will lead to new discoveries and improved lives for all.	NA/o	See Rationale 3.
02-03	Doug	Protect students' rights to ALL THE FACTS about the climate I am glad that you are taking a look at the science curriculum in your school districts. I believe it's imperative that students receive all of the information about the earth's climate and I appreciate that you are willing to take the initiative to see that your students do receive it all and not just what might seem to be "the only answer" from those that appear just to have an agenda. Look at all of the data and allow students to make up their mind.	N/o	
02-03	Ray Jones	<p>Scientific Curriculum and Global Warming REAL scientific data reveal a serious lack of man made Global Warming, in fact an 18 year period of Global Cooling is what is observed the past 18 years.</p> <p>More than 30,000 world scientists have stated objections to the Global warming alarmists and their faulty computer models predicting Gloval warming holocaust.</p> <p>Data really shows that both the observed warming & recent cooling are attributable to the cycles of the Sun & not the minuscule efforts of mankind.</p> <p>Teaching children to fear global warming based on the current data and the sham interpretation of it will do horrible damage to their economic future. It will likely cause misdirection of enormous economic resources that would be much better spent on "Real " problems where real corrections are needed.</p>	NA/-	See Rationale 2.

		Please approve a Balanced curriculum on this issue, or exclude the Global Warming / Climate Change agenda entirely.		
02-03	Jim Hansen	<p>Please teach the scientific method I worked as a statistician for Union Carbide in WV. I would like all students to practice the scientific method. This includes having an open mind and not be swayed by either the "religion" of the global warmers or the ranting of the far right. The article by Thomas Sewell and others show that all data should be examined critically.</p> <p>http://townhall.com/columnists/thomassowell/2015/02/03/s-tormy-weather-and-politics-n1951792</p> <p>Let the students have both sides fairly and let them decide.</p>	NA/-	See Rationale 2.
02-03	Sue Dawson	<p>Balanced Climate Curriculum</p> <p>We have become aware that a decision is to be made concerning climate curriculum in the West Virginia schools.</p> <p>The true mind of science never stops examining the facts and fears no data, no matter how inconvenient it may be. Students need to be taught facts and not 'persuasions' of a particular group in their science curriculum and should be exposed to all of the scientific data and analysis on climate, not be limited to what warming pressure groups want them to see. A balanced climate curriculum for the West Virginia schools would have a beneficial effect more far-reaching than this particular area of the country at the moment.</p>	NA/-	See Rationale 2.
02-03	Judy Hollis	Global warming Another political scam for waisting tax payer dollars. Mother Nature will take care of herself. Man may try to control her but it will never happen. The earths crust will continue to move, storms will continue to destroy, new land will rise other lands will sink. Teach the truth!!	NA/-	See Rationale 2.

02-03	Sincerely, Jane E. DeGrafft	<p>Protect students' rights to all the facts about the climate</p> <p>The Board of Education should ensure that its science standards permit students to examine and learn from all the data and analysis about global warming.</p> <p>Must students be made ignorant of scientific data which shows that over the last 18 years climate computer models have consistently projected a warmer world than scientific observations record? Global warming has not occurred as projected during the entire lifetime of today's school children.</p> <p>Should the actual recorded data of world temperature, sea levels, storms, droughts, floods and all the rest be banned from our classrooms?</p> <p>Is comparing this data to the pronouncements of highly funded global warming pressure groups heresy?</p> <p>Claims of an overwhelming scientific global warming consensus have been repeatedly and thoroughly debunked. The discussion is far from over. The true mind of science remains open to new data and alternative explanations.</p> <p>Whether and how much of the approximately 1/2 degree C of warming which occurred in the latter half of the 20th century is due to human industry has not been conclusively established. Neither have any of the incredibly expensive "solutions"</p> <p>proposed to address any global warming been shown to be meaningfully effective or worth their tremendous cost.</p> <p>The Board owes every child an open-minded education free of indoctrination.</p> <p>Thank you for considering my request, as a former classroom teacher</p>	NA/-	See Rationale 2.
02-03	Thomas Roman, P.E. President and Engineer [BSEE, MSEE, MSDD] Respect-for-Life, Inc. St. Anthony, MN 55418	<p>Encourage you to not conform to any standards that limit the knowledge of all data</p> <p>Please teach the whole truth about anything including science ... teach all the truthful information about this world.</p>	NA/o	See Rationale 3.

02-04	Kim Skaro	I just want to inform you that I am in favor of a balanced climate curriculum, especially since there are entities that only want people to hear their biased views.	NA/o	See Rationale 3.
02-04	Lois Quinn	Climet Corriculicum Please be in Support of a balanced science weather corr. In the Common Core Corriculicum. I believe global warming is not as serious as made out to be. It certainly doesn't show that where I live.	NA/-	See Rationale 2.
02-04	Joan R. Gibson, PhD	Please included my attached letter in the public comments concerning the proposed changes in WV Science Standards for public schools. ATTACHMENT	NA/-	See Rationale 2.
02-04	Susan R Karnecki	Science vs global warming If you are going to teach the children in your state to exercise critical thinking, then you have to teach BOTH sides of the issues involved in the THEORY of global warming. There are more and more reputable scientists who have come forward to say that there has been no warming in the past ten years. In fact, there are several indications that there has been a significant DROP in global temperatures. I urge you to ensure that your science curriculum presents the full picture to your students. Politics do not belong in the school system.	NA/-	See Rationale 2.
02-04	Evan Cale 101 Andrew St Mineral Wells, WV 26150-6708	I am writing in support of Next Generation Science Standards in West Virginia K-12 education. In particular, I support the standards as-written on teaching climate science. The science is clear on climate change and human impacts on warming. Climate change is impacting communities in West Virginia, and our students deserve to learn about it in school.	N/+	
02-04	Bob Roark	Science Curriculum I understand the West Virginia Board of Education is considering calling a halt to the advancement of science, specifically that the "science" of climate change has been settled for all time. What a hoot!! Since early scientists found that the sun revolved	NA/-	See Rationale 2.

		around the earth, the practice of science has been one of ever-changing revelation in every aspect of scientific inquiry. And, more than a few times, scientists have resorted to fraud to uphold a "fact" they wanted to insist was true. Science is not going to be intimidated or turned off by challenge. In fact, challenge is the only motivating factor that keeps science alive and well. If there is no new truth, what do we need scientists for? I urge you to keep the voices of "settled truth" from strangling the continued exploration into all the things we have yet to discover.		
02-04	Eddie mepanzero@xxxxx.xxx	West Virginia children should be exposed to scientific data regarding climate change from both sides of the isle, not just what they are told to see and hear. There is scientific data from some of the most respected climate experts that totally disagree with the "warming" theory projected by those whose interests are not necessarily honest and truthful, but biased and profitable. Under no circumstances is climate change projected truthfully. Hailed as a threat to our lives more than terrorism is not only dishonest, it is shamefully and blatantly untrue. West Virginia residents have suffered enough and should be treated with dignity and respect.	NA/-	See Rationale 2.
02-04	Joy Parker, Santa Rosa, CA	Education It is incomprehensible to me that the government in the US would order one-sided information to schoolchildren. That isn't education, it is indoctrination.	N/o	
02-04	S. Myers	balanced science curriculum Please present the climate change theory accurately including a balanced approach from all sides. We should be opening the minds of our citizens not indoctrinating them.	NA/o	See Rationale 3.
02-04	J. J. (Jim) Logan Logan DNA Project, GenGen-NV, ISOGG	Climate Change in education Yes the climates change. They have both warmed and cooled for millions of years with various trends over tens and thousands of years. In my research into climatology in conjunction with study of human evolution, I find that the science is NOT	NA/-	See Rationale 2.

		settled. Therefore, any science curriculum should consider all the facts, not just crude models which to date have not been very accurate.		
02-04	Richard E. Hartle, M.D.	Teaching science Science is an ever changing phenomenon. What was considered infallible at one time has since been disproved numerous time. Some things that I was taught in medical school 57 years ago have since been proven to be wrong. Students must be taught how to judge science and not to take every thing as proven for eternity. That includes such things as evolution and global warming.	N/o	
02-04	Tom Stark 334 Seven Acres Road Parkersburg, WV 26104	Comments regarding NGSS - Policy 2520.3C The following are my comments to be included with the public comments on the Next Generation Science Standards currently under review. Since the form provided did not match up with the way the standards wer organized I thought this would make it clearer as to my position on the standards: Grade 6 - Objective- S.6-8.ETS. Using the phrase "sufficient precision" offers a standard with a totally <u>subjective criteria</u> for evaluation. There is no precise metric to consider in measuring exactly what is "sufficient precision." Grade 9 Standard - Weather and climate Topic- Earth's Systems Objective - S.9.ESS.14. Terribly difficult objective to accomplish. The sources of geoscience data in nearly every textbook references global warming, a.k.a climate change. It would be nearly impossible for students to focus on any other topic. This is an obvious attempt to focus students on a pre-determined topic that has heavy overtones of indoctrination, not honest science. Blinders are being placed on teachers and students. The objective discourages "out-of-box" thinking and problem solving.	NA/-	See Rationale 2.

		<p>The following are the standards that caused significant controversy. The yellow shows the changes that were reversed before this comment period began. “Achieve Version” represents the currently worded standard as presented for public comment. The blue highlighted comments are my recommendations for a neutral/objective wording that provides opportunity for all sides of the issue to be considered while removing any ambiguity that may or may not exist:</p> <p>Achieve Version</p> <p>S.6.ESS.6 ask questions to clarify evidence of the factors that have caused the rise in global temperatures over the past century.</p> <p>Version Withdrawn</p> <p>S.6.ESS.6 ask questions to clarify evidence of the factors that have caused the rise and fall in global temperature over the past century.</p> <p>Ask questions to clarify the degree to which various factors have influenced fluctuations in global temperatures over the past century.</p> <p>Achieve Version</p> <p>S.9.ESS.14 Analyze geoscience data and the results from global climate models to make an evidence-based forecast of the current rate of global or regional climate change and associated future impacts to Earth systems.</p> <p>Version Withdrawn</p> <p>S.9.ESS.14 Aanalyze geoscience data and the predictions made by computer climate models to assess their credibility for predicting future impacts on the Earth System.</p> <p>Analyze geoscience data and the predictions of computer climate models to assess their relative accuracy and credibility in predicting future impacts, if any, on earth systems.</p> <p>Achieve Version</p>		
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		<p>cause of climate change is false and political science rather than pure science.</p> <p>For these reasons, I sincerely suggest that if the WV Board of Education approves these standards as written, they have abdicated their role in properly supervising the public schools of West Virginia and, in fact, are derelict in their duty to keep politics and propaganda out of our classrooms and see that our children are properly educated in a manner that will equip them to work and seek careers in many different fields where their science education will likely come into play.</p> <p>The voices of militants from either end of the political spectrum should not provide inordinate influence in the board's decision-making but seems to be have that inordinate influence at the present time. This needs to change immediately to the degree necessary to preclude those with extreme views from adversely impacting the children. Their first obligation is to the proper education of the kids. Nothing else should get in the way.</p>		
02-04	Floyd Gunter	<p>Re weather events and recent snow storms</p> <p>Here is one report as of Feb. 2 which you may have heard of, also I may send another which concerns Canada and USA.</p> <p>Snow storm in Chicago area, Cook County 5th worst in history</p> <p>At least 13 people died over a three day stretch from shovelling snow that blanketed Illinois over the weekend, officials say.</p> <p>Ten of the deaths occurred in the state's Cook County, while three were reported in Dupage County, the Chicago Tribune reports.</p> <p>Cook County officials said that the deaths occurred between 6 p.m. Jan. 31 and 11:50 p.m. Feb. 2. The deaths stem from the blizzard that left 19 inches across much of the northeastern part of the state.</p>	N/-	

		<p>Six of the people who died were in their 60s, three were in their 50s and one man was in his 40s, the Chicago Sun-Times reported.</p> <p>Three other men in their 60s died while shovelling at their homes in Dupage.</p> <p>Nine of the Cook County victims died from shovelling snow, while the 10th died from using a snow blower.</p> <p>The National Safety Council warned anyone who is over 40-years-old who are relatively inactive should be careful, especially while shovelling snow. The organization also advises taking it slow and stretching beforehand and only picking up a small amount of snow at a time to avoid injury.</p> <p>Much of the snow at the start into the middle part of the blizzard is referred to as "heart-attack snow," according to the Tribune.</p> <p>The storm was the fifth largest in Chicago's history, according to weather officials.</p>		
02-04	Floyd Gunter	<p>Report from Canadian weather office Feb., 04, 2015 Wednesday, February 4, 2015, 9:51 AM - Although Vancouverites usually enjoy quite mild winters, they are certainly no strangers to snow. However, if the right conditions came together to dump a whopping 100 centimetres of the white stuff over the city, the resulting chaos would cause major disruptions, possibly cost some people their lives, and cost the city (and insurance companies) hundreds of millions of dollars.</p> <p>The Weather Mash-Up</p> <p>The vast majority of the times it snows over southwestern British Columbia, Vancouver and other communities along the Lower Mainland, and even on Vancouver Island, remain blissfully untouched by it.</p> <p>The precipitation they do see simply falls as rain, or if they do get a little taste of winter, it's from a mix of rain and snow, or maybe even a light dusting of flakes that melts</p>	N/o	

		<p>before there's any real need to send out someone to plough the roads.</p> <p>Why is this? Because the Pacific Ocean current that runs right past coastal BC is a relatively warm one, so storms coming in off the ocean are typically too warm to produce snow on their own. They need to climb the mountain slopes a bit before they cool down enough (and encounter cold enough air to help) to generate significant amounts of snow.</p> <p>However, it only takes the right mash-up of weather conditions to ensure that these storms cool off immediately as they reach the coast. This can produce significant snowstorms that can dump up to a metre or more of snow in just a couple of days' time, and there have been two such events in the past century</p> <p>The first was at the beginning of February, 1916, when a storm sitting off the western shores of the United States pumped significant moisture up the coast, which ran up against cold Arctic air flowing out of the mountain passes of British Columbia. Now called the Groundhog Day Snowstorm, it dropped nearly 80 cm of snow on Victoria over two days (with over 50 cm falling on Feb 2).</p> <p>Vancouver saw over 40 cm of snow in the same time period, and had over 30 cm join that on the ground over the next week.</p> <p>This situation repeated itself 80 years later, in the last 10 days of December 1996, when BC's Lower Mainland and Vancouver Island felt the impact of a series of storms that swept in from over the Pacific. Meanwhile, as a particularly strong storm - which was packing considerable warmth and moisture - approached from the southwest, from the direction of Hawaii rather than from the Aleutian Islands to the northwest, an Arctic high building to the north set off a pattern of winds through the mountains known as Arctic Outflow</p>		
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		<p>Just as it happened in 1916, the mash-up of these two weather conditions set up a significant amount of cold air over the southwest of British Columbia ahead of the arrival of the storm, which essentially acted like a wedge to drive the warm, moist air brought by the storm upwards, cooling it and producing snow rather than rain. Add to this the extra lift that the storm was experiencing as it rode up the physical slopes along the southern tip of Vancouver Island to reach Victoria, and the mountain slopes east of Vancouver (orographic lift), and you had the perfect setup to produce the biggest snowstorm the region has seen in the past 100 years.</p> <p>In just two days, on Dec 28-29, a total of 124 cm of snow fell on Victoria, shutting the city down and forcing them to call the army in to help dig them out. So much snow was covering everything that it collapsed roofs and brought down tree branches, adding to the damages. Across the Strait of Juan de Fuca, Vancouver didn't see quite as much, but they still ended up with 60 centimetres of snow on the ground. Motorists were stranded on roadways covered in ever-deepening snow, and drifts whipped up by the storm's strong winds reached to 3 metres high in some areas.</p> <p>In the aftermath of the storm, it had cost two people their lives, and the estimated cost of cleaning up climbed to around \$200 million.</p> <p>Just not prepared</p> <p>Any region of the country, even those that are used to big snow storms, would struggle when dealing with over a metre of snow dropping in just two days. However, when it comes to preparedness, this was about the worst place for the storm to hit. The reason? This kind of weather affects the Lower Mainland and Vancouver Island so infrequently that the cities just don't have the proper resources to handle it. Allowances are made in city budgets for equipment and supplies (like salt), of course, because some snow does fall during the winter there. However, what was available just</p>		
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		<p>wasn't anywhere near what was required to handle a snow storm of this magnitude. The simple fact is that city officials would be hard pressed to justify setting aside \$200 million in the budget for snow removal for a once-in-80-years storm.</p> <p>Will it happen again?</p> <p>Will Victoria and Vancouver see a storm like this again?</p> <p>MOST DEFINITELY!</p> <p>Although nothing has come close since '96, at least one storm has made an attempt, in November of 2006. Up to half a metre of snow fell in a swath stretching from Vancouver Island to Abbotsford, affecting Metro Vancouver as well.</p> <p>Since it all comes down to what patterns of weather develop, it's really just a matter of time before another similar mash-up occurs. It's even possible that with climate change, snowstorms impacting Victoria, Vancouver and the vicinity may become even worse, dropping even greater amounts of snow over the region. Whether Arctic outflows will happen more often remains to be seen, but expect storms that produce more snowfall and winds than storms in the past.</p> <p>We now know that Solar Flares have a large effect in bringing about these abnormalities, this was not known in 1916 nor 1996. Many prominent scientists, NASA and FEMA groups in the USA realize that what used to be termed solar spots are actually the vacated area from which solar flares have been emitted.</p> <p>The Atlantic Coast is also very vulnerable to such storms with high winds and much colder temperatures than normal, this has been occurring in Canada's Atlantic Provinces plus even inland in Ottawa, Toronto, Montreal and many other areas both in 2014 and 2015.</p> <p>The foregoing is only a Canadian forecast, however the USA Coasts may well see quite similar weather events as it</p>		
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		seems the storms are tending to occur more southerly than had been expected in previous years.		
02-04	Henry van der Molen ca	<p>Balanced Science Although a Canadian, I'd like to share my thoughts on the "science" that seems to dominate the world view at present. Climate change is based on human input of data into a computer, data which may be very narrow because it (the data) is viewed as the single most influential aspect to climate change. What if the idea of that single aspect is wrong, what if there is more to climate change than one thing, or even ten things, or perhaps a hundred. I'm not a scientist, but I do like predictions of weather, because a huge part of the work I do relies on the weather. My go to predictors are the computer models that predict the weather for several hours, or several days. These models use data placed in the computer (probably daily) so that future predictions can become more and more precise. Now I don't know about you, but the accuracy of these models leaves a fair bit to be desired, and they only cover what might happen over a few days. I hope you get where I'm going here. If models predicting temperature, cloud cover, and wind are off a few hours or days after a prediction, is it possible that models making predictions decades away could be wrong? Weather has changed for as long as the earth has existed, I'm fairly confident that the fires of early man and those occurring naturally in the environment didn't play a huge role in the change. Surely there is the likelihood that other factors play a role, limiting science to a presumed "fact" could lead to never finding other factors being important, until such time as this one debunked (or not) once and for all.</p>	NA/-	See Rationale 2.
02-05	Dr. Ansel Payne Postdoctoral Affiliate American Museum of Natural History Walton WV	<p>Dear Ms. Sizemore--</p> <p>I'd like to throw my support behind your decision to revert to previously proposed Next Generation science standards. West Virginia students deserve the chance to thrive in a twentieth-century economy, one that revolves around a clear-eyed</p>	N/+	

		<p>understanding of science and its associated technologies. Adopting rational guidelines and educational standards is an important step toward preparing those students for the future, and I'd like to encourage you to maintain our state's tradition of rigorous and objective science standards.</p> <p>At its heart, the scientific method is a tool for separating truth from fiction, and the truth is not--cannot be--a political issue. Please continue to teach our children about the scientific consensus on climate change, and about the methods that scientists used to discover it. They, not we, will be the ones who deal with the long-term effects of man-made emissions, and we owe it to them to prepare them for that struggle.</p> <p>In short, please put our children and the truth first, and adopt educational standards based on the peer-reviewed research of scientists and the recommendations of professional educators.</p> <p>Thank you. Sincerely, Dr. Ansel Payne (formerly of Walton, WV; now living in Charlottesville, VA)</p>		
02-05	Andymunro	<p>Education science standards All that needs to be said on this subject has been covered by the CFACT e mail sent to you.</p> <p>Please accept my e mail as a 100% endorsement of those comments.</p>	NA/-	See Rationale 2.
02-05	Mike Galea	Protect Real Science Please protect real science not propaganda and scare tactics, all children have the right to the truth and forming an intelligent scientific conclusion.	N/o	
02-05	<p>Name nancy smith Address Street Address: 1253 pike street City: milton State / Province: wv</p>	<p>Please don't compromise science education in WV I support the West Virginia Science Teachers Association and the Next Generation of Science Standards as those standards are implemented in the recently-issued proposed CSO document. I am glad that the State Board has withdrawn the modifications that would compromise those</p>	N/+	

	Postal / Zip Code: 25541 Country: United States	standards in the area of climate science. The current wording reflects the work of dedicated scientists and science educators. West Virginia needs standards that will provide students with the data and skills they need to be informed West Virginia citizens.		
02-05	Shawn Wright 1658 Johnnycake Ln Harpers Ferry, WV 25425-5214	Support accurate climate science in WV education I am writing in support of Next Generation Science Standards in West Virginia K-12 education. In particular, I support the standards as-written on teaching climate science. The science is clear on climate change and human impacts on warming. Climate change is impacting communities in West Virginia, and our students deserve to learn about it in school.	N/+	
02-05	Hans Schreuder Ipswich, England retired analytical chemist	RE: http://www.bloomberg.com/news/articles/2015-02-05/temperatures-rise-as-climate-critics-take-aim-at-u-s-classrooms Thank you for publishing the above article, in which amongst others you write: "Boys and girls, are global temperatures rising or falling?" With almost all media outlets "sold" on subscribing to the "man-is-evil and causing global warming and/or climate change and/or climate disruption" meme, what do you expect kids to "know" about "global temperatures"? Which temperature across the globe are you referring to? Northern Canada, US East Coast, US West Coast, Nevada Desert, South American jungle, Russian Tundra, Sahara Desert,? Chicago, Boston (and untold other cities) in January 2014 or 2015? You then assert "While scientists almost universally agree the world is warming" - a misleading assertion due to the fact that science does not depend on a consensus.	NA/-	See Rationale 2.

		<p>Specific historical proof of such is the 1,400 year "consensus" that the sun revolved around the earth, as well as all the planets and stars - a position enforced by the Papal seat no less. There are many other examples, although none so extreme as to have lasted 14 centuries.</p> <p>True scientists who went against that consensus were either burnt at the stake or confined to house arrest. No denial was tolerated!</p> <p>We have an identical situation now with the hype over human produced carbon dioxide (CO₂), with even the current Pope adding his name to the charade and no debate is allowed - after all "the science is settled" - nothing is further from the truth!</p> <p>Are you at all aware that to date there has not been one single scientifically verified piece of evidence to link any warming with an increase in atmospheric CO₂ despite all those 4,000 peer reviewed papers you mention? If you know of just one, please let me know!</p> <p>Oceans are not rising alarmingly fast; neither North nor South Pole is melting alarmingly - both have had record ice extent during their most recent respective winters; Polar Bears are not becoming extinct - quite the opposite etc. etc. etc.</p> <p>Are you aware that to get a paper peer reviewed the authors have to, <i>de facto</i>, agree to the basic premise that any warming is due to humans?</p> <p>Are you aware that any academic who needs to raise funds for his institute <i>has</i> to agree that any warming is due to humans?</p> <p>Are you aware that despite a constantly increasing level of atmospheric CO₂ there has been no constantly increasing world temperature?</p> <p>Are you aware that there is in fact no such metric as a "world temperature"; that temperature readings are routinely adjusted to fit a pre-determined agenda? More and more weather stations in cooler zones are routinely</p>		
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		<p>shut down "due to costs" when in reality that gives rise to claiming the alleged "warming", even if only by a few hundred's of one degree, well outside the accuracy of most thermometers.</p> <p>Are you aware that the actual amount of human produced CO2 amounts to just barely 3% of the total atmospheric content of CO2? That figure comes directly from UN IPCC publications - see attached pdf file.</p> <p>As part of a voluntary-run scientific organisation I can assure you that it is not even physically possible for any amount of CO2 to cause warming of the planet - CO2 is a cooling gas, by whatever means you look at it. Even NASA admitted that CO2 helps to keep our planet from over-heating - http://www.principia-scientific.org/the-four-known-scientific-ways-carbon-dioxide-cools-earth-s-climate.html</p> <p>Re-radiated energy can in any case never make the emitter of that same energy warmer, else we would have found an unlimited source of energy; few realise that all-important issue.</p> <p>All talk of so-called atmospheric "feedbacks" is scientific gobbledygook as there is never any mention of where the extra energy to "cause" the feedback is coming from, a vital detail that escapes all but the most thorough expert.</p> <p>As a scientist I could go on and on, backed by at least 30,000 scientists from all over the world and by at least 6,000 papers and articles that were not accepted by the mainstream publishing journals - for political reasons.</p> <p>To claim that any one year is "warmer" than any other when the difference over the past 18 years is barely 0.5°C is scaremongering, when during the same time the atmospheric level of CO2 kept on rising, both due to perfectly natural causes.</p> <p>You see, sir, the true hidden agenda, in plain view, but hidden from the public due to lack of publicity, is the UN's Agenda 21.</p>		
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		<p>It's so much easier to just go along with the consensus, don't rock the boat, appeal to authority etc. etc.</p> <p>The truth remains, regardless of what you read in the newspapers or are told by so-called experts.</p> <p>The truth is that the minor warming period during the latter part of the last century was perfectly natural and driven by a highly active sun, the same sun that has since gone into a much quieter mode - quieter than in the past 100 years - and may even be heading for hibernation - pray that does not happen!</p> <p>What's the great scare about a bit more warmth all about, really, when a bit more cold will be substantially more harmful.</p> <p>During the last documented warming period, when the Romans ruled the world, there was prosperity, plenty food and life was good; neither did the ice caps vanish nor the seas rise alarmingly. Only the extreme edges of Greenland could be colonised.</p> <p>Surely you are aware of the Dalton Minimum period, when death and starvation were the order of the day?</p> <p>To repeat myself, the answer is hidden within that UN's Agenda 21 - http://en.wikipedia.org/wiki/Agenda_21 - there are too many people and not enough resources; the classic Malthusian meme, proven wrong time and time again. The Iron Age did not stop when the world ran out of iron, neither did the Bronze Age or the Stone Age stop, etc. etc.</p> <p>We're running out of "fossil fuels" - let's all panic! Oh dear, we've just discovered enough hydro-carbon fuels to last us at least another 1,000 years and so on and so forth. (Secret: there are no fossils in fossil fuel; earth makes them on a 24/7/365 basis)</p> <p>ATTACHMENT</p>		
02-05	Carolyn Roberts	Climate curriculum Students should have a balanced climate curriculum. They should see observed global temperature data which shows that climate computer	NA/-	See Rationale 2.

		models have called for a warmer world than measurements show since last century. Please consider this when approving their science curriculum.		
02-05	Randolph Wills	Core and climate There is a mountain of information available concerning climate change. None of it is certain. None of it proves what the warming crowd would have us believe. Let's show all the facts and discuss them openly. The left only uses the scare tactics as a means to separate us from more of our money, and to give up more of our freedoms.	NA/-	See Rationale 2.
02-05	Jerry L Smith Ashburn, Virginia	<p>Education/indoctrination of young minds: Watching our national leadership attempt to indoctrinate youngsters, as well adults, that carbon dioxide (CO2) is a pollutant has to be one of the most abominable endeavors that I have ever witnessed! "Carbon pollution" is a propaganda slogan for the campaign against carbon dioxide (CO2). It is not science.</p> <p>We survive on this planet only by the consent of "natural processes". It is sad commentary on the apparent widespread ignorance, even in some segments of the scientific community, members of congress, and some on educational school boards, about our dependence on plants and photosynthesis for food and oxygen.</p> <p>example: For someone to say that carbon dioxide (CO2) is a plant "fertilizer" is a misnomer and is misleading. Plants absorb macro and micro nutrients through their root system.</p> <p>Photosynthesis: $6H_2O + 6CO_2 \xrightarrow{\text{in the presence of light}} C_6H_{12}O_6 + 6O_2$</p> <p>So, the above chemical equation translates as: (six molecules of water plus six molecules of carbon dioxide --- in the presence of light---produces one molecule of sugar plus six molecules of oxygen. It becomes quite obvious that carbon dioxide (CO2) is a "reactant" in the photosynthesis equation and not a fertilizer. Also, the photosynthesis equation is further proof of the "law of</p>	NA/-	See Rationale 2.

		<p>conservation of mass". Carbon is the cornerstone of all life on earth. We are made of it, we eat it and we breathe it. To label carbon dioxide (CO₂), which is a component of the natural carbon cycle, a pollutant as the US Supreme Court did in 2007, is absurd.</p> <p>Atmospheric CO₂ is not a pollutant but is the only compound responsible for plant bulk. Current CO₂ levels are far below optimum for most plants, and far below norms of geological history, when CO₂ concentrations averaged several times higher than present values. As far as the plant kingdom goes our atmosphere is CO₂ impoverished. If someone wants to call our only source for food "carbon pollution". So be it! I will just have another piece of my "carbon polluted" pecan pie with a scoop of "carbon polluted" vanilla ice cream! That of course, only after one of my favorites "carbon polluted" country fried steak!</p>		
02-05	Carol Stephens	<p>Science curriculum I urge you not to take a side in this debate until all facts and all sides have been heard. This is entirely too controversial for anyone, certainly a school district whose curriculum is shaping young minds to weigh in on one side of the other at this time.</p>	NA/-	See Rationale 2.
02-05	Lynne Balzer Faraday Science Institute	<p>Open Science Discussion in Schools Regarding the current debate over whether all sides of a question involving science should be discussed in the classroom: anything else would not be science. Scientists must be critical thinkers, and that means starting with a skeptical attitude.</p> <p>Many prominent scientists - even former astronauts - have been questioning the whole premise of the global warming hypothesis, because even though there is a little more carbon dioxide in the atmosphere, it remains just a few hundredths of one percent. The main greenhouse gas (3%) is water vapor. Satellite data shows that there has been no warming at all since 1996. Whether the skeptical scientists</p>	NA/-	See Rationale 2.

		are right or wrong, students deserve the freedom to discuss ALL sides of a question. That's what science and education are all about.		
02-05	Joyce Nichols 138 Shrewsbury Drive Martinsburg, WV 25405	Support accurate climate science in WV education I am writing in support of Next Generation Science Standards in West Virginia K-12 education. In particular, I support the standards as-written on teaching climate science. The science is clear on climate change and human impacts on warming. Climate change is impacting communities in West Virginia, and our students deserve to learn about it in school.	N/+	
02-05	Bob Hoppe	Global Warming lies/hysteria Please consider all the science regarding global warming, now called climate change/extreme weather, etc. Man is not responsible for climate change, it has been going on forever, and we are in an interglacial period. Let's hope for warm global temps.	NA/-	See Rationale 2.
02-05	Patrice Lusk	Science curriculum Please keep global warming politics out of the classroom and present balanced facts on the subject.	NA/-	See Rationale 2.
02-05	Timothy Moore	Global warming I believe that children should be taught the facts where possible. With Global warming there is much discussion on what the facts are and it seems to be a political thing. I'm not so sure that climate should be taught in school at all, but if you are going to teach it, you should teach both sides of the story. A child's mind should be inspired to think, not indoctrinated.	NA/-	See Rationale 2.
02-05	Roger Robins Leawood, Kansas	Climate Change - Sure it does, and has been for eons One thing we do know for certain, When CO 2 level goes up, Vegetation growth goes up around the world. If it gets warmer at the same time, growth goes crazy. The Climate change crazies are after one thing and one thing only. Control.	NA/-	See Rationale 2.

		My Daughter Robin Frisella lives in Orlando and is very well none as Teacher of the year, etc. She is dead set against "Teaching to the Test" I think she calls it. Has no use for "Common core".		
02-05	William A. Gibson AB degree from West Virginia Univ.--physics Ph.D. University of Rochester--nuclear physics Oak Ridge National Laboratory--7 years--nuclear physics experiments	<p>Global warming Below are a couple of sites that you have probably already seen, but here they are again. This is because some global warming advocates claim that there are few that disagree and they do not have the knowledge or background to understand to be taken seriously. Such ignorance</p> <p>The global warming proponents claim there are only a few anti-global warming advocates and they have no qualifications to justify their opinions. The advocates think this because they do not look at (or understand) the data and do not have the knowledge to apply the scientific method to test their statements. They are ignorant!</p> <p>There are many web sites that discuss the myth of global warming in detail and below are a couple of links.</p> <p>http://scienceandpublicpolicy.org/images/stories/papers/rep rint/UN_open_letter</p> <p>https://cataulagaweather.wordpress.com/2012/12/02/climate-change-global-warming-open-letter-to-un-secretary-general-ban-ki-moon/</p>	NA/-	See Rationale 2.
02-05	Lori Shumate RR. 1 Box 385 Roncerverte, WV 24970	Attachment	NA/-	See Rationale 2.
02-06	Roger Waterman	Science Standards The Board of Education should ensure that its science standards permit students to examine and learn from all the data and analysis about global warming.	NA/-	See Rationale 2.

		<p>Must students be made ignorant of scientific data which shows that over the last 18 years climate computer models have consistently projected a warmer world than scientific observations record? Global warming has not occurred as projected during the entire lifetime of today's school children.</p> <p>Should the actual recorded data of world temperature, sea levels, storms, droughts, floods and all the rest be banned from our classrooms? Is comparing this data to the pronouncements of highly funded global warming pressure groups heresy?</p> <p>Claims of an overwhelming scientific global warming consensus have been repeatedly and thoroughly debunked.</p> <p>The discussion is far from over. The true mind of science remains open to new data and alternative explanations. Whether and how much of the approximately 1/2 degree C of warming which occurred in the latter half of the 20th century is due to human industry has not been conclusively established. Neither have any of the incredibly expensive "solutions" proposed to address any global warming been shown to be meaningfully effective or worth their tremendous cost.</p> <p>The Board owes every child an open-minded education free of indoctrination.</p>		
02-06	Jean Bartholomew	<p>Science Teaching Standards</p> <p>West Virginia is revising its science teaching standards to fall in line with proposed national standards designed to function like a "common core" for science.</p> <p>Global warming campaigners see these national standards as a chance to indoctrinate school children about climate and to stifle discussion of any scientific data which does not fit the warming narrative.</p>	NA/-	See Rationale 2.

		<p>Is it heresy for science students to see the observed global temperature data which shows that climate computer models have called for a warmer world than measurements show since last century? How about that weather extremes are historically normal and sea level continues to rise at only 3 mm per year? Must they be shielded from any data inconvenient to the global warming narrative?</p> <p>The true mind of science never stops examining the facts and fears no data, no matter how inconvenient it may be.</p> <p>There is no more important lesson science students need to learn.</p>		
02-06	John Lepant	<p>global warming curriculum comments</p> <p>My reason for sending this message to you is that an email regarding the development of the school curriculum for the topic of Anthropogenic Global Warming in West Virginia was forwarded to me by a friend.</p> <p>The email indicates that your Office is accepting comments on the proposed curriculum.</p> <p>Please accept this comment:</p> <p>The curriculum should reflect the very large scientific opinion that contradicts the notion that human CO2 emissions cause any type of climate change, including global warming.</p> <p>If you will go to this website: www.petitionproject.org,</p> <p>you will find a statement signed by over 31,000 scientists working in the fields of the natural sciences which states that human CO2 emissions DO NOT CAUSE global warming.</p> <p>These are people well qualified to comment as they work in the fields of the natural sciences: math, chemistry and physics. Historians and psychologists are certainly very good people, but they're not allowed to sign this statement.</p>	NA/-	See Rationale 2.

		<p>This is much stronger than a peer-reviewed research paper.</p> <p>As you well know, all the peer-review process does is establish that a given scientific paper meets standards for publication in a given science journal. The reviewers may or may not agree with some, all or none of the conclusions in the paper. They merely approve it on the basis that it meets standards for publication.</p> <p>The statement at petitionproject.org is a positive statement. There is also peer-reviewed research at the website.</p> <p>The simple fact is that thousands of well qualified scientists have publicly stated that human CO2 emissions do not cause global warming. The curriculum should reflect this fact.</p>		
02-06	<p>Name Carol holmes Address Street Address: 16398 Jerrys Run Road City: Pliny State / Province: WV Postal / Zip Code: 25082 Country: United States</p> <p>Name Carol Lough Address Street Address: Box 393 City: Hundred State / Province: WV Postal / Zip Code: 26575 Country: United States</p>	<p>Please don't compromise science education in WV I support the West Virginia Science Teachers Association and the Next Generation of Science Standards as those standards are implemented in the recently-issued proposed CSO document. I am glad that the State Board has withdrawn the modifications that would compromise those standards in the area of climate science. The current wording reflects the work of dedicated scientists and science educators. West Virginia needs standards that will provide students with the data and skills they need to be informed West Virginia citizens.</p>	N/+	
02-06	<p>Ms. Nina Morehead 2304 44th Street Parkersburg, WV 26104-1344</p>	Attachment	NA/-	See Rationale 2.
02-07	<p>Kari Clark Teacher</p>	<p>It has been shown that the human activity of burning fossil fuels in mass quantities has increased the CO2 in the</p>	N/+	

	John Marshall High School Glen Dale WV	atmosphere. This has increased the earth's ability to hold in heat (The Greenhouse Effect) which is causing the glaciers to melt at a faster rate, which decreases the albedo in those areas, which in turn causes more absorption of solar energy that heats up the earth. Students should understand what this is occurring and what they can do now to slow it down for the future generations.		
02-07	Steven L Curtis PE, CSP, CHMM Chemical Engineer Princeton University, '73	<p>School Curriculum and Climate Change</p> <p>I understand you are in the process of updating WV school curricula, including sections on climate change, but there are questions on whether it should be presented as "settled science" or as an unsettled hypothesis due to conflicting data.</p> <p>I strongly urge you to take the latter course. Not only because it is the truth, but because it will be better for the students.</p> <p>While some might claim that the fundamental science and computer models leave no room for debate, that is not the case. The models are woefully incomplete; incapable of adequately modeling past climatic behavior or explaining current phenomena. Given the failure of the models to confirm what we know to be true, it would be folly to claim they are correct in predicting far future conditions.</p> <p>Some aspects of fundamental science, the absorption of some wavelengths of radiation by carbon dioxide in particular, or not in dispute, and should be presented as fact. The problem is that there is so much more to climate change that must be "left out" for the theory to be considered "settled". Specifically, the role played by solar cycles, cloud cover, and aerosols have been ignored by those claiming the science is "settled".</p> <p>Nor should the problems with the data used to "support" the settled science viewpoint be ignored. There is clear evidence the data sets are not strong, and serious issues have been raised as to whether they, in fact, support the anthropogenic global warming viewpoint, Issues such as</p>	NA/-	See Rationale 2.

		<p>heat island effects being ignored, data collection and interpolation bias, and variations in data collection methodology must be ignored in order to claim "the science is settled".</p> <p>I could go on, but perhaps the most important aspect of this is whether we are going to teach our children that the scientific method and critical enquiry are the basis of science, or if we have moved to the point where science is determined by politics and popularity. Those who oppose the idea of presenting climate change as "settled" science don't claim there haven't been climatic changes, but rather that science has not provided an adequate explanation for the observations. Our position, and one I hope the WV schools will adopt, is that more debate, investigation, and scientific analysis is needed, not less. Instead of allowing politicians to shut down debate, and then use a weak theory and imprecise models to justify massive economic and societal changes, we support the scientific method of observation, hypothesis, prediction, and testing. Only then can science support truth, rather than politics.</p> <p>Some of the greatest accomplishments in human history are the result of science and the scientific method, while some of our darkest hours have been associated with periods where politics trumped science. We owe it to our children to show them how science works best, not how the power of politics perverts.</p>		
02-07	Paul Constantine I Service Specialist. Fleet Management Element Financial Corporation 940 Ridgebrook Road, Sparks, MD 21152	<p>Climate change in the curriculum</p> <p>Please exercise good judgment regard providing both sides of the science regarding climate change. The only way for children to truly learn is to provide all sides of a story so that they can make informed, intelligent decisions. Not jaded, one sided positions that do not support the true science. Thank you for your consideration in this matter.</p>	NA/o	See Rationale 3.
02-07	BARBARA GRAY	I hope you will consider exposing your students to all of the scientific data analysis on climate and not be limited to what warming pressuring groups want your children	NA/-	See Rationale 2.

		to learn. Don't let the Federal standards be imposed on your local schools lest you loose complete control of your educational system.		
02-07	Pat Nickalls	<p>Science is a serious subject and should be clear of bias for the children of WV</p> <p>Without unbiased science taught in schools we will find ourselves back in the middle ages when common folk thought the air at night was poisonous. Religion has a vital place in the world but without science there is no progress. Global warming has replaced religion in some minds and it is a closed minded kind of religion. Let us give the next generation - those who will lead the world when we are no longer able - the freedom to see both sides of an argument, to access the data, analyze it and come up with their own conclusions.</p> <p>There should be no politics involved in science. When politics and government grants are involved the results are often poor and faulty science followed by a corrupt media selling the costly, dangerous, even deadly ideas to the public.</p> <p>We have seen this in the banning of DDT where many malaria deaths occurred in third world nations and the widespread medical concern about cholesterol which only now after generations is being seen as inaccurate or at least in need of more research.</p> <p>Global warning is another such falsehood, started as these ideas often are by one man and fueled by money given to corrupt men who know the truth but prosper from the lie.</p> <p>Let our children be uncontaminated by such falsehood. Let them learn only to seek the truth. Sincerely</p>	NA/-	See Rationale 2.
02-07	Name Paula Hunt Address Street Address: 659	Please don't compromise science education in WV I support the West Virginia Science Teachers Association	N/+	

	Hoard Rd City: Morgantown State / Province: WV Postal / Zip Code: 26508 Country: United States	and the Next Generation of Science Standards as those standards are implemented in the recently-issued proposed CSO document. I am glad that the State Board has withdrawn the modifications that would compromise those standards in the area of climate science. The current wording reflects the work of dedicated scientists and science educators. West Virginia needs standards that will provide students with the data and skills they need to be informed West Virginia citizens.		
02-07	Lorraine O. Gloede Dover, DE 19901	<p>NEXT GENERATION SCIENCE STANDARDS</p> <p>I understand the state board of education in West Virginia will be voting on the new science standards soon. I live in Delaware and had occasion to hear a presentation on them several months ago. The presenters felt these standards are good because they give an opportunity for the students to narrow their focus and to delve into a subject more deeply. I see that as a flaw, because I believe that education in the secondary grades should give a broad overview. It may be the only opportunity that students have to learn as much as possible in a broad context, since college is where the focus is narrowed, and rightly so. A friend who was in research, both at DuPont and at the university level, said that he found that students today can't discuss anything outside of their discipline; and they can't write. I see the Next Generation Science Standards as making this problem worse.</p> <p>However, what is more concerning is that these Science Standards do not appear to give a balanced view of climate change. This has become a political issue, with one side seeming to get all the attention. The facts are that solar activity has been correlated with climate change, and that man's activity has very little, if anything, to do with climate change. Climate has always been changing and always will. The polar bears have not disappeared, in spite of a warmer climate in the medieval period than anything that has been experienced since. Our climate has virtually not</p>	NA/-	See Rationale 2.

		<p>changed in the last eighteen years, and the climate alarmists have been using models that have been proven false. We were told that by 2013 the polar ice caps would disappear; in fact, they are larger now than then. The U.N.'s IPCC said that by 2010 50,000 people would be homeless because of climate change. When that didn't happen, they changed the date to 2020. And on and on it goes. Does it really make sense that a gas necessary for human life is doing us harm? So, I think it behooves you to see that the other side is presented, perhaps with a caveat that this issue has not been settled to everyone's satisfaction. It is difficult for those who jumped on that bandwagon to retract their statements now, because climate change has become a big business.</p>		
02-07	<p>Name Dianne Shook Address Street Address: po Box 971 Street Address Line 2: 109 Roost Ln City: Summersville State / Province: wv Postal / Zip Code: 26651 Country: United States</p>	<p>Please don't compromise science education in WV I support the West Virginia Science Teachers Association and the Next Generation of Science Standards as those standards are implemented in the recently-issued proposed CSO document. I am glad that the State Board has withdrawn the modifications that would compromise those standards in the area of climate science. The current wording reflects the work of dedicated scientists and science educators. West Virginia needs standards that will provide students with the data and skills they need to be informed West Virginia citizens.</p>	N/+	
02-07	V. Barrett	<p>May I respectfully propose that you consider not narrowing down the science curriculum to come in line with global warming.</p>	NA/-	See Rationale 2.
02-08	<p>Anne Smith Middle School science teacher Pocahontas County Schools Green Bank WV</p>	No Comment	N/o	
02-08	Corky Rowe	<p>Climate change science : - I have never been able to understand the big hulabalo that arises over climate change. For crying out loud, the air around the earth changes temps, I would imagine, every</p>	NA/-	See Rationale 2.

		<p>day, maybe even several times each day. It gets cooler and then gets warmer, then cooler then warmer, then, etc., etc, etc.</p> <p>I certainly don't feel that it's getting any warmer, normally, for any length of time than what it has been in times past. I'm 72 now, so I actually can remember the summers of my youth here in Michigan, near the border with Indiana on the west and Ohio to the south. I, along with several young friends used to make the rounds of several local farmers that made their own hay, putting it up in the square bales of the day, (1950's). We spent the summers, for the most part, without a shirt on at all, and if we did put something on it was usually a tee shirt. We were paid the grand sum of \$1/hr. for our labors getting the hay bales onto the wagons and then into the mows to be stored until such time in the winter months when they would be fed either to beef cattle to help fatten them, or to milk cows to help them produce the milk that fed the farmer, his wife, kids, and maybe a barn cat or twenty. We were in the hot, sometimes blistering sun from dawn to dusk, generally. I vividly remember seeing readings of 110 to as high as 130 F. on several of the thermometers positioned around the yard of our home, and quickly heading for the house for a cold glass of water, once in a while a lemonade, to cool off.</p> <p>My point is that as hot as it was then, certainly felt hotter than it gets now, so my take on weather is that it gets warmer then cooler, then warmer then cooler. It seldom ever goes much farther one direction than the other, and if it does, it's only for a short period and then we're back to the middle again. Let the kids read about whatever type of weather change they want to, then they can make up their own minds.</p>		
02-08	Robert A. Mertz	<p>Science policy comments</p> <p>As a retired Biology, Environmental Earth Science, and Wildlife Management teacher, I am concerned that</p>	N/+	

		<p>political influence is altering the science standards of the classroom. I am appalled that the wording of the objectives was being manipulated to cast doubt on solid science in favor of the viewpoint of economic interests of the fossil fuel industries. Once we allow non-science interests to dictate the education of our children, we are starting down a slippery slope where the power of science to illuminate the true nature of the world is lost in the fog of political manipulation. Good science must seek to find the truth, whether we like what we see or not. It is too often a temptation to substitute a pleasant fantasy for an unpleasant reality. Adjusting to the realities of human caused climate disruption may be difficult, both economically and socially, but the alternative is much worse. We must not let our investment in the current fossil fuel driven infrastructure we have built, blind us to the long-term damage we are doing to the natural life support systems of our space ship Earth. For the sake of our granddaughter, and for the welfare of all our children, please correct this mistake. I urge you to adopt the West Virginia Next Generation Content Standards and Objectives for Science, with the corrected climate standards from NGSS.</p>		
02-08	<p>Name Emily Whitaker Address Street Address: 504 Main St Street Address Line 2: PO Box 20 City: Hendricks State / Province: WV Postal / Zip Code: 27271 Country: United States</p> <p>Name Dianne Shook Address Street Address: po Box 971</p>	<p>Please don't compromise science education in WV I support the West Virginia Science Teachers Association and the Next Generation of Science Standards as those standards are implemented in the recently-issued proposed CSO document. I am glad that the State Board has withdrawn the modifications that would compromise those standards in the area of climate science. The current wording reflects the work of dedicated scientists and science educators. West Virginia needs standards that will provide students with the data and skills they need to be informed West Virginia citizens.</p>	N/+	

	<p>Street Address Line 2: 109 Roost Ln City: Summersville State / Province: wv Postal / Zip Code: 26651 Country: United States</p> <p>Name Ned Grant Address Street Address: 25 Plumtrees Rd. City: Newtown State / Province: CT Postal / Zip Code: 06470 Country: United States</p>			
02-09	<p>Dr. Mike Reeder Global Regulatory Affairs Engineer Walbro Co., Ltd. 6242 Garfield St. Cass City, MI 48726</p>	<p>Please don't let "Global Warming" statistics be allowed as the only forum in your class rooms. It's much too soon to declare this and the data as well as the models is faltering even now. We need a balanced approach to this issue and even scientific data urges much the same idea. Please, with all that's holy, do NOT let these "crusaders" be the only voice in the science classrooms. We will step back into time like it was 400 years ago. This very thing is why it's not right to let the government fund education in these United States in the first place. Stop the insanity!</p>	NA/-	See Rationale 2.
02-10	Mary Christine	<p>Truth is valuable and should not be silenced by any political force, truth is worth pursuing and defending, truth is beautiful and worth defending! Truth should be the ultimate goal of everyone, especially scientists and teachers, our country depends on it's people who value the truth to survive! Let's not allow our country to be overcome by anyone who does not respect and search for truth! Keep science always searching for truth, and not be put to sleep, by lack of will to search for truth. Don't be overcome by political forces!</p>	NA/o	See Rationale 3.
02-10	<p>Bill Suan RR 2 Box 242</p>	<p>I am writing in support of Next Generation Science Standards in West Virginia K-12 education. In particular, I</p>	N/+	

	<p>143 Post Farm Road Lost Creek, WV 26385-9627</p> <p>Leszek Golec Topolowa 1 Oronsko, WV 26505</p> <p>Conni McGraw Morris 2345 Winter St Saint Albans, WV 25177-3310</p> <p>SK Miller 320 Tea Table Rd Nitro, WV 25143-1783</p> <p>Lawrence Bissett 793 Echo Rd Charleston, WV 25303-2708</p> <p>Leonard Greene 157 Left Ave Bluefield, WV 24701-9045</p> <p>John Singleton 267 Long Leaf Ln Harpers Ferry, WV 25425-6118</p> <p>Damon Mills 338 11th Ave W Huntington, WV 25701-3028</p> <p>Donna Hinkle</p>	<p>support the standards as-written on teaching climate science. The science is clear on climate change and human impacts on warming.</p> <p>Climate change is impacting communities in West Virginia, and our students deserve to learn about it in school</p>		
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RR 2 Box 271 Lewisburg, WV 24901-9334			
debbie wilson 3470 Cadillac Dr Parkersburg, WV 26104-2115			
Harold Manning PO Box 1222 Martinsburg, WV 25402-1222			
William Smith 3499 Benedict Rd Culloden, WV 25510-9309			
Charles Walters 1000 Purusha Pl Romney, WV 26757-5020			
Patricia Hedrick Young 15 Kittyyoung Ln Valley Grove, WV 26060-8304			
Michael Mcleod 4 Penrose St White Hall, WV 26554-8942			
Michael Doig 119 Guy St Elkins, WV 26241-3921			
Lee Mitchell			

1638 Woodvale Dr Charleston, WV 25314-2547			
Whitney Metz 100 1/2 E Main St Mannington, WV 26582-1127			
Christie Smith 2924 Armstrong Creek Rd Kimberly, WV 25118-9726			
Laird Knight 127 Springfield Ave Morgantown, WV 26505-6334			
Dennis Collins 209 Main St Man, WV 25635-1213			
Cathy Arnett 2128 Davis St Fairmont, WV 26554-8201			
Teresa Hassig 2065 Pennsylvania Ave Saint Albans, WV 25177-3559			
Laura Bayer 157 Odell Farm Ln Oak Hill, WV 25901-9490			
Johann Gudziol Calle 18 # 122-135			

	<p>Calle 101B # 17-108 Cali, WV 25608</p> <p>Lori Rose 461 19th St Dunbar, WV 25064-2443</p> <p>Robert Gall 17 Damian Rd Wheeling, WV 26003-6005</p> <p>Suzanne Kruger 60 Huckleberry Ln Harpers Ferry, WV 25425-6416</p> <p>Jacqueline Hill Clay Avenue Charleston, WV 25387</p> <p>Mella Gregg 302 Presbyterian Church Rd Hedgesville, WV 25427-5515</p>			
02-10	<p>Kristin Loken PO Box 337 Falling Waters, WV 25419-0337</p>	<p>I am writing in support of Next Generation Science Standards in West Virginia K-12 education. In particular, I support the standards as-written on teaching climate science. The science is clear on climate change and human impacts on warming.</p> <p>Climate change is impacting communities in West Virginia, and our students deserve to learn about it in school.</p> <p>I would also like to give Core Curriculum a chance. It could bring great things to education in west Virginia.</p>	N/+	

02-10	Esther M. Leonard 154 Cedar St Huntington, WV 25705-1324	<p>I am writing in support of Next Generation Science Standards in West Virginia K-12 education. In particular, I support the standards as-written on teaching climate science. The science is clear on climate change and human impacts on warming.</p> <p>Climate change is impacting communities in West Virginia, and our students deserve to learn about it in school.</p> <p>As I understand it, this has since been put up for public comment. Please stand firm on your action, even if you get negative feedback.</p>	N/+	
02-10	Helen McGinnis PO Box 300 Harman, WV 26270-0300	Please stand up to Big Coal.	N/+	
02-10	Elaine R. Jacobsen	truth in science Please allow science into the classrooms in West Virginia. Pressure groups have been outright lying about global warming and the part humans supposedly play in it. West Virginia's coal industry has suffered because of these mistaken beliefs. Your children have already suffered enough without having them grow up in ignorance of true science and what it means to seek the truth even if it's not popular. The media almost without exception now present an agenda, not the truth. Please help the children learn about this.	NA/-	See Rationale 2.
02-10	William Fox 588 Breakiron Hill Rd Morgantown, WV 26508-9585	<p>I support the educational standards as-written on teaching climate science for K-12.. The science is clear on climate change and human impacts on planetary warming.</p> <p>WV students will go out into the world with the equipment with which we provide them. They must learn everything there is to learn about climate change, and how it effects them at home, in our state, nation, and planet.</p>	N/+	

		Whether it be mitigation or adaptation, it would be unfair to shortchange our students on this vital issue.		
2-10	Petition with 14 names from Chi Beta Phi Petitioners: Contact: Paul S. Peck	We, the undersigned members of the <i>Glenville State College Alpha Iota Chapter Of CHI BETA PHI</i> National Science Honorary petition the West Virginia State Board of Education to adopt the Next Generation Science Standards as drafted and edited by thousands of scientists and science educators across the nation, including hundreds of West Virginians, and released by Achieve. ATTACHMENT	N/+	
02-11	Wynnmar Carter 318 Moonlight Ln Martinsburg, WV 25404-3581 Victoria Schweizer 44 Grandview Ave Morgantown, WV 26501-6921 William Bennett 124 Summit Rd Parkersburg, WV 26105-8061	I am writing in support of Next Generation Science Standards in West Virginia K-12 education. In particular, I support the standards as-written on teaching climate science. The science is clear on climate change and human impacts on warming. Climate change is impacting communities in West Virginia, and our students deserve to learn about it in school.	N/+	
02-11	James Stamm 1 Woodridge Ct Huntington, WV 25705-2134	I am writing in support of Next Generation Science Standards in West Virginia K-12 education. In particular, I support the standards as-written on teaching climate science because the science is clear about the affects of climate change and human impacts on global warming. Climate change is impacting communities in West Virginia, and our students deserve to learn about these impacts in school to henceforth make the right. critically	N/+	

		important decisions about how to proceed into the future with our relationship with climate.		
02-11	William A. Gibson, Ph. D, Nuclear Physics, University of Rochester	<p>I will not waste your time in stating my position on wasting time in schools with such nonsense. Instead I the link below is the thoughts of 31,000 knowledgeable experts will do it for me. And do not forget the East Anglia University corruption.</p> <p>Note that the letter on the site below was signed by Edward Teller a Nobel Laureate and father of the hydrogen bomb.</p> <p>http://www.petitionproject.org/qualifications_of_signers.php</p>	NA/-	See Rationale 2.
02-11	Charles Hendrix 1414 Princess Drive South Charleston, WV. 25309	<p>I am a retired chemical engineer and statistician. I was in charge of the Applied Statistics Group for Union Carbide for 35 years and then taught and consulted for several major companies for another 10 years. Finding data that have been faked or manipulated is one of my hobbies. Trust me, there's plenty of that to keep me busy. Accountants would call this "cooking the books". I call it scientific fraud.</p> <p>For at least ten years we've known that the "global warming" data is not what it seems to be. There are many problems with it, including numbers that have been "adjusted" to try to make the data fit the global warming theories. In some instances these falsifications are blatant and almost obvious. In other instances a lot of work is required to get to the truth.</p> <p>For instance, recent studies have shown that "the data" from times past have been changed. How do we know this? Actual records from the past were preserved by some people and are now being compared to the numbers being given to the media and to government agencies.</p>	NA/-	See Rationale 2.

		<p>Some critical numbers have been changed... falsified. How so? Temperatures from the past have been lowered and recent values have been increased to make it seem there's been an increase over time. Here is an article that recently appeared... http://www.telegraph.co.uk/news/earth/environment/global_warming/11395516/The-fiddling-with-temperature-data-is-the-biggest-science-scandal-ever.html</p> <p>This came as no surprise to those of us who have followed this story for almost two decades.</p> <p>Government, the media, and "scientists" have a vested interest in scaring the public. Here's how it works.</p> <p>Academic "scientists" get grants to "study the global warming problem". They hire graduate students to do the work; cheap labor. They write papers and travel and give speeches. "It's worse than we thought. Here's another animal that's being driven to extinction. etc." They use these "findings" to get more grants to "study the problem". The media aids in this because they make money by printing scare stories.</p> <p>The government gladly passes out more of our tax money to feed this scam. They say "See, we are concerned. We are protecting you from those evil corporations and deniers." They enable the EPA to grow and impose more regulations.</p> <p>It's a loop. "Scientists" get the money fed to them by the government. The only way they can continue to get more money is to keep finding more "disasters" caused by "global warming". The media cooperates because they need scare stories. The government needs "scientists" who will produce the "right" answers. This justifies the existence of large government organizations who are "protecting the people".</p> <p>Politicians are ignorant and self-serving. They want the votes that come from "serving the people".</p>		
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		<p>It's an evil system.</p> <p>It's about money, power, and politics.</p> <p>For more than 18 years there has been no increase in the average global temperature. All of the expensive models based on "carbon dioxide causes global warming" have failed miserably. They predict increases in temperature when there are no increases. The IPCC continues to have huge meetings in expensive and exotic places trying to keep this fraud going. It's worldwide, not just in the U.S. Small countries demand that we, the U.S.A., compensate them for the "damage" we have caused. The UN demands we pay them more than \$100 billion a year for many years to come because we "caused global warming". The UN wants to distribute that money as they see fit. This is not a small scam.</p> <p>When the expression "global warming" failed because there is no increase, it was necessary to change the name. It became "climate change".</p> <p>Now that's becoming "climate disruption" and other variations. But it's all rooted in the "global warming theory". And a theory it is.</p> <p>The money still flows like water.</p> <p>A few in the media are sick of this scam, just like they are sick of the Brian Williams fiasco. No major U.S. newspapers are willing to tell the truth. A few in the UK have come to the point of revealing the truth.</p> <p>As an aside, please consider this. The government has granted Yeager Airport about \$15 million to stop buying electricity and to run solely on solar power. As it stands, Yeager spends \$400,000 a year to buy electricity. This solar project has been proclaimed as a "green project that will fight global warming and save money". Really? The payout time for this is more than 30 years. That's the time required for the solar system to save \$30 million dollars. It won't last that long. Solar panels do wear out and have to be maintained and replaced. Charleston WV is among the</p>		
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		<p>worst places in this country to generate solar power. We don't have enough bright sunshine days. So why is this project located here? Let's guess. Putting this in the heart of coal country is a political gesture. "See, there's no need for burning coal. We can use solar power instead." Nonsense. This is strictly political.</p> <p>So what about our schools?</p> <p>I believe that students learn best when they are allowed to see the facts and come to their own conclusions. This rather being fed lies and falsifications. Let them see the evidence. Show them the IPCC predictions based on theoretical models that predict increase in earth temperature alongside the actual data. If I were in charge I would even show them why so much of the temperature data was misleading from the beginning because it's measured in weather stations at airports on asphalt and concrete paving and even near tarmacs where jet engines spew hot air. This, rather than out in the country. Let the students try to measure air temperature outside in the woods and also while standing in a hot parking lot. Then "adjust" some of their numbers using Mickey Mouse logic to get the number you wanted. See how they react to that. If your went to a doctor feeling bad and the nurse took your temperature and it was "normal" and if the nurse said "I'm going to add four degrees to this before the doctor sees it because you are feeling bad" what would your reaction be to this charade?</p> <p>Tell the students this matter is not "settled science". It's just greatest science fraud in history.</p> <p>Someone in our school system suggest that our students be shown the facts and let them decide for themselves. That's a great idea. The Charleston Gazette screamed bloody murder because the students might realize the truth.</p> <p>Which one will you vote for?</p>		
2-12	James Stamm	Support accurate climate science in WV education	N/+	

	<p>1 Woodridge Ct Huntington, WV 25705-2134</p> <p>David McConnell 990 Lightstone Ln Sugar Grove, WV 26815-7020</p>	<p>I am writing in support of Next Generation Science Standards in West Virginia K-12 education. In particular, I support the standards as-written on teaching climate science because the science is clear about the affects of climate change and human impacts on global warming.</p> <p>Climate change is impacting communities in West Virginia, and our students deserve to learn about these impacts in school to henceforth make the right. critically important decisions about how to proceed into the future with our relationship with climate.</p>		
02-12	Charles Hendrix	<p>Temperature tampering This just arrived at my Inbox. It has a nice graphic showing an example of "adjusting" the data. The amazing thing is these "adjustments" are always designed to make it seem that temperature is increasing with time, never the other way around. Why? It's about scaring the public to drum up more money "to study the problem" when the real problem is dishonesty.</p> <p>Yes, humans are indeed causing the earth to seem to be getting warmer. This is done by tampering with the data.</p> <p>Why would we want to teach children to be afraid of "global warming" when this notion is based on a scam.</p>	NA/-	See Rationale 2.
2-12	Charles Wright	<p>Common Core Global warming is not science. It is a political agenda. Information is again being uncovered concerning our Federal government "cooking the books" on historical data concerning ,Arctic ice, snow, and temperature measurements for the last one hundred years and on the temperature along the coast from the equator to the tip of South America to Greenland. Global warming is not a foregone conclusion, the science has been compromised to political reasons.</p>	NA/-	See Rationale 2.

2-12	DENNIS SEGO	<p>FW: Temperature Data Tampered With; ‘Biggest Science Scandal Ever’ Thought that this might go along with another email on the education of our kids and why we should endeavor to teach truth. Dear Reader:</p> <p>Christopher Booker of the UK Telegraph calls man-made global warming the “biggest science scandal ever,” and it’s easy to see why.</p> <p>Recent studies have shown:</p> <ul style="list-style-type: none"> • Temperature data from NASA’s Goddard Institute for Space Studies (GISS) was dramatically altered, and rather than showing a 1.5-degree Celsius increase from 1950 to 2014, the raw data actually showed a 1-degree Celsius temperature decrease over those 65 years. • Two of the official data records for climate temperatures — Remote Sensing Systems (RSS) in California, and the University of Alabama in Huntsville (UAH) — have recorded 18 straight years of no temperature increases, and 2014, recently called the “warmest year ever” was, in fact, only the sixth warmest year since 1997. • Arctic ice levels, it turns out, have nothing to do with alleged man-made global warming. The decrease in Arctic ice is simply a byproduct of naturally occurring cyclical shifts in warm water currents. In fact, when the warm water currents last peaked 75 years ago, Arctic ice had retreated even further back than it has recently. <p>None of this is news to John Casey, who has been at the forefront of the movement calling man-made global warming a total hoax.</p> <p>Casey, a former White House space program adviser, consultant to NASA headquarters, and space shuttle engineer, found evidence — buried right in the government’s own environmental studies — that destroys the argument for “global warming.”</p>	NA/-	See Rationale 2.
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		<p>Using their own data, John has proven that “global warming” is a sham backed by a network of politicians, corporations, and scientists conspiring to promote the fear of “global warming” . . . despite clear evidence that no such “global warming” exists.</p> <p>Casey’s analysis is shocking, but I have to say, it’s a must-read exposé, which is why I put together a free report that reveals some of the key findings.</p> <p>Click here to read my report.</p> <p>Tom Luongo Editor, Resolute Wealth Letter</p>		
02-12	<p>Name James Skalsky Address Street Address: 21 Pleasantview Dd City: Athens State / Province: Ohio Postal / Zip Code: 45701 Country: United States</p> <p>Name Phyllis Law Address Street Address: 137 Loretta Avenue City: Follansbee State / Province: WV Postal / Zip Code: 26037 Country: United States</p> <p>Name Barb Howe Address Street Address: 432 Riley St. City: Morgantown State / Province: WV Postal / Zip Code: 26505 Country: United States</p>	<p>12</p> <p>Please don't compromise science education in WV I support the West Virginia Science Teachers Association and the Next Generation of Science Standards as those standards are implemented in the recently-issued proposed CSO document. I am glad that the State Board has withdrawn the modifications that would compromise those standards in the area of climate science. The current wording reflects the work of dedicated scientists and science educators. West Virginia needs standards that will provide students with the data and skills they need to be informed West Virginia citizens.</p>	N/+	

	<p>Name Sandra Fallon Address Street Address: 39 Buckhannon Ave City: Morgantown State / Province: WV Postal / Zip Code: 26501 Country: United States</p> <p>Name Cathie Galford Address Street Address: 6823 fairfield way City: sachse State / Province: tx Postal / Zip Code: 75048 Country: United States</p> <p>Name Dot Montgillion Address Street Address: 1289 Smoke Camp Rd City: Weston State / Province: WV Postal / Zip Code: 26452 Country: United States</p> <p>Name jo Ann Barlow Address Street Address: 306 Robert E Lee aVe City: Elkins State / Province: WV Postal / Zip Code: 26242 Country: United States</p> <p>Name Beth Raps Address Street Address: PO Box 117 City: Berkeley Springs</p>			
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	<p>State / Province: WV Postal / Zip Code: 25411 Country: United States</p> <p>Name Michael Schmotzer Address Street Address: 751 Hillcrest Rd City: York State / Province: PA Postal / Zip Code: 17403 Country: United States</p> <p>Name Peggy Fugate Address Street Address: 6685 Stillwell-Beckett Road City: Oxford State / Province: OH Postal / Zip Code: 45056 Country: United States</p> <p>Name S. Thomas Bond Address Street Address: 1779 Jesse Run Road City: Jane Lew State / Province: WV Postal / Zip Code: 26378 Country: United States</p> <p>Name Phyllis Law Address Street Address: 137 Loretta Avenue City: Follansbee State / Province: WV Postal / Zip Code: 26037 Country: United States</p>			
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02-12	<p>Name Victoria Brownlee Address Street Address: PO Box 36 City: Millwood State / Province: WV Postal / Zip Code: WV Country: United States</p>	<p>Please don't compromise science education in WV I support the West Virginia Science Teachers Association and the Next Generation of Science Standards as those standards are implemented in the recently-issued proposed CSO document. I am glad that the State Board has withdrawn the modifications that would compromise those standards in the area of climate science. The current wording reflects the work of dedicated scientists and science educators. West Virginia needs standards that will provide students with the data and skills they need to be informed West Virginia citizens.</p> <p>Science is the basis of everything. To eliminate real science and evolution from school curriculums and trying to replace or integrate science and religion as compatible is ignorant. It is absolutely unconstitutional. Our country was founded on separation of church and state, NOT Christianity. Our founding fathers were assists, meaning if there were a god or gods, after allowing the universe to create itself, that was it. No person God who made miracles, knew everything we did or said, answered prayers, or had anything further to do with this universe. How many ridiculous religions have been made up over the billions of years to try to answer our questions of "why?". Well, there is no "why", and that is why over and over again ignorant "people" full of warlike traits and hubris. Religion is the root of all "evil".</p>	N/+	
02-12	<p>Allen Johnson 12664 Frost Road Dunmore, West Virginia 24934</p>	<p>First, let me say that I support the science standards as endorsed by the WV Science Teachers Association. Although it has been many years ago, I taught chemistry and biology at Crum High School (Wayne County) and mathematics (algebra, geometry) in Pocahontas County. I have an undergraduate B.A. degree in Biology and a Masters in Theology with emphasis on public policy from an evangelical Christian seminary. I emphasize the importance of strong science coupled with, as in all education, ethical training and character development.</p>	N/+	

		<p>I am concerned that certain outside influences are bearing upon school boards to compromise and capture certain science matters, especially as they bear upon political, economic, and/or religious special interests. American Legislative Exchange Council (ALEC) is one of these. Another is Truth In Texas Textbooks, which pressures textbook companies to bend to their will, knowing the influence Texas has on textbook publishers. This latter group might have influenced this year's legislature on introducing a bill to push a certain social studies flavor into school curricula.</p> <p>Below are some links I researched on the above named special interests and am getting out to some circles. West Virginia needs to emphasize sound science even in the face of vested interests. Otherwise we lose our most precious assets, our talented, motivated, high character young people.</p>		
02-13	<p>Name Gregory Esteve Address Street Address: 3655 North Scenic Highway City: Lake Wales State / Province: Florida Postal / Zip Code: 33898 Country: United States</p> <p>Name Karen and Richard Watson Address Street Address: PO Box 33 City: Dryfork State / Province: West Virginia (WV) Postal / Zip Code: 26263 Country: United States</p>	<p>Please don't compromise science education in WV</p> <p>I support the West Virginia Science Teachers Association and the Next Generation of Science Standards as those standards are implemented in the recently-issued proposed CSO document. I am glad that the State Board has withdrawn the modifications that would compromise those standards in the area of climate science. The current wording reflects the work of dedicated scientists and science educators. West Virginia needs standards that will provide students with the data and skills they need to be informed West Virginia citizens.</p>	N/+	

	<p>Name Louise Mann Address Street Address: 10201 River Road Street Address Line 2: 10201 River Road City: South Chesterfield State / Province: VA Postal / Zip Code: 23803-1048 Country: United States</p> <p>Name Ruth Brooks Address Street Address: 816 Benoni Avenut City: Fairmont State / Province: WV Postal / Zip Code: 26554 Country: United States</p>			
	<p>Name Victoria Brownlee Address Street Address: PO Box 36 City: Millwood State / Province: WV Postal / Zip Code: WV Country: United States</p>	<p>I support the West Virginia Science Teachers Association and the Next Generation of Science Standards as those standards are implemented in the recently-issued proposed CSO document. I am glad that the State Board has withdrawn the modifications that would compromise those standards in the area of climate science. The current wording reflects the work of dedicated scientists and science educators. West Virginia needs standards that will provide students with the data and skills they need to be informed West Virginia citizens.</p> <p>Science is the basis of everything. To eliminate real science and evolution from school curriculums and trying to replace or integrate science and religion as compatible is ignorant. It is absolutely unconstitutional. Our country was founded on separation of church and state, NOT Christianity. Our founding fathers were assists, meaning if there were a god or gods, after allowing the universe to create itself, that was it. No person God who made</p>	N/+	

		<p>miracles, knew everything we did or said, answered prayers, or had anything further to do with this universe. How many ridiculous religions have been made up over the billions of years to try to answer our questions of "why?". Well, there is no "why", and that is why over and over again ignorant "people" full of warlike traits and hubris.</p> <p>Religion is the root of all "evil".</p> <p>Thank you for your commitment to quality science education in West Virginia.</p>		
02-13	<p>Name Cynthia Hintz Address Street Address: 915 Grady Drive City: Johnson City State / Province: TN Postal / Zip Code: 37604-2940 Country: United States</p>	<p>I support the West Virginia Science Teachers Association and the Next Generation of Science Standards as those standards are implemented in the recently-issued proposed CSO document. I am glad that the State Board has withdrawn the modifications that would compromise those standards in the area of climate science. The current wording reflects the work of dedicated scientists and science educators. West Virginia needs standards that will provide students with the data and skills they need to be informed West Virginia citizens.</p> <p>An educated, analytical public is a huge resource for any state, and WV students deserve the best.</p>	N/+	
02-14	<p>Carolyn Thomas WV</p>	.	N/o	
02-15	<p>Robert Kota 146 Spring Hill Lane Wheeling W.Va</p>	Attachment	NA/-	See Rationale 2.
02-15	<p>Petition with 83 names sent by Richard Thomas Professor and Chair of Biology at WVU</p>	<p>We, the undersigned faculty from West Virginia University, are concerned that modifications made to the WV Science Standards by the WV State Board of Education are not consistent with scientific consensus on climate change and urge you to take action to adopt the national Next Generation Science Standards as conceived and developed by The National Research Council, the National Science Teachers Association, the American</p>	N/+	

		<p>Association for the Advancement of Science, and Achieve to ensure that K---12 students in West Virginia are provided with the best STEM education.</p> <p>It has become axiomatic that the American public is increasingly unable to comprehend the complex scientific information needed to make rational policy decisions concerning the rapid changes in the sciences. We believe that it is important to teach students at a young age to think critically and challenge them to learn the underpinnings of all scientific issues so that they may participate intellectually in the series of ongoing debates and discussions about current events, such as global climate change. The proposed modifications to the WV Science Standards that deliver a deceptive interpretation of the scientifically accepted human influence on current climate change provides a great disservice to our young students and our teachers in West Virginia.</p> <p>As teachers of higher education and concerned citizens in West Virginia, we urge you to reconsider the amendments that you have made that add erroneous interpretations of climate change science to the WV Science Standards.</p> <p>Thank you for your consideration of this request, and please do not hesitate to contact us if you would like more information and/or to discuss these issues further.</p>		
02-16	<p>Andrew Schedl Assistant Professor West Virginia State University Institute WV</p>	<p>It is embarrassing when a national scientific society, the American Geophysical Union, sends an e-mail directed at its West Virginia members urging them to act on a specific issue. At West Virginia State University I teach Physical Science I, Physical Science II, Physical Geology and Weather and Climate. Most of the students who take my classes are elementary education and general science education majors. In my classes I tell my students what distinguishes the natural and physical sciences from the social sciences is that in the natural and physical sciences sometimes the scientific community comes to a consensus about the big issues. (Note the present day controversy in the legislature about the ideas</p>	N/+	

		of Keynes versus Hayek on economics.) Human caused climate change is one of the subjects where this consensus has been reached. The only ideas which appear in science textbooks are ideas where scientific consensus has been reached. In all my classes students are taught about human caused climate change. Having teachers teach that there is considerable doubt about human produced climate runs contrary to their training.		
02-16	Christina 7th grade science teacher Maloney Morgantown WV	No Comment	N/o	
02-16	Kevin Poe Aerospace Engineer Morgantown WV	<p>S.6.ESS.6 - ask questions to clarify evidence of the factors that have caused the rise in global temperatures over the past century.</p> <p>Many factors contribute to the fluctuations in global temperatures. Temperatures rise and fall. S.6.ESS.6 is not an accurate statement.</p> <p>S.9.ESS.14 - Analyze geoscience data and the results from global climate models to make an evidence-based forecast of the current rate of global or regional climate change and associated future impacts to Earth systems.</p> <p>As I have demonstrated, global climate models often make incorrect predictions and cannot be relied upon to give accurate forecasts. S.9.ESS.14 is not an accurate statement.</p> <p>S.HS.ENV.17 - Debate climate changes as it relates to greenhouse gases, human changes in atmospheric concentrations of greenhouse gases, and relevant laws and treaties.</p> <p>Greenhouse gasses (specifically CO2) are a minor contributor to climate (some scientist believe that CO2 over 300ppm has</p>	NA/-	See Rationale 2.

		no additional affect on global temperature) and humans contribute less than 5% of the total CO2 in the atmosphere.		
02-16	Name David Warner Address Street Address: 7444 south fork little Cacapon road City: Shanks State / Province: WV Postal / Zip Code: 26761 Country: United States	<p>Please don't compromise science education in WV I support the West Virginia Science Teachers Association and the Next Generation of Science Standards as those standards are implemented in the recently-issued proposed CSO document. I am glad that the State Board has withdrawn the modifications that would compromise those standards in the area of climate science. The current wording reflects the work of dedicated scientists and science educators. West Virginia needs standards that will provide students with the data and skills they need to be informed West Virginia citizens.</p> <p>As a forester and scientist, I have witnessed first hand the dramatic changes in our West Virginia forests over the past 30 years. I don't understand how, in the face of overwhelming evidence, some continue to deny the obvious. The climate around us is changing and the results are likely to be catastrophic. To deny the truth or at least the presentation of the body of science to our youth is unforgivable and robs them of their chance for a healthful future. Support climate science.</p>	N/+	
2-16	Petition with 12 names from Glenville State College Science and Math Department Gary Morris, Dept. Chair contact person	We, the undersigned members of the Glenville State College Department of Science and Mathematics, petition the West Virginia State Board of Education to adopt the Next Generation Science Standards as drafted and edited by thousands of scientists and science educators across the nation, including hundreds of West Virginians, and released by Achieve.	N/+	
2-16	Petition with 205 names from the West Virginia Science Teachers Association Todd Ensign- contact person	<p>On behalf of the West Virginia Science Teachers Association, please find the attached 205 signatures from mostly WV educators in support of the current version of the NGSS posted online.</p> <p>The West Virginia Science Teachers Association (WSTA) and the 200 signers of this petition</p>	N/+	

		<p>endorse the currently posted version of Policy 2520.3C <i>Next Generation Content Standards and Objectives for Science in West Virginia Schools</i>. The organization endorses this version policy due to the widespread involvement of West Virginia K-16 science educators and stakeholders in the development and review of the <i>Next Generation Science Standards</i>. We believe these standards will support high quality science education in West Virginia and improve opportunities for our students. It is essential that fidelity to the language in the NGSS remain. Modification of the standards negates our national recognition as an NGSS state. Uninformed and random modifications to the standards cast doubt on the credibility of the standards and do not serve our students well and will lead to misconceptions.</p>		
02-16	Linda Newcome	<p>It seems that we educators in West Virginia jump eagerly on every bandwagon that passes our way. If we review the areas of academia in which we initiated new standards and etc., we are still falling behind across the country. We need to teach students at the level of comprehension they can learn. Science should be a hands-on outdoors type of class and activity. Students in the lower grades need to master the basics and once that has been successful, they will grab and pass other states in academia.</p> <p>I personally and firmly believe that we are moving a false step forward and sliding back three because no one knows what or how to teach the basics, problem solving, social skills, and critical thinking.</p>	N/-	
02-16	Amity Boblits WV	<p>Next Generation Science Standards I am writing to you as a parent and a citizen of West Virginia to comment on the Next Generation Science Standards.</p> <p>I believe West Virginia needs to implement and maintain high educational standards. I believe citizens of the United</p>	N/+	

		<p>States should be informed and educated about standards being implemented, and be able to vote on those standards. Not enough information has been provided to the general population about the science standards, just as with math and language arts. Furthermore, the information I have gained regarding all Next Generation Standards (Common Core), and the process by which the states have adopted Common Core, leads me to believe that these standards will not serve us well.</p> <p>I oppose the Next Generation Science Standards, as I oppose the Common Core math, language arts, and history. It is imperative that the State of West Virginia seek a successful, evidence-based, high achieving, common sense approach to education.</p>		
02-16	<p>Ellen Mosley Thompson Byrd Polar and Climate Research Center, Director Department of Geography, Distinguished University Professor</p> <p>Lonnie G. Thompson Byrd Polar and Climate Research Center, Director School of Earth Science, Distinguished University Professor</p>	<p>Here is the letter that Ellen and Lonnie will be mailing tomorrow morning to the superintendent. We will also be mailing copies to all members of the board of education. The online form for comments was not setup to accept letters. Can you offer any advice here?</p> <p>Attachment</p>	N/+	
02-16	<p>A. Pitrolo 164 Casey Lane Washington, WV 26181</p>	Attachment	NA/-	See Rationale 2.
2-17	<p>Lisa Williams, Harrison County Educator</p>	<p>I am commenting as both a professional educator and parent in the WV school system.</p> <p>There were just a few things that sent up a red flag to me: 8th grade science standard: Natural Selection and Adaptations</p>	N/-	See Rationale 2.

		<p>S.8.LS.7 "apply scientific ideas to construct an explanation for the anatomical similarities and differences among organisms and between modern and fossil organisms to infer evolutionary relationships".</p> <p>I agree with constructing explanations for similarities and differences. I do not believe it is a good idea to say that it needs to point to evolution unless you open that up to also include other beliefs about those relationships. I believe we need to point students to make those choices for themselves by providing research and evidence for all theories rather than say they need to "infer evolutionary relationships" when not all students agree with those "relationships". Evolution is a theory/belief just as creationism is a belief. It is only fair to provide evidence for all theories and let the students construct their own arguments. This applies not only to this standard but to the overall Science Standards.</p> <p>This goes along with a comment made on 126CSR44CC that says "Students examine processes that occur on time scales from the blink of an eye to those that happen over billions of years". "Billions of years" is also a theory and has not been proven. I just think we need to be careful about presenting something as fact when it has not been proven especially when we are educating our children.</p> <p>Also applies to Natural Selection and Evolution topic in Biology - Grade 10 and I'm sure many other standards. I know it's an old argument but I think we need to be careful. If we are going to say that the controversial belief of evolution is true we need to also provide opportunities within these standards for other beliefs/theories to be presented. I would like my children to know all of them, not just one.</p> <p>This also applies to "Global Warming" or "Climate Change". There are new studies showing Global Warming hasn't occurred for 10 years.</p> <p>I just want us, as people making these decisions and influential educators, to be cautious when shaping young minds. We need to present all the facts and evidence that is</p>		
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		out there and allow the students to decide. These standards need to be written in a way that allows students to explore these ideas and not just point to one idea.		
02-17	David Sturm Substitute teacher Marion County BOE Fairmont WV	I agree with the standards most recently submitted.	N/+	
02-17	Jeffrey Gustafson Shenandoah Junction WV	We must ensure our kids learn climate change science in school. Please adopt Next Generation Science Standards (NGSS) -- comprehensive, research-based, world-class science that includes climate education, without coal industry bias or political ideology.	N/+	
02-17	Linda Lilly Teacher Park Middle School Beckley WV	Will the WV Next Generation Standards and Objectives in Science be recognized nationally or have the changes negated that possibility?	N/o	
2-17	Sara Carley-Peña MS	I am writing to you today to ask that the current science content standards taught in West Virginia not be changed to reflect the propaganda of big business and the conservative right wing political parties. I am a mother of two school age children and a science teacher. In order for our children to keep up and compete on a national and global level they need to be taught "real" science based on latest research and information. Please do not let this injustice take place, it will set our children and our state back even further than we already are perceived to be.	N/+	
02-17	Mary Sue Burns, NBCT Pocahontas County HS Science Dpartment	NGSS Of course, I have already commented on the NGSS. However, I want to add this as another email expressing support for the NGSS in their current form. I have a long-time commitment to science education in West Virginia. These standards will help our students move forward in their ability to meet the challenges of our increasingly	N/+	

		global world. We cannot deny facts, like climate change, or we risk having "our heads in the sand".		
02-17	Mary A Borchers 1801 Middle Ridge Rd Romney, WV 26757-7027	Support accurate climate science in WV education I am writing in support of Next Generation Science Standards in West Virginia K-12 education. In particular, I support the standards as-written on teaching climate science. The science is clear on climate change and human impacts on warming. Climate change is impacting communities in West Virginia, and our students deserve to learn about it in school.	N/+	
02-17	Robert E. Strong Director SMART-Center http://www.smartcenter.org/	Please Adopt Next Generation Science Standards without changes As an informal science educator and business person here in West Virginia I ask that you please do everything possible to insure that West Virginia adopts the official / original version of the Next Generation Science Standards without changes. Having carefully read the NGSS, I sincerely believe this is the best educational direction for the students, teachers, and future of West Virginia.	N/+	
02-17	Petition with 5106 names John Friedrich, Climate Parents, Contact person	All 5106 signers on the document titled "Please adopt WV NGSS including original climate standards.pdf, signed the following statement: "I urge the board to adopt the West Virginia Next Generation Content Standards and Objectives for Science, including the original climate science standards contained in the Next Generation Science Standards. The board did the right thing in removing the altered and misleading climate science content that had been previously included, and it is time to move forward with adoption of accurate science standards. The original climate science content in the Next Generation Science Standards was written and peer-reviewed by scientists and science educators, and represents the scientific consensus on climate	N/+	

		change. Please stand by your recent decision to support high quality, evidence-based science education and adopt standards that include accurate climate science."		
02-17	Petition with 306 names John Friedrich, Climate Parents, Contact person	All 306 signers on the document titled, "WV Board of Ed - Thank you for withdrawing altered climate standards", signed the following statement: "Thank you for standing up for West Virginia students by voting to remove altered climate change content from new science standards for K-12 students. We're counting on you to support the best science education available for West Virginia students, which includes the evidence-based climate science content in the Next Generation Science Standards."	N/+	
02-17	Petition with 311 names John Friedrich, Climate Parents, Contact person	The 311 signers of the document titled "WV Board- Please adopt original climate standards" submitted similar comments, with some unique contributions.	N/+	
§126-44CC-4. Summary of Content Standards and Objectives.				
01-16	Daniel Owens Mr Weir High School Weirton WV	It looks as though the language that would cast unfounded doubt onto the current models of global climate change was removed. The process of science is dependent upon having the bravery to follow the evidence, even if it takes you to a conclusion that challenges your current mindset. Thank you.	N/+	
01-16	Roy Beven President-elect Washington Science Teacher Association Bellingham WA	The NGSS are completely accurate scientificall and pedagogically. These standards should be adopted without personal edits.	N/+	
01-16	Scott Ramsey Teacher Randolph County Board Elkins WV	The climate change CSOs in 6th and 9th grade should remain unchanged. If the CSOs change any more due to political pressure about climate change science teachers will be teaching an opinion instead of science fact about human involvement and the global crisis of climate change. Ignore political pressure and teach the facts.	N/+	
01-16	Carl L. Armour Ph.D. Gilmer County Board of	Standards for climate change should not be altered. A skilled science teacher will present all sides of important issues to encourage students to apply analytic thinking to make up	N/+	

	Education glenville West	their own minds. For example, that is the way the theory of evolution, intelligent design, galactic seeding of life, and creation are handled in the classroom. If science teaching is tampered with what comes next?		
01-16	Lester Allen Barclay WG 9 5803 Tech Mob Equip Ground Ret Dept. ARMY Tampa fl	<p>Global Warming false Science</p> <p>Unbelievable Liberals in the Media and true Science are diametrically opposed. Because their mind cannot process logical information they are easy targets, like lemmings, for George Soros Illuminati Communist propaganda Global Warming. True Science of Geological History's shows Evidence that Sulfur Dioxide, fall out from our atmosphere, is in each layer of Soil/ Rock proceeded each ICE AGE Especially the last real Ice Age 22,000 years ago have nothing to do with Global Warming! During this ICE AGE the CO2 levels were an astounding 1200 PPM with the sulfur dioxide that caused it showing that today's 400 PPM CO2 is no threat. Stands to reason when volcanic activity produces enough sulfur dioxide to build a glacier of Ice it will also produce substantial amounts of CO2 that obviously are not the cause of Global Warming.</p> <p>This is a sick generation of College people that can't get away from their kindergarten Pre-Primer Chicken Little's book, "The Sky Is Falling". There are 35 active Volcanoes currently in the world that all have contributed to Sulfur Dioxide above the Troposphere in the Antarctic first and now the arctic, which, Buy the way, displaces Ozone. It (Sulfur Dioxide Emissions) started in the Antarctic 5 years ago from a Chilean Andes mountain Volcano at a high altitude. This Kind of Ozone depletion DOES NOT CAUSE GLOBAL WARMING IT CAUSES GLOBAL COOLING. We have real Scientist that know these things but Liberal Media covers up their ears to their outcries against STUPIDITY.</p> <p>http://en.wikipedia.org/wiki/Last_glacial_period</p> <p>The Obama administration are incredible hypocrite their Green Policies Amount to nothing Read Below</p> <p>Invention lost to humanity by a greedy invention on a DAMN</p>	NA/-	See Rationale 2.

		<p>CAR</p> <p>Global warming climate change is false. 9,000 PHD's agree. All fossil Fuel gets burned into our atmosphere at subduction zones of all tectonic plates. That is where Earths Atmosphere comes from. CO2 of last Ice Age, 8,000 years ago, was 1200 PPM compared to todays 388 PPM. CO2 causing Global warming is Hocum.</p> <p>Not using Fossil Fuel solves nothing Because of these Subduction Zones. However we have an Alternative that was squashed by President Obama not using an ARMY Patent. An Invention stopped by Greedy inventors that used it on a car first alarming all Oil producers to put a stop to him, and this invention used on a car. An invention lost to humanity that solves our Desalination of Salt water, Purification of Sewage Water, and creates electricity for our failing Electric Grid. HHO energy from water used by Hitler for all non essential transportation during WWII because of his lack of Fuel.</p> <p>https://www.youtube.com/watch?v=Zu-Hg6ntgqI&index=45&list=PLL5pQFJIwlAvy6vCQ3GmFBthkPZQ6_WfG</p> <p>An invention lost to humanity because of Big oil putting President in office to do nothing about this Patent owned by the ARMY Now. A president put in power not to produce this power but to stop it with failed Environmental inventions of the past that are proven not to work while He secures USA oil under islamic control. For this reason his Presidency was Bought and Paid for twice by Big Saudi Oil . An invention that solves the EPA ridiculous CO2 restriction by Desalination of salt water and production of Electricity at a fraction of todays caust. LOST forever because of a GREEDY inventor and his car proving it to USF Tampa Florida's Engineering Dept on a DAMN CAR.</p> <p>Sea Level Has Dropped Since the Mini Ice age 12 Century to 18 century !!</p> <p>Vice President Joe Biden is trying to connect the dots of Global warming to Republicans with the rising of the oceans.</p>		
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		<p>Not going to do it not on my watch. Democrats know very little about finance why would expect them to understand science. King Henry The 8th 28 June 1491 – 28 January 1547, built a castle on the cost of Southern England Southsea Castle 1544 during a mini ice age. 1544 would have been at the peak of the ice age with the most sea ice causing the water to rise in europe of the times. While it was not a true ice age, the term was introduced into the scientific literature by François E. Matthes in 1939.[2] It has been conventionally defined as a period extending from the sixteenth to the nineteenth centuries,[3][4][5] or alternatively, from about 1350 to about 1850. They have recently found the plans and on the plans it was built right on the water within 6-9 feet. The same castel today is 120 feet from the water.The water has receded since then as well as polar ice. During a ice age or a period of massive ice covering the ocean the sea is higher because Ice is expanded water, ice floats because ice displaces more water than water and when the ice caps are much larger than today they raise the sea level. History proves it. Tell Joe Biden to read Chicken little over again. Sea's oceans have retreated since then so has the water. King Henry 8th's Chastel is proof.</p> <p>We save our country from an ecological disaster by burning a fuel that was being dumped on the Ground.</p> <p>We the people had nothing to do with it !!!</p> <p>We the people had nothing to do with phony global warming/climate change. The cooling was caused by two volcanoes in Greenland just like it was in 1918' record cold spell. And it will happen again in another 86 years. We had nothing to do with it . We The People of the United States have always cleaned up our own messes. We, with Nikola Tesla's invention of the ignition system with a spark plug and Henry FORD's invention of the automobile cleaned up John D. Rockefeller's environmental disaster of pouring Gasoline on the ground at all his refineries as we burned it in that</p>		
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		<p>automobile to keep it out of our groundwater. Since that time 1903 our climate has been getting colder. At that time Mrs. Deland and her Son's fruit industry was all over South Louisiana, Alabama, and Georgia all across the southern States westward to Mexico, and it stretched all the way to the southern tip of Florida. After the introduction of fossil fuel this industry has moved farther south every year since 1903 because of the climate getting colder. It is no longer frost proof in Frostproof South Florida. It is impossible for God's creation the fruit tree to lie.</p> <p>Stop stalling on Keystone pipeline! Mr. President Mr. Secretary of State John Kerry</p>		
01-16	<p>Lester Allen Barclay DA Civilian / SGT ARMY Ret Dept Defence WG 9 5803 Tampa Flori</p>	<p>Then the Teachers Union Does not represent children, just teachers against Children and their Families. We need a Union for Students only, no teachers !!</p> <p>Letting a D- Student Be US President don't help, his Flouting of Common Core education is a disaster !! My Granddaughter and all the smart students are having deep problems with this STUPID Curriculum. My advice to her mother was to take her out , since she's 18 and enroll her in Adult Ed for full credit, like I did to give her a fighting chance for college. Adult Ed has way more tools for Education than Public school. They have the Best College Prep courses. I graduated there with Honors my Junior and Senior Years Straight A's. And I haven't had a Grandchild that can do that yet. I believe its the Damn Commun Core Curriculum in Public Education not my intelligence !! My Education Finished up in High School Adult Education Greatly Prepared me for Teaching and College that I would do in the ARMY Maintenance program !!</p>	N/-	
01-16	<p>Dennis McAllister BS Physics BS Math, MS Comp Sci Retired Olympia WA</p>	<p>A 92 page Senate report shows that from 1989 to 2009 government spending on climate change was 3,500 times as much as oil companies directed to skeptics. The government produced no single piece of empirical evidence that man-made carbon dioxide has a significant effect on the global climate.</p>	NA/-	See Rationale 2.

		http://scienceandpublicpolicy.org/images/stories/papers/originals/climate_money.pdf The 61.5 year global temperature cycle cannot be produced by any of 114 simulations of 35 CMIP5 climate models.		
01-17	Julia Colaw Teacher Petersburg Elementary School Petersburg WV	I believe that all altered content in Policy 2520.3C (Next Generation Content Standards and Objectives for Science in West Virginia Schools) should be replaced with the original peer-reviewed science standards written in part by West Virginia scientists and science educators.	N/+	
01-17	Dennis J. McAllister Retired Olympia WA	It has come to my attention that you are interested in empirical data to refute the Catastrophic Anthropogenic Global Warming (CAGW) rhetoric. I have provided some empirical facts from recent observations, experiments and measurements that refute the CAGW hypothesis. References follow. So far there is no empirical evidence supporting CAGW to replace the rhetoric. This was made clear in a 92 page Senate report published in 2009. It should A. Students should be taught the hypothesis of how CO2 is supposed to warm the earth. B. Students should be taught the steps of the scientific method and how the failure of even one experiment is sufficient to declare that a hypothesis is invalid. C. Students should be taught how the CAGW hypothesis can be tested. D. Students should be taught the importance of model based predictions. E. Students should be taught that there are a three important global temperature databases. F. Students should be taught that the surface station global temperature database is sparse and biased due to the Urban Heat Island effect and is not really used anymore. G. Students should be shown how 114 simulations of 37 CMIP models failed to predict satellite observed temperatures since 1979.	NA/-	See Rationale 2.

		<p>EMPIRICAL FACTS:</p> <p>H. Outgoing Long Wave Infrared Radiation (OLWIR) is increasing, not decreasing as predicted by the CAGW hypothesis.</p> <p>I. The moisture holding capacity of the atmosphere and the intensity of hydrological cycles has decreased since 1957, not increased as predicted by the CAGW hypothesis.</p> <p>J. Water evaporation from warm tropical oceans falls as rain, cooling and drying the tropical troposphere and stratosphere providing a negative global warming feedback contrary to the CAGW hypothesis.</p> <p>K. On every time scale from seasonal to multi-millennial CO2 increases after the oceans and earth warm, never before. Students may be provided the following examples. (1.) CO2 increases around the Big Island in the Fall after the ocean warms and cools in the Spring after the ocean cools. (2.) Global temperature varies in 60 year cycles corresponding to the Jupiter / Saturn Synodic Cycle. (3.) It warmed from 1849 to 1979, cooled until 1912, warmed until 1943, cooled until 1974, warmed until 2002 and has slightly cooled since then while CO2 increased 34%. (4.) It was warmer than now 1, 2, 3.5 and 8,000 years ago. (5.) In the last 8,000 years CO2 increased 57 % while Global temperature decreased 1.5C. (6.) For longer time periods CO2 increases about 800 years after the earth warms.</p> <p>(X) It might be pointed out that ocean acidity varies cyclically and is about the same as it was 100 years ago.</p> <p>(Y) It may pointed out that recently, too much ice in the Russia and Alaskan Arctic prevented polar bears from getting to the open ocean to get their food supply. Polar bears survive quite well in ice free Arctic winters.</p> <p>(Z) It may also be pointed out that MunichRe research reports reveal that extreme weather events “ tornadoes, hurricanes, droughts, floods, fires have been in sharp decline.</p>		
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		<p>EMPIRICAL FACTS</p> <p>(H) OLWIR INCREASING, NOT DECREASING http://www.friendsofscience.org/index.php?id=458</p> <p>(I) THE MOISTURE-HOLDING CAPACITY OF THE ATMOSPHERE HAS DECREASED, NOT INCREASED. http://www.co2science.org/articles/V17/dec/a21.php</p> <p>(J) TROPICAL OCEAN EVAPORATION PROVIDES NEGATIVE FEEDBACK http://hockeyschtick.blogspot.com/2014/02/new-paper-finds-negative-feedback.html</p> <p>(K) ON ALL TIME SCALES CO2 INCREASES AFTER THE EARTH WARMS, NOT BEFORE: http://www.woodfortrees.org/plot/esrl-co2/isolate:60/mean:12/scale:0.2/plot/hadcrut3vgl/isolate:60/mean:12/from:1958 http://climatephysics.com/80/ http://stevengoddard.wordpress.com/2014/04/09/the-disturbing-correlation-between-atmospheric-co2-and-temperature-in-the-20th-century/</p> <p>(X) OCEAN ACIDITY IS CYCLIC AND THE SAME AS 100 YEARS AGO. http://energymakesamericagreat.org/current-energy-commentary</p> <p>(Y) TOO MUCH ICE THREATENS POLAR BEARS http://cnsnews.com/news/article/barbara-hollingsworth/alaskan-polar-bears-threatened-too-much-spring-ice-0 http://www.thegatewaypundit.com/2014/04/brrr-record-thick-ice-threatens-polar-bears-in-beaufort-sea/</p> <p>(Z) EXTREME WEATHER EVENTS ARE IN DECLINE http://bobtisdale.wordpress.com/2013/12/15/open-letter-to-the-executive-producers-of-years-of-living-dangerously/ testimony of Roger Pielke, Jr. Reinsurer Munich Re Natural Catastrophe Statistics Report 2012: Far Less Global Damage From Weather In 2012!</p>		
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01-19	Linda Fonner Teacher Wetzel County Schools New Martinsville WV	I am a WV resident and classroom teacher. I am a Presidential Excellence in Science Awardee. I also served as a National Reviewer for the NGSS. In addition, I am a past president of WVSTA. Having reviewed the standards and objectives at the national level, I can say I had input on these objectives as written and continue to support them.	N/+	
01-19	Paul Cassak Associate Professor West Virginia University Morgantown WV	Science is too important in the modern world to allow politics and biases to diminish the education of our nation's students. As a scientist in WV, I urge the committee to adopt the Next Generation Science Standards concerning climate change in their original form, not the weakened and misleading version offered by the committee.	N/+	
01-20	Martha K Burke na NA St. Albans WV	Fidelity to the language in the NGSS regarding climate change is necessary to keep the scientific integrity of the standards since the wording reflects many hours of edits and arguments by many scientists and science educators who worked on the drafting of these standards.	N/+	
01-20	jim rye professor wvu morgantown wv	adopt. the standards represent the best science that we know at this time as well as the foundations for science instruction	N/+	
01-20	Travis Miller Prof. of Physics WV Science Educator Wellsburg WV	Please adopt the NGSS exact wording and please do not alter it without stake holders feedback. This should have been done before this policy got to this point. The WV Science Teachers Association approved the original NGSS not an altered version.	N/+	
01-20	Tina a Rimmer Science Teacher WILLIAMSON WV	leave as approved by the science committee and do not allow Linger's changes	N/+	
01-21	William Dorsey Teacher Kanawha County School Charleston WV	In reviewing the CSOs it is apparent that we are dancing around the issue of Global Warming. This is a known climate change that an excessive majority of scientific experts are now confirming is in part directly due to humanity. Yes the planet has a natural warming and cooling pattern but it has never in its history warmed so quickly. By skirting the issue of global warming as a scientific fact, we are removing our	N/+	

		<p>children from effective future discussions on environmental issues that will affect them directly. We are taking away their educated voice on the matter. Without looking to the past and our impact on the planet we will be unable to formulate changes that ensure the future. We are also telling our students that corporate needs and influence are greater than fact and knowledge. Yes we are a state built by coal, coal which is becoming increasingly poor in quality, lesser in its availability, and harder to get at in the ground. This state needs to follow the nation and deal in truth, fact, and open and honest discussions if we have a wish to survive the impending death of the coal industry in our state. Over 75% of the coal originally in WV has been mined. Union mining jobs are declining rapidly while non-union jobs for out of state companies are skyrocketed in comparison. We owe it to our students to provide as determined by fact, not corporate influence, greed, or fear.</p>		
01-21	<p>Randall Wiesenmayer Professor WVU Morgantown WV</p>	<p>The Next Generation of Science Standards (NGSS) should be approved without any modifications to climate change. In the past 15 years, there has not been ONE peer-reviewed publication that suggests that humans are NOT primarily responsible for the increased warming of this planet. The combustion of fossils fuels accounts for 80% of the increased carbon dioxide (CO2) levels in the atmosphere and deforestation accounts for most of the other 20%. Prior to the industrial revolution, CO2 levels remained under 300 ppm. “During ice ages, CO2 levels were around 200 parts per million (ppm), and during the warmer interglacial periods, they hovered around 280 ppm (see fluctuations in the graph). In 2013, CO2 levels surpassed 400 ppm for the first time in recorded history. This recent relentless rise in CO2 shows a remarkably constant relationship with fossil-fuel burning, and can be well accounted for based on the simple premise that about 60 percent of fossil-fuel emissions stay in the air. (Source NASA http://climate.nasa.gov/climate_resources/24/),</p>	N/+	

		For our State Science Standards to suggest that there is uncertainty related to humansâ€™ impact on climate and to suggest that the burning of fossil fuels is NOT the primary human activity responsible for climate change, is to force teachers to teach political views as science, rather than scientistsâ€™ views.		
01-21	Julian Martin Self Charleston WV	I don't understand what is asked for here. Please clarify	N/o	
01-21	Stefan Smolski Science Teacher Grafton High School Grafton WV	I have found that the WV content standards in this document reflect the national standards (NGSS) that were adopted in 2014. It makes perfect sense to adopt state standards that closely, if not exactly, match the national standards. I applaud the outstanding efforts of the stake holders as these standards are a major step in the right direction of moving away from teaching a mile wide and an inch deep. Now, as a science teacher, I can cover material in greater depth.	N/+	
01-22	Courtney Ostaff Morgantown West	I support the Next Generation Science Standards (NGSS) when they reflect the scientific reality of human-caused N/+climate change.	N/+	
01-22	Elizabeth Gallaher Physical Science Teacher Wallback WV	Please keep the standards involving climate change as recommended by the NSTA, a variety of educators from the national and state level, and scientists.	N/+	
01-23	Dr. Deb Hemler Professor of Geoscience Fairmont State University Fairmont WV	I applaud the Board of Education's recent decision to withdraw the previous CSO document that was up for comment and replace it with the original document that was submitted by the committee of stakeholders and professional educators who spent hours thoughtfully translating the Next Generation of Science Standards (NGSS) into the newly proposed WV CSOs. Many WV educators did not negatively comment on the previous document simply because they were unaware that changes had been made to the policy and, without coming through the numerous pages looking for three alterations, assumed it was the same document that the CSO review committee submitted to the WVDE. The lack of negative comments for that policy should in no way be	N/+	

		<p>interpreted as support for that document.</p> <p>This policy that is currently up for review embraces the language developed, reviewed, and revised by the lead states to reflect the most scientifically accurate representation of science standards as they should be taught to K-12 students. West Virginia has consistently omitted earth science as a required course from its high school curriculum, relegating it as an elective course in which a culture of "science for dummies" has developed. In a state with extractive industries as the basis for its economy, it makes sense to educate its populous about the science, history, and nature of coal, oil, and gas.</p> <p>More globally, our students should have a concrete "big picture" of our geosphere before diving into the microscale theoretical sciences of biology, chemistry, and physics. Proposing 9th grade earth science provides valuable experience and global awareness for those accelerated students who will be applying science to our world AND give those students who are struggling with math to "catch up" before diving into more theoretical math driven sciences. This has made sense for the states around us who require earth science in high school. The proposal here allows all students access to all sciences while still allowing STEM-bound students to take their advanced science classes. I support the policy currently proposed by the WVDE.</p>		
01-23	<p>Lisa Kukura Chair UHS-LSIC Morgantown WV</p>	<p>Our LSIC has been investigating introduction of biology into the 9th grade either by taking both Physical Science and biology or obtaining PS in 8th grade. Earth science does not fit the proper flow of science curriculum in the science track for a science minded student. One can take biology-9th grade year, AP bio, and Chemistry-10th grade, physics-11th grade and 2 AP Physics classes in the 12th grade. For those not on the science track one would still follow this path until 12th grade.</p>	NA/-	See Rationale 1.

[illegible]

		standards don't have as many "flavors" of chemistry (conceptual, Chem I, Chem II, for example). If two flavors seem to be Physical Science or Chemistry. I agree that not all students need a rigorous chemistry course. I believe it will fall to the individual teachers/counselors/schools to get students to take the courses that they need to be successful later. Students who are proceeding to college in ANY science/medical career need AT LEAST one full year of Chemistry. My school's second year of chemistry is AP Chemistry. Any student who will wants to go into medicine or engineering is encouraged to take AP Chemistry. If a student is allowed to choose Physical Science when the student needs Chemistry, the student will be unprepared for college chemistry and will end up taking the lowest level (remedial) chemistry that is offered at the college he attends. The student will be behind from the day he begins college and will be destined to take 5 or more years to complete his degree, or he will again choose the path of least resistance, and change his major to a non-science major.		Students will make decisions about 3rd and/or 4 th science courses based on their Personalized Education Plans and the requirements of post-secondary institutions they plan to attend. Students may double up on science courses and/or take AP courses.
01-26	Julie Rowan-Wolford 6th Grade Science Teacher Hampshire County Schools Romney WV	<p>In general, the inclusion of modeling, data collection and, analysis are good ideas and limiting topics to make that happen looks more manageable as far as being able to deliver content at a greater depth. However, I do have concerns about the following:</p> <p>6.LS.4--I'm concerned about the complexity of this topic for the average 11 to 12 year old, especially if there isn't a grade appropriate article or background resource for the students to follow.</p> <p>6.PS.3--"Waves" are so abstract and to write fluently about something which the students cannot see to investigate or read about in a well constructed text does not seem fair. The CSO itself seems a tad vague. The phrase "...more reliable way to encode and transmit information" makes me wonder what students are supposed to compare it to in order to deem</p>	N/o	

		<p>it "more reliable." Again, if there was a side by side text that students could chart to weigh the pros and cons, that might not be so bad, but if that can't be depended upon, it seems unfair to assess students on this or to base part of teachers' evaluations on this gap.</p> <p>Weather and Climate--Will working, durable weather tools be provided for data collection?</p> <p>EES.7--Again, very vague. Are we discussing forest fires or earth quakes? It might make the difference between an inexpensive rain gauge or a hi-tech seismograph.</p> <p>ETS--Vague, though to a degree understandable. This is why a standard format text or program would be very useful. An optimal design or solution really depends on the problem and without an agreed upon frame of reference for that problem a person could spend every waking moment on myriad problems and still not hit the one that will determine whether the person will be judged rightly or erroneously on ability to learn or instruct when students engage in end of year testing.</p>		
01-27	<p>deborah shaffer-palmer teacher 1993 Moundsville West</p>	<p>7th grade could be biology/life sciences, 8th grade could be Earth sciences, and 9th could be physical sciences like years gone by when education mattered to students, teachers, and parents! What about the kits for 6th grade. They are incomplete and come few and far between. My 6th grade teacher is always trying to find material to teach her students since the kits will not be exchanged for a few weeks or did not arrive when expected. The content of some of these standards is hard to find resources to use: s8ls1 + s8ls2 s8ls6 + s 8ls7and especially s8ls8. I teach adaptation now as we are expected and it is very hard to find materials for students to practice with and to create concepts with. The thermal standards will require hazardous materials and math again our students are not even able to manipulate an equation and the math would stop the learning of science. PLEASE remember</p>	N/o	

		the mental development that was harped at me in school and think about adapting the standards to the student's level for manimum learning to occur. High hopes will be dashed with these standards as is. I raised our science school at the school I am in but with these guidelines I know they will not continue to raise. Why not learn about the heart, lung, diseases, and other acutal science that these students can relate too at this age.		
01-27	deborah shaffer-palmer teacher 1993 Moundsville West	I believe a certain amount of memorization is necessary especially vocabulary. Experimentation is often lost with students due to lack of understanding of the expected outcomes and frustration with steps. If students have adequate direct instruction and the ability to use this knowledge to see for themselves in a lab then learning is able to occur otherwise it is a way to waste time. The skipping around on content does not allow adequate time for this to happen. Please look at the number of areas each grade level expected to cover; thing about lumping like content areas to a particular grade level to promote retention of vocabulary and then allow the application process.	N/o	
01-27	deborah shaffer-palmer teacher 1993 Moundsville West	I believe a certain amount of memorization is necessary especially vocabulary. Experimentation is often lost with students due to lack of understanding of the expected outcomes and frustration with steps. If students have adequate direct instruction and the ability to use this knowledge to see for themselves in a lab then learning is able to occur otherwise it is a way to waste time. The skipping around on content does not allow adequate time for this to happen. Please look at the number of areas each grade level expected to cover; thing about lumping like content areas to a particular grade level to promote retention of vocabulary and then allow the application process.	N/o	
01-27	Jacqueline A. McDaniels Science Teacher B-UMS Buckhannon WV	As a 7th grade science teacher I am disappointed that some of my favorite CSOs were moved to 6th or 8th grade but, over 29 years of teaching I have gone through several CSO changes and have survived those just fine. :)	N/o	

		<p>Apparently, my dictionary will get a work out as I make my new CSO lesson plans.</p> <p>I am glad the CSOs in question were reinstated to their original form. Doesn't any one on the state board know that no matter how the material, whether its climate change or something else, is presented will be questioned/challenged by some students? We have had the climate change/natural cycle discussion at the 7th grade level. Teachers and students should be trusted to have these conversations.</p>		
01-28	Chemistry Educator Chemistry Educator Martinsburg WV	<p>2.)</p> <p>Questions regarding the new chemistry "standards"</p> <p>Does S.HS.C.6 include colligative properties?</p> <p>Why are nomenclature and writing chemical formulae eliminated? Being able to write formulae and name substances are fundamental to chemistry.</p> <p>In comparing methods of measuring pH nothing is mentioned of calculating pH or of sig figs with regards to pH. Is this eliminated?</p> <p>Does S.HS.C.20 include more than just the combined gas laws? If so, perhaps list them (Avogadro's principle, Boyle's Law, Charles's Law, Gay-Lussac's Law, Graham's Law, Ideal Gas Law, Van der Waal's, Dalton's Law of Partial Pressure)</p> <p>Does S.HS.C.20 include unit conversion of various pressures?</p> <p>Does S.HS.C.19 include molar volume?</p> <p>Does S.HS.C.19 include percent yield?</p> <p>Where is wavelength and frequency calculations for atomic spectra?</p> <p>Where is kinetics?</p> <p>Where is equilibrium?</p>	NA/-	The Chemistry course and objectives have been vetted by teams of high school chemistry specialists. Teachers will add foundational information and experiences where appropriate.
02-01	Morris Price Substitute Teacher Charleston WV	It is important for students to know that climate change is in part caused by human activity.	N/+	

02-01	Orville Forrest Cain Elkview WV	Would like express my dismay that our children will not be learning climate science based on legitimate studies and scientific consensus. Please adopt next generation science standards my children as well as yours will have to deal with the consequences of climate change and they deserve accurate information. I will not support any politician who dilutes our children's education by censoring the facts. Though I have not been politically active in the past, except to vote, I will in the future if other than credentialed educators make these decisions.	N/+	
02-01	Laura Mahony Charleston WV	I urge you to adopt the Next Generation Science Standards. The controversy regarding Climate Change should be discussed, not in Science class, but in Sociology class. The question to ask is "Why would a group of people deny scientific facts?". The facts should be taught in Science class.	N/+	
02-02	Susanne Coffield Charleston WV	<p>We must ensure our kids learn climate science and solutions in school.</p> <p>In the future, please do not approve standards for K-12 students that deny the scientific consensus on climate change.</p> <p>Students have a right to be taught accurate information about the causes and consequences of climate change, so they can help develop solutions to the biggest global challenge their generation will face.</p> <p>I hope you will refuse to consider any Science Standards that deny or censor the scientific consensus on human caused climate change.</p> <p>If we want our children to have a healthy future, we need climate solutions now.</p> <p>Our kids will suffer the greatest impacts from climate change, and they must have the science education they'll need to develop and innovate solutions.</p> <p>Please adopt Next Generation Science Standards (NGSS) -- comprehensive, research-based, world-class science that includes climate education, without corrupting with political ideology.</p>	N/+	

		Please do not allow science and other educational standards to be determined by individual bias, rather than upon the research-based, peer-reviewed recommendations of credentialed educators.		
02-02	Paul Taylor Charleston WV	<p>Please do not allow science and other educational standards to be determined by individual bias, rather than upon the research-based, peer-reviewed recommendations of credentialed educators.</p> <p>Students have a right to be taught information that is accurate about the causes and consequences of climate change, so they can help develop solutions to the biggest global challenge their generation will face.</p>	N/+	
02-02	Rebecca Recco Itinerant Art Teacher/ Parent of KCS students Kanawha County Schools Charleston WV	Please do not accept any changes to the Content Standards and Objectives for Science that fail to acknowledge the overwhelming scientific consensus that human-created climate change is a reality. I realize and appreciate the funding our schools receive from the coal industry and I understand that we rely on that funding for many of our programs, but as a teacher, I can not condone teaching students to disregard prevailing scientific thought. In this age where information (reliable and unreliable) is available so readily, it is important for students to learn how to discern scientific data from opinion or even marketing and public relations claims. Without the ability to suss out fact from fiction, our students are growing up without the ability to perform quality research. My husband, a college professor, sees this every day. West Virginia schools MUST NOT FAIL OUR STUDENTS by supporting theories that fly in the face of almost 100% of the world's leading climate scientists. Our students deserve not only to learn the truth about climate change, but also to learn how the scientific process works, and how to properly research using acceptable academic sources. By including theories about climate change denial, we are telling students that sources that have NOT been	N/+	

		backed up by the scientific community, and therefore, their future research in all academic areas will suffer.		
02-02	Elizabeth Gaucher Middlebury VT	Please keep curriculum science standards based on the current professional consensus of the scientific community. Our children deserve that, and playing politics with education does not serve our students or their futures. Thank you!	N/+	
02-02	Brendan Bell Charleston Wv	Please do not adopt changes to the science curriculum that question the scientific consensus that climate change is real and man made. The scientific community is almost entirely in agreement on this issue.	N/+	
02-02	Kate Candillo Winfield WV	Please do NOT adopt changes to the Science Curriculum Standards and Objectives that support climate change denial (and ignore 97% of the leading scientific studies on climate change).	N/+	
02-02	Tammie Fields Dunbar WV	I ask that the State NOT adopt changes to the Science Curriculum Standards and Objectives. It would ignore 97% of the leading scientific studies on climate change. Thank you!Â Â	N/+	
02-02	Margaret Leef Parent Charleston 25314	<p>We must ensure our kids learn climate science and solutions in school.</p> <p>In the future, please do not approve standards for K-12 students that deny the scientific consensus on climate change.</p> <p>Students have a right to be taught accurate information about the causes and consequences of climate change, so they can help develop solutions to the biggest global challenge their generation will face.</p> <p>I hope you will refuse to consider any Science Standards that deny or censor the scientific consensus on human caused climate change.</p> <p>If we want our children to have a healthy future, we need climate solutions now.</p> <p>Our kids will suffer the greatest impacts from climate change, and they must have the science education they'll need to develop and innovate solutions.</p> <p>Please adopt Next Generation Science Standards (NGSS) --</p>	N/+	

		comprehensive, research-based, world-class science that includes climate education, without corrupting with political ideology. Please do not allow science and other educational standards to be determined by individual bias, rather than upon the research-based, peer-reviewed recommendations of credentialed educators.		
02-02	Paul Epstein Charleston WV	I am a retired teacher. I was shocked about the language changes suggested by the Board President and am glad you are reverting to the original language that respects scientific evidence. It is inappropriate for political considerations and opinions about issues to effect the content standards and objectives that teachers use as a guide to help students learn about science, and the idea that teachers would be told to introduce doubt about established scientific theories and evidence is wrong. Please adopt the science content standards as they were originally written and as they are now being considered, not the way Wade Linger wishes they were.	N/+	
02-02	Staci Leech-Cornell 21st CCLC Director/Manager for Explore & Soar The Clay Center Charleston WV	I hope you will refuse to consider any Science Standards that deny or censor the scientific consensus on human caused climate change. If we want our children to have a healthy future, we need climate solutions now.	N/+	
02-02	Nancy Michael St Albans West	As a parent and a pre-service teacher studying to be a professional educator in the state of West Virginia I am extremely concerned about several aspects of this change. My first concern is that it was not founded on research-based facts, but rather the opinion of a board member. My second concern is that it originated from a board member and was included without proper process. Finally, my concern is that our students need to be educated about climate change so they can work to find solutions to the problems, rather than deny that they exist.	N/+	
02-03	Leslie Bakker Associate Professor Emeritus	Our science education curriculum should be based on scientific evidence of the day. Our children should be taught evidence- based information with opinions and perspectives	N/+	

	retired nursing school faculty Charleston Wv	acknowledged as that. Only with science information that is as factual as possible can students have the information base to make informed decisions about future concerns ! Whatever that might be. Can you imagine health care if practitioners and researchers didn't use evidence-based science in their practice? The same standard must apply to education and curriculum development for our science education.		
02-03	Sean Harwell Graduate Assistant Fairmont State University Fairmont WV	Making the content standards more rigorous and challenging will be good for the students.	N/+	
02-03	Aaron Allen Teacher Wetzel County Schools New Martinsville WV	I have to say some of the standards are much better. The performance standards added cover science much better than constellations of facts as modeled in the old standard. Now for the negative. I should start this by saying That there has never been a set of content standards proposed by West Virginia that have realistically allowed for mastery level understanding from students across ability levels. There are too many standards and not enough time. With that being said, this set of standards is entirely unattainable for most educational settings in the state. Take high school bio for instance. All the main themes in Biology can be summed up in 4 areas: evolution, energy tranfer, genetics, and cell theory. Why do we have so many individual standards to cover? Pardon the cliche but we go a mile long but an inch deep, which is the exact opposite of the intended effect of the next Gen standards. The entire curriculum could be streamlined into about half of the current standards, I would give educators more time to gain depth on a subject, and students a better base in science rather than content. Content is great on Jeopardy but my community stake holders want people that can do science, understand how math relates, and how to problem solve. I can not give my students the time they need to wrestle with skill formation and grow when I'm covering 6 pages of various standards. The original reason I logged on to read the standards to begin with is because of the information	N/-	

		circulating that there is some political/industrial agenda in the environmental standards. I did see some. I will adress it in this manner - societies flourish when their education systems flourish. Every great society was built and destroyed by the rise and fall of the system under which citizens were conveyed the tenants of good lives. Good education systems flourish in open environments. They do not flourish under political agendas. I hope that the people who represent the educational system I love, in the state that I love will maintain the fiercely independent stance West Virginia ms have always maintained, and keep the education system open, honest, and in the hands of the people, not corporate America.		
02-03	Travis Miller Assistant Professor of Physics West Liberty University Wellsburg WV	The NGSS should be adopted as originally made by professionals around the country and have a large array of knowledge from scientific to pedagogical to even administrative. As such they contain statements that are factual and are needed for our country and state to move ahead in this day and age. Any adjustment would be a slap in the face of the individuals that developed the NGSS for the sole purpose of states adopting them as they are. Our professional teachers around the state are the ones that will make sure that the standards are treated appropriately which entails sticking to the facts that are scientifically based.	N/+	
02-03	Robert S. Baker Chair Beckley Human Rights Commission Beckley WV	I think it is very important that we keep the science standards as they are in the last version published by the Board. It would be a huge, embarrassing mistake to put the language favored by climate change deniers back into the standards. It would be like putting into history standards that President Obama was born in Kenya. The science language proposed by Mr. Linger, that was inserted by him last fall, is just that ignorant.	N/+	
02-04	Ellen Murphy Program Director Potomac Valley Audubon Society Shepherdstown WV	I am so very pleased that WV makes use of professional educators to write the CSO's. It is very important that states recognize that the learning standards are designed to provide a framework of accurate information rather than being based in any one person's/group's opinions. WV's students have a	N/-	

		lot of challenges because of factors that are out of their control--economics comes to mind--so our role as educators, parents, and community members is to prepare students to be competitive in the 21st century workforce. I strongly support the State Board of Education's approval of the science CSO's based on the Next Generation Science Standards.		
02-04	Stephen DiFazio Associate Professor West Virginia University Morgantown WV	I support acceptance of the Next Generation Science Standards as written by the National Research Council, and without edits by the state of West Virginia. The standards set a high standard of excellence for West Virginia students, and do not need to be modified to meet the state's goals of enhancing STEM education and spurring further economic growth.	N/+	
02-05	Mairin Odle Charlottesville VA	Dear Board of Education I'd like to comment in strong support of your decision to revert to the proposed Next Generation science standards. I want WV students to have up-to-date and rigorous STEM education, and that means science standards based on the overwhelming consensus of researchers that climate change is real and severe. This generation of students will face tremendous environmental challenges, and they need an education that will prepare them to develop solutions not to mention preparing them for creative, high-level employment in fields requiring critical thinking, data analysis, and an understanding of statistical methods. Please adopt educational standards based on the peer-reviewed research of scientists and the recommendations of professional educators. Thank you. Sincerely, Mairin Odle	N/+	
02-06	Mollie Coordinator Off-Campus/JASON Learning Glenville State College Glenville WV	I like that there are less content areas in each grade level to give teachers the opportunity to teach subjects in depth. I like that any topic that might be controversial asks students to use scientific principles of investigation, gathering of	N/+	

		evidence, analyzing evidence, and asking questions to allow them to make informed hypotheses.		
02-06	Wendy Lee Ms Spring Mills High Martinsburg WV	The Nex Gen Standards for Climate Change should be left as is in the standards. Climate Change is real and should be discussed in the classroom. The next generation needs to have knowledge of what is happening in the world and begin to hypothesize solutions to the problems.	N/+	
02-08	Anne Smith Middle School science teacher Pocahontas County Schools Green Bank WV	I agree with the Standards as they are currently written, provided they are the same standards that were developed over an extensive period of time using the advice, input and expertise of science educators, science practitioners and the best scientific knowledge available at the time. I do not agree with any standard that may be put in place for political or social reasons and/or is not based on accurate scientific knowledge. I would also like to comment that in general real science is not based on people's opinions or on the political state or social makeup of a state or nation, but on facts that have been rigorously tested and retested by multiple people trained in scientific investigation, and the conclusions that are drawn from these investigations can only be refuted by contradictory scientific information collected in a like manner. This is the basis for critical thinking in science, and is the cornerstone for great scientific education. Watering down a curriculum because of potential social or political ramifications does the exact opposite in providing for a thorough and efficient science education for West Virginia public school students. In conclusion, it does not matter what you call these standards, or how you change them to fit certain needs or thought patterns, the bottom line is these standards will allow public school teachers to deliver science instruction as it should be delivered: in-depth, interactive, pertinent to today's world and engaging to the students in West Virginia's public schools. For too long we have let this type of instruction be regulated to the realm of the willing; we as a state owe it to our children, and our students, to show them how science can really be taught.	N/+	

02-08	Lenora Richardson Milton West	It is my hope that students can learn to develop understanding of all aspects of the earth and forces which can affect it, both natural and human developed. Students need to be able to develop thinking skills which question based on evidence. The incorporation of the literacy standards is an excellent way to develop citizens who can think and argue based on data, on observations and not on political views that support special interest groups.	N/+	
02-09	Diana Boston Science Teacher WV Lead State Reveiw Team Vienna WV	The standards should be adopted as originally written in the next Generation Science Standards. They were thoroughly reviewed during the written process for accuracy. West Virginia was directly involved in this writing process through reviewing the standards as they were being written and revised. Adopt them in their original wording without the changes the WV Board of Education made previously.	N/+	
02-09	Davita Melander teacher Berkeley County Schools Falling Waters WV	This set of standards, as currently written, represents a curriculum in which students will be able to thoughtfully engage with the content of science. They reflect familiarity with both the content and the ability level of the students for whom they are written. This is an excellent, thoughtful set of standards, designed by a consensus that included teachers, administrators, and (perhaps best of all) scientists, that should not be changed to suit the whims on non-experts. Adopt these standards and let West Virginia students rise to the occasion!	N/+	
02-10	Toni DeVore Chair School of Graduate Education Ohio Valley University Vienna WV	Having worked on WV state science standards from IGOs to CATS, I find these standards to be important major science concepts for K-12 students and I urge we accept the original document. As for concerns about global climate change...obviously climates have changed over geologic time and will continue to do so. Having a science literate society is essential and these standards will help create that science literacy.	N/+	
02-11	Mark Lemasters Science Teacher Magnolia High School New Martinsville WV	The objectives for Chemistry and Physics are ambiguous to say the least. They make a LOT of assumptions that students will remember the basic material from grade 8 to grade 11. There seems to be no order for the selection of the older,	NA/-	In the <i>Effective Science Instruction: What Does Research Tell Us?</i> report, the Center on Instruction

		<p>more traditional content standards and seems to assume that teachers will be able to make smooth transitions.</p> <p>Grade 9 Earth Science focuses solely on the evolution of the planet as a consequence of several accepted theories. While the information may be enjoyable, it is interesting to note that it lacks specific information to be taught and assumes that students can rely on past experiences.</p> <p>Whatever happened to spiraling skills on a yearly basis?</p> <p>Of note, I found that Chemistry objectives included the building of electrolytic cells, yet nowhere prior the course is oxidation-reduction built upon. And teaching magnetism requires a knowledge of forces that most high school students lack.</p> <p>I guess that is why we have a lightened physical science curriculum as well.</p>		<p>“advocates for in-depth learning of a smaller number of important ideas and ... [designating] a smaller enough set of learning goals so that in-depth learning is possible” (2010).</p>
02-12	<p>Amelia Wolfe Teacher (CATS 8) Wood County Board of Education Parkersburg WV</p>	<p>Initially I wanted to respond during this comment period to support the corrected wording of the environmental related standards. I believe it is neglectful to the students of WV and an insult to their science educators to remove the “science” from the NGSS environmental related standards. Science has proven that the burning of fossil fuels is detrimental to our atmosphere which of course has a string of harmful consequences. With the implementation of CC and NGSS we can have an opportunity to develop students into critical thinkers and engineers that could be developing solutions to our environmental problems.</p> <p>After spending time looking at 126CSR44CC I am truly concerned about the implementation date of July 2016. Yes, the NGSS need to be adopted, but the WV-NGSS is not enough for the science educators of WV. I have been fortunate enough to work with a group of 20 teachers from across the US for the past 3-4 years on the NGSS. We have spent hours breaking down each standard and looking at the expectations for the age level as well as the assessment boundaries. We worked at all levels of education (K-12) to</p>	<p>N/+</p> <p>N/o</p>	

		<p>make the standards flow. The WV-NGSS is a skeleton of the actual NGSS. Teachers MUST have professional development on these standards. Without any knowledge of The Framework (A Framework for K-12 Science Education) I am afraid teachers are not going to implement the standards correctly. Teachers need to be trained on the NGSS website. They need to see the standard in context with the disciplinary core ideas, science and engineering practices, cross-cutting curriculum, and most importantly, to me, the assessment boundaries. It looks as though WV â€˜cut and pasteâ€™ only the basic standards from the NGSS. Teachers need to see the big picture, the complete concept, so they can correctly teach the standard. I am excited that WV is moving forward with the NGSS however, the complexity of the NGSS needs to be taken into consideration. Please do not just hand science educators across the state the WV-NGSS, please take the time to explain to educators the entirety of the NGSS. Without properly preparing the educators, you are not going to produce scientifically literate students in WV.</p>		
02-12	<p>Amelia Wolfe Teacher (CATS 8) Wood County Board of Education Parkersburg WV</p>	<p>Initially I wanted to respond during this comment period to support the corrected wording of the environmental related standards. I believe it is neglectful to the students of WV and an insult to their science educators to remove the â€˜scienceâ€™ from the NGSS environmental related standards. Science has proven that the burning of fossil fuels is detrimental to our atmosphere which of course has a string of harmful consequences. With the implementation of CC and NGSS we can have an opportunity to develop students into critical thinkers and engineers that could be developing solutions to our environmental problems.</p> <p>After spending time looking at 126CSR44CC I am truly concerned about the implementation date of July 2016. Yes, the NGSS need to be adopted, but the WV-NGSS is not enough for the science educators of WV. I have been fortunate enough to work with a group of 20 teachers from</p>	<p>N/+</p> <p>N/o</p>	

		<p>across the US for the past 3-4 years on the NGSS. We have spent hours breaking down each standard and looking at the expectations for the age level as well as the assessment boundaries. We worked at all levels of education (K-12) to make the standards flow. The WV-NGSS is a skeleton of the actual NGSS. Teachers MUST have professional development on these standards. Without any knowledge of The Framework (A Framework for K-12 Science Education) I am afraid teachers are not going to implement the standards correctly. Teachers need to be trained on the NGSS website. They need to see the standard in context with the disciplinary core ideas, science and engineering practices, cross-cutting curriculum, and most importantly, to me, the assessment boundaries. It looks as though WV "cut and paste" only the basic standards from the NGSS. Teachers need to see the big picture, the complete concept, so they can correctly teach the standard. I am excited that WV is moving forward with the NGSS however, the complexity of the NGSS needs to be taken into consideration. Please do not just hand science educators across the state the WV-NGSS, please take the time to explain to educators the entirety of the NGSS. Without properly preparing the educators, you are not going to produce scientifically literate students in WV.</p>		
02-13	<p>Terri Morris Teacher Nettie WV</p>	<p>These Standards are horribly written with no cohesiveness between grade levels.</p>	N/-	
02-15	<p>Laura Kesner RN Capon Bridge WV</p>	<p>I am not sure how in depth the content standards have to be when it comes to specifically what the children will be learning, but these standards appear to contain mostly General Science content and large amounts of persuasive or argumentative writing. In order to prepare for a profession in a medical or science field, students must be able to take different levels of biology, chemistry, anatomy, and physics. I see that these are offered but from the description, the content looks limited and very poor. When I was in school, Biology I and II, Inorganic and Organic Chemistry, Anatomy and</p>	N/-	

		Physiology, and Physics were offered as separate full semester classes.		
02-16	Andrew Schedl Assistant Professor West Virginia State University Institute WV	The state of West Virginia Board of Education must adopt the original standards on climate change. Not doing so will undermine student's understanding of what constitutes valid science.	N/+	
02-16	Bruce Edinger, Ph.D. retired biology professor Wheeling WV	<p>I am a parent with children currently in the Ohio County public schools. I am a retired biology professor, having taught at colleges in Indiana and West Virginia.</p> <p>It is wise to prevent meddling in the wording of well-researched CSOs involving the teaching of climate change. The agendas of one or a few activist contributors to the WV Board of Education should not bully the best current scientific consensus. To do so is attract the justified attention and derision of the rest of the country.</p> <p>The integrity of any program of education depends upon the integrity of its administration. With regard to CSO Policy 2520.3C, it is important to always instruct based on best current scientific evidence. Thus, it is egregious to allow non-specialists serving the WV Board of Education to insert language that amounts to personal, unsubstantiated opinion that suggests a conflict of interest.</p> <p>Historically, some state boards of education have made huge errors allowing religion into the science classroom, masquerading as science. This was true of the Intelligent Design and Early Earth/Old Earth so-called "debates" that were forced into the biology classroom.</p> <p>Good bye to a democracy when politics and corporate "acceptability" determine what we teach in our public schools. The nutritional supplement industry is a big business, why not let them have more access to the instruction of West Virginia's pharmacy school students? Some alternative</p>	N/+	

		<p>remedies also bring in huge profits and employ many, why not make sure their opinion is taught at West Virginia's schools of medicine? Why let the lack of science get in the way?</p> <p>It is no accident, and fully documented, that the evidence for serious harm that cigarettes do to smokers and non-smokers alike was actively ridiculed and suppressed for decades by interests that profited from selling their very harmful products. This is a not proud chapter of how our society cripples the ability of science to serve humanity. Lets not repeat such a bullying of science in West Virginia. Lets do a good job of teaching science with accepted facts, even if these facts are uncomfortable for some.</p>		
02-16	Robert E. Strong Director SMART-Center Wheeling WV	<p>Please adopt the OFFICIAL / UNALTERED / ORIGINAL version of the Next Generation Science Standards for the students, teachers, and future of West Virginia.</p> <p>Please leave the Next Generation Science Standards in their official exact wording, NOT the unofficial, unsanctioned, changed in secrecy, version that some of the members of the West Virginia Board of Education had decided they would alter to their personal whims without asking anyone.</p> <p>There are many national and world-wide news agencies watching how West Virginia acts during our adoption of the Next Generation Science Standards. Please do not give these news agencies additional live ammunition so we can be yet again the punch line in a series of jokes on education, corruption, graft, and general moral ineptitude.</p>	N/+	
02-16	Todd Ensign Program Manager NASA IV&V Educator Resource Center Fairmont WV	I support the current version of the NGSS CSO's because they cover the essential scientific concepts for our students.	N/+	
02-16	Mary Sullivan Executive Director	Please keep the Science Standards in their current form as written by professionals in science and science education, untainted by politics.	N/+	

	Learning Options, Inc. Fairmont WV			
02-16	Christina 7th grade science teacher Maloney Morgantown WV	<p>Content Standards 6-8 : A little disappointed to lose a few of my standards- especially Life Cycle of Stars- but happy that the standards have been streamlined allowing more time to cover concepts in depth.</p> <p>My remaining comments will be directed toward the standards that drew the attention of the media.</p> <p>S.6.ESS.6 - The next gen version is misleading and factually incorrect. The adopted WV version was more accurate. Temperatures have risen and fallen over the past century and in fact in the 1970's scientists were concerned that we might be entering the next ice age. That information should be shared and discussed with students.</p> <p>S.9.ESS.14 - As science teachers, we are not supposed to be teaching students what to think, we are supposed to be teaching them how to think critically and analyze information. They should be assessing everything they hear and read for credibility. To remove "assess credibility" from any standard belies any understanding of the scientific method which involves observation, analysis, development of hypothesis and testing. In short skepticism and evaluation are critical to science.</p> <p>S.HS.ENV.17 - Again, the WV version is more accurate. Students studying anything related to climate should be aware of and consider the long term impact of Milankovitch cycles. When discussing climate and climate change all factors - long and short term should be discussed and analyzed.</p>	NA/-	See Rationale 2.
02-16	Marcie Raol Shinnston Wv	Please respect the work of all those involved with the writing of Ngss and do not change to accommodate coal interests.	N/+	
02-16	Mrs. Bennett Science Teacher Richwood Middle School Richwood WV	I too think curriculum should spiral and impact what students learn as they continue their educational journey. My concern with the NXGEN's is losing the content identity to enhance reading, writing, and math skills. In an attempt to process the mindset of the	N/o	

		<p>NXGEN's..... I am asking if perhaps we should view the science curriculum as PBL-modules that are science specific, spiraling, incorporating reading, writing, math, technology, application, and presentation. The NEXGEN "science" seems to be disconnected while sharing reading, writing, and math skills. Thank you to all who have worked with the NEXGEN Vision. As we all share in the responsibility to educate and prepare our students for the world we too have many decisions.</p>		
02-16	<p>Steven Roof Chair, Department of Biology, Chemistry and Geosci Fairmont State University Fairmont WV</p>	<p>I support the Next Generation Standards and Objectives for Science as written. Specifically with regard to climate change we MUST educate our children about the reality of global climate change and the effects on the biosphere. The evidence of global climate change is broad and convincing and should be presented to our children as such. I realize that some individuals find the idea of global climate change inconvenient or a threat to a particular way of life, but this does not change the fact that the vast body of scientific evidence supports the idea that our climate is changing and that human activity is one of the driving factors. Climate change is having, and will have, a profound impact on human existence.</p> <p>Two quick and recent examples: Writing in the February 2014 issue of Microbe “ The News Magazine of the American Society for Microbiology, Shannon Weiman outlines the ways that climate change broadly increases the risk of infectious disease. Dr. Weiman writes “ climate change is tipping the balance between host and pathogen, a shift in favor of pathogens that will lead to more frequent and severe outbreaks of bacterial, viral, and fungal diseases across diverse ecosystems.” This increase is not limited to humans directly “ we will probably see a greater impact on agriculture through reduced crop yields, and an increase in plant pathogens.</p> <p>My brother lives in California and tells me that is practically impossible to obtain a mortgage to buy a coastal home. The</p>	N/+	

		<p>reason “ mortgages require homeowners insurance and the insurance companies have stopped writing policies on coastal homes “ the threat of home destruction from rising sea levels due to global climate change is too big a risk for them to take. If the American insurance industry is worried about climate change, shouldn’t we all be?</p> <p>To solve these problems we need more minds working on the problem, not less. We can’t afford to bury our heads in the sand on this one; we will need everyone’s intellectual contributions as we struggle with the climate change issue. West Virginia students deserve a seat at the problem solving table and that requires they have a robust science education. The Next Gen Standards are a step in that direction.</p>		
02-16	Nancy Kincaid Teacher Monongalia County Schools Morgantown WV	As a WV public school teacher, I stand with the state science teachers as they voice their dissatisfaction with changes that were made to the Next Gen Science Standards. I support the Common Core Standards/ Next Gen standards as they were originally written and agreed upon by state education professionals before one board member recommended changing the wording.	N/+	
02-16	Kevin Poe Aerospace Engineer Morgantown WV	The standards as given in Sections S.6.ESS.6, S.9.ESS.14, and S.HS.ENV.17 require revision because they do not represent good science.	NA/-	See Rationale 2.
02-17	David Sturm Substitute teacher Marion County BOE Fairmont WV	I agree with the standards most recently submitted.	N/+	
02-17	M. Domenick Martinsburg WV	I do like 9th grade as Earth Science and 11/12 as Physical science (if not in Chemistry or Physics). Do not modify this from current posted version.	N/+	
02-17	Elizabeth Strong (for the WVSTA Executive Board) President (for the Executive Board) West Virginia Science	The West Virginia Science Teachers Association (WSTA) endorses Policy 2520.3C Next Generation Content Standards and Objectives for Science in West Virginia Schools . The organization endorses this policy due to the widespread involvement of West Virginia K-16 science educators and stakeholders in the development and review of the Next	N/+	

	Teachers Association Wheeling WV	<p>Generation Science Standards. We believe these standards will support high quality science education in West Virginia and improve opportunities for our students.</p> <p>It is essential that fidelity to the language in the NGSS remain. Modification of the standards negates our national recognition as an NGSS state. Uninformed and random modifications to the standards cast doubt on the credibility of the standards and do not serve our students well and will lead to misconceptions.</p> <p>WVSTA Executive Board</p>		
02-17	Elizabeth Strong Program Coordinator and Project Director SMART-Center and WV Handle On Science Wheeling WV	<p>Policy 2520.3C Next Generation Content Standards and Objectives for Science in West Virginia Schools holds the potential to move West Virginia forward and to place the students of our state on an even playing field with much of the nation. Any changes to these standards cannot be made by those who have no science or education background, leading to student misconceptions. It is important that WV students learn all the information that will help them to be informed citizens in our state. Eliminating information or changing it to serve any particular purpose is not acceptable.</p> <p>Speaking as a professional developer with a Master's degree in Secondary Education with a science emphasis, multiple years of classroom experience (7-16), and as an informal science education provider, the standards are our best chance to bring WV into the competitive realm in Science, Technology, Engineering, and Mathematics.</p>	N/+	
02-17	Robert E. Strong Director - President Near Earth Object Foundation Wheeling WV	<p>This time around please leave the Next Generation Science Standards in their official exact wording as stated by the originators of this document. Please adopt the OFFICIAL / UNALTERED / ORIGINAL version of the Next Generation Science Standards for the students, teachers, and future of West Virginia.</p> <p>Thank you.</p>	N/+	

02-17	Adam Osborne Teacher Hurricane High School Hurricane West	<p>I am writing to strongly recommend that our state adopt the Next Generation Content Standards and Objectives for Science as they were originally written. These standards were developed by a consortium of 26 states, the National Science Teachers Association, the American Association for the Advancement of Science, the National Research Council, and Achieve, a nonprofit organization that was also involved in developing math and English standards. West Virginia was one of the 26 states involved in the development of these standards. We, as a state, had our input into how they were written. The standards are researched based both in the science that they cover and in the how they are scaffolded from kindergarten to twelfth grade. To alter these standards in any way would weaken them and potential harm our students' science literacy, especially if the alterations are not research based " both in the science content and in the way they are to be taught. What credentials do I have to strongly recommend that our state adopt these standards as they were originally written? I am a chemist with a Bachelor of Science in Chemistry from Marshall University. I am a member of the West Virginia Science Teachers Association. I am a veteran teacher who has taught for eight years in our state. I have presented at the International Society for Technology in Education (ISTE) Conference twice. I am a citizen of our state.</p> <p>To highlight the importance of these standards, let me paraphrase a section from the Next Generation Science Standards website: Science "and therefore science education" is central to the lives of all West Virginians, preparing them to be informed citizens in a democracy and knowledgeable consumers. If our state is to compete and lead in the global economy and if West Virginian students are to be able to pursue expanding employment opportunities in science-related fields, all students must have a solid K-12 science education that prepares them for college and careers. As a scientist and a teacher, I fully believe that these</p>	N/+	
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		standards will prepare our students “our citizens” for a future where science literacy is crucial for our state’s success. That is why I strongly recommend that our state adopt the Next Generation Content Standards and Objective for Science as they were originally written.		
02-17	Jeffrey Gustafson Shenandoah Junction WV	Students have a right to be taught accurate scientific information about the causes and consequences of climate change, so they can help develop solutions to the biggest global challenge their generation will face.	N/+	
02-17	Linda Lilly Teacher Park Middle School Beckley WV	I appreciate the reduced number of different types of sciences to be addressed on the middle school level. However, I believe the lack of detail in the standards as compared to the NGSS may be problematic. A veteran teacher will recognize the amount of background that will go into the student's full understanding of the concept, but a newer teacher may not have this advantage. As for the literacy standards, my initial impression was that science content is not as important as language arts. Upon reviewing them I noticed that I adhere to many of these anyway and would venture to say that most teachers do as well.	N/o	
02-17	Ellen Mosley-Thompson Director, Byrd Polar & Climate Research Center Columbus OH	February 16, 2015 To: Michael J. Martirano, Ed.D. Cc: Members of the West Virginia Board of Education Dear Dr. Martirano and Fellow West Virginians: We are writing this brief letter to address the proposed modification of the Next Generation Science Standards (NGSS). As you know the science content is based on the document entitled “A Framework for K-12 Science Education” (http://www.nap.edu/catalog/13165/a-framework-for-k-12-science-education-practices-crosscutting-concepts) from the National Research Council. Moreover, the scope, sequence, and wording were thoroughly reviewed by relevant teachers in addition to education and	N/+	

		<p>science-content experts during the writing of the NGSS. Altering the wording runs the risk of undermining the credibility of the document and circumventing the already extensive review process.</p> <p>Lonnie Thompson and I are fellow West Virginians. Lonnie graduated from Gassaway High School (Braxton County) and I graduated from Nitro High School (Kanawha County). We are 1970 graduates of Marshall University and are now both Distinguished University Professors at the Ohio State University and we have both been elected to the National Academy of Sciences. Our areas of specialty are climatology, Earth Science and glaciology. We are climate scientists who have spent our academic careers studying Earth's climate system and the history of Earth's climate as preserved in the ice cores we have collected from ice sheets and glaciers around the world. Last year on March 10 we had the privilege of addressing over 600 West Virginia citizens at the Clay Center in Charleston where we gave a joint lecture entitled "Climate Change: The Evidence, People and Our Options." This presentation is available at https://www.youtube.com/watch?v=Yv0D4eJtDDE. Lonnie and I were also featured in West Virginia Public Broadcasting's Inspiring West Virginians series segment entitled "Ice Hunters." You can view this at http://www.streamica.com/#!eNmYLvvE7iQ. (It takes a few minutes to load so please be patient).</p> <p>As climate scientists we are concerned that the science of climate change that is presented be consistent with the body of knowledge presented in the peer-reviewed literature and the assessment of that knowledge by the major scientific organizations. Data collected globally confirm that the Earth system is warming and that the concentrations of greenhouse gases such as carbon dioxide and methane have been rising since the advent of the Industrial Revolution. The ice core</p>		
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		<p>research has been essential in reconstruction the long history of the concentration of these gases. The role these gases play in warming the planet is well understood and the science rests on over 250 years of research extending back to the work of Fourier in the late 18th century. It is critical that the minds of West Virginia’s most precious resource, its bright young people, be presented with information that has been vetted through the peer-review process and that they understand the importance of critically reviewing the data that underpin the science they are studying, whether it be climate science, earth science, biology or chemistry. With regard to climate science and global climate change, the public policy actions that could or should be taken are open for discussion or debate; however, the science of global climate change was decided long ago. Earth is warming and most of the warming in the last 50 to 60 years is the result of human emissions of greenhouse gases. We have attached a page that contains many sources of information relative to global climate change and upon which the conclusions stated above are based. We hope that you will find these helpful in resolving any questions you have about climate science. The sources on this sheet include the major national and international climate assessments as well as other peer-reviewed information. Lonnie and I would be happy to talk with you directly regarding global climate change if that would be helpful in your decision making process. Our contact information is provided below.</p> <p>You are in a powerful position with the opportunity to influence young minds and prepare West Virginia’s next generation of citizens to contribute their time and talents for the benefit of society. We urge you to retain the original, peer-reviewed, language of the Next Generation Science Standards (NGSS).</p> <p>Best regards,</p>		
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		<p>Ellen Mosley-Thompson Byrd Polar and Climate Research Center, Director Department of Geography, Distinguished University Professor thompson.4@osu.edu</p> <p>Lonnie G. Thompson Byrd Polar and Climate Research Center, Senior Research Scientist School of Earth Science, Distinguished University Professor thompson.3@osu.edu</p>		
02-17	chris white student WVU morgantown wv	Teach climate change. The vast majority of experts agree on it.	N/+	
§126-44CC-5 Severability				
01-16	Lester Allen Barclay WG 9 5803 Tech Mob Equip Ground Ret Dept. ARMY Tampa fl	<p>Lies Told by the media With no credible Evidence Does Not set a Credible Education Goal !!</p> <p>Senator Rubio Bay news 9, politifacts and the entire liberal media accused you of lying saying that climatologist have a mountain of evidence against you, Craig Rucker's CFACT, and I. I WILL STACK GODS CREATION THE ORANGE TREE UP AGAINST THEIR MOUNTAIN OF EVIDENCE ANY DAY. CFACT has all the real Geological scientist that coincidentally work for fuel companies BECAUSE THESE COMPANIES DEMAND RESULTS FROM THEIR SCIENCES FINDING FUEL. These so called climatologist are professional college students that have never had to produce results for an employer. THEY ARE STUCK ON STUPID STILL IN KINDERGARTEN READING CHICKEN LITTLE THE KINDERGARTEN PRE PRIMER,"The Sky is Falling". Now one elected them they fill our public colleges and they are filling our students full of lies. At some time in the future when its convenient give us at CFACT legislation to defund all these liars grants. And remember these people libeled you and I and we have the</p>	NA/-	See Rationale 2.

		irrefutable truth because God's creation the tree is incapable of lying like that old lizard satan that climbed up in that tree. That lizard satan had offspring and has succeeded in climbing up in all our public colleges to lie to our students of the Commonwealth of the United States.		
01-16	Lester Allen Barclay DA Civilian / SGT ARMY Ret Dept Defence WG 9 5803 Tampa Flori	Even in University they would do well to get away from Public Education. At USF I found a Senior in a Bachelors of science Chemistry course, that didn't know Atomic Weight, Specific Gravity, the first five on the Periodical table of Elements, And had absolutely no idea what PH Balance is. I wouldn't be a bit surprised if he was the Chemist on the oil Derrick in the Gulf of Mexico responsible for Core samples to make damn sure saltwater wasn't pumped down over Sulfur Hydrate the Cryogenic that Blew up that Oil well. And that's probably what broke Billy Bob's baseball bus in the Gulf of Mexico !! BP hired an Idiot now he's dead !!! We all need to take responsibility for our Children and get them away from this Buffoonery Public Education !!! None of this Crap was Benjamin Franklin's intention. Dems have Turned it into a Communist Indoctrination Curriculum of Commun Core STUPIDITY that Vladimir Putin, of Russia will not allow in Russia. Now that has to tell you something !!!! And it is this behavior in education that endangers the lives of every American What If this lackless wonder of College Political correctness and Global Warming Nonscience was in charge of a Nuclear Facility ???	N/-	
01-16	Dennis McAllister BS Physics BS Math, MS Comp Sci Retired Olympia WA	The simple method by which CO2 is proposed to warm the earth should be explained. The steps of the scientific method should be explained. The consequences of the failure of even one experiment testing a scientific theory should be explained. The existence of the global temperature databases should be identified. And the quality of surface temperature versus satellite based data should be explained. And the effect of the Urban Heat Islands on the surface temperature database should be explained.	N/o	

01-17	Dennis J. McAllister Retired Olympia WA	N/A	N/o	
01-21	Julian Martin Self Charleston WV	I don't understand what is asked for here. Please clarify.	N/o	
01-23	John Doe	no	N/o	
01-26	Hans Schreuder Mr Principia Scientific International Ipswich, England	see section 1	N/o	
01-27	deborah shaffer-palmer teacher 1993 Moundsville West	Labs are expensive and need to be funded by the schools!! Presently we have 100 dollars from faculty senate to spend on supplies. After I buy pencils there is not much left for science labs. The school says there is not money and the county agrees. You can only do so much with baking soda and vinegar! If we are teaching literacy we need books that are appropriate and cover the topics in order to have basics to then go and experiment and expand on. Vocabulary is important and we need good sources for students to gain a working knowledge of it. Technology is not the answer!! It does not work often when the servers go down and one set for each department does not promote usage either. No matter how much we stand over the students they destroy the hardware. Half of our computers are missing keys. We do not have printing capabilities either. We need resources available for teachers to prepare from and students to use for resources and as a jumping place for these very large content standards. The standards are full of a lot of content but written in lump sums that are not clearly outlined. I have 2 children who graduated number 1 + 2 in their classes and the 1 top one percent of their college classes and know what students are capable of and what they need to know to be successful. What we have now is not it! My daughter is now in optometry school and she is always saying if she had had such and such	N/o	

		taught in school it would have been more helpful. Why do we let our students down? My son agrees but he would have liked more math. Both of my students feel experimentation does not work alone because the concepts are missed by this age group when doing an experiment so I am very please that we are pusing more reading and writing to help promote concept development and understanding. You did not make changes that were relavent if any (I could not find any when I compared these to the last time we commented). PLEASE TRY again. I am in the field and know that a lot of the content is not for this developmental level.		
01-27	deborah shaffer-palmer teacher 1993 Moundsville West	I suggest the committe members visit school and observe the students abilities. It would be even more informative for someone who has not taught for a while and are making the NXGS for the state actually try to teach a standard as they are written.	N/-	
01-27	deborah shaffer-palmer teacher 1993 Moundsville West	I suggest the committe members visit school and observe the students abilities. It would be even more informative for someone who has not taught for a while and are making the NXGS for the state actually try to teach a standard as they are written.	N/-	
02-02	Staci Leech-Cornell 21st CCLC Director/Manager for Explore & Soar The Clay Center Charleston WV	Our kids will suffer the greatest impacts from climate change, and they must have the science education they'll need to develop and innovate solutions. Please adopt Next Generation Science Standards (NGSS) -- comprehensive, research-based, world-class science that includes climate education, without corrupting with political ideology. Please do not allow science and other educational standards to be determined by individual bias, rather than upon the research-based, peer-reviewed recommendations of credentialed educators.	N/+	
02-03	Sean Harwell Graduate Assistant Fairmont State University Fairmont WV	Yay!	N/+	

02-08	Anne Smith Middle School science teacher Pocahontas County Schools Green Bank WV	No Comment	N/o	
02-08	Jeffrey Wimsatt Professor & Director WVU, HSC Morgantown West	Thank you!	N/o	
02-13	Terri Morris Teacher Nettie WV	These standards are not capable of being separated from other things to which it is joined and maintaining a complete and independent existence.	N/o	
02-16	Christina 7th grade science teacher Maloney Morgantown WV	No Comment	N/o	
02-17	David Sturm Substitute teacher Marion County BOE Fairmont WV	I agree with the standards most recently submitted.	N/+	

126CSR44CC

POLICY 2520.3C: Next Generation Content Standards and Objectives for Science in West Virginia Schools

COMMENT PERIOD ENDS: February 17, 2015

COMMENT RESPONSE FORM

NOTICE: Comments, as submitted, shall be filed with the West Virginia Secretary of State's Office and open for public inspection and copying for a period of not less than five years.

The following form is provided to assist those who choose to comment on Policy 2520.3C: Next Generation Content Standards and Objectives for Science in West Virginia Schools. Additional sheets may be attached, if necessary.

Name: Scott E. Soderholm Organization: Clay-Battelle High School
Title: Science Teacher (Biology/Physical Science)
City: Blacksville State: WV

Please check the box below that best describes your role.

- | | | |
|---|--|--|
| <input type="checkbox"/> School System Superintendent | <input type="checkbox"/> School System Staff | <input type="checkbox"/> Parent/Family |
| <input type="checkbox"/> Principal | <input checked="" type="checkbox"/> Teacher | <input type="checkbox"/> Business/Industry |
| <input type="checkbox"/> Professional Support Staff | <input type="checkbox"/> Service Personnel | <input type="checkbox"/> Community Member |

COMMENTS/SUGGESTIONS

§126-44CC-1. General.

Please see detailed comments below on this proposed rule's cost and implementation timeline.

§126-44CC-2. Purpose.

126CSR44CC

§126-44CC-3. Incorporation by Reference
§126-44CC-4. Summary of Content Standards and Objectives
Please see detailed comments below on grade level, content, and assessment plans set forth in this proposed rule.
§126-44CC-5. Severability

Please direct all comments to:

Robin Sizemore, Science Coordinator
Office of Secondary Learning
West Virginia Department of Education
Capitol Building 6, Room 603
1900 Kanawha Boulevard, East
Charleston, West Virginia 25305-0330
E-Mail Address: robin.sizemore@k12.wv.us
Fax No.: (304) 558-5325

1. General: (Excerpts from proposed rule followed by comments.)

No costs or revenue will be impacted by the proposed amendment of W. Va. 126CSR44CC, Policy 2520.3C, Next Generation Content Standards and Objectives for Science in West Virginia Schools.

1.1.1. This statement seems to shift the entire cost of equipment and books to meet the standards onto schools. The state should have funds available to help with implementation. In addition, the training and test writing mentioned later will require expenditure by the state and counties.

effective July 1, 2016 so the instructional materials adoption process may begin, but delay implementation so professional development may occur, instructional materials may be adopted,

1.2. and the state assessments may be prepared.

1.2.1. This is a very slow implementation, considering the NGSS for Science have been published for a long time now. In order to support CCSS, these standards need to be adopted and implemented a year ago. Furthermore, I am concerned this will continue to delay adoption of textbooks. Current science textbooks are already 10 years old, which is not serving our students well in terms of either physical condition or, more importantly, science content. The science content standards describe teaching “current” research and understandings. 10 year old textbooks cannot provide that, and puts the entire burden of importing current knowledge on the teacher. While I do this already, it is reasonable to expect the textbook to support the learning of *current* knowledge.

4. Summary of Content Standards and Objectives:

4.1. Physical Science content:

fundamental questions- “What is everything made of?” and “Why do things happen?” Students apply these core ideas to explain and predict a wide variety of phenomena, such as the evaporation of water, the transmission of sound, the digital storage and transmission of information, the tarnishing of metals, and photosynthesis, to name just a few. Because such explanations and predictions rely on a basic understanding of matter and energy, students’ abilities to conceive the interactions of matter and energy are central to their science education.

4.1.1. It seems unwise these “core ideas” and “basic understandings” until the third year of high school. The current system of teaching Physical Science to freshmen is a much better practice. There is no material here that is mathematically or conceptually inappropriate for 9th graders.

4.2. ESS Grade 9

The ninth grade Earth and Space Science (ESS) course builds upon science concepts from middle school by revealing the complexity of Earth’s interacting systems, evaluating and using current data to explain Earth’s place in the universe and enabling students to relate Earth Science to many aspect of human society. Disciplinary core ideas, science and engineering practices, and crosscutting concepts are intertwined as students focus on five ESS content topics: Space Systems, History of Earth, Earth’s Systems, Weather and Climate, and Human Sustainability. The objectives strongly

4.2.1. These concepts are not as foundational as the Physical Science content to understanding all other sciences in high school. It would be more valuable to keep Earth and Space Science as a 3rd science course, not a 9th grade course as proposed.

4.3. Biology grade 10

4.3.1. The groupings of concepts and lessening of breadth represented in this proposed rule will be helpful in teaching with greater depth, following the pattern of CCSS, the College Board, and others. Leaving time for inquiry and student-guided exploration is critical to developing the more general science skills that students need. These skills include visualizations (e.g. graphing), reading, and writing about science.

4.3.2. I do not understand, however, the push to develop a new WESTest for this or other science courses. The adoption of CCSS and associated testing was supposed to test the critical literary and mathematical aspects of science. This plan feels like trying to keep one foot in each of two boats, and is a concerning aspect of this proposal.

4.4. Chemistry (3rd STEM science)

Chemistry is an advanced elective course designed for students pursuing Science Technology Engineering Mathematics (STEM) education and careers. Students will develop a deeper understanding of the core concepts of: Structure and Properties of Matter and Chemical Reactions as they

4.4.1.Designating this as a course for students planning on “STEM” careers misses the fact that ALL colleges generally expect Chemistry. Rewording the recommendation as being for “students pursuing Science Technology Engineering Mathematics (STEM) education and careers, as well as for any students who plan to attend a 4-year college or university” would clarify this.

4.4.2.There is a LOT of content still in Chemistry. Is there content that can be removed to allow greater depth, or is this all necessary for college?

4.5. Environmental Science (elective)

4.5.1.There is a lot of content in this course (the most objectives of any course, with most requiring at least a week to cover well leaving alone enrichment activities or time for student exploration), with greater emphasis on verbs like “explain,” “relate,” etc. rather than the more open-ended objectives in other content areas. This does not seem like it is in line with the NGSS philosophy at all. This course could be rich with opportunities for student exploration and inquiry, but this outline looks like it is trying to preclude that.

4.6. Forensic Science (elective)

4.6.1.The specificity shown in this outline will help teachers to run the course, while there are not so many objectives to hinder completion or exploration. This seems to strike the balance well.

4.7. Human Anatomy & Physiology (elective)

4.7.1.The verbs and content have *not* been re-worked to reflect CCSS and NGSS ideas. However, that may be needed for this course to prepare students for medical study by requiring more memorization and testing than other courses. The challenge will be to integrate Common Core literacy into this, though that is a worthwhile challenge to undertake.

Thank you for seeking and considering these comments. Please contact me if you would like any further feedback or clarification.

Sincerely,

Scott E. Soderholm

ssoderholm@k12.wv.us

Science Teacher

Clay-Battelle High School

Blacksville, WV

Howard C. Hayden
785 S. McCoy Drive
Pueblo West, CO 81007

January 28, 2015

Robin Sizemore, Science Coordinator
Office of Secondary Learning
West Virginia Department of Education
Capitol Building 6, Room 603
1900 Kanawha Boulevard,
East Charleston, West Virginia 25305-0330

Dear Ms. Sizemore and members of the Board:

As an Emeritus Professor of Physics (UConn), I am utterly appalled at the BOE's decision that the classroom should brook no skepticism of the Climate Change (nee Global Warming) script.

Let us look immediately into a pervasive lie, namely that “the science is settled.” Exhibit A is shown in Figure 1, which shows IPCC’s efforts to figure out the periodicities of past weather. (It’s their graph, not mine. You can look IPCC reports up at <http://ipcc.ch/>, and I seriously recommend that you do so.) Notice that the scales are logarithmic, with each major mark representing a factor of 10 over the previous one. The range from lowest estimate is up to a factor of 3,000. Most of the variation covers a range of about a factor of 100.

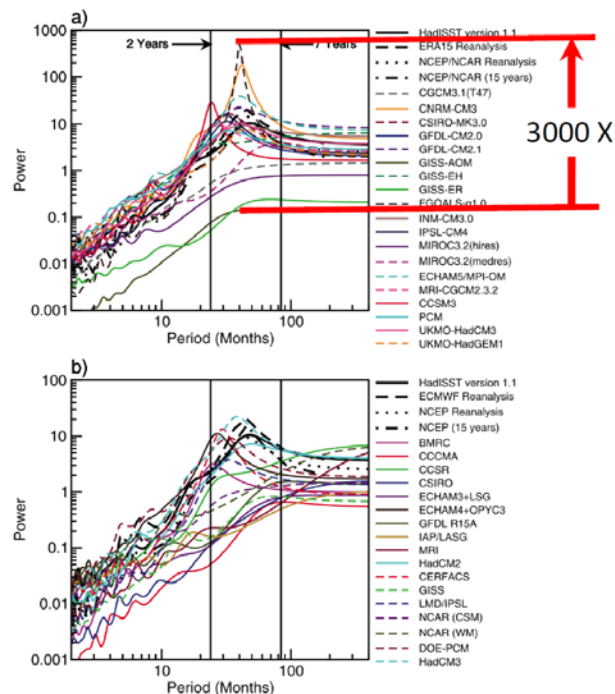


Figure 1: Spectral power of periods from various models (Figure 8.1 from the IPCC’s *Fourth Assessment Report*). Note the disagreement of a factor of 3,000.

Scientists and engineers use models all the time. Their models include the complete package of necessary physics and data. The result — such as how heat will flow in a gas turbine engine that will go into a Boeing 787 — is reliable. It takes precisely ONE model, because the science is settled. Why, then, do so-called climatologists (read: modelers) need over a hundred models for the climate? Is there any chance that the science is not settled?

There are a great many such “spaghetti” graphs and charts in IPCC’s *Fourth Assessment Report* (AR4) showing very wide variations (though none as dramatic as Fig. 1). I’ll present just two more examples, namely their attempts to come to grips with Sea Surface Temperature (SST) (Figure 2, left), and global average temperature (Figure 2, right). If the science is settled, why do the models not agree? Alternatively, if *one* of the models is correct, is it not time to quit funding the rest of the modelers?

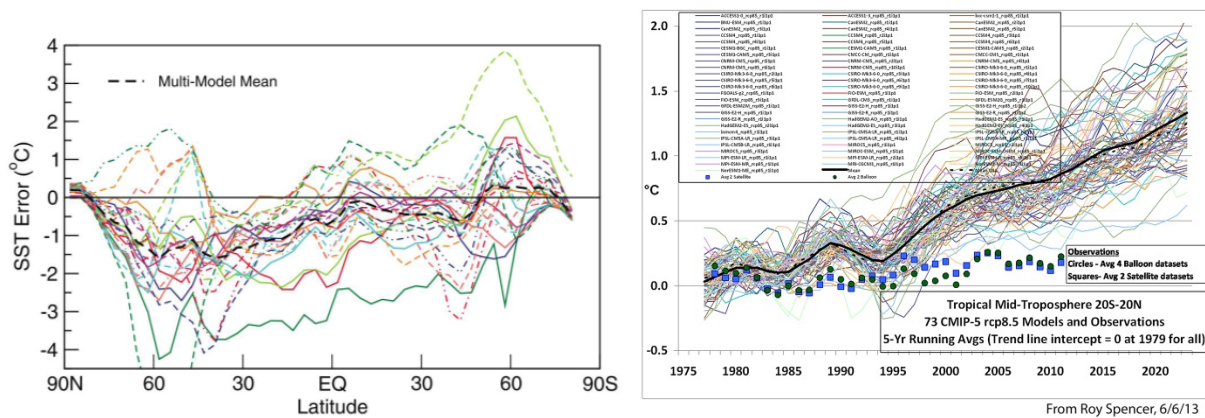


Figure 2: Left. IPCC’s attempt to get Sea Surface Temperature right (Fig. 8.8 from AR4). Right. 75 climate models attempt to replicate the average temperature of the earth.

The second point to discuss is the reliability of IPCC’s climate models. In point of fact, the computer models on which the climate scare is based are wrong. ALL of them. Every single one has failed to replicate real data. See Figure 3 to see how badly the models—upon which the “climate change” scare is based—fit the real-world data. Nevertheless, the IPCC’s confidence level that they are right about man’s influence has grown from Confident in 1990, to brash arrogance (“extremely likely” more than 95% certain) in 2013, as their models have increasingly diverged from reality.

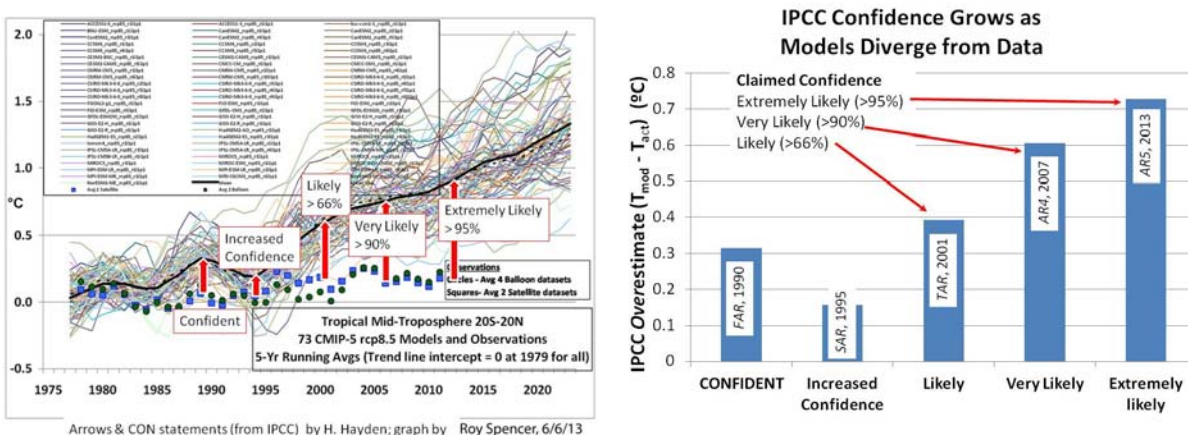


Figure 3: Results of 73 IPCC climate models showing temperature anomaly from 1975 on, extrapolating to about 2030, compared to actual data. As their *overestimate* of temperature has grown from 0.3 °C in 1990 to 0.72 °C in 2013, their confidence that man is responsible for “climate change” has gone from mere confidence to brash arrogance.

The third thing to bring up is the frequently *implied* lie that the earth is in an unprecedented period of warmth. Most recently, we have heard the absurd statement that 2014 is the warmest year on record. It is absurd because *one* data set says that the earth is an immeasurably small 0.02 °C warmer than it was a few years ago, but also because “on record” refers to a minuscule length of time. Data from the Greenland ice core (GISP2) show a general cooling of 2 °C since the Minoan Warm Period (Figure 4), and 1 °C since the Roman Warm Period. In fact, the Argentiére Glacier in the French Alps has retreated enough to expose Roman lead mines there.

A fourth point is the lie that climate skeptics are deniers of climate change. *All* climate skeptics say without reservation that the climate changes. It always has and always will. They agree that CO₂ has *some* effect on temperature. The question revolves around “how much?”, and that is a matter for scientific research.

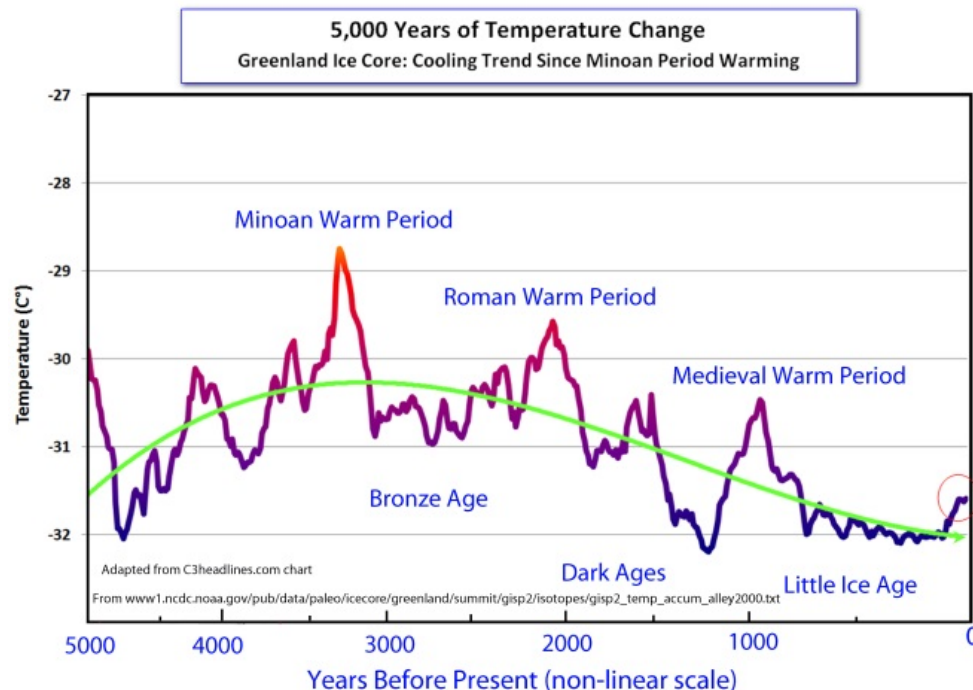


Figure 4: A 5,000-year history of temperature, taken from a Greenland ice core (GISP2).

A fifth point for discussion is the narrative that “97% of climate scientists agree ...” There are two sources of this narrative, both of them thoroughly inept studies.

One singularly inept poll was published in a University of Illinois master’s thesis, which purports to show that “97–98% of the climate researchers most actively publishing in the field support the tenets of Anthropogenic Climate Change.” The poll asked two questions, specifically

1. When compared with pre-1800s levels, do you think that mean global temperatures have generally risen, fallen, or remained relatively constant?
2. Do you think human activity is a significant contributing factor in changing mean global temperatures?

Anybody who knows anything about climate will answer question 1 in the affirmative: Yes, it’s warmer now than at the end of the Little Ice Age that ended (whatever that means) in about 1750.

As for question 2, what is meant by the adjective significant? A 10% contribution? A 50% contribution? I would imagine that the great majority of the skeptics I know would say that human activity (including such things as deforestation, changing the landscape, building cities, and flying jets that leave contrails) might account for 10%-20% of the warming during the last century, while they may well also believe that while believing that CO₂ is responsible for less than 10% of the warming. Is that

“significant”? The direct answer to the question may well be yes, while the answer to the intended question (human activity = burning of coal, oil, and natural gas) is no.

The other study looked at the abstracts of a large number of papers, the overwhelming majority of which said nothing one way or another, but found that 97% of those that did comment on whether man influenced the climate said so. (The list included some skeptics who most assuredly did *not* agree.)

Perchance you think (because you've been told a million times) that skeptics are in the pay of the energy industries. If so, you are wrong. Neither Exxon-Mobil nor any other corporation or private company has ever paid me a dime. Like you, I pay them for gasoline and natural gas. I pay the utility for my electricity. (*I personally know a large number of prominent skeptics, and every single one is in the same boat.*) That much said, ponder how much the environmental lobby receives and spends on efforts to restrict your access to energy supplies. See Figure 5.55



Figure 5: At the recent “climate change” conference in Lima, Peru, Greenpeace despoiled the Nazca Lines to advertise themselves. There was not a single session at the conference dedicated to any aspect of climate science. Look it up at http://unfccc.int/meetings/lima_dec_2014/meeting/8141.php.

Where, pray, do they get their money to flit around the globe, obstruct activities with their ships, attend expensive “climate conferences” (which are not about climate, but about governance), and to lobby Congress and other legislatures throughout the world—all of the states and most of the countries? Does that sound like Poverty City to you?

Did you know that these NGOs receive lavish support from government grants? Did you know that they receive large sums of money from the energy industries in an attempt to buy them off?

Let us review the propaganda we hear repeatedly:

- The science is settled
- The climate models fit the real-world data
- We are in the hottest time for at least a millennium
- Climate skeptics are deniers
- Climate skeptics are shills for energy companies
- 97% of climate scientists agree that man’s combustion of fossil fuels is causing disastrous climate change
- There are two David-and-Goliath stories—one of grass-roots (impoverished) Environmentalists against rapacious energy companies, and another of Climate Scientists against Deniers.

Every single one of those statements is wrong. No exceptions. Why, then, should West Virginia insist on protecting so-called “climate science” from honest inquiry?

In a word, students should learn *how* to think, not *what* to think. What-to-think is not education; it's indoctrination. Don't be guilty of it!

Best Regards,

Howard C. Hayden

My thoughts on the WV school board's decision to scrap changes made from the educational goals set by Achieve, by Nir J. Shaviv

Recently, the WV school board decided to scrap changes it has made on the *Next Generation Science Standards* set by Achieve, which if left, would have given exposure to the scientific uncertainties we have in climate change.

This recent behavior of both Achieve and the West Virginia school board is very disappointing because of several disturbing implications. In short, it will cause the indoctrination of students by an unproven hypothesis that was put on the pedestal of a sacred theory. It demonstrates how dogma can tramp those in a weaker position. But by far, from my point of view as a scientist, this behavior takes a big step backwards towards quenching the objective inquisitiveness so much needed in proper scientific education.

Before elucidating the above, let me clarify a few common misconceptions about the “theory” of anthropogenic global warming. AGW is not a theory like the big bang theory, or the theory of general relativity, in that it cannot make significant quantitative predictions. While the Big Bang theory can be used to predict the ripples seen in the cosmic microwave background radiation, or the theory of General Relativity than can be used to predict the exact precession of Mercury, AGW theory cannot predict even within a factor of 3 the expected temperature increase following CO₂ doubling (as attested by the 1.5 to 4.5°C range appearing in all the IPCC reports). It is also not a theory that made confirmed predictions like the aforementioned theories or other less quantitative ones, such as plate tectonics that was decisively confirmed by GPS measurements of plate motion. In fact, the few predictions that can be made by the AGW theory are inconsistent with the actual observations. Even with the recent hype of 2014 being the hottest year ever recorded, the present average global temperature is well below the range of predictions made in the first IPCC report (the predictions of which should still be valid given that the range of climate sensitivities to CO₂ doubling didn't change), yet frightening scenarios based on the upper part of the range are heralded day in and day out. The reason for this inconsistency is that climate sensitivity is in fact on the low side, and that the standard AGW theory blatantly ignores evidence showing the solar variations are important and explain perhaps half of the 20th century global warming. Last, one should be aware that there is no measurement that proves climate to be very sensitive to CO₂ increase or that 20th century climate change is predominantly because of that (or that climate change over any period in earth's history was governed by changing CO₂ levels for that matter).

With this in mind, we should now judge Achieves' list of academic goals and the WV school board decisions. To begin with, the large uncertainty in the AGW theory should imply that it should not be taught with the certainty inferred from Achieve's respective goals. Instead, the correct way should be to present an objective list of evidence and allow the students to reach the various possible conclusions and the possible confidence one should have in them. Without presenting all the evidence, including those that are inconsistent with AGW predictions, such as the much smaller warming than expected over the past few decades (the so called warming “hiatus”), or the disregard of evidence clearly showing that solar variations have had a significant impact on 20th century climate change, teaching AGW theory and consequent agenda would simply be indoctrinating the students as if the theory is written in stone.

The second disturbing point is that we see in operation Thucydides principle that “the strong can do everything within their power to do so; the weak have to accept everything that they have to accept.” Since the WV school board needs the help of Achieve to keep

the high education standards that WV students deserve, they feel they have no choice but to accept Achieve's demands that forbid changing even a single word in the education goals. Achieve does so because they believe their truth is better than anything else, and of course because they know they can force the WV board to do so.

The third disturbing point is that the teaching of science in WV will be compromised. Instead of learning how science is carried out, which is to objectively study the evidence and the range of theories that were proposed to explain the data, and only then try to reach conclusions and the confidence in them, the students learn that they should accept as a fact whichever theory they are thrown at by whomever has more authority, without ever raising any doubt. It would be a shame to quench the inquisitive young minds. On the other hand, all this can all be used as an interesting lesson in political science...



New Jersey

Powered by: **The Star-Ledger**

Climatologists are no Einsteins, says his successor



By [Paul Mulshine/The Star Ledger](#)

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on April 03, 2013 at 8:57 PM, updated April 04, 2013 at 10:46 AM

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[Freeman Dyson](#) is a physicist who has been teaching at the [Institute for Advanced Study](#) in Princeton since Albert Einstein was there. When Einstein died in 1955, there was an opening for the title of "most brilliant physicist on the planet." Dyson has filled it.



Freeman Dyson

So when the global-warming movement came along, a lot of people wondered why he didn't come along with it. The reason he's a skeptic is simple, the 89-year-old Dyson said when I phoned him.

"I think any good scientist ought to be a skeptic," Dyson said.

Dyson came to this country from his native England at age 23 and immediately made major breakthroughs in quantum theory. After that he worked on a nuclear-powered rocket (see video below). Then in the late 1970s, he got involved with early research on climate change at the Institute for Energy Analysis in Oak Ridge, Tenn.

"I just think they don't understand the climate," he said of climatologists. "Their computer models are full of fudge factors."

That research, which involved scientists from many disciplines, was based on experimentation. The scientists studied such questions as how atmospheric carbon dioxide interacts with plant life and the role of clouds in warming.

But that approach lost out to the computer-modeling approach favored by climate scientists. And that approach was flawed from the beginning, Dyson said.

"I just think they don't understand the climate," he said of climatologists. "Their computer models are full of fudge factors."

A major fudge factor concerns the role of clouds. The greenhouse effect of carbon dioxide on its own is limited. To get to the apocalyptic projections trumpeted by Al Gore and company, the models have to include assumptions that CO-2 will cause clouds to form in a way that produces more warming.

"The models are extremely oversimplified," he said. "They don't represent the clouds in detail at all. They simply use a fudge factor to represent the clouds."

Dyson said his skepticism about those computer models was borne out by recent reports of [a study by Ed Hawkins](#) of the University of Reading in Great Britain that showed global temperatures were flat between 2000 and 2010 — even though we humans poured record amounts of CO-2 into the atmosphere during that decade.

That was vindication for a man who was termed "a civil heretic" in [a New York Times Magazine article](#) on his contrarian views. Dyson embraces that label, with its implication that what he opposes is a religious movement. So does his fellow Princeton physicist and fellow skeptic, William Happer.

"There are people who just need a cause that's bigger than themselves," said Happer. "Then they can feel virtuous and say other people are not virtuous."

To show how uncivil this crowd can get, Happer e-mailed me an article about an Australian professor who proposes — quite seriously — the death penalty for heretics such as Dyson. As did Galileo, they can get a reprieve if they recant.

I hope that guy never gets to hear Dyson's most heretical assertion: Atmospheric CO-2 may actually be improving the environment.

"It's certainly true that carbon dioxide is good for vegetation," Dyson said. "About 15 percent of agricultural yields are due to CO-2 we put in the atmosphere. From that point of view, it's a real plus to burn coal and oil."

In fact, there's more solid evidence for the beneficial effects of CO-2 than the negative effects, he said. So why does the public hear only one side of this debate? Because the media do an awful job of reporting it.

"They're absolutely lousy," he said of American journalists. "That's true also in Europe. I don't know why they've been brainwashed."

I know why: They're lazy. Instead of digging into the details, most journalists are content to repeat that mantra about "consensus" among climate scientists.

The problem, said Dyson, is that the consensus is based on those computer models. Computers are great for analyzing what happened in the past, he said, but not so good at figuring out what will happen in the future. But a lot of scientists have built their careers on them. Hence the hatred for dissenters.

"It was similar in the Soviet Union," he said. "Who could doubt Marxist economics was the future? Everything else was in the dustbin."

There's a lot of room left in that bin for the ideas promulgated by people dumber than Dyson. Which is just about everyone.

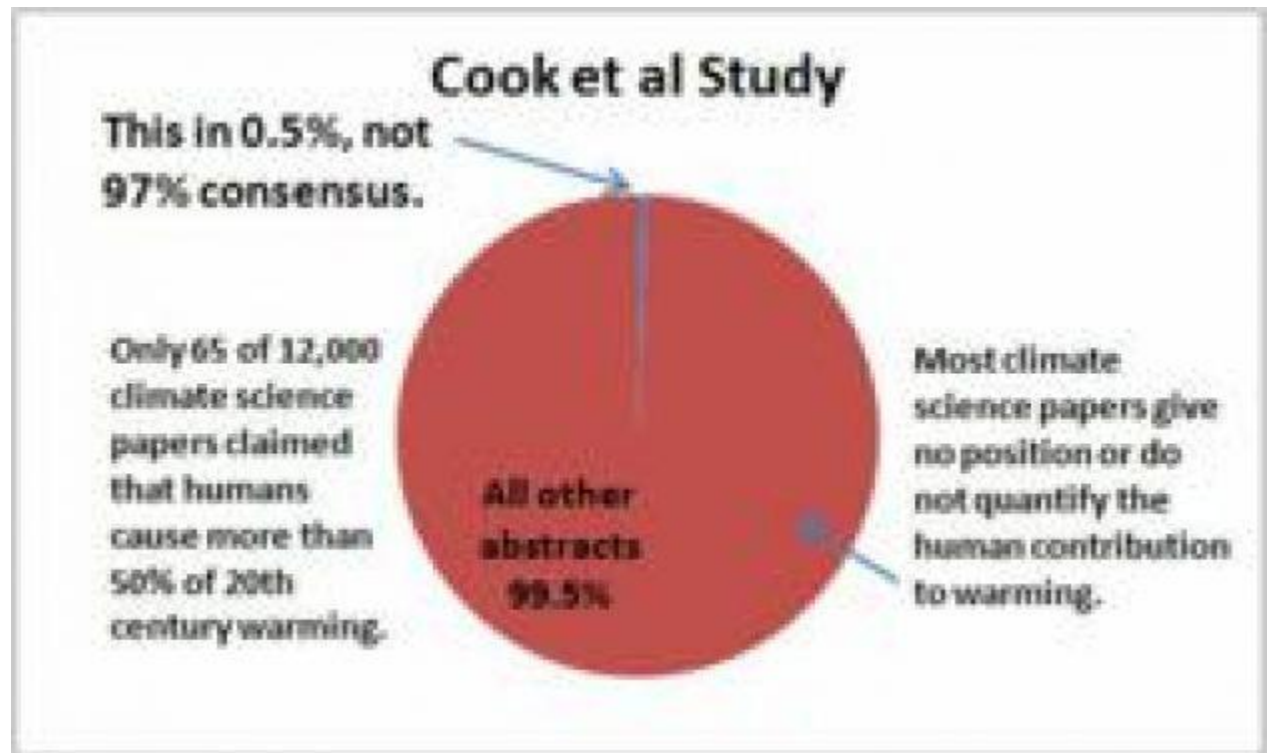
ADD: This quote from the great H.L. Mencken captures perfectly the religious nature of those in the climate cult:

"The essence of science is that it is always willing to abandon a given idea, however fundamental it may seem to be, for a better one; the essence of theology is that it holds its truths to be eternal and immutable."

Only 65 Scientists of 12,000 Make up Alleged 97% on Climate Change and Global Warming Consensus According to Breakdown of Cook et al study, say Friends of Science

PRWeb

Published 10:01 am, Tuesday, May 28, 2013



(PRWeb)

PRESS RELEASE

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In response to multiple inquiries from media and global warming advocates, Friends of Science issue this release to expose the statistical manipulation evident from the break down of the Cook et al paper. Friends of Science decry the linking of this flawed study with alleged danger from man-made carbon dioxide emissions (CO2) as there has been no global warming in 16 years despite a rise in CO2 levels; Friends of Science say the sun and oceanic oscillations are the main drivers of climate change, not CO2.

Calgary, Alberta (PRWEB) May 28, 2013

“The [Cook et al paper](#) is very misleading as described in major media. The breakdown of the survey results are not described up front,” says [Ken Gregory](#), Director of Friends of Science. “The Cook study claims that any paper that mentions CO2 as a possible cause of some warming is part of a ‘consensus’. That is simply not true. Further, this survey does not assess ‘danger’.”

Gregory’s comment refers to the Obama tweet that wrongly claimed that "Ninety-seven percent of scientists agree: [Cook survey](#) showed that climate change is real, man-made and dangerous.””

“Nothing in this survey discusses any level of danger to humans; in fact [global warming stopped 16 years ago](#) and this is [well-known in the scientific community](#) and acknowledged by the UN Climate Panel, the IPCC,” says Gregory.

Friends of Science say the public should question the motives of those who are twisting the survey results. The Herald Sun of Melbourne, Australia published similar questions along with [answers from surprised scientists](#) who do not support Cook's 'consensus' at all, even though Cook says they do!

Gregory explains a subtle point most readers would miss. “The Cook abstract falsely says, "Among abstracts expressing a position on anthropogenic global warming (AGW), 97.1% endorsed the consensus position that humans are causing global warming.”

He explains that the UN Climate Panel (IPCC) AGW consensus position is that humans are causing at least [90% of the recent warming to 2001](#), not that humans have ‘some’ effect on climate. However Cook's 'explicit endorsement level' is based on only 50%, influence by humans, misleading to average citizens as it reduces the accepted international parameter by almost half.

While Friends of Science note that most scientists acknowledge that humans affect climate in some way, the paths are many – including farming, forestry, land disturbance, industrial emissions, and breathing.

“Each of us emits CO₂ at about [40,000 ppm](#) when we breathe out,” says Gregory. “Does that make us dangerous?”

Another under-reported element is that "This letter was conceived as a 'citizen science' project by volunteers contributing to the Skeptical Science website: skepticalscience.com."

Skeptical Science is an advocate of the AGW theory. A [searchable database](#) of abstracts and ratings in the Cook study is provided on the Skeptical Science site.

This link shows the "Endorsement level 1, Explicitly endorses and quantifies AGW as 50+%. (human actions causing 50% or more warming)"

Note that this search term returns 65 of the 12000+ abstracts. The page lists each of the 65 abstracts giving the title with a link to the abstract, the journal where it was published and the endorsement rating.

The IPCC and climate alarmists claim that 90% to 100% of the recent warming (since 1975) was caused by greenhouse gas emissions. An astrophysical paper by [Nir Shaviv](#) that shows the sun causing 60% of the warming does not support the IPCC position on climate change. However, in the Cook study, this paper was falsely rated as explicitly endorsing AGW ("but does not quantify or minimize").

Several of the 65 papers categorized by Cook as Endorsement level 1 in fact show that the IPCC projections of warming are wrong and grossly exaggerated.

A paper by [Scafetta and West](#) states, "We estimate that the sun contributed as much as 45–50% of the 1900–2000 global warming."

The Cook et al study data base has seven categories of rated abstracts.

1. 65 explicit endorse, >50% warming caused by man
2. 934 explicit endorse
3. 2933 implicit endorse
4. 8261 no position
5. 53 implicit reject
6. 15 explicit reject
7. 10 explicit reject, <50% warming caused by man

Papers in the third category which Cook alleges, “implicit endorse,” in reality make no comment on whether humans have caused warming. This category includes papers about [mitigation policies](#).

Says Gregory, “It is wrongly assumed by Cook et al, that an author who writes about biofuels, endorses the IPCC position on climate change. This is not necessarily the case.”

The Cook et al paper adds up categories 1, 2 and 3 and presents this total of 3932 papers as endorsing the AGW consensus. In fact many of those papers strongly reject the IPCC AGW position.

“Public policy should be based on scientific evidence, not statistical manipulations like this,” says Gregory.

About Friends of Science

Friends of Science have spent a decade reviewing a broad spectrum of literature on climate change and have concluded the sun is the main driver of climate change, not carbon dioxide (CO₂). The core group of the Friends of Science is made up of retired and active earth and atmospheric scientists. Membership is open to the public and available on-line.

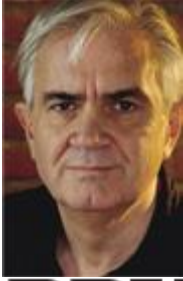
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**BRYAN
APPLEYARD.COM**

Physics: Superstitions and Allegories?

Unpublished, 05 January 2015

The greatest story of our time may also be the greatest mistake. This is the story of our universe from the Big Bang to now with its bizarre, Dickensian cast of characters – black holes, tiny vibrating strings, the warped space-time continuum, trillions of companion universes and particles that wink in and out of existence.

It is the story told by a long list of officially accredited geniuses from Isaac Newton to Stephen Hawking. It is also the story that is retold daily in popular science fiction from Star Trek to the latest Hollywood sci-fic blockbuster Interstellar. Thanks to the movies, the physicist standing in front of a vast blackboard covered in equations become our age's symbol of genius. The universe is weird, the TV shows and films tell us, and almost anything can happen.

But it is a story that many now believe is pointless, wrong and riddled with wishful thinking and superstition.

“Stephen Hawking,” says philosopher Roberto Mangabeira Unger, “is not part of the solution, he is part of the problem.”

The equations on the blackboard may be the problem. Mathematics, the language of science, may have misled the scientists.

“The idea,” says physicist Lee Smolin, “that the truth about nature can be wrestled from pure thought through mathematics is overdone... The idea that mathematics is prophetic and that mathematical structure and beauty is a clue to how nature ultimately works is just wrong.”

And in an explosive essay published last week in the science journal *Nature* astrophysicists George Ellis and Joe Silk say that the wild claims of theoretical physicists are threatening the authority of science itself.

“This battle for the heart and soul of physics,” they write, “is opening up at a time when scientific results — in topics from climate change to the theory of evolution — are being questioned by some politicians and religious fundamentalists. Potential damage to public confidence in science and to the nature of fundamental physics needs to be contained by deeper dialogue between scientists and philosophers....The imprimatur of science should be awarded only to a theory that is testable. Only then can we defend science from attack.”

Unger and Smolin have also just gone into print with a monumental book – *The Singular Universe and the Reality of Time* – which systematically takes apart contemporary physics and exposes much of it as, in Unger’s words, “an inferno of allegorical fabrication.” The book says it is time to return to real science which is tested against nature rather than constructed out of mathematics. Physics should no longer be seen as the ultimate science, underwriting all others. The true queen of the science should be history – the biography of the cosmos.

So when did it all go so horribly wrong? The critics would say in 1984 when a new idea – superstrings – suddenly seemed to offer physicists an escape from a dead end left behind by Einstein.

The physicist Brian Greene describes superstring theory as “a sweeping movement that inspired thousands of physicists worldwide to drop their research in progress and chase Einstein’s long-sought dream of a unified theory. The field was young, the terrain fertile and the atmosphere electric.”

Superstrings are tiny loops at the heart of every particle. The way they vibrate determines what the particle is and how it behaves. If they existed then they could solve the mystery left behind by Einstein – how to unite all the forces in the universe in a single theory. They might crack the most embarrassing problem of all. Einstein’s relativity, which describes the behaviour of large objects like planets, and quantum mechanics, which describes the behaviour of very small objects, are the two great achievements of twentieth century science. They both seem to be true, but, embarrassingly, they contradict each other. Perhaps superstrings would be the solution.

Well, in a way, it worked. Superstrings produced some of the most complex and, to its supporters, beautiful mathematics ever devised. It even, in theory, solved all the problems. But only in theory because to make the theory work, scientists had to invent a world with more than three dimensions and millions of other universes – the so-called ‘multiverse’. Since the strings themselves are too small for us to see, the additional dimensions locked away beyond the gaze of our most powerful instruments and the other universes were undetectable. In other words, no

experiment or observation of these things would be possible; to believe the solutions of string theory you had to believe in the maths alone. And that's where it all starts to fall apart.

"As we see it," write Ellis and Silk about this development, "theoretical physics risks becoming a no-man's-land between mathematics, physics and philosophy that does not truly meet the requirements of any."

To the critics, the idea that we should believe solely in the mathematics is, first, a betrayal of science and, secondly, a demonstrable absurdity. It is a betrayal because science has always been the development of hypotheses in the mind or in the lab which are then tested against what we can find in nature – any theory must be falsifiable by nature or it is metaphysics, faith or superstition.

Outside physics, this definition is intact and the dangers of relying on maths are obvious. In climate science, for example, mathematical models have repeatedly proved wrong – most spectacularly in their failure to predict the pause in global warming over the last two decades. By the rigorous and effective standard of testing against nature and falsifiability, superstring theory cannot be science.

Relaying on mathematics is demonstrably absurd because it makes two unprovable assumptions – that maths can accurately describe the universe and, even if that is true, that our maths at this particular moment is good enough to do it.

Faced with these problems defenders of the faith – like the physicist Sean Carroll – have argued that it is time we loosened our definition of science to include purely mathematical proofs. This is a serious – indeed, a reckless – escalation that turns what was a skirmish into outright war in which there will be many more casualties than just superstring theory.

Unger and Smolin's book, for example, swings a wrecking ball through almost the whole of contemporary physics from Einstein onwards. They insist on three principles – there is only one universe, time is real and mathematics is limited – that would, if accepted, not only cause a revolution in physics but in the whole of science. Most importantly, they would displace physics as the queen of the sciences. Instead the real, experimentally and observationally demonstrable, history of the cosmos would become science's new gold standard.

The multiverse, in particular, comes in for a kicking.

"The multiverse," says Unger, "treats these imaginary worlds as if they were real worlds. That's the sleight of hand of particle physics." And in popular sci-fi – "As the fabricated universes become real, the actual universe becomes less real."

The multiverse has, in fact, been used three times to plug a gap – in the inflationary theory of the universe, in quantum theory and in string theory. Each time it is an attempt to explain why our universe just happens to be the way it is. But, surely, this is cheating. If, say Unger and Smolin, our theories don't work, then we should ditch the theories, not invent imaginary and forever undetectable worlds.

Bizarrely, these worlds are invented by people who are forced to admit that their theories can't actually work and full accounts of the universe. The conditions at the heart of a 'singularity' – in the Big Bang or in black holes - are said to lie beyond the laws of physics, so, in other words, the supposedly unchanging laws of physics only work by encompassing their own limitations.

If, as Unger and Smolin insist, time is real and not simply an aspect of space or of our perceptions, then the laws of physics begin to look even less solid. If everything is subject to time and, therefore, change, then these laws can evolve. They suggest the idea that these laws are eternally fixed is a superstition caused by mathematics – all the insights of maths are timeless and maths is only a human creation. In fact, two of the greatest physicists of all time – Richard Feynman and Paul Dirac – both accepted the possibility that the laws of physics evolve through time. Yet eternal, immutable physical laws, somehow detached from our physical universe, remain one of the primary superstitions of our age.

Even the cherished Big Bang may not survive the return of real time. It may, instead, by a Big Squeeze, a moment at which our universe shrank and then expanded again. Time did not begin, as the physicists have been telling us, at the Big Bang, it pass serenely on through the Big Squeeze, as did our own universe.

But, I ask Smolin, how many people now accept the case of the critics?

"I would divide my community into two parts," he says, "the people who try to think carefully about where we are, where we are going and why we have not made so much progress and everybody else. There are a remarkable number of people in the first group who at least partly agree with us. But there are a number of very deep thinkers who disagree. We are a minority but my sense is that a lot of people haven't thought it through."

Does any of this matter to you? All of it does. The rise of physics to the throne of ultimate science since the early twentieth century has, inevitably, affected ordinary life with its assumptions and not just in sci-fi. For example, contemporary determinism – the idea that everything that happens is inevitable and that our free will is an illusion – springs from twentieth century physics and has, most recently, infected neuroscience.

Perhaps more damagingly, the idea that the human mind, unaided except by mathematics, can encompass the universe has downgraded nature and deluded us

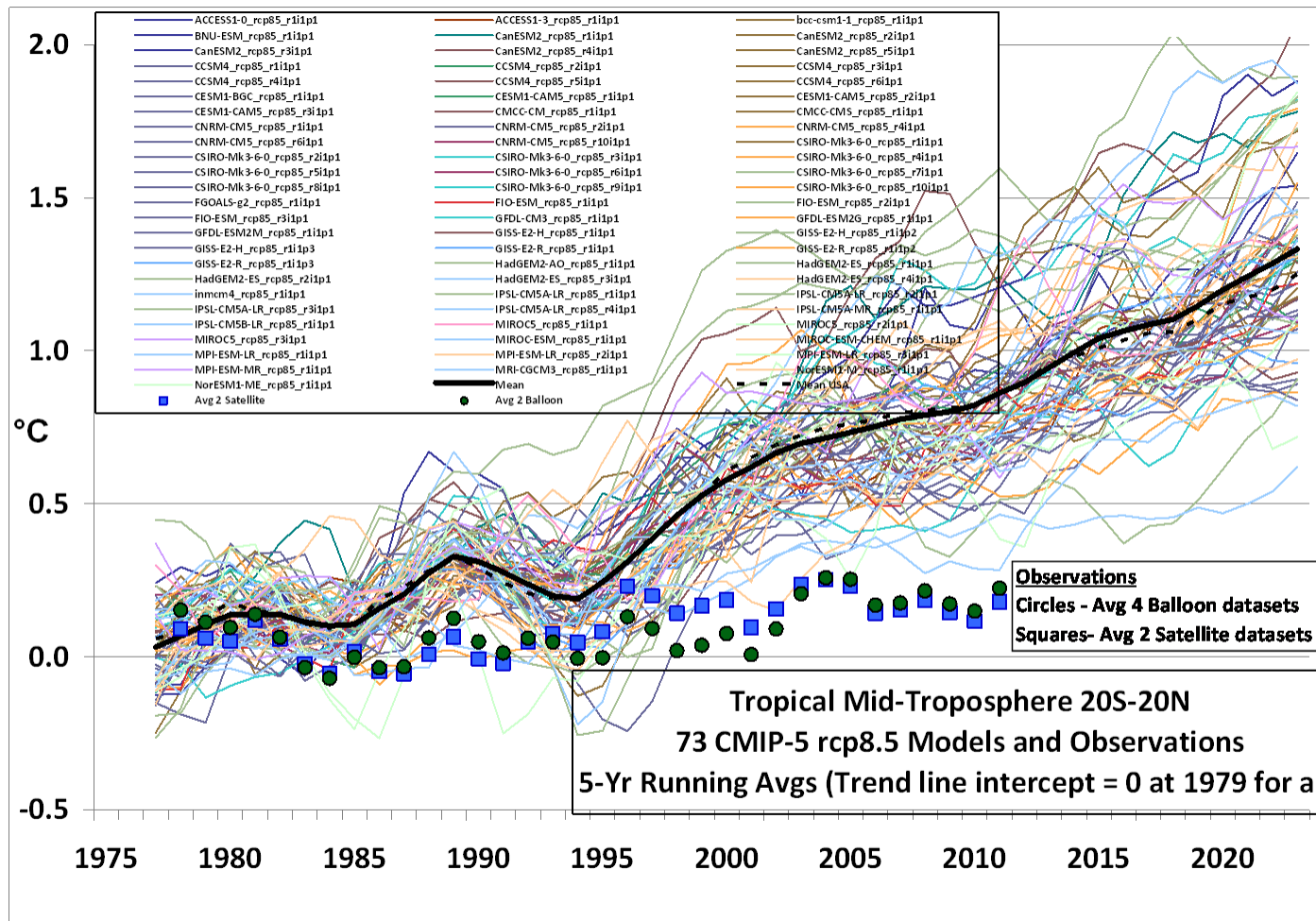
into thinking we can do anything. We can't. Nature – human or otherwise – is the only standard by which we or our ideas can be tested. The rest is just chalk on a blackboard.

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STILL Epic Fail: 73 Climate Models vs. Measurements, Running 5-Year Means

June 6th, 2013 by Roy W. Spencer, Ph. D.

In response to those who complained in [my recent post](#) that linear trends are not a good way to compare the models to observations (even though the modelers have claimed that it's the long-term behavior of the models we should focus on, not individual years), here are running 5-year averages for the tropical tropospheric temperature, models versus observations (click for full size):



In this case, the models and observations have been plotted so that their respective 1979-2012 trend lines all intersect in 1979, which we believe is the most meaningful way to simultaneously plot the models' results for comparison to the observations.

In my opinion, the day of reckoning has arrived. The modellers and the IPCC have willingly ignored the evidence for low climate sensitivity for many years, despite the fact that some of us have shown that simply confusing cause and effect when examining cloud and temperature variations can totally mislead you on cloud feedbacks (e.g. [Spencer & Braswell, 2010](#)). The discrepancy between models and observations is not a new issue...just one that is becoming more glaring over time.

It will be interesting to see how all of this plays out in the coming years. I frankly don't see how the IPCC can keep claiming that the models are "not inconsistent with" the observations. Any sane person can see otherwise.

If the observations in the above graph were on the UPPER (warm) side of the models, do you really believe the modelers would not be falling all over themselves to see how much additional surface warming they could get their models to produce?

Hundreds of millions of dollars that have gone into the expensive climate modelling enterprise has all but destroyed governmental funding of research into natural sources of climate change. For years the modelers have maintained that there is no such thing as natural climate change...yet they now, ironically, have to invoke natural climate forces to explain why surface warming has essentially stopped in the last 15 years!

Forgive me if I sound frustrated, but we scientists who still believe that climate change can also be naturally forced have been virtually cut out of funding and publication by the 'humans-cause-everything-bad-that-happens' juggernaut. The public who funds their work will not stand for their willful blindness much longer.

Why Politicized Science is Dangerous

*(Excerpted from **State of Fear**)*

Imagine that there is a new scientific theory that warns of an impending crisis, and points to a way out.

This theory quickly draws support from leading scientists, politicians and celebrities around the world. Research is funded by distinguished philanthropies, and carried out at prestigious universities. The crisis is reported frequently in the media. The science is taught in college and high school classrooms.

I don't mean global warming. I'm talking about another theory, which rose to prominence a century ago.

Its supporters included Theodore Roosevelt, Woodrow Wilson, and Winston Churchill. It was approved by Supreme Court justices Oliver Wendell Holmes and Louis Brandeis, who ruled in its favor. The famous names who supported it included Alexander Graham Bell, inventor of the telephone; activist Margaret Sanger; botanist Luther Burbank; Leland Stanford, founder of Stanford University; the novelist H. G. Wells; the playwright George Bernard Shaw; and hundreds of others. Nobel Prize winners gave support. Research was backed by the Carnegie and Rockefeller Foundations. The Cold Springs Harbor Institute was built to carry out this research, but important work was also done at Harvard, Yale, Princeton, Stanford and Johns Hopkins. Legislation to address the crisis was passed in states from New York to California.

These efforts had the support of the National Academy of Sciences, the American Medical Association, and the National Research Council. It was said that if Jesus were alive, he would have supported this effort.

All in all, the research, legislation and molding of public opinion surrounding the theory went on for almost half a century. Those who opposed the theory were shouted down and called reactionary, blind to reality, or just plain ignorant. But in hindsight, what is surprising is that so few people objected.

Today, we know that this famous theory that gained so much support was actually pseudoscience. The crisis it claimed was nonexistent. And the actions taken in the name of theory were morally and criminally wrong. Ultimately, they led to the deaths of millions of people.

The theory was eugenics, and its history is so dreadful --- and, to those who were caught up in it, so embarrassing --- that it is now rarely discussed. But it is a story that should be well known to every citizen, so that its horrors are not repeated.

The theory of eugenics postulated a crisis of the gene pool leading to the deterioration of the human race. The best human beings were not breeding as rapidly as the inferior ones --- the foreigners, immigrants, Jews, degenerates, the unfit, and the "feeble minded." Francis Galton, a respected British scientist, first speculated about this area, but his ideas were taken far beyond anything he intended. They were adopted by science-minded Americans, as well as those who had no interest in science but who were worried about the immigration of inferior races early in the twentieth century --- "dangerous human pests" who represented "the rising tide of imbeciles" and who were polluting the best of the human race.

The eugenicists and the immigrationists joined forces to put a stop to this. The plan was to identify individuals who were feeble-minded --- Jews were agreed to be largely feeble-minded, but so were many foreigners, as well as blacks --- and stop them from breeding by isolation in institutions or by sterilization.

As Margaret Sanger said, "Fostering the good-for-nothing at the expense of the good is an extreme cruelty ... there is not greater curse to posterity than that of bequeathing them an increasing population of imbeciles." She spoke of the burden of caring for "this dead weight of human waste."

Such views were widely shared. H.G. Wells spoke against "ill-trained swarms of inferior citizens." Theodore Roosevelt said that "Society has no business to permit degenerates to reproduce their kind." Luther Burbank "Stop permitting criminals and weaklings to reproduce." George Bernard Shaw said that only eugenics could save mankind.

There was overt racism in this movement, exemplified by texts such as "The Rising Tide of Color Against White World Supremacy" by American author Lothrop Stoddard. But, at the time, racism was considered an unremarkable aspect of the effort to attain a marvelous goal --- the improvement of humankind in the future. It was this avant-garde notion that attracted the most liberal and progressive minds of a generation. California was one of twenty-nine American states to pass laws allowing sterilization, but it proved the most-forward-looking and enthusiastic --- more sterilizations were carried out in California than anywhere else in America.

Eugenics research was funded by the Carnegie Foundation, and later by the Rockefeller Foundation. The latter was so enthusiastic that even after the center of the eugenics effort moved to Germany, and involved the gassing of individuals from mental institutions, the Rockefeller Foundation continued to finance German researchers at a very high level. (The foundation was quiet about it, but they were still funding research in 1939, only months before the onset of World War II.)

Since the 1920s, American eugenicists had been jealous because the Germans had taken leadership of the movement away from them. The Germans were admirably progressive. They set up ordinary-looking houses where "mental defectives" were brought and interviewed one at a time, before being led into a back room, which was, in fact, a gas chamber. There, they were gassed with carbon monoxide, and their bodies disposed of in a crematorium located on the property.

Eventually, this program was expanded into a vast network of concentration camps located near railroad lines, enabling the efficient transport and of killing ten million undesirables.

After World War II, nobody was a eugenicist, and nobody had ever been a eugenicist. Biographers of the celebrated and the powerful did not dwell on the attractions of this philosophy to their subjects, and sometimes did not mention it at all. Eugenics ceased to be a subject for college classrooms, although some argue that its ideas continue to have currency in disguised form.

But in retrospect, three points stand out. First, despite the construction of Cold Springs Harbor Laboratory, despite the efforts of universities and the pleadings of

lawyers, there was no scientific basis for eugenics. In fact, nobody at that time knew what a gene really was. The movement was able to proceed because it employed vague terms never rigorously defined. "Feeble-mindedness" could mean anything from poverty to illiteracy to epilepsy. Similarly, there was no clear definition of "degenerate" or "unfit."

Second, the eugenics movement was really a social program masquerading as a scientific one. What drove it was concern about immigration and racism and undesirable people moving into one's neighborhood or country. Once again, vague terminology helped conceal what was really going on.

Third, and most distressing, the scientific establishment in both the United States and Germany did not mount any sustained protest. Quite the contrary. In Germany scientists quickly fell into line with the program. Modern German researchers have gone back to review Nazi documents from the 1930s. They expected to find directives telling scientists what research should be done. But none were necessary. In the words of Ute Deichman, "Scientists, including those who were not members of the [Nazi] party, helped to get funding for their work through their modified behavior and direct cooperation with the state." Deichman speaks of the "active role of scientists themselves in regard to Nazi race policy ... where [research] was aimed at confirming the racial doctrine ... no external pressure can be documented." German scientists adjusted their research interests to the new policies. And those few who did not adjust disappeared.

A second example of politicized science is quite different in character, but it exemplifies the hazard of government ideology controlling the work of science, and of uncritical media promoting false concepts. Trofim Denisovich Lysenko was a self-promoting peasant who, it was said, "solved the problem of fertilizing the fields without fertilizers and minerals." In 1928 he claimed to have invented a procedure called vernalization, by which seeds were moistened and chilled to enhance the later growth of crops.

Lysenko's methods never faced a rigorous test, but his claim that his treated seeds passed on their characteristics to the next generation represented a revival of Lamarckian ideas at a time when the rest of the world was embracing Mendelian

genetics. Josef Stalin was drawn to Lamarckian ideas, which implied a future unbounded by hereditary constraints; he also wanted improved agricultural production. Lysenko promised both, and became the darling of a Soviet media that was on the lookout for stories about clever peasants who had developed revolutionary procedures.

Lysenko was portrayed as a genius, and he milked his celebrity for all it was worth. He was especially skillful at denouncing his opponents. He used questionnaires from farmers to prove that vernalization increased crop yields, and thus avoided any direct tests. Carried on a wave of state-sponsored enthusiasm, his rise was rapid. By 1937, he was a member of the Supreme Soviet.

By then, Lysenko and his theories dominated Russian biology. The result was famines that killed millions, and purges that sent hundreds of dissenting Soviet scientists to the gulags or the firing squads. Lysenko was aggressive in attacking genetics, which was finally banned as "bourgeois pseudoscience" in 1948. There was never any basis for Lysenko's ideas, yet he controlled Soviet research for thirty years. Lysenkoism ended in the 1960s, but Russian biology still has not entirely recovered from that era.

Now we are engaged in a great new theory that once again has drawn the support of politicians, scientists, and celebrities around the world. Once again, the theory is promoted by major foundations. Once again, the research is carried out at prestigious universities. Once again, legislation is passed and social programs are urged in its name. Once again, critics are few and harshly dealt with.

Once again, the measures being urged have little basis in fact or science. Once again, groups with other agendas are hiding behind a movement that appears high-minded. Once again, claims of moral superiority are used to justify extreme actions. Once again, the fact that some people are hurt is shrugged off because an abstract cause is said to be greater than any human consequences. Once again, vague terms like sustainability and generational justice --- terms that have no agreed definition -- - are employed in the service of a new crisis.

I am not arguing that global warming is the same as eugenics. But the similarities

are not superficial. And I do claim that open and frank discussion of the data, and of the issues, is being suppressed. Leading scientific journals have taken strong editorial positions of the side of global warming, which, I argue, they have no business doing. Under the circumstances, any scientist who has doubts understands clearly that they will be wise to mute their expression.

One proof of this suppression is the fact that so many of the outspoken critics of global warming are retired professors. These individuals are not longer seeking grants, and no longer have to face colleagues whose grant applications and career advancement may be jeopardized by their criticisms.

In science, the old men are usually wrong. But in politics, the old men are wise, counsel caution, and in the end are often right.

The past history of human belief is a cautionary tale. We have killed thousands of our fellow human beings because we believed they had signed a contract with the devil, and had become witches. We still kill more than a thousand people each year for witchcraft. In my view, there is only one hope for humankind to emerge from what Carl Sagan called "the demon-haunted world" of our past. That hope is science.

But as Alston Chase put it, "when the search for truth is confused with political advocacy, the pursuit of knowledge is reduced to the quest for power."

That is the danger we now face. And this is why the intermixing of science and politics is a bad combination, with a bad history. We must remember the history, and be certain that what we present to the world as knowledge is disinterested and honest.

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Attn: Desk Officer for the EPA
Office of Information and Regulatory Affairs - OMB
725 17th St. NW.,
Washington, DC 20503.

Re: EPA-HQ-OAR-2013-0602 Comments

EPA Administrator Gina McCarthy recently told Congress that the Agency's proposed Existing Source Performance Standards for coal fired power plants, which could be the death knell for coal as an industry, was, in fact, an opportunity for economic growth: **"The great thing about this proposal is that it really is an investment opportunity. This is not about pollution control."** It's about investment in renewables and clean energy. McCarthy was referring to the economic opportunities of millionaires and billionaires who are part of the far-left environmental machine heavily invested in helping EPA advance such regulations. What she said is what it has always been about and is why Lisa Jackson the previous administrator had a private email address so she could interface directly with the environmental activists. I don't believe the EPA was formed to develop investment opportunities and further not to the detriment of established industries.

It is surely not an opportunity for Americans living in Appalachia or the Powder River Basin who depend on coal for their energy supply and livelihood, nor is it an economic opportunity for Americans already struggling to pay their energy bills.

The UN-IPCC and the EPA made up that carbon dioxide warmed the earth, when in fact all gases and dust in the atmosphere cools our planet. Dr. Alan Carlin completed a study for the EPA that concluded the same thing, CO₂ has a slight cooling effect. He was not allowed to publish that study. Since 1966 it is apparent that CFC destruction of stratospheric ozone was the only mechanism that caused the earth to warm. Since 1998 when CFC production was stopped in developed countries by the Montreal Protocol and CFC concentration in the stratosphere stopped increasing, the earth temperature has not increased (see attached).

Many scientists, including the author, see global warming from CO₂ as a cruel global swindle to eliminate conventional fuels, so that a few, at the expense of the many, can reap huge profits from either carbon taxes and/or alternative "non-green" bird killing energy sources such as windmills and solar power. **The coal mining industries and coal mining unions should sue the EPA, Lisa Jackson and Gina McCarthy just like the House is suing President Obama.**

Science is a search for truth -- nothing else; when scientific truth is trashed (the US EPA is complicit in this) for personal gain by a few influential greedy charlatans, the world and the average people in it, are in very deep trouble!

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EPA-HQ-OAR-2013-0602 COMMENTS

No Such Thing as Greenhouse Gases Global Warming from CO₂ is a Fraud! CFC Destruction of Stratospheric Ozone was Cause of Warming!

Introduction

Here is an excerpt¹ from a paper written by a National Oceanic and Atmospheric Administration (NOAA) meteorologist; "Climate models used for estimating effects of increases in greenhouse gases show substantial increases in water vapor as the globe warms and this increased moisture would further increase the warming." However, this meteorologist along with the International Panel on Climate Change (IPCC) crowd got it completely backwards about water vapor and CO₂ -- they cool the earth like all other gases and dust in our atmosphere! Although moisture in the atmosphere does increase with warming, this is because the higher temperature causes more water to evaporate. With every pound of water evaporated 1,000 Btu is absorbed and that causes cooling. Further, increased water in the atmosphere causes further cooling (not warming) by reflecting more of the radiant energy from the Sun that is hitting the water vapor molecules back to outer space, e.g. cooler on a cloudy day than a clear day.

Gore's "Inconvenient Truth" Documentary -- Cause and Effect Reversed

Al Gore presented the climate change fraud in his "Inconvenient Truth", actually a "Convenient Lie" presentation of the Vostok Ice Core data, see below. In this documentary, Gore fudged the Vostok Ice core temperature and CO₂ line graphs so it would show a CO₂ spike coming first in time, but the real graph showed just the opposite. See the data in a shorter time frame (250,000 Years rather than 420,000 Years Before Present showed by Gore). This makes it easier to see which came first, Figure 1.

Antarctic Ice Core Data 1

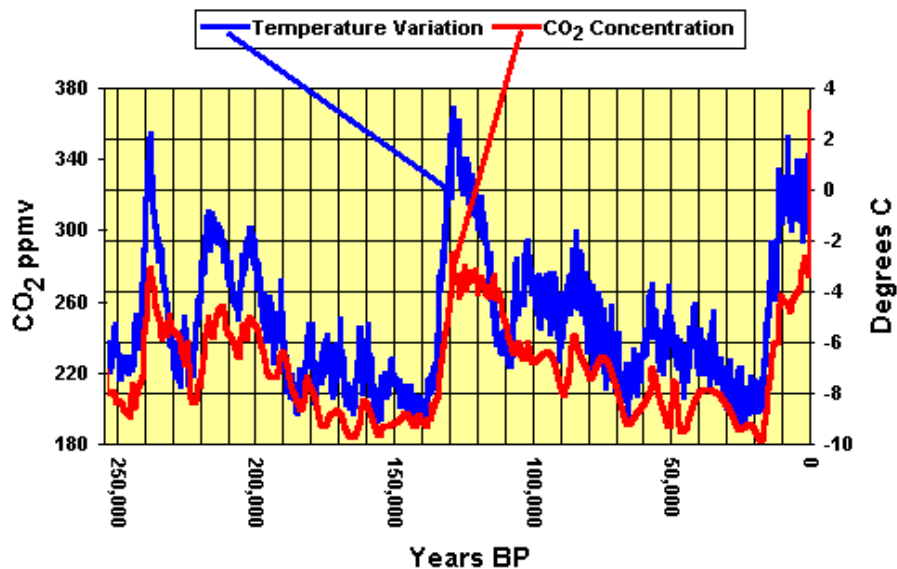


Figure 1. Vostok, Antarctica Ice Core Data².

It is clearly seen that a global warming spike (blue line) always comes first. The spike warms the oceans, which slowly reduces the solubility of CO₂ in water that results in the liberation of CO₂ from the oceans around 800 years later (see Figure 2). Gore gave no explanation what would cause a CO₂ spike to occur in the first place, but then again he is a politician with an agenda to make him wealthy. See the most recent time of warming between the 500 year long medieval warming period and the start of an increase in CO₂ in the atmosphere. One can see that CO₂ started increasing during a cooling period showing it was not controlled by recent warming that started some 80 years later and it is about 800 years from the end of the medieval warming period. This is historically what happens. Dr. Michael Mann of Penn State, eliminated the Medieval Warming period with his hockey stick graph, - clearly a fabricated one by “cherry picking” the temperature data.

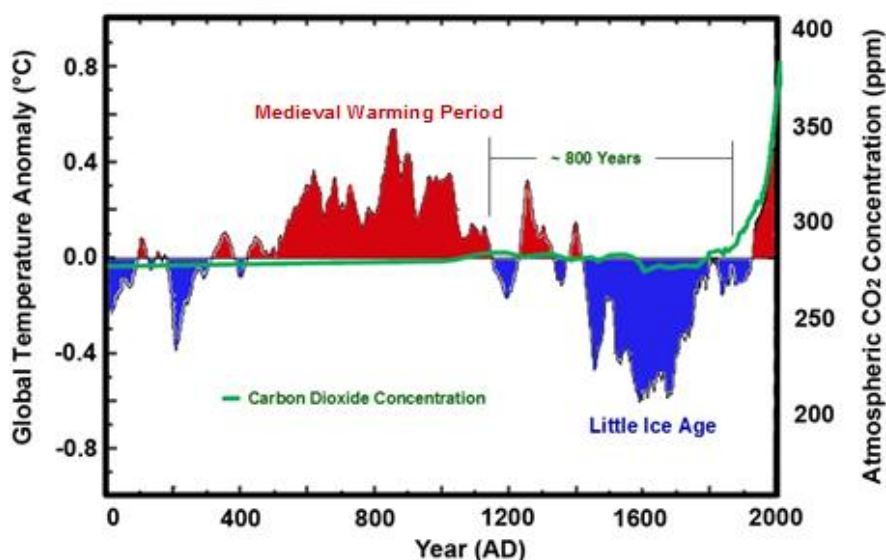


Figure 2. Medieval Warming Period, Little Ice Age and Carbon Dioxide³.

Man-made Emissions of Carbon Dioxide (CO₂)

CO₂ emissions created by man, i.e. combustion of fuels, (called anthropogenic emissions) is miniscule compared to the emissions of CO₂ from nature? Table 1 was developed by the Intergovernmental Panel on Climate Change (IPCC) who promote the global warming lie. This is their data. It shows annual CO₂ emissions to the atmosphere from both nature and man and how much of the CO₂ emitted is re-absorbed by nature. **You cannot find this table anymore, like Lois Lerner IRS emails it has been deleted.** Using the table in combination with a total concentration of 401 ppmv of CO₂ seen in the atmosphere in May 2014, one sees that the CO₂ caused by man's activities amounts to only 11.6 ppmv of the CO₂ in the atmosphere.

TABLE 1. GLOBAL SOURCES AND ABSORPTION OF CO₂

Carbon Dioxide:	Natural	Human Made	Total	Absorption
Annual Million Metric Tons	770,000	23,100	793,100	781,400
% of Total	97.1%	2.9%	100%	98.5%

Source: Intergovernmental Panel on Climate Change, Climate Change 2001: The Scientific Basis (Cambridge, UK Cambridge University Press, 2001), p. 188.

The amount of CO₂ from man is a mouse-milk quantity compared to nature's emissions. If we eliminated worldwide, all man-made CO₂ emissions tomorrow, we would go back to the level we had in 2008. Since 1998 there has been no warming and yet CO₂ in the atmosphere increased some 31 ppmv, almost triple the global man-made quantity.

Nature absorbs 98.5% of the CO₂ that is emitted by nature and man. As CO₂ increases in the atmosphere, nature causes plant growth to increase via photosynthesis which is an endothermic (cooling) reaction. For every pound of biomass formed some 8,000 Btu are removed from the atmosphere. CO₂ is absorbed, and oxygen is liberated. Further, a doubling of CO₂ will increase the photosynthesis rate by some 300+ %, depending on temperature and available moisture⁴, see Figure 3.



Figure 3. Increased plant growth with increased CO₂ concentration.

More CO₂ is absorbed by the plants due to the increased concentration of CO₂ for conversion to carbohydrates. Nature therefore has in place a built-in mechanism to regulate the CO₂ concentration in the atmosphere that will always completely dwarf man's feeble attempts to regulate it. Further, no regulation is necessary because CO₂ is not a pollutant; it is part of the animal-plant life cycle and without it, life would not exist on earth!

A Common Sense Scientific Truth

Any mass between you and a radiant energy source will provide cooling. Stand near a fireplace that is burning and feel the warmth of the radiant energy; then have two people drape a blanket between you and the fireplace -- you will feel cooler! Another example, stand outside on a sun shiny day. When a cloud goes over and shades you from the direct rays of the sun, most people feel cooler, but perhaps not the IPCC pseudo-scientists. Nitrogen, oxygen, water vapor, carbon dioxide and any dust that is in the atmosphere all provide cooling.

More radiation hits our atmosphere from the sun (342 Watts/m^2) than is reflected back from the earth (164 Watts/m^2) to the atmosphere see Figure 4. The overall effect will always be cooling – not warming!

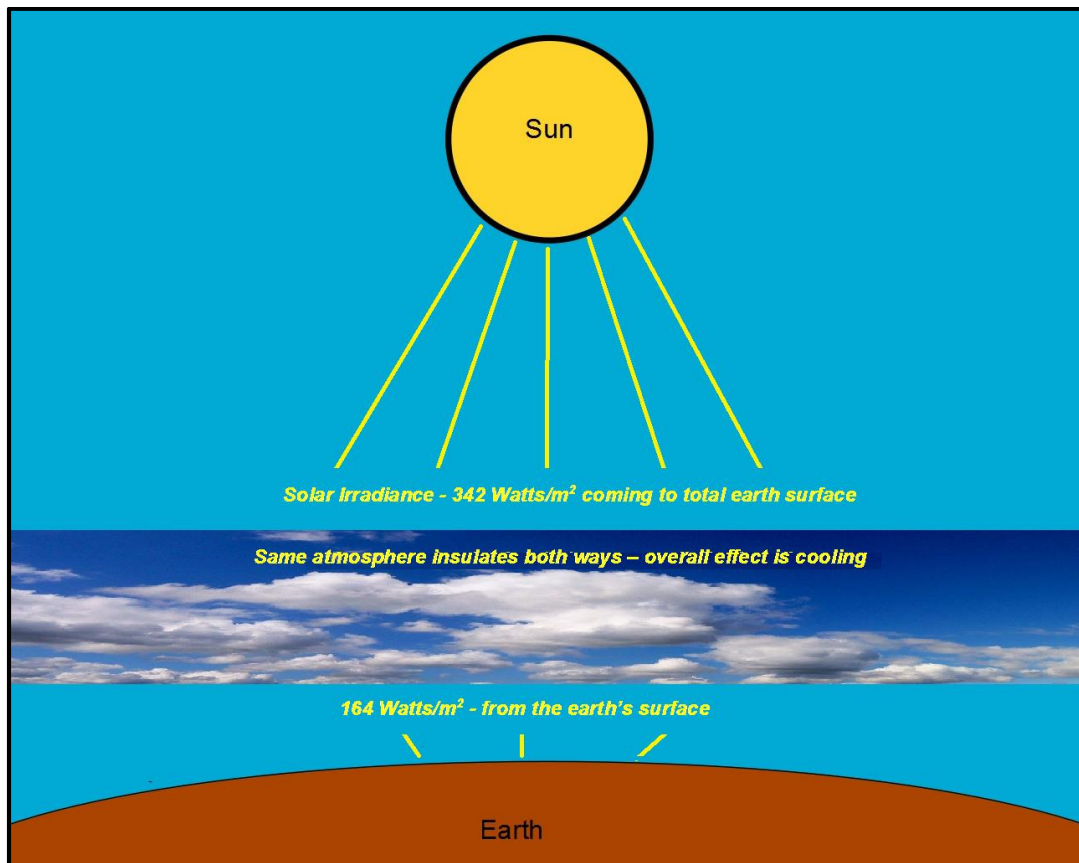


Figure 4. Radiation from the sun and reflection back from the earth.

The IPCC scientists must not realize we get our energy from the sun; they look at only one-half of the mass and energy balance. It is like saying you don't need a furnace in your house in the winter, insulation alone will keep you warm. If common sense isn't good enough for you there is also scientific proof.

Proofs -- Water Vapor Cools the Earth

Water vapor is considered by the IPCC pseudo-scientists to have the greatest greenhouse gas effect. If this so-called greenhouse gas actually cools the earth, so must all of the other gases cool that are put in that greenhouse gas category (carbon dioxide, methane, nitrogen oxides, etc.).

1st Proof

Following the 9-11 terrorist attacks, the Federal Aviation Administration prohibited commercial aviation over the United States for three days following the attacks. This presented a unique opportunity to study the temperature of earth with and without jet airplane contrails.

Dr. David Travis, an atmospheric scientist at the University of Wisconsin, along with two others, looked at temperatures for those three days (2001) and compared them to other days when planes were flying. They analyzed data from about 4,000 weather stations throughout the lower 48 states (U.S.) for the period 1971-2000, and compared the three-day grounding period with three days before and after the grounding period. They found that the average daily temperature range between highs and lows was 1.1°C higher during September 11-14 (see Figure 5) compared to September 8-11 and September 11-14 for other years with normal air traffic.

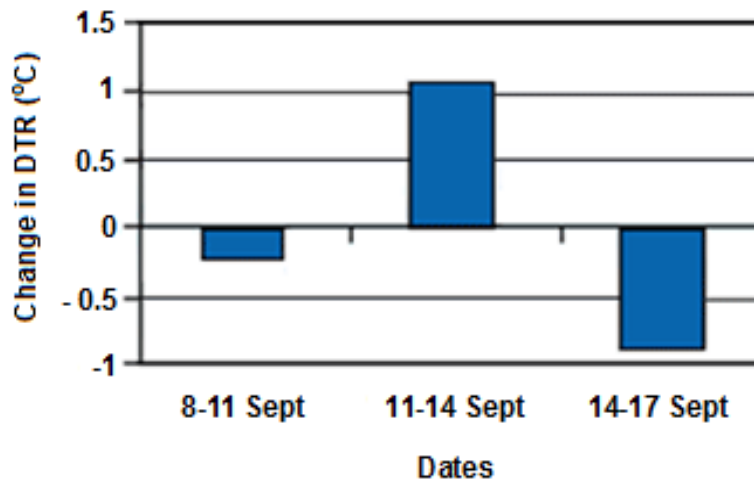


Figure 5. Average diurnal (daily) temperature range (DTR)⁵.

2nd Proof

An experiment was performed by Carl Brehmer to study the effect of rising and falling levels of humidity on soil temperature and discovered that the addition of moisture to the atmosphere exerts a significant negative feedback (cooling effect).

The experiment showed the same result as the analysis of the 9-11 data; on an overall basis increased humidity reduces the temperature on earth; it doesn't warm it. The data were taken over 38 days so the first thing done was to find the 38 day mean dew point and divide the days up between those that fell above the mean -- the "humid" days -- and those that fell below the mean -- the "arid" days. Then the data was averaged as shown on the curves on the graph below. One can readily see the hotter day time temperatures for the arid days (red line), Figure 6.

The Climate Change Agenda is a Complete Fraud

There is a lot of supporting evidence that indicates that the Climate Change agenda is and always has been a fraud. Why is it called a fraud? An event now referred to as "Climategate" publicly began on November 19, 2009, when a whistle-blower leaked thousands of emails and documents central to a Freedom of Information request placed with the Climatic Research Unit of the University of East Anglia in the United Kingdom. This institution had played a central role in the "climate change" debate: its scientists, together with their international colleagues, quite literally put the "warming" into Global Warming: they were responsible for analyzing and collating the measurements of temperature from around the globe from the present to the distant past.

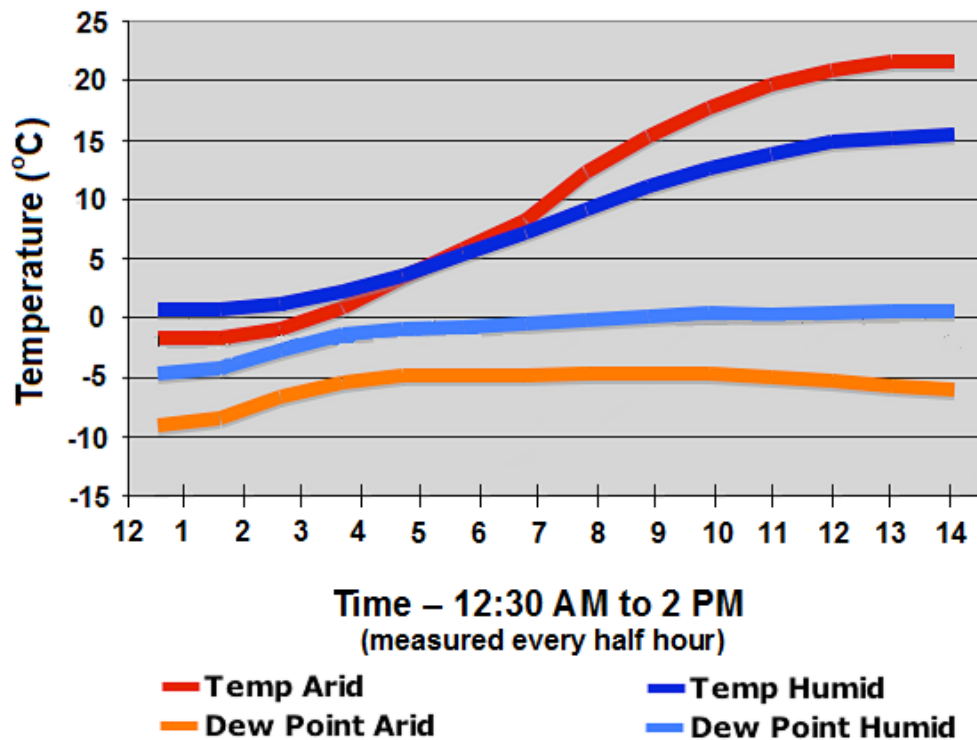


Figure 6. Effect of Humidity on Soil Temperature ⁶.

Dr. John Costella⁷ relays, "Climategate has shattered that myth (the myth of global warming)." It gives us a peephole into the work of the scientists investigating possibly the most important issue ever to face mankind. Instead of seeing large collaborations of meticulous, careful, critical scientists, we instead see a small team of incompetent cowboys, abusing almost every aspect of the framework of science to build a fortress around their "old boys club", to prevent real scientists from seeing the shambles of their research.

Back in time, the IPCC relayed there was a greenhouse signature in the atmosphere and the temperature 8-12 km above the tropics was warmer than the ground temperature⁸. Actual temperature measurements refuted this. They also violated the second law of thermodynamics by saying a cooler atmosphere can warm a warmer earth. They don't have a clue, or they think people are stupid -- two bogus explanations that are easy to show are completely false.

Around 1990, NOAA began weeding out more than three-quarters of the climate measuring stations around the world. It can be shown that systematically and purposefully, country by country, they removed higher-latitude, higher-altitude and rural locations, all of which had a tendency to be cooler. The thermometers kept were near the tropics, the sea, and airports near bigger cities. These data were then used to determine the global average temperature and to initialize climate models. From 1960 through 1980, there were more than 6000 stations providing temperature information. The NOAA reduced these to fewer than 1500. Calculating the average temperatures this way ensured that the mean global surface temperature for each month and year would show a false-positive temperature anomaly, a bogus warming trend. Interestingly (although absent scientific credibility), the very same stations that were deleted from the world climate network were retained for computing the average-temperature base periods, further falsely increasing the bias towards earth warming.

An internal study by the U.S. EPA⁹ completed by Dr. Alan Carlin and John Davidson concluded the IPCC was wrong about global warming. Dr. Carlin is an Environmental Protection Agency veteran who wrote a damaging report to Lisa Jackson's EPA agenda, warning that the science behind climate change was questionable at best, and that we shouldn't pass laws that will hurt American families and hobble the nation's economy based on incomplete information.

One statement in his executive summary found that the crucial assumption in the Greenhouse Climate Models (GCM) used by the IPCC concerning a strong positive feedback from water vapor is not supported by empirical evidence and that the feedback is actually negative. **This is exactly what is shown here, water vapor in the atmosphere causes a cooling (negative feedback), not a positive warming feedback.**

EPA tried to bury Dr. Carlin's report. An email from Al McGartland, Office Director of EPA's National Center for Environmental Economics (NCEE), to Dr. Alan Carlin, Senior Operations Research Analyst at NCEE, forbade him from speaking to anyone outside NCEE on endangerment issues. In a March 17 email from McGartland to Carlin, stated that he will not forward Carlin's study. "The time for such discussion of fundamental issues has passed for this round. The administrator (Lisa Jackson) and the administration have decided to move forward on endangerment, and your comments do not help the legal or policy case for this decision. I can only see one impact of your comments given where we are in the process, and that would be a very negative impact on our office." I guess telling the truth would be a negative impact to the EPA. A second email from McGartland stated "I don't want you to spend any additional EPA time on climate change. "McGartland's emails demonstrate that he was rejecting Dr. Carlin's study because his conclusions ran counter to the EPA/IPCC position. Yet this study had its basis in three prior reports by Carlin (two in 2007 and one in 2008) that were accepted. **Another "government cover-up", just what the United States does not need.**

Most of the U.S. House of Representatives agree with the fraud assessment.¹⁰ On February 19, 2011 they voted to eliminate U.S. funding for the Intergovernmental Panel on Climate Change. With a vote of 244-179, they said that it no longer wishes to have the IPCC prepare its comprehensive international climate science assessments. The amendment, sponsored by Rep. Blaine Luetkemeyer (R-Missouri), said; "The IPCC scientists manipulated climate data, suppressed legitimate arguments in peer-reviewed journals, and researchers were asked to destroy emails, so that a small number of climate alarmists could continue to advance their environmental agenda". The organization responsible for managing a global cap-and-trade system worth billions of dollars for carbon emissions projects around the world is trying to get sweeping legal immunities for its actions, even as it planned to expand its activities in the wake of the 2012 United Nations' Rio + 20 summit on sustainable development.¹¹ Yes, global warming from CO₂ is a complete fraud - that is why they are seeking shelter from prosecution.

Why Was It Done?

It is all about the money. For example, Al Gore's Generation Investment Management LLP was started in 2004 and in 2008 this announcement was made, "It will be closed to new investors, having risen close to its \$5 billion target!"¹². It rose to five billion dollars in 4 years! This shows that a lot of investment firms were in on the scam big time. They also hooked in nefarious pseudo-scientists who were awarded grants for their work in promoting this fraud. Sadly, much of the world runs on the tenet, "Show Me the Money!" **They don't care seem to care one whit about our children or the jobs of the people who work in conventional fuels, such as coal, petroleum and natural gas!**

CFC Destruction of Stratospheric Ozone did cause the Earth to Warm?

A greater than normal warming did occur from 1966 until 1998 but no measurements confirm an increase in CO₂ emissions, whether anthropogenic or natural, had any effect on global temperatures. As a matter of fact, all atmospheric gases and dust in our atmosphere cools our planet, they don't warm it¹³ as explained above. However, there is very strong evidence that anthropogenic emissions of chlorofluorocarbons (CFCs) were the cause of the near recent abnormal warming. It is not a radiation effect, it is because of the reaction of CFCs with stratospheric ozone. CFCs were used primarily in air conditioning units. Acting in accordance with an International Treaty called the Montreal Protocol (1987); the U.S. Environmental Protection Agency (EPA) mandated the phase-out of CFCs (R-22) through the Clean Air Act.

CFCs and other halides created both unnatural atmospheric cooling and earth warming based on these facts. CFCs destroyed ozone in the lower stratosphere-upper troposphere causing these zones in the atmosphere to cool 1.37° C from 1966 to 1998, see Figure 7.

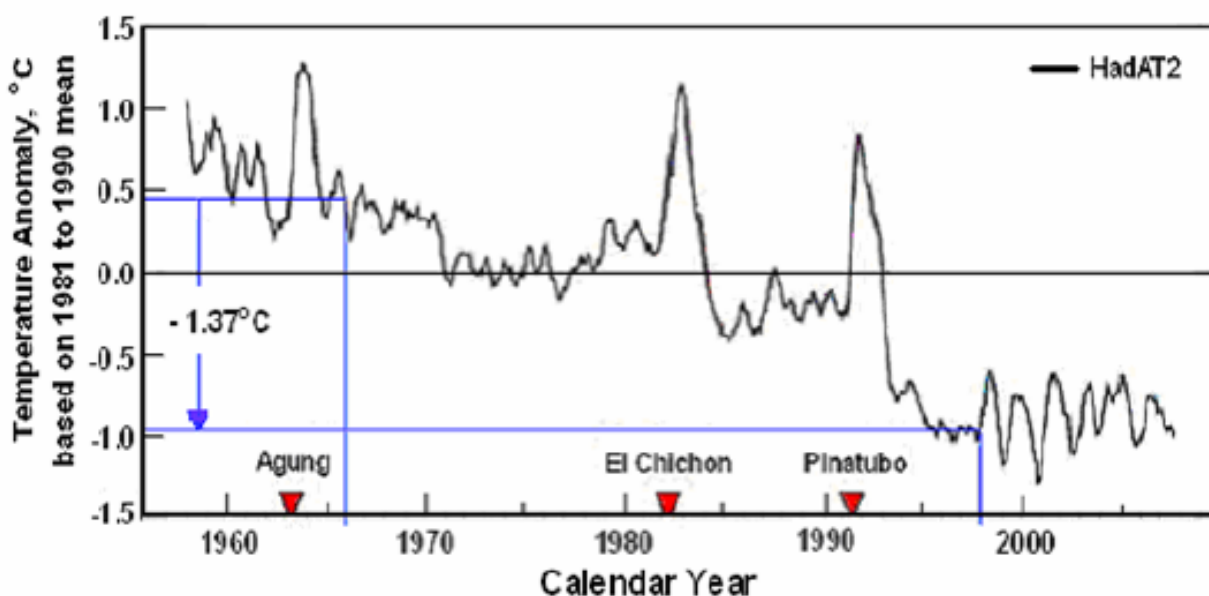
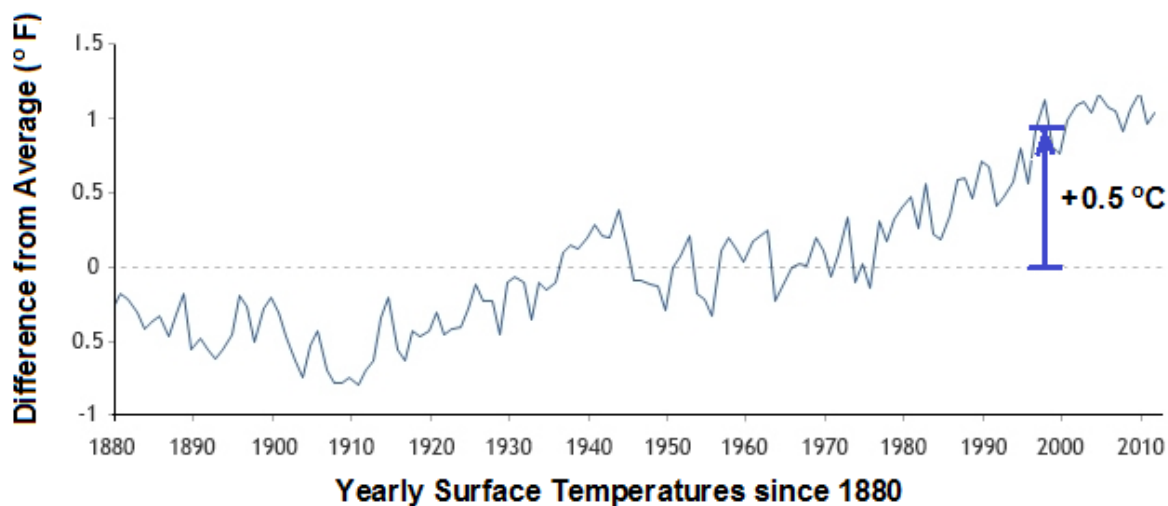


Figure 7. Lower Stratosphere-Upper Troposphere Cooling

The ozone loss allowed more UV-B light to pass through the stratosphere at a sufficient rate to warm the lower troposphere plus 2" of the earth by 0.5° C (1966 to 1998). The effect of banning CFC production started having its effect around 1998. Since 1998 there has been no warming, see Figure 8.

Most of the temperature change from ozone loss is in UV-B light, that is 2% of the 8% of the UV light (based on total light) that hits our atmosphere. UV-B light provides 25% of the energy that hits the earth. $E = hf$ and high frequency UV-B photons carry much more energy than visible light photons.



Yearly surface temperatures since 1880 compared to the twentieth-century average (dashed line at zero).
NOAA's National Climatic Data Center.

Figure 8. Global Mean Temperature, 1880 to 2012.

Stratospheric ozone was diminished by CFCs and other refrigerants-propellants released into the atmosphere. These compounds are broken down by the sun's UV-B rays and release chlorine and bromine molecules that destroy the ozone.

Scientists estimate that one chlorine atom can destroy 100,000 ozone molecules over its life in the stratosphere. With less ozone in the stratosphere, more UV-B rays hit earth, warming it up and increasing the risk of skin cancer.

The ozone layer extends from 8 km (upper troposphere) up throughout the stratosphere. It is well known that the warming of the stratosphere is caused by the reaction of ultraviolet light with ozone. Energy is absorbed and ozone (O_3) converts to diatomic (O_2) and (O) nascent oxygen. Conversely, ozone loss decreases the amount of UV-B light absorbed and thus causes the stratosphere to cool and the earth to warm.

Figure 9 shows the lowest value of ozone measured by TOMS (Total Ozone Mapping Spectrometer) each year, a satellite instrument used to determine ozone levels. One can see how CFCs destroyed the ozone in the late 1960's until the late 1990's.

CFCs, chlorinated solvents, halons, methyl bromide, methyl chloride and halogenated chlorofluorocarbons (HCFCs) in the stratosphere have begun to show a slow decline after reaching a peak in the mid-1990s.

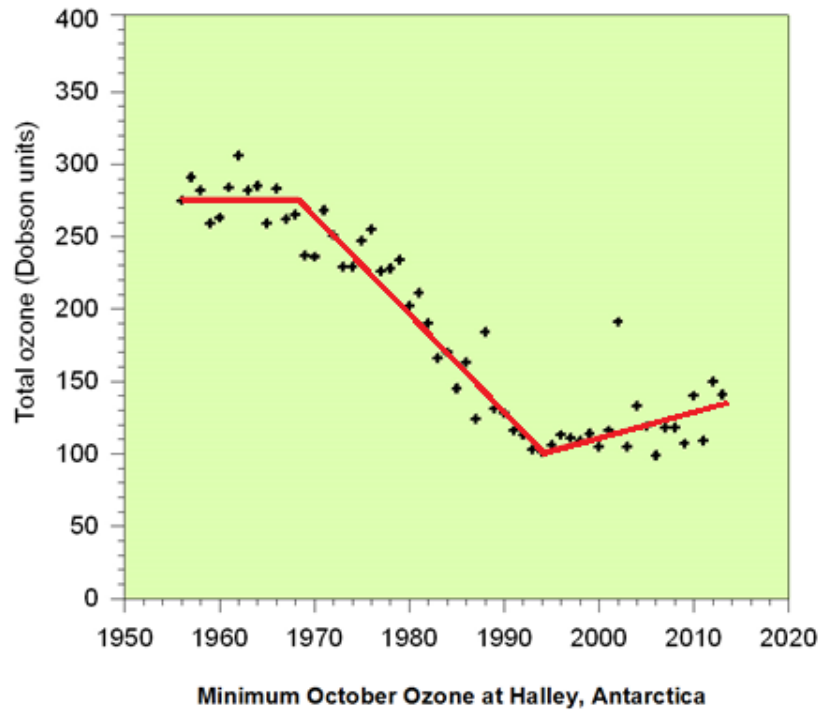


Figure 9. Antarctic ozone over time ¹⁴.

Large solar heating-cooling cycle variations also occur every 80,000 to 110,000 years, but the sun's thermostat also changes in shorter term cooling-warming cycles of approximately 11 years, see Figure 10. The period chosen for analysis to negate this effect was from 1966 to 1998. At these two points in time, the solar irradiance hitting the earth was approximately the same (1365.8 W/m^2). Table 1 and Table 2 show mass and energy balances around the earth and stratosphere from 1966 to 1998.

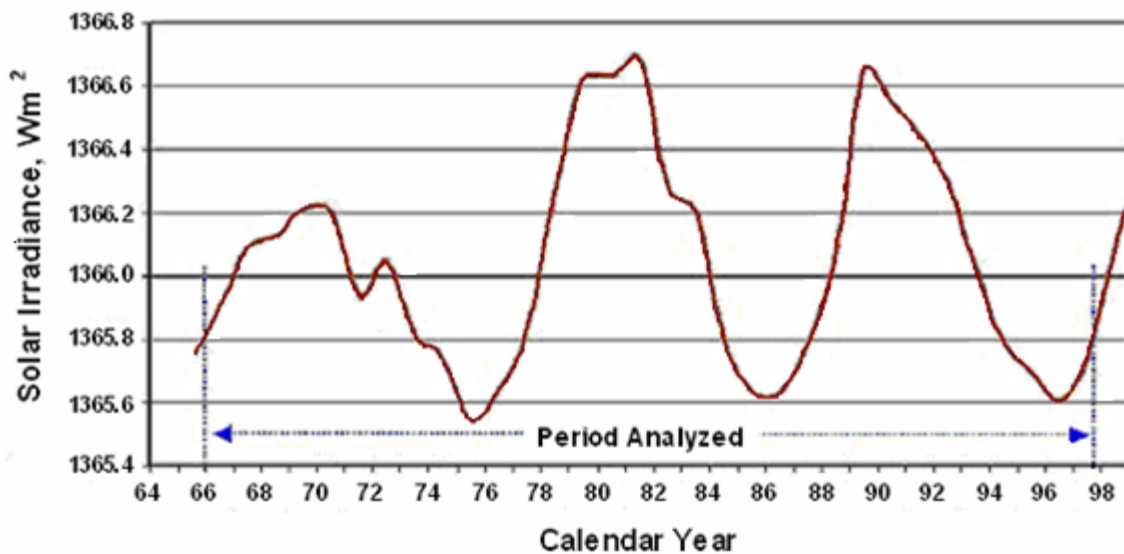


Figure 10. Solar irradiance cycle effect on earth ¹⁵

TABLE 1. UV-B LIGHT PASSING THROUGH STRATOSPHERE IN 1966 COMPARED TO 1998
Mass and Energy Balance
Lower Stratosphere/Upper Troposphere (19 km down to 8 km above sea level)

<u>1966</u>					
		<u>TEMP. °R</u>	<u>Total Lb</u>	<u>Btu/Lb</u>	<u>Total Btu</u>
AIR	Wt%	419.000			
O ₂	23.24		7.0900E+17	91.4	6.4803E+19
N ₂	76.76		2.3418E+18	104.8	2.4542E+20
H ₂ O	0.00 (no moisture above 6.4 km)		0.0		0.0
Total	100.00		3.0508E+18		3.1022E+20
<u>1998</u>					
AIR	Wt%	416.554			
O ₂	23.24		7.0900E+17	90.9	6.4448E+19
N ₂	76.76		2.3418E+18	104.2	2.4402E+20
H ₂ O	0.00 (no moisture above 6.4 km)		0.0		0.0
Total	100.00		3.0508E+18		3.0846E+20
UVB energy not absorbed in 1998 compared to 1966 resulted in 2.446 °R or 1.37 °C Cooling					1.7596E+18

TABLE 2. UV-B LIGHT HEATING OF LOWER TROPOSPHERE AND EARTH IN 1998
Mass and Energy Balance
Troposphere (0 to 8 km above sea level) + 2" earth

<u>1966</u>					
		<u>TEMP. °R</u>	<u>Total Lb</u>	<u>Btu/Lb</u>	<u>Total Btu</u>
AIR	Wt%	517.200			
O ₂	23.21444		1.4494E+18	105	1.5219E+20
N ₂	76.67556		4.7859E+18	120.3	5.7574E+20
H ₂ O	0.11		6.8664E+15	1273.1	8.7416E+18
Total	100.00		6.2422E+18		7.3667E+20
Earth/Water 2" deep		517.200	5.6818E+17	517.2	2.9386E+20
UVB energy hitting earth/troposphere in 1998 compared to 1966					1.7596E+18
Total			6.8103E+18		1.0323E+21
<u>1998</u>					
	Wt%				
AIR					
O ₂	23.21444	518.100	1.4494E+18	105.1827	1.5245E+20
N ₂	76.67556		4.7859E+18	120.5093	5.7675E+20
H ₂ O	0.11		6.8664E+15	1273.1	8.7416E+18
Total	100.00		6.2422E+18		7.3794E+20
Earth/Water 2" deep		518.100	5.6818E+17	518.1	2.9437E+20
Total			6.8103E+18		1.0323E+21
Added UV-B light hitting earth accounts for + 0.9 °R or 5 °C warming from 1966 to 1998					12

The start of the reduction of ozone in the stratosphere is the result of the Montreal Protocol of 1987 and later amendments. CFC production ceased in developed countries in 1998 and was stopped in underdeveloped countries in 2010¹⁶. The decline is now about 1% per year and the ozone is also now increasing slightly in the stratosphere as shown above in Figure 8.

By around 2100 the ozone should be back to the levels seen in 1960. Ozone in the year 2002 was higher in the ozone hole because of unusually high temperatures in the Antarctic stratosphere (probably due to more interaction with air outside of the Antarctic region).

The global average ozone is about 300 Dobson units. Before 1980 ozone less than 200 Dobson units was rarely seen. In recent years ozone near 100 Dobson units has become normal in the ozone hole. The Dobson unit is the most common unit for measuring ozone concentration. One Dobson unit is the number of molecules of ozone that would be required to create a layer of pure ozone 0.01 millimeters thick at the surface of the earth at a temperature of 0 degrees Celsius and a pressure of 1 atmosphere.

The legendary hypotheses of Paul Crutzen, Mario Molina, and Sherwood Rowland, and led to CFCs being banned because they were destroying stratospheric ozone. Total stratospheric organic chlorine is currently over 2.5 ppbv, in 1970 it was just over 1 ppbv, see Figure 11.

One can see how the reduction in stratospheric chlorine has affected global temperature. As it stopped its rise in 1998 and started decreasing the temperature also started decreasing slightly (refer back to Figure 7).

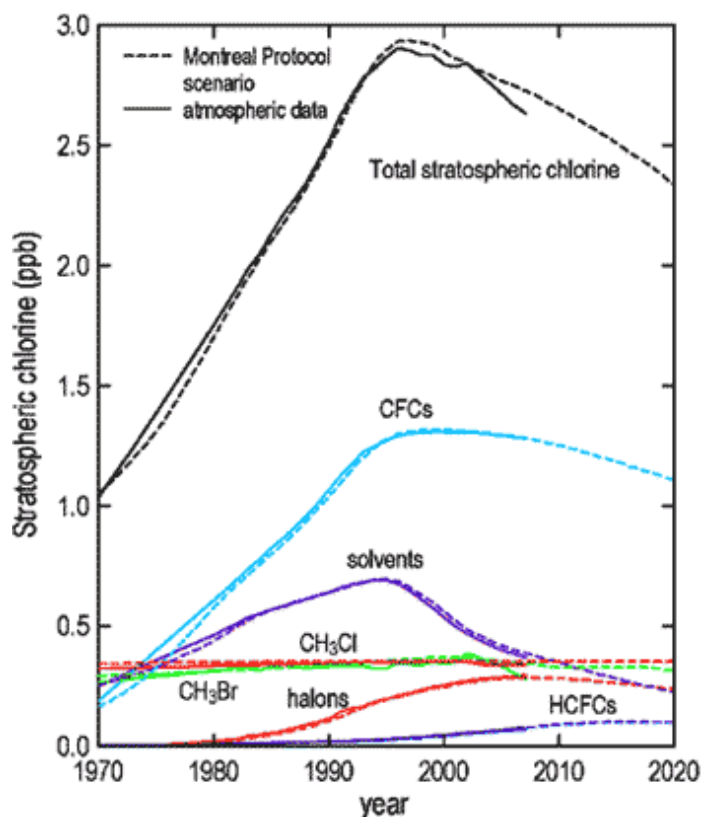


Figure 11. Stratospheric Chlorine¹⁷.

Conclusions

Since 1966 it is apparent that CFC destruction of stratospheric ozone was the only mechanism that caused the earth to warm. Since 1998 when CFC production was stopped in developed countries and CFC concentration in the stratosphere stopped increasing, the earth temperature has not increased. Fairly recently¹⁸, Qing-Bin Lu of the University of Waterloo stated, "a new theoretical calculation on the greenhouse effect of halogenated gases shows that they (mainly CFCs) could alone result in the global surface temperature rise of ~0.6°C from 1970-1998. These results provide solid evidence that recent global warming was indeed caused by the greenhouse effect of anthropogenic halogenated gases". Although there is no such thing as greenhouse gases, the author is pleased that someone else has determined that CFCs not CO₂ and has caused the earth to warm. The author discovered the CFC effect back in 2009, Dr. Lu has been touting this for years as well but most scientists haven't accepted it.

So, based on real data evaluation, CO₂ causing global warming is completely contrived. The lesson to the world here is, when it comes to science; never blindly accept an explanation from a politician or scientists who have turned political for their own private gain. Many scientists, including the author, see global warming from CO₂ as a cruel global swindle to eliminate conventional fuels, so that a few, at the expense of the many, can reap huge profits from either carbon taxes and/or alternative "non-green" energy sources such as windmills, solar power, and hydroelectric power.

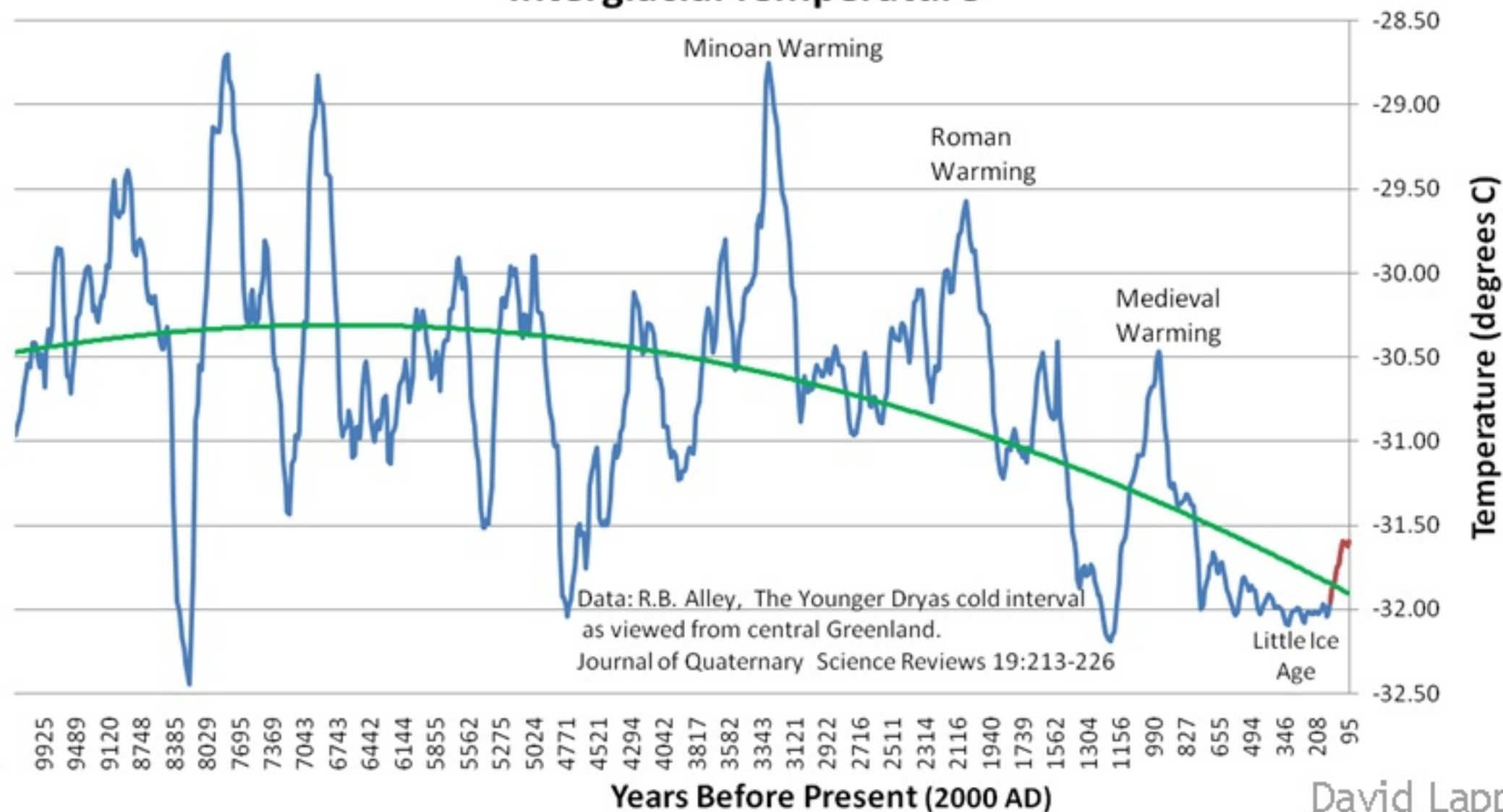
Science is a search for truth -- nothing else; when scientific truth is trashed (the US EPA is complicit in this) for personal gain by a few influential greedy charlatans, the world and the average people in it, are in very deep trouble!

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Greenland GISP2 Ice Core - Last 10,000 Years

Interglacial Temperature



3rd February 2015

ATTENTION: Robin Sizemore, West Virginia Science Coordinator.

robin.sizemore@k12.wv.us.

Dear Robin

I note there is a proposal for the West Virginia board to consider changes to its science curriculum in order that a more balanced approach might be undertaken in the teaching of climate change within your school district. I would like to make a few comments in this regard.

Now retired, my academic background is in the geosciences (including climate and paleoclimate) and I have taken a close interest in the IPCC process, their media statements, technical reports and Summaries for Policymakers which have influenced so many in the media and politics. I have also been a science educator at a number of universities in Australia and the USA and have always strived to promote scientific integrity throughout my academic life. I feel well qualified to comment about the teaching of climate science and the way this topic is presented by the IPCC and its supporters. I should point out that I have never worked for, or received funding from any energy provider.

I will comment under a number of headings.

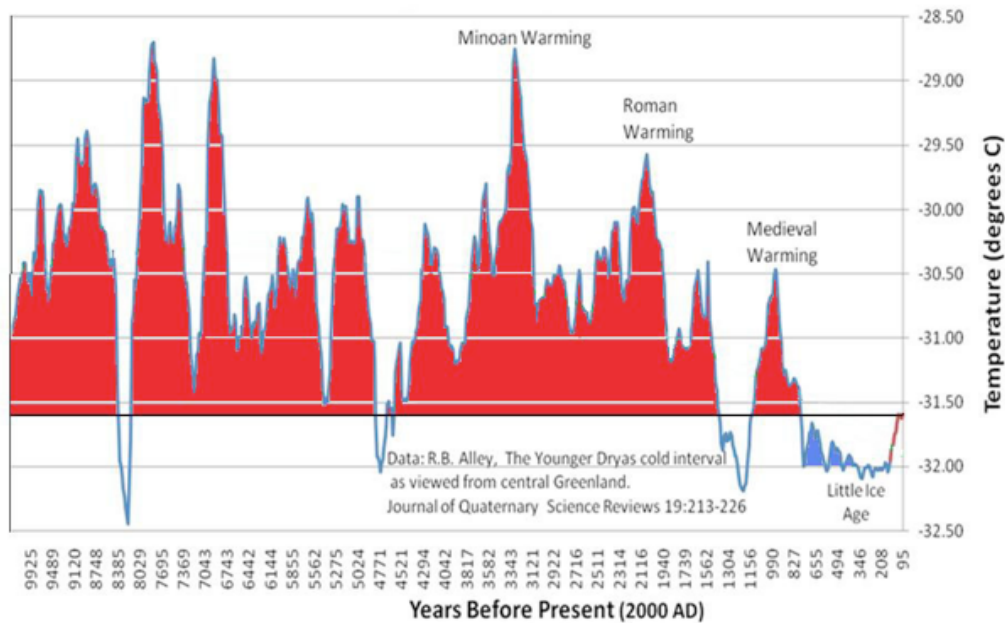
CLIMATE PAST AND PRESENT

It is hardly surprising that there has been slight warming over the last century since we are still emerging from the Little Ice Age. In England, sea, lakes and rivers were frozen. The winter of 1709 was called the "Great Frost."

The Earth's climate is always changing. It is changing as you read this and will continue to change irrespective of what we do. For most of geologic time, the Earth has experienced temperatures up to 10°C higher than we are experiencing today. Sometimes climate change has been rapid and sometimes it has been slow.

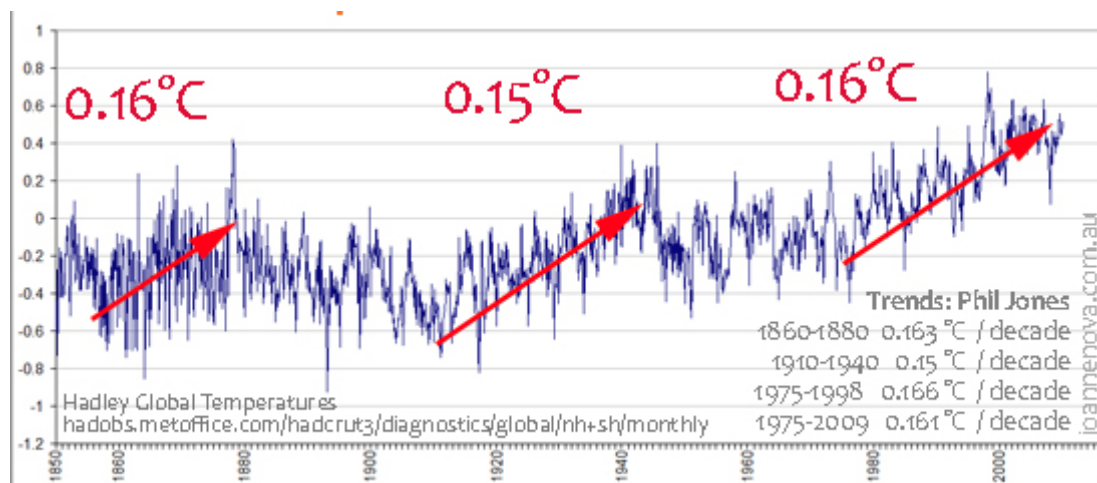
If anyone believes that current temperatures are unusually high, they should consider temperatures over the last 10,000 years:

Greenland GISP2 Ice Core - Temperature Last 10,000 Years



Note that current temperatures are lower than those attained during the Medieval Warm Period, the Roman Warm Period and the Minoan Warm Period.

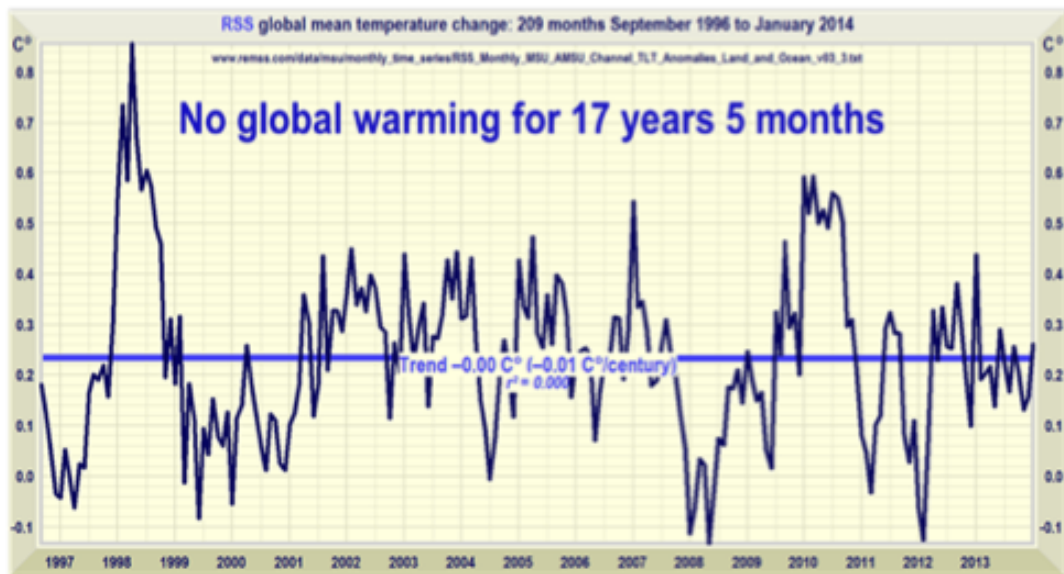
If anyone believes that current temperatures are unusually high, they should consider temperatures over the last 100 years and place the mild 20th century warming in perspective:



Hadley Global Temperatures show almost identical temperature increases between 1855–1880, 1910–1950 and 1980–2000. It would be difficult to convince anyone that the 1855–1880 warming phase was due to natural processes whilst the late 20th century warming was most likely anthropogenic in origin and what precisely caused the two cooling phases in between?

CURRENT TEMPERATURE TRENDS

So what do uncontaminated satellite and radio-sonde data show about current temperature trends?



In fact there has been no global warming for more than 17 years despite carbon dioxide levels rising, essentially from natural inputs.

DOES CARBON DIOXIDE DRIVE GLOBAL TEMPERATURE?

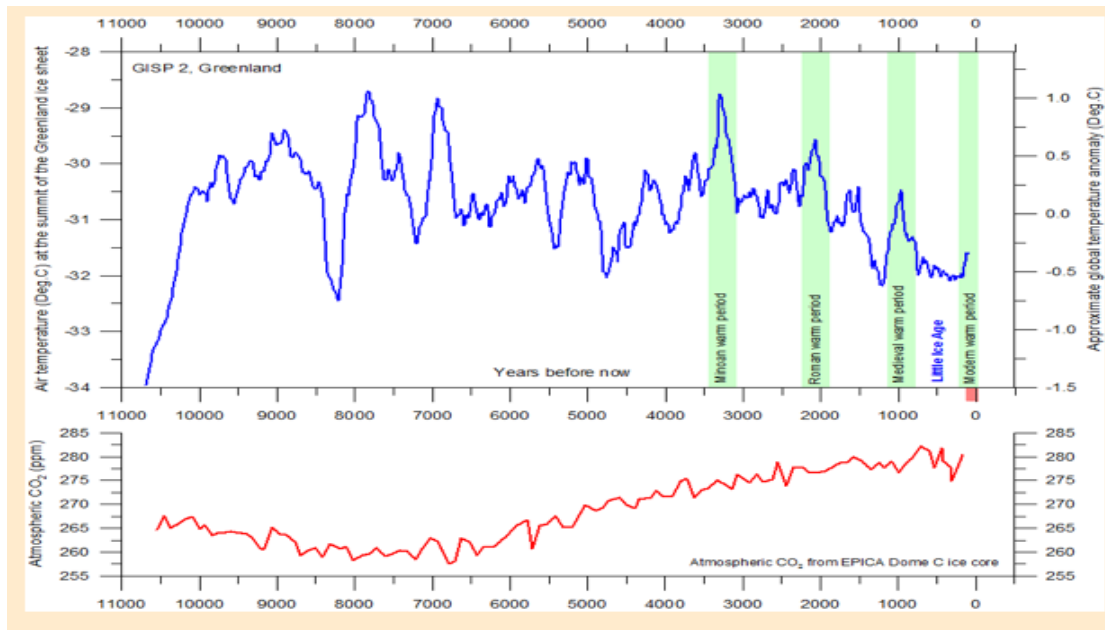
Many climate alarmists argue that carbon dioxide somehow drives global warming. In fact the peer-reviewed, published literature clearly shows that carbon dioxide has never controlled global temperature. This is hardly surprising.

Is carbon dioxide a greenhouse gas? Yes, but it is a minor greenhouse gas providing only a trivial warming effect.

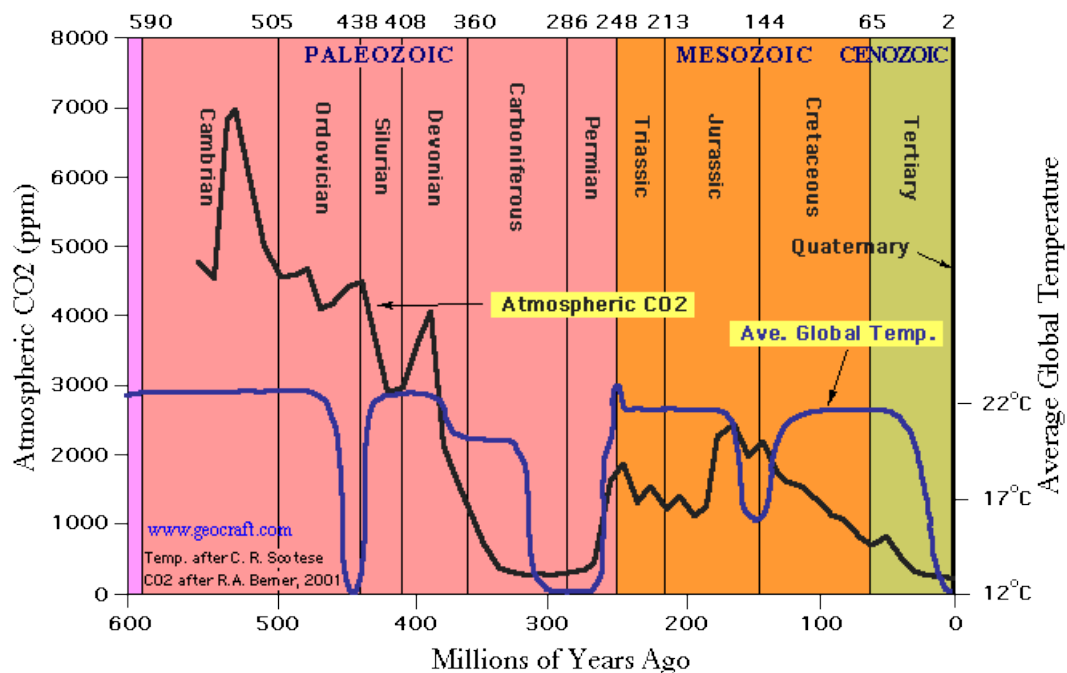
Is the atmosphere loaded with carbon dioxide? No. Current levels (0.038%) are amongst the lowest in Earth history.

Shouldn't we be reducing carbon dioxide emissions anyway? No. Carbon dioxide is a colourless, odourless, non-toxic gas which is essential for photosynthesis and all life on Earth. The planet needs more carbon dioxide, not less.

Ice core data show temperature fluctuations over the last 11,000 years with a clear disconnect between global temperature and carbon dioxide levels:



Consider also, the following proxy data and disconnect for global temperature and atmospheric carbon dioxide levels going back over 500 million years:



It is now widely accepted, even by warming alarmists, (perhaps not from those with vested interests) that there has been no increase in global temperature over the last 17 years.

ISN'T THE INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE (IPCC) THE AUTHORITY ON CLIMATE SCIENCE?

Definitely not! Understandably, those who might be confused about the arguments over climate science often rely on media comments and summary reports from the now discredited IPCC. No doubt the IPCC and its acolytes would like to continue promoting the mantra of catastrophic anthropogenic global warming (CAGW) although I can assure you that few in the broader scientific community now take this claim (or the IPCC) seriously.

It is now widely recognized that the IPCC, is a political/ideological organization which has been masquerading as an independent scientific body since its inception in 1988.

The IPCC certainly has clear goals but these are not directed towards a better understanding of the climate system.

Maurice Strong, founder of the United Nations Environmental Program (UNEP), from which the IPCC was spawned, was unequivocal about his position:

"Isn't the only hope for the planet that the industrialized civilizations collapse? Isn't it our responsibility to bring that about?"

Ottmar Edenhofer is a leading member of the UN's IPCC. He was co-chair of the IPCC's Working Group III, and a lead author of the IPCC's Fourth Assessment Report released in 2007. He seems happy to sacrifice scientific integrity for the IPCC's ideological goal of transferring money from developed nations to third world countries. He made clear the UN's position:

"The climate summit in Cancun ---- is not a climate conference, but one of the largest economic conferences since the Second World War."

He described what the UN intentions are:

"We redistribute de facto the world's wealth by climate policy."

And:

"One has to free oneself from the illusion that international climate

policy is environmental policy. This has almost nothing to do with environmental policy anymore."

So climate science will be abused by the UN to promote socialism. This might be seen as a "*noble cause*" but no scientist or indeed any intellectually honest person should go along with this.

Senator Timothy Wirth, former undersecretary for global affairs, made clear his political stance when he addressed the U.N. sponsored Rio Earth Summit in 1992. He said:

"We have to ride the global warming issue. Even if the theory of global warming is wrong."

Apparently, Greenpeace co-founder Paul Watson agrees with such deception:

"It doesn't matter what is true, it only matters what people believe is true."

The IPCC's non-scientist Chairman, Dr Rajendra Pachauri has publicly declared his bias about climate change, Western lifestyles and his desire to transform the world's economy by demonizing carbon dioxide. He said:

"Unless we live in harmony with nature, unless we are able to reduce our dependency on fossil fuels and adopt renewable energy sources and until we change our life styles, the world will increasingly become unfit for human habitation."

And:

"I am not going to rest easy until I have articulated in every possible form the need to bring about major structural changes in economic growth and development. That's the real issue. Climate change is just a part of it."

This is a supposedly impartial Chairman of a supposedly unbiased scientific body. Again, no scientist or indeed any intellectually honest person should go along with this.

HASN'T THE IPCC FAIRLY ASSESSED ALL THE PEER REVIEWED LITERATURE ON ALL ASPECTS OF CLIMATE CHANGE?

It's interesting to note that there are over 120 peer reviewed published papers on the influence of the sun on climate. See for instance: <http://notrickszone.com/100-papers-sun-drives-climate/>

So why has the IPCC played down the solar influence on climate and inputs other than carbon dioxide? On every issue such as global warming, climate extremes, sea level rise, drought etc. where IPCC representatives promote alarmism, there is contrary and less alarming evidence. One has to ask why the IPCC has ignored this. Perhaps Dr Jason Johnston, former Professor of environmental law has the answer.

In a paper entitled: *Global Warming Advocacy: A Cross-Examination*, he looked to see if the IPCC reports actually represented "*an unbiased and objective assessment.*" Johnston reported:

"Such verification means comparing what the IPCC has to say about climate science with what one finds in the peer-reviewed climate science literature."

He concluded:

"On virtually every major issue in climate change science, IPCC reports systematically conceal or minimize what appear to be fundamental scientific uncertainties."

Johnston went on to say that when they examined research by "*scientists at the very best universities*" who are of "*unimpeachable credibility*" they found "*facts and findings that are rarely if ever mentioned*" by the IPCC.

HASN'T THE IPCC RECEIVED INPUT FROM A LARGE NUMBER OF CLIMATE SCIENTISTS, INCLUDING IPCC REVIEWERS?

Yes, but what has happened to that input should be of concern to everyone who values scientific integrity. Here are a few examples of IPCC malfeasance:

IPCC officials have admitted that the IPCC is more about ideology and wealth distribution rather than a dispassionate analysis of climate science;

The IPCC's claim that human activity is contributing significantly to global warming and that this claim is supported by up to 4,000 scientists is demonstrably false;

The IPCC gives the impression that its reports are prepared by the world's best scientists yet many contributors are graduate students and environmental activists;

The IPCC has not only incorporated "grey literature" in its reports but has also allowed NGO operatives, such as Greenpeace personnel, to make significant contributions. Lobby groups such as Greenpeace, Friends of the Earth and the World Wildlife Fund (WWF) have no place in the production of a dispassionate scientific document;

The IPCC attempts to include the names of experts on their reports even if those experts disagree with the IPCC summary statements;

Because the predicted warming failed to materialise, the IPCC changed its terminology from "global warming" to weasel terms such as "climate change" and "extreme weather";

The IPCC attempted to change well established climate history including the existence of the Medieval Warm Period, the Roman Warm Period and Little Ice Age;

The IPCC does not allow any criticism of the anthropogenic global warming meme to progress through to the final IPCC Summaries for Policymakers;

Some statements in the technical reports were deleted or changed if they did not conform with requirements of UN officials and bureaucrats;

Comments from IPCC expert reviewers were often ignored if they did not conform with the more alarmist requirements of UN officials and bureaucrats;

When IPCC scientists resigned over perceived malfeasance the IPCC simply ignored this;

IPCC Summaries for Policymakers, made available to the media and politicians, were essentially written by UN officials, bureaucrats and politicians;

IPCC Summaries for Policymakers were negotiated and written in camera with no access given to the public and media representatives;

The IPCC Chairman Dr Rajendra Pachauri claimed that the InterAcademy Council (IAC), established to investigate the IPCC, found the IPCC's work to be solid and robust. In fact the IAC concluded no such thing. The IAC reported that there were significant shortcomings in each major step of the IPCC's assessment process.

The above are summary statements of questionable IPCC behaviour for which I have further details, should these be required. I will elaborate on one example.

The Chairman of the IPCC, Rajendra Pachauri has always been dismissive of any scientist or journalist critical of the IPCC process. Here is one defensive line he has used regularly:

"The IPCC studies only peer-review science. Let someone publish the data in a decent credible publication. I am sure the IPCC would then accept it, otherwise we can just throw it into the dustbin."
Rajendra Pachauri, November 2007.

He also said:

"People can have confidence in the IPCC's conclusions...Given that it is all on the basis of peer-reviewed literature." Rajendra Pachauri, June 2008.

And:

"This is based on peer-reviewed literature. That's the manner in which the IPCC functions. We don't pick up a newspaper article and, based on that, come up with our findings." Rajendra Pachauri, June 2008.

Similar statements have been echoed by others who actually believed Pachauri:

"Without a strong, peer-reviewed science base (provided by the IPCC) ... the case for action on climate change would not be as unequivocal as it is today." Ban Ki-Moon, United Nations Secretary General, August 2008.

"The IPCC relies entirely on peer reviewed literature in carrying out its assessment." US Environmental Protection Agency, December 2009.

"The IPCC bases its work on papers that have been published in the peer-reviewed scientific literature." *The Economist*, December 2009.

One has to ask if the above statements are correct?

A team of 43 auditors from 12 countries has scrutinised the IPCC's 2007 report which comprises 44 chapters in its almost 3,000 pages.

There are 18,531 cited references and each chapter was audited 3 times with references being sorted into articles that were published in peer-reviewed academic journals and non-peer-reviewed articles.

It became clear that, of the 18,531 references cited in the IPCC report, 5,587 (nearly one third) of these were not peer-reviewed. They included press releases, newspaper and magazine articles, discussion papers, student theses, working papers, and literature published by environmental groups.

Some chapters were particularly scant with regard to peer-reviewed literature. Chapter 5, from Working Group 3's report, for instance, has only 61 of its 260 references being peer-reviewed, i.e. about three-quarters of the material cited in that particular chapter was not peer-reviewed.

Once again, we find the IPCC Chairman being economical with the truth. Scientists expected and trusted that the IPCC would undertake an impartial meta-analysis of all the peer-reviewed, published climate literature. Clearly they have done no such thing and a leaked email in 2000, from the IPCC's Vice-Chair (2002-2008) Dr George Filippo, shows that he knew grey literature was being used. He said:

"I feel rather uncomfortable about using not only unpublished but also unreviewed material as the backbone of our conclusions (or any conclusions) ... I feel that at this point there are very little rules [sic] and almost anything goes."

WHAT ABOUT THE CLAIM THAT 97% OF CLIMATE SCIENTISTS SUPPORT THE NOTION OF CATASTROPHIC ANTHROPOGENIC GLOBAL WARMING (CAGW)?

When the media and politicians make public statements about the 97% consensus we can be fairly confident that they are merely repeating what they have heard and/or what they want to believe for political/ideological reasons. A little due diligence would readily reveal that the 97% comes from a crude 2009 online survey by Doran and Zimmerman from the University of Illinois. 10,257 scientists were surveyed about their views on climate change. The survey was subsequently sent out to a subgroup of a mere 77 scientists, knowing that 75 of these had indicated their belief that humans contribute to climate change. 75 out of 77 gives 97%.

Others have referred to the equally flawed paper: Cook, J., D. Nuccitelli, S.A. Green, M. Richardson, B. Winkler, R. Painting, R. Way, P. Jacobs, and A. Skuce, (2013). Quantifying the consensus on anthropogenic global warming in the scientific literature, *Environ. Res. Lett.* 8: 024024 (7 pp), doi:0.1088/1748-9326/8/2/024024.

In this paper we see a poor definition of consensus, the use of abstracts only, the exclusion of those responding with no opinion, the omission of some key results and the misrepresentation of other statements.

Professor Mike Hulme from the School of Environmental Sciences, University of East Anglia has summarized and dismissed the Cook et al. study thus:

"The "97% consensus" article is poorly conceived, poorly designed and poorly executed. It obscures the complexities of the climate issue and it is a sign of the desperately poor level of public and policy debate in this country that the energy minister should cite it."

Hulme had previously commented:

"Claims such as '2,500 of the world's leading scientists have reached a consensus that human activities are having a significant influence on the climate' are disingenuous ... The actual number of scientists who backed that claim was "only a few dozen."

The other point to bear in mind is that consensus has no place in science. If the *argumentum ad populum* was persuasive in science, we would still believe in a geocentric view of the universe; a 4,000 year old Earth; that heavier objects fall faster than lighter objects; the atom is the smallest part of matter; the impossibility of flying machines; all rocks are formed from water, bacteria don't exist; that stomach ulcers are caused by stress, spicy foods or too much stomach acid.

Science is driven by skepticism and hard data, not groupthink but the shift away from belief in CAGW is now clear. Please look up:

"More Than 1000 International Scientists Dissent Over Man-Made Global Warming Claims." found at:

<http://www.climatedepot.com/a/9035/SPECIAL-REPORT-More-Than-1000-International-Scientists-Dissent-Over-ManMade-Global-Warming-Claims--Challenge-UN-IPCC--Gore>

You might also look up: 1350+ Peer-Reviewed Papers Supporting Skeptic Arguments Against ACC/AGW Alarm at:

<http://www.populartechnology.net/2009/10/peer-reviewed-papers-supporting.html>

Tens of thousands of scientists have now signed petitions against the notion of CAGW and I urge you to look up the following:

The Heidelberg Appeal; The Oregon Petition; The Manhattan Declaration; Open Letter to UN Secretary General; The Petition by German Scientists to the Chancellor; The Leipzig Declaration; Statement from Atmospheric Scientists; Letter to the Members of the U.S. House of Representatives and the U.S.

Senate; Memorandum submitted by the Institute of Physics; Statement from scientists to President Obama; Two statement from NASA scientists and other employees; Petition to Ban Ki Moon.

WHAT ABOUT THE CLAIM THAT ALL MAJOR SCIENCE SOCIETIES AND ACADEMIES ENDORSE THE NOTION OF CATASTROPHIC ANTHROPOGENIC GLOBAL WARMING (CAGW)?

They don't! In fact position statements from science academies and associations are usually made without debate or consultation with their wider membership. Of the international science bodies that have issued statements in support of CAGW, none have provided evidence that the majority of their members support it.

Such statements may represent the opinions of a mere handful of members. These governing boards are well aware of where their funding originates and the rank and file members could be blissfully unaware of alarmist, unsubstantiated statements released by their governing board until it is too late.

Fellow of the Royal Society of Canada (RSC) and a leading Canadian energy expert, Dr Archie Robertson explains:

"The president of the Royal Society of London ... drafted a resolution in favour and circulated it to other academies of science inviting co-signing. ... The president of the RSC, not a member of the [RSC's] Academy of Science, received the invitation. He considered it consistent with the position of the great majority of scientists, as repeatedly but erroneously claimed by Kyoto proponents, and so signed it. The resolution was not referred to the Academy of Science for comment, not even to its council or president."

A survey of statements from other science bodies shows they are usually the opinions of the executives or committees specifically appointed by the executive. The scientist membership is rarely consulted.

From Stephen W Foster to Dr Colin P. Summerhayes, Vice-President of the Geological Society of London.

“The Society and the IPCC do not reflect the views of all members of the Society or of all, or even a majority, of meteorologists, climatologists and physicists.”

And:

“A central presupposition of Summerhayes' letter, and that of the GSL statement on climate change, that CO2 concentrations are a direct cause of temperature change has not been proved by any of the statements in this or any other of his letters or IPCC reports, or by any research data.”

And:

“I therefore ask that Professor Summerhayes consider and respond to the following criticisms with hard data rather than opinion disguised as fact.”

Why has the IPCC in its latest report:

1. Failed to explain its twenty three year long track record of proven inability to accurately predict climate change?
2. Not publicly and fully disclosed inherent flaws in its methodology that have been repeatedly pointed out by its critics?
3. Kept silent on other climate theories and models that are far superior to those used by the UN-IPCC?

And:

“In a recent report by the Space and Science Research Corporation (an independent body which has no links with any political bodies), 19 claims or climate predictions in the IPCC Summary were evaluated. Five of these claims were found to be misleading and 14 were found to be false or highly unlikely. None were found to be accurate.”

And:

"I am very aware that this subject has long since moved from being one where contrary opinions can be held and debated in relatively balanced manner and that it has become politicised to such a degree that it is now almost impossible to hold a reasoned debate. Instead we are being presented with spurious statements about "95% probabilities" of certainty which deliberately ignore contrary data and the considered opinions of many well informed individuals from a wide variety of relevant disciplines."

The **US National Academy of Sciences** appears to have taken on the role of an alarmist climate advocacy group intent on promoting the alarmist narrative.

In contrast, **Britain's Royal Society** shifted its position on climate change in 2010 away from total support of the IPCC toward expressing much more uncertainty. In fact a review of the Royal Society's initial position was forced on the society by 43 of its Fellows who demanded that its publication *Climate Change Controversies*, produced in 2007 and published on its website, should be rewritten to consider the views of CAGW skeptics. In a statement about global warming, the Royal Society now says:

"There remains the possibility that hitherto unknown aspects of the climate and climate change could emerge and lead to significant modifications in our understanding."

Sir Alan Rudge, a society Fellow of the Royal Society and former member of the Government's Scientific Advisory Committee, said that the society had previously adopted an:

"unnecessarily alarmist position on climate change."

In 2009, **the American Physical Society** (APS) Council decided to review its current climate statement when more than 250 of its membership urged a change in the APS climate statement.

Many physicists wrote to the APS governing board, pointing out:

"Measured or reconstructed temperature records indicate that 20th - 21st century changes are neither exceptional nor persistent, and

the historical and geological records show many periods warmer than today.”

Dr Roger Cohen, a respected fellow of the APS, said:

“The APS response to the petition was the appointment of a committee that took months to review the 157-word Statement. Only one of the members was familiar with the climate science field, and more than one had a vested interest in continued climate alarm. The committee’s final report referred only to IPCC reports and its supporting material, and so we had the predictable outcome: not a single change to the original Statement. Thus, as is the practice of bureaucracies, a position once taken is rigidly adhered to, even when the process that produced it was flawed.”

Dr Lance Wallace agrees:

“This is truly upsetting to me, as a physicist. I had seen the revolt against the original policy statement (“the science is incontrovertible”) and expected that surely the voices of reason would prevail, particularly since physicists are (I thought) less dependent on CAGW funding than atmospheric chemists, oceanographers, dendrochronologists, etc. But it was not to be. Feynman, as far as I know, is the only person to resign from the National Academy of Sciences, on the grounds that the organization only exists to select (or blackball) new members. But now there is an order of magnitude more funding at stake, so we see that such organizations also exist mainly to assure future funding for their members. So the “policy statements” are created by Society bureaucrats (e.g., Leshner of AAAS), for government bureaucrats (Chu of DOE), without troublesome input from members.”

Dr Roger Cohen again:

“Thus far more than two dozen (members) have told me that they have resigned or will resign from the APS climate activity. A few may resign from the APS though I have discouraged that.”

And:

“There is evidence that the process itself that produced the Statement was at least highly questionable if not downright

illegitimate. It is known that a small group of individuals, not satisfied with the degree of alarm contained in the original draft produced by the officially charged committee, acted unilaterally and without authority to raise the level of alarm. A senior APS professional confides in writing that:

“This [the original draft] was unfortunately changed ‘on the fly, over lunch’ by several [APS] Council members who were not pleased with the ‘mild tone’ of the drafted statement. Then the modified statement was voted on at the end of the Council meeting (probably as people were leaving to catch planes) [parentheses original].”

And:

“As I reflect on my experience, I cannot avoid the question of whether we have passed the point of no return, whether the descent of once grand scientific societies into advocating bureaucracies and self-satisfied clubs lobbying for funds can be arrested, reversed, and integrity restored; or is what we have now a permanent feature of modern science – a postmodern distortion of the best values of the scientific tradition that has served humanity well for centuries.”

In 2011 Nobel prize winner Dr. Ivar Giaever resigned from the APS in disgust over the group’s promotion of man-made global warming fears. He objected to their statement that: *“the evidence is incontrovertible.”*

Dr Harold Lewis, Emeritus Professor of physics at the University of California, Santa Barbara, resigned from the APS. He said:

“Climategate was a fraud on a scale I have never seen.”

And:

“... the global warming scam, with the (literally) trillions of dollars driving it, that has corrupted so many scientists, and has carried APS before it like a rogue wave. It is the greatest and most successful pseudoscientific fraud I have seen in my long life as a physicist.”

A statement by APS editor Jeffrey Marque explains:

"There is a considerable presence within the scientific community of people who do not agree with the IPCC conclusion that anthropogenic CO2 emissions are very probably likely to be primarily responsible for global warming that has occurred since the Industrial Revolution."

The **American Chemical Society** considers itself to be the world's largest scientific society. In 2009, skeptical members of the ACS openly revolted against the ACS Editor in Chief, Rudy Baum with many ACS scientists demanding he be removed after he promoted, without due consultation, the position that:

"The science of anthropogenic climate change is becoming increasingly well established."

ACS members also rebuked Baum's use of the word "deniers" stating that it was a derogatory term "associated with Holocaust deniers." In addition, the scientists called Baum's editorial: "disgusting"; "a disgrace"; "filled with misinformation"; "unworthy of a scientific periodical" and "pap."

A survey of members, published in the Bulletin of the **American Meteorological Society** found that 50% disagreed or strongly disagreed with the statement: *"Most of the warming since 1950 is likely human induced."* In fact only 8% strongly agreed.

The **Royal Statistical Society** is the UK's professional and learned society devoted to the interests of statistics and statisticians. The Society has members in over 50 countries worldwide.

The RSS submitted a memo critical of scientists withholding of data by members of the Climatic Research Unit (CRU) at the University of East Anglia. The RSS stated:

"The Society welcomes this opportunity to submit evidence to the Science and Technology committee on the disclosure of climate data from the Climatic Research Unit at the University of East Anglia inquiry."

And:

“The RSS believes that the debate on global warming is best served by having the models used and the data on which they are based in the public domain.”

And:

“The raw data, and associated meta-data, used for these analyses should, within reason, also be made available.”

And:

“The RSS believes that a crucial step in improving the quality of the debate on global warming will be to place the data, the analysis methods and the models in the public domain.”

In 2010 the **British Institute of Physics**, with a worldwide membership of over 36,000, made a statement to the House of Commons Science and Technology Committee's inquiry into the integrity of the IPCC and scientists at the CRU. They stated:

“The Institute is concerned that, unless the disclosed e-mails are proved to be forgeries or adaptations, worrying implications arise for the integrity of scientific research in this field and for the credibility of the scientific method as practised in this context.”

In fact the emails were genuine.

And:

“The CRU e-mails as published on the internet provide prima facie evidence of determined and co-ordinated refusals to comply with honourable scientific traditions and freedom of information law.”

And:

“The e-mails reveal doubts as to the reliability of some of the (climate) reconstructions and raise questions as to the way in which they have been represented.”

And:

“There is also reason for concern at the intolerance to challenge displayed in the e-mails. This impedes the process of scientific

'self correction', which is vital to the integrity of the scientific process as a whole, and not just to the research itself."

The **French Academy of Sciences** has also indicated that there still remains uncertainty regarding the climatic effects of human-induced carbon dioxide emissions. Their 2010 report was critical of the IPCC's claim of scientific certainty regarding climate change and the central role of anthropogenic carbon dioxide. The French Academy statement pointed to the role of other factors such as clouds and solar radiation.

In 2012 the **German Academy of Sciences and Engineering** rejected the notion of climate catastrophe and stated that coping with climate change would not pose any difficult challenges. In a study commissioned by the German Federal Government, Acatech President Reinhard Hüttl said:

"No climate conditions are going to occur here that already do not exist on the globe elsewhere and that we cannot cope with."

The report went on to say that, should warming occur, there would be benefits such as longer growing seasons and reduced wintertime heating costs. Germans typically heat their homes for about 8 months per year.

In 2009 the **Polish Academy of Sciences** produced a report which pointed to the IPCC's position on CAGW as becoming increasingly untenable. The Geologic Science Committee of the PAS reported:

"Experiments in natural science show that one-sided observations, those that take no account of the multiplicity of factors determining certain processes in the geo-system, lead to unwarranted simplifications and wrong conclusions when trying to explain natural phenomena."

And:

"Politicians who rely on incomplete data may take wrong decisions. It makes room for politically correct lobbying, especially on the side of business marketing of exceptionally expensive, so called eco-friendly, energy technologies or those offering CO2 storage

(sequestration) in exploited deposits. It has little to do with what is objective in nature."

And:

"The PAN Committee of Geological Sciences believes it necessary to start an interdisciplinary research based on comprehensive monitoring and modelling of the impact of other factors - not just the level of CO₂ - on the climate. Only this kind of approach will bring us closer to identifying the causes of climate change."

The **Russian Academy of Science** completely rejects the notion of anthropogenic global warming, predicting that:

"In the coming years the temperature over the entire planet will fall."

And:

"The average temperature on Earth is now returning to the level of the 1996-1997 years, 0.3°C lower."

A **Japanese Geoscience Union symposium survey** in 2008 *"showed 90 per cent of the participants did not believe the IPCC report."* Dr's Maruyama, Akasofu, Kusano and Maruyama state that large influences on global climate over time may be global cosmic rays and solar activity.

In May 2012, 49 **NASA** scientists and engineers sent a petition to the NASA and GISS administration requesting they *"Not draw conclusions and issue claims about research findings"* about dangerous anthropogenic climate change. Their petition included the following statement:

"We, the undersigned, respectfully request that NASA and the Goddard Institute for Space Studies (GISS) refrain from including unproven remarks in public releases and websites. We believe the claims by NASA and GISS, that man-made carbon dioxide is having a catastrophic impact on global climate change are not substantiated, especially when considering thousands of years of empirical data. With hundreds of well-known climate scientists and tens of thousands of other scientists publicly declaring their

disbelief in the catastrophic forecasts, coming particularly from the GISS leadership, it is clear that the science is NOT settled."

They added:

"We are not trying to stifle discourse, but undisciplined commentary, lacking in precision, is wholly inappropriate when NASA's name and reputation is attached."

In 2008 A survey of more than 51,000 scientists from the **Association of Professional Engineers, Geologists and Geophysicists of Alberta, Canada** (APEGGA) found 68% of them disagreed with the statement that:

"The debate on the scientific causes of recent climate change is settled."

The APEGGA concluded:

"Furthermore, the majority of scientific participants in the survey agreed that the theoretical climate models used to predict a future warming cannot be relied upon and are not validated by the existing climate record. Yet all predictions are based on such theoretical models."

And:

"Finally, agriculturalists generally agree that any increase in carbon dioxide levels from fossil fuel burning has beneficial effects on most crops and on world food supply."

And:

"We are disturbed that activists, anxious to stop energy and economic growth, are pushing ahead with drastic policies without taking notice of recent changes in the underlying science. We fear that the rush to impose global regulations will have catastrophic impacts on the world economy, on jobs, standards of living, and health care, with the most severe consequences falling upon developing countries and the poor."

In 1991 A survey of **U.S. atmospheric scientists** confirmed that there is no consensus about the cause of the slight warming

observed during the past century. They pointed to sunspot variability, rather than anthropogenic carbon dioxide, as being responsible for the global temperature fluctuations recorded since the 1800's.

WHY HASN'T THE MEDIA EXPOSED IPCC MALFEASANCE?

A number of journalists have done their best to inform the public and politicians about the ways in which climate science has been systematically abused by the IPCC and some environmental groups. I suggest you read the books written by Canadian investigative journalist Donna Laframboise, author and former vice-president of the Canadian Civil Liberties Association. These are:

"The Delinquent Teenager who was Mistaken for the World's Top Climate Expert."

And:

"Into the Dustbin: Rajendra Pachauri, the Climate Report and the Nobel Peace Prize."

Laframboise has spent several years doing what other journalists and those who have meekly accepted the IPCC's alarmism, should have accomplished long before now. She has investigated the IPCC's claims that it is a rigorous, impartial scientific body which draws on the expertise of the world's top climate experts to determine if there is a detectable dangerous anthropogenic global warming signal.

Laframboise says of the IPCC:

"I've given up expecting the IPCC to demonstrate any sort of professionalism or accountability. I think the internal culture there is so rotten, the situation is quite hopeless."

Laframboise says of the IPCC Chairman's claims:

"It was like fact-checking a pathological liar's resumé. One by one, I worked my way down a list of IPCC claims, attempting to verify their accuracy. Again and again, I found no evidence to support them."

WHY HAVEN'T IPCC CONTRIBUTING SCIENTISTS SPOKEN OUT AGAINST THE IPCC BIAS AND PROCESS?

They have! A number have gone on record expressing their frustrations and disappointment about the IPCC process. Others have qualified some of the IPCC statements. Here are a few examples:

Dr Robert Balling: "The IPCC notes that "No significant acceleration in the rate of sea level rise during the 20th century has been detected." (This did not appear in the IPCC Summary for Policymakers).

Dr Lucka Bogataj: "Rising levels of airborne carbon dioxide don't cause global temperatures to rise.... temperature changed first and some 700 years later a change in aerial content of carbon dioxide followed."

Dr Daniel Botkin: "The two (IPCC) reports assume and argue that the climate warming forecasts by the global warming models is happening and will continue to happen and grow worse. Currently these predictions are way off the reality."

Dr John Christy: "As time went on, nations would tend to nominate only those authors whose climate change opinions were in line with a national political agenda which sought perceived advantages (i.e. political capital, economic gain, etc.) by promoting the notion of catastrophic human-induced climate change. Scientists with well-known alternative views would not be nominated or selected."

Dr Rosa Compagnucci: "Humans have only contributed a few tenths of a degree to warming on Earth. Solar activity is a key driver of climate."

Dr Richard Courtney: "The empirical evidence strongly indicates that the anthropogenic global warming hypothesis is wrong."

Dr Judith Curry: "I'm not going to just spout off and endorse the IPCC because I don't have confidence in the process."

Dr Robert Davis: "Global temperatures have not been changing as state of the art climate models predicted they would. Not a single mention of satellite temperature observations appears in the (IPCC) *Summary for Policymakers*."

Dr Willem de Lange: "In 1996, the IPCC listed me as one of approximately 3,000 "scientists" who agreed that there was a discernable human influence on climate. I didn't. There is no evidence to support the hypothesis that runaway catastrophic climate change is due to human activities."

Dr Chris de Freitas: "Government decision-makers should have heard by now that the basis for the longstanding claim that carbon dioxide is a major driver of global climate is being questioned; along with it the hitherto assumed need for costly measures to restrict carbon dioxide emissions. If they have not heard, it is because of the din of global warming hysteria that relies on the logical fallacy of 'argument from ignorance' and predictions of computer models."

Dr Peter Dietze: "Using a flawed eddy diffusion model, the IPCC has grossly underestimated the future oceanic carbon dioxide uptake."

Dr Don Easterbrook: "After reading the recently-released [IPCC AR5] report, we can now add, 'there are liars, damn liars, and IPCC.'"

Dr John Everett: "It is time for a reality check. The oceans and coastal zones have been far warmer and colder than is projected in the present scenarios of climate change. I have reviewed the IPCC and more recent scientific literature and believe that there is not a problem with increased acidification, even up to the unlikely levels in the most-used IPCC scenarios."

Dr George Filippo: "I feel rather uncomfortable about using not only unpublished but also unreviewed material as the backbone of our conclusions (or any conclusions) ... I feel that at this point there are very little rules [sic] and almost anything goes."

Dr Oliver Frauenfeld: "Much more progress is necessary regarding our current understanding of climate and our abilities to model it."

Dr Eigil Friis-Christensen: "The IPCC refused to consider the sun's effect on the Earth's climate as a topic worthy of investigation. The IPCC conceived its task only as investigating potential human causes of climate change."

Dr Lee Gerhard: "I never fully accepted or denied the anthropogenic global warming (AGW) concept until the furor started after [NASA's James] Hansen's wild claims in the late 1980's. I went to the [scientific] literature to study the basis of the claim, starting at first principles. My studies then led me to believe that the claims were false."

Dr Francois Gervais: "The aim and goal of the AR5 report are to try to confirm scientifically that anthropogenic emissions of CO2 would be the main cause of global warming, or not. I regret to admit that in its present form, the AR5 draft the conclusions of which are based on models which are not substantiated from the point of view of arguments recalled hereon, is not convincing to this physicist expert reviewer."

Dr Indur Goklany: "Climate change is unlikely to be the world's most important environmental problem of the 21st century. There is no signal in the mortality data to indicate increases in the overall frequencies or severities of extreme weather events, despite large increases in the population at risk."

Dr Vincent Gray: "The (IPCC) climate change statement is an orchestrated litany of lies."

Dr Kenneth Green: "We can expect the climate crisis industry to grow increasingly shrill, and increasingly hostile toward anyone who questions their authority."

Dr Mike Hulme: "Claims such as '2,500 of the world's leading scientists have reached a consensus that human activities are having a significant influence on the climate' are disingenuous ... The actual number of scientists who backed that claim was "only a few dozen."

Dr Kiminori Itoh: "There are many factors which cause climate change. Considering only greenhouse gases is nonsense and harmful. When people know what the truth is they will feel deceived by science and scientists."

Dr Yuri Izrael: "There is no proven link between human activity and global warming. I think the panic over global warming is totally unjustified. There is no serious threat to the climate."

Dr Steven Japar: "Temperature measurements show that the climate model-predicted mid-troposphere hot zone is non-existent. This is more than sufficient to invalidate global climate models and projections made with them."

Dr Georg Kaser: "This number (of receding glaciers reported by the IPCC) is not just a little bit wrong, but far out of any order of magnitude ... It is so wrong that it is not even worth discussing."

Dr Aynsley Kellow: "I'm not holding my breath for criticism to be taken on board, which underscores a fault in the whole peer review process for the IPCC: there is no chance of a chapter [of the IPCC report] ever being rejected for publication, no matter how flawed it might be."

Dr Madhav Khandekar: "I have carefully analysed adverse impacts of climate change as projected by the IPCC and have discounted these claims as exaggerated and lacking any supporting evidence."

Dr Hans Labohm: "The alarmist passages in the (IPCC) Summary for Policymakers have been skewed through an elaborate and sophisticated process of spin-doctoring."

Dr. Andrew Lacis: "There is no scientific merit to be found in the Executive Summary. The presentation sounds like something put together by Greenpeace activists and their legal department."

Dr Chris Landsea: "I cannot in good faith continue to contribute to a process that I view as both being motivated by pre-conceived agendas and being scientifically unsound."

Dr Judith Lean: "Climate models failed to reflect the sun's cyclical influence on the climate and that has led to a sense that the sun isn't a player ... they have to absolutely prove that it's not a player."

Dr Richard Lindzen: "The IPCC process is driven by politics rather than science. It uses summaries to misrepresent what scientists say and exploits public ignorance."

Dr Harry Lins: "Surface temperature changes over the past century have been episodic and modest and there has been no net global warming for over a decade now. The case for alarm regarding climate change is grossly overstated."

Dr Philip Lloyd: "I am doing a detailed assessment of the IPCC reports and the Summaries for Policy Makers, identifying the way in which the Summaries have distorted the science. I have found examples of a summary saying precisely the opposite of what the scientists said."

Dr Martin Manning: "Some government delegates influencing the IPCC Summary for Policymakers misrepresent or contradict the lead authors."

Dr Stephen McIntyre: "The many references in the popular media to a "consensus of thousands of scientists" are both a great exaggeration and also misleading."

Dr Ross McKittrick: "The world still awaits a proper inquiry into climategate: one that is not stacked with global warming advocates, and one that is prepared to cross-examine evidence, interview critics as well as supporters of the CRU and other IPCC players, and follow the evidence where it clearly leads".

Dr John McLean: "The repeated failure of predictions based on climate models is further evidence that the models are flawed and have no credibility."

Dr Patrick Michaels: "The rates of warming, on multiple time scales have now invalidated the suite of IPCC climate models. No, the science is not settled."

Dr Nils-Axel Morner: "If you go around the globe, you find no sea level rise anywhere."

Dr Johannes Oerlemans: "The IPCC has become too political. Many scientists have not been able to resist the siren call of fame, research funding and meetings in exotic places that awaits them if they are willing to compromise scientific principles and integrity in support of the man-made global-warming doctrine."

Dr Roger Pielke: "All of my comments were ignored without even a rebuttal. At that point, I concluded that the IPCC Reports were actually intended to be advocacy documents designed to produce particular policy actions, but not as a true and honest assessment of the understanding of the climate system."

Dr Jan Pretel: "It's nonsense to drastically reduce emissions ... predicting about the distant future - 100 years can't be predicted due to uncertainties."

Dr Alec Rawls: "What I found interesting in the IPCC report is how blatant the statistical fraud is, omitting the competing explanation from the models completely, while pretending that they are using their models to distinguish between anthropogenic and natural warming. These people are going to hang on to their power grab until the bitter end."

Dr Paul Reiter: "As far as the science being 'settled,' I think that is an obscenity. The fact is the science is being distorted by people who are not scientists."

Dr Murray Salby: "I have an involuntary gag reflex whenever someone says the "science is settled. Anyone who thinks the science is settled on this topic is in fantasia."

Dr Ben Santer: "It's unfortunate that many people read the media hype before they read the chapter we (the IPCC) say quite clearly that few scientists would say the attribution issue was a done deal."

Dr Tom Segalstad: "The IPCC global warming model is not supported by the scientific data."

Dr. Keith Shine: "We produce a draft, and then the policymakers go through it line by line and change the way it's presented They don't change the data, but the way it's presented. It is peculiar that they have the final say in what goes into a scientists' report."

Dr Jagadish Shukla: "It is inconceivable that policymakers will be willing to make billion-and trillion-dollar decisions for adaptation to the projected regional climate change based on models that do not even describe and simulate the processes that are the building blocks of climate variability."

Dr Fred Singer: "Isn't it remarkable that the Policymakers Summary of the IPCC report avoids mentioning the satellite data altogether, or even the existence of satellites--probably because the data show a (slight) cooling over the last 18 years, in direct contradiction to the calculations from climate models?"

Dr Hajo Smit: "There is clear cut solar-climate coupling and a very strong natural variability of climate on all historical time scales. Currently I hardly believe anymore that there is any relevant relationship between human CO2 emissions and climate change."

Dr Roy Spencer: "The IPCC is not a scientific organization and was formed to regulate carbon dioxide emissions. Claims of human-cause global warming are only a means to that goal."

Dr Robert Stavins: "The IPCC should not ask lead authors to volunteer enormous amounts of their time over multi-year periods to carry out work that will inevitably be rejected by governments in the Summary for Policymakers."

Dr Peter Thorne: "Observations do not show rising temperatures throughout the tropical troposphere unless you accept one single study and approach and discount a wealth of others. This is just downright dangerous. We need to communicate the uncertainty and be honest."

Dr Richard Tol: "The IPCC attracted more people with political rather than academic motives. In AR4, green activists held key positions in the IPCC and they succeeded in excluding or neutralising opposite voices."

Dr Tom Tripp: “There is so much of a natural variability in weather it makes it difficult to come to a scientifically valid conclusion that global warming is man made.”

Dr Fritz Vahrenholt: “Doubt came two years ago when I was an expert reviewer of an IPCC report on renewable energy. I discovered numerous errors and asked myself if the other IPCC reports on climate were similarly sloppy. I couldn't take it any more.”

Dr James Wanliss: “Global warming is the greatest scam in scientific history.”

Dr Heinz Wanner: “I was a reviewer of the IPCC-TAR report 2001. In my review ... I criticized the fact that the whole Mann hockeystick is being printed in its full length in the IPCC-TAR report.

In 1999 I made the following comments:

1. The spatial, temporal (tree-ring data in the midlatitudes mainly contain “summer information”) and spectral coverage and behaviour of the data is questionable, mainly before 1500-1600 AD.

2. It is in my opinion not appropriate already to make statements for the southern hemisphere and for the period prior to 1500 AD.

My review was classified “unsignificant”

Dr Robert Watson: “The (IPCC) mistakes all appear to have gone in the direction of making it seem like climate change is more serious by overstating the impact. That is worrying. The IPCC needs to look at this trend in the errors and ask why it happened.”

Dr Gerd-Rainer Weber: “Most of the extremist views about climate change have little or no scientific basis.”

Dr David Wojick: “The public is not well served by this constant drumbeat of alarms fed by computer models manipulated by advocates.”

Dr Miklos Zagoni: “I am positively convinced that the anthropogenic global warming theory is wrong.”

Dr. Eduardo Zorita: “Editors, reviewers and authors of alternative studies, analysis, interpretations, even based on the same data we have at our disposal, have been bullied and subtly blackmailed. By writing these lines... a few of my future studies will not see the light of publication.”

WHY DO SO MANY PEOPLE STILL BELIEVE IN ANTHROPOGENIC CATASTROPHIC ANTHROPOGENIC GLOBAL WARMING?

There is a high level of scientific illiteracy within the general community, the media and (especially) amongst politicians. These are the groups which are inclined to listen to so-called authorities and they generally don't/can't question what such authorities tell them about imaginary catastrophic anthropogenic global warming.

The media have a tendency to promote alarmist messages and politicians generally “sniff the breeze” to see where public sentiment lies. Few Australians now believe in CAGW. The government knows this and no longer accepts global warming alarmism. It has scrapped the carbon tax and disbanded the Australian Climate Commission. It will continue to care for the environment and address real pollution problems (not carbon dioxide) in a responsible way. They will spend taxpayer money on adaptation strategies as they are required, without wasting millions of dollars on useless climate mitigation schemes.

Despite overwhelming evidence against CAGW, many vested interest groups continue to promote CAGW or climate change or extreme climate to protect their reputations, having nailed their global warming colours to the mast. Other groups will promote CAGW to protect their funding and vested interests such as expensive, unreliable and inefficient solar and wind projects which have swallowed up billions of taxpayer dollars around the world.

As glaciologist Dr Terry Hughes, professor emeritus of earth sciences and climate change at the University of Maine, says:

“Researchers want to keep federal funding for climate change alive, and politicians want to earn environmentalist votes, and both predict global pandemonium to that end.”

WHY IS BALANCE ESSENTIAL IN ANY SCIENCE CURRICULUM?

As pointed out previously, skepticism is the hallmark of good science and the science is never settled in any area. School curriculum statements should reflect this position.

Science educators at the primary, secondary and tertiary levels should always stress to their students the importance of scientific integrity and the need to look at all the evidence, following it wherever it takes them. In this regard there is no better example than that given by Dr Charles Lineweaver from the School of Earth Sciences at the Australian National University. In writing about the cosmic microwave background and our current state of knowledge about the universe he candidly observed:

“The biggest prize of all may be something unexpected. We know that our model of the universe is incomplete ... It seems very probable that our model is wrong in some unexpectedly fundamental way. It may contain some crucial conceptual blunder (as has happened so many times in the past). Some unexpected quirk in the data may point us in a new direction and revolutionise our view of the universe ..”

It would be refreshing (and surprising) if the IPCC said:

“Some unexpected quirk in the data may point us in a new direction and revolutionise our view of climate change.”

Albert Einstein's theory of general relativity pointed to a universe which should be expanding or contracting yet he was unhappy about this. He doubted his calculations and initially introduced a cosmological “fudge factor” which he later came to regret. Edwin Hubble used observational data to argue that the universe is expanding. Einstein looked further and admitted that he had made an error, modifying his mathematical models to accommodate the real world observations.

It would be refreshing (and surprising) if the IPCC admitted they had made an error and modified their computer models to accommodate real world observations.

School science curricula should stress that scientific integrity is about hypothesis testing and the sharing of all data with serious consideration given to competing ideas. Scientists should be prepared to modify their position as new data comes to hand. This is how intellectually honest scientists proceed and how scientific knowledge is advanced.

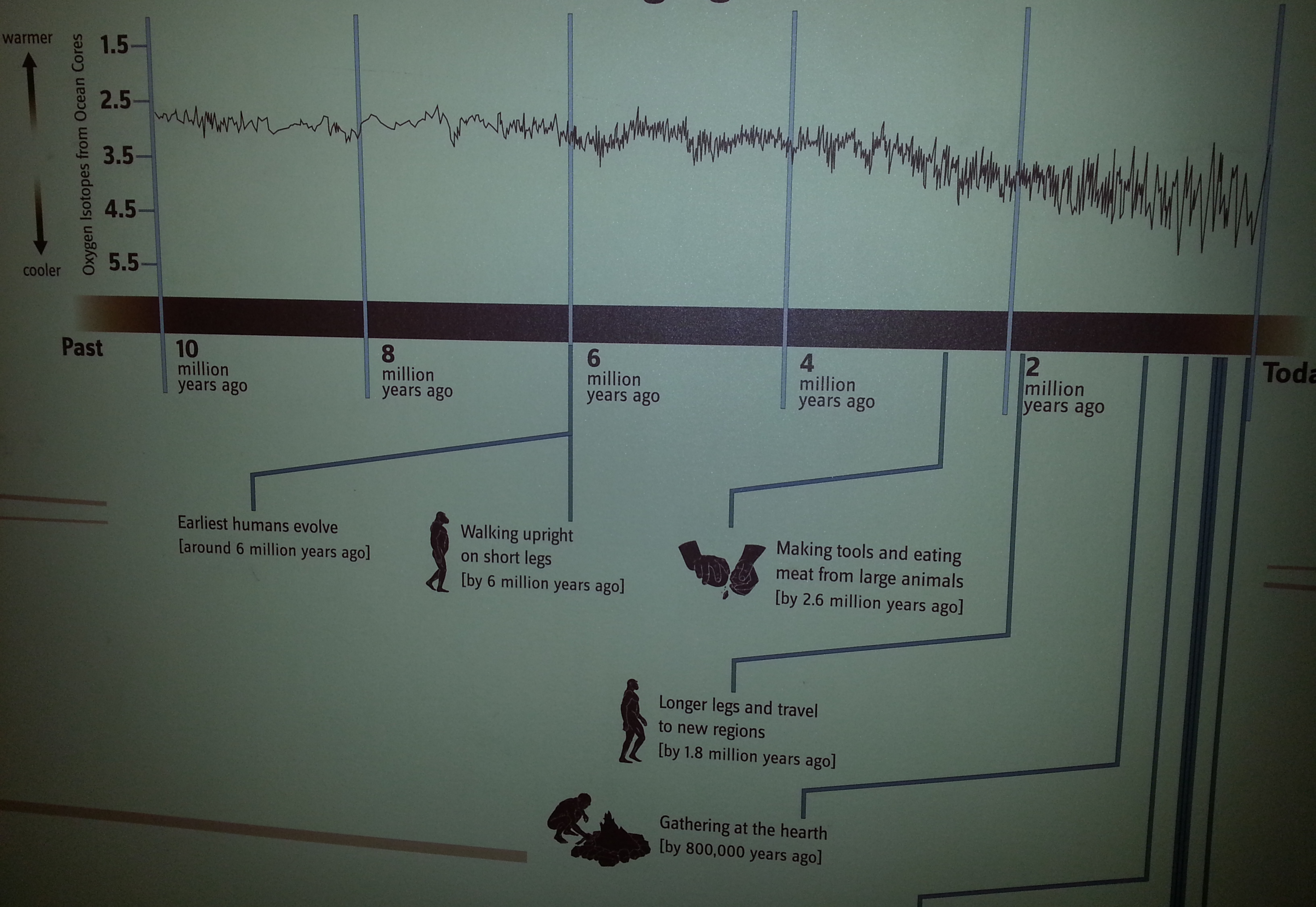
Sadly, this intellectually honest approach is in stark contrast to the defensive, intransigent, secretive and even hostile position adopted by the Intergovernmental Panel on Climate Change (IPCC) and its acolytes whenever their catastrophic anthropogenic global warming (CAGW) hypothesis is challenged.

Little wonder Dr Vincent Gray, expert reviewer of all four IPCC Assessment Reports describes the IPCC reports as: “*An orchestrated litany of lies.*”

Sincerely

Dr John Happs

Earth's Changing Climate

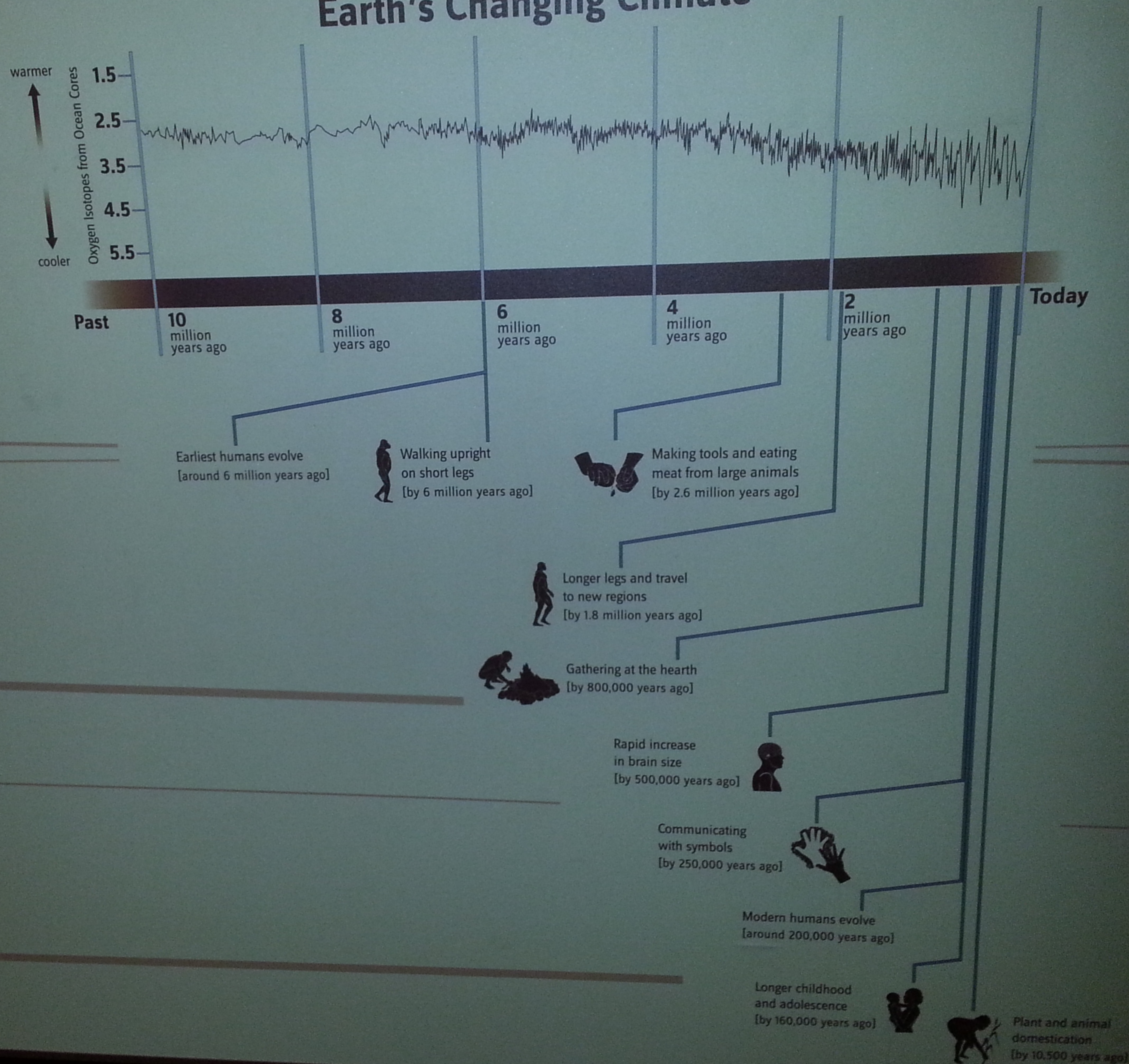


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Earth's Changing Climate



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Earth's Changing Climate

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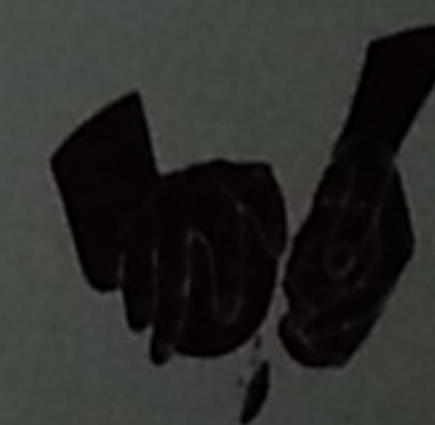
Earliest humans evolve
[around 6 million years ago]



Walking upright
on short legs
[by 6 million years ago]



Longer legs and travel
to new regions
[by 1.8 million years ago]



Making tools and eating
meat from large animals
[by 2.6 million years ago]

the hearth



UN and Obama Administration pushing pseudo-science to justify policies that hurt energy, jobs, liberty – and people

A report by Paul Driessen, with contributions by Marc Morano

Committee For A Constructive Tomorrow
ClimateDepot.com

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EXECUTIVE SUMMARY

Launched in 1988 at the urging of activists opposed to hydrocarbon energy, economic growth, and modern living standards, the Intergovernmental Panel on Climate Change (IPCC) was originally charged with assessing possible human influences on global warming and potential risks of human-induced warming. Over the subsequent decades, however, the IPCC increasingly minimized non-human factors, to the extent that it now claims *only* human influences matter – and *any* climate changes would “threaten our planet.”

The **climate change scientist-government-industrialist complex** has grown increasingly wealthy and powerful. It now spends billions of dollars annually on climate and weather research, focusing almost exclusively on carbon dioxide and other “greenhouse” gases, and many billions more on renewable energy research and subsidies that raise energy prices, cost jobs, and reduce living standards.

Indeed, laws and regulations implemented in the name of preventing climate change have increased the cost of virtually everything people make, grow, ship, drive, eat, and do. They affect our lives, liberties, livelihoods, living standards, health, and welfare. Expert analysts calculate that climate-related rules will cost U.S. families and businesses almost \$51 billion and 224,000 U.S. jobs every year through 2030 – on top of the *\$1.9 trillion* in regulatory costs that Americans already pay every year.

With so much at stake, it is essential that climate research is honest, accurate and credible, and that the resultant energy and climate policies are based on sound, replicable science. Instead, the studies and reports are consistently defective and even deceitful. They incorporate every study financed by this multi-billion-dollar system that supports the “dangerous manmade climate change” thesis – no matter how far-fetched and indefensible their claims might be – and ignore all contrary studies and experts. They rely on faulty, manipulated data, secretive working sessions that revise the “science” to reflect political “summaries,” and computer models that completely fail to predict actual real-world climate trends.

Because average global temperatures have not risen for 18 years (and have even cooled slightly), even the terminology has shifted: from global warming to climate change, climate disruption, and extreme weather.

Relying on the IPCC work, the \$2.5-billion-a-year U.S. Global Change Research Program (GCRP) issued a 2014 National Climate Assessment (NCA) that claimed climate change “is already affecting” the lives of Americans in a “multitude of ways.” President Obama said its effects “are already being felt in every corner of the United States.” The U.S. Environmental Protection Agency (EPA) and other federal agencies use IPCC studies to justify costly vehicle mileage standards, delays and bans on oil and gas drilling and pipelines, and rules that are closing hundreds of coal-fired power plants and preventing new ones from being built.

As ClimateDepot.com director Marc Morano explains, the IPCC is “a political body masquerading as a science body.” It makes its pseudo-science fit its political agenda. The GCRP and the EPA do likewise. Their actions violate information quality laws and basic standards of sound science and peer review – to drive an anti-growth, anti-fossil fuel agenda. They exaggerate every conceivable cost associated with hydrocarbons, but completely ignore even the most obvious and enormous benefits of using fossil fuels.

Now the White House wants to commit the United States to a new international “agreement” on climate change, energy use, economic growth, and wealth redistribution – without presenting it to Congress, in violation of constitutional requirements that any treaty receive the “advice and consent” of the Senate.

Every American concerned about our nation’s future should read this report, to understand what is happening and what is at stake. They should resist these actions by unelected, unaccountable regulators, challenge them in courts and legislatures, and demand that every study, report, and proposed rule be presented for review by citizens, legislators, and independent experts outside the closed circles of the **climate change scientist-government-industrialist complex**. If the climate alarmists are truly confident in their claims and have nothing to hide, they should be happy to participate in this honest, commonsense approach.

INTRODUCTION: How the climate scare began

President Obama has long promised to prevent “abrupt and irreversible” damage from global warming, by curbing fossil fuel development and use, slashing carbon dioxide emissions, causing electricity rates to “skyrocket,” and “bankrupting” any company that tries to build a coal-fired generating plant. Climate change, he insists, threatens coastal cities, Americans’ health and well-being, wildlife, and our planet.

At the President’s direction, the EPA is issuing increasingly restrictive regulations covering emissions from cars, electricity generating plants, and major industrial, manufacturing, and other facilities. He is also exploring ways to commit the United States to a new international agreement on climate change. The U.S. Chamber of Commerce, the Heritage Foundation, and other expert analysts estimate that these regulations and restrictions will cost Americans thousands of jobs and tens of billions of dollars annually. The impacts on our lives and living standards will be profound.

To justify his concerns and policies, Mr. Obama and his government agencies rely heavily on the IPCC and its steady output of scary studies, reports, and warnings.

The IPCC was launched in 1988 during a 20-year period of planetary warming, at the urging of activists opposed to hydrocarbon energy, economic growth, and capitalism. It was originally charged with assessing possible human influences on global warming and potential risks of human-induced warming. But because it is an intergovernmental body, its founding principles require that the process must “involve both peer review by [IPCC] experts and review by governments.” That innocuous sounding phrase soon corrupted climate change science, by providing billions of dollars in government research grants for studies that focus on carbon dioxide (CO₂), a major byproduct of fossil fuel use.¹

It means governments nominate lead science authors who support this agenda; governments then have the final say on what the IPCC publishes, by writing the “Summary for Policymakers” (SPM) and using that summary to revise the underlying scientific studies, to support SPM analyses and conclusions.

Its First Assessment Report promoted the non-binding United Nations Framework Convention on Climate Change that was put forth at the 1992 “Earth Summit” in Rio de Janeiro, and ratified by the U.S. Senate later that year. The IPCC report had trouble distinguishing between natural and human influences on Earth’s climate. However, because the Clinton Administration wanted to use IPCC reports to secure binding “greenhouse gas” emission targets in a UN treaty, the 1995 Second Assessment Report *had* to find human and fossil fuel influences. And so it did – sort of.

After weeks of discussions, IPCC scientists and bureaucrats and U.S. State Department officials finally agreed that the SPM would say: “The balance of evidence suggests a discernible human influence on global climate.” The word “discernible” simply means detectable and says nothing about *how much* people might be affecting the climate, or whether any changes would be harmful or beneficial.²

However, over the next two decades, “discernible” morphed into “dominant,” and the IPCC increasingly minimized and ignored non-human factors. It now claims *only* human influences matter – and any changes in climate or weather would be extremely detrimental. The sun and other complex, powerful, interrelated natural forces – which clearly caused ice ages, interglacial periods, and countless climate and weather fluctuations throughout Earth and human history – are now deemed irrelevant.

Subsequent reports predicted increasingly worse disasters for the climate, oceans, plant and wildlife species, agriculture, and human civilization.

Government reports inflate alleged climate change risks, to justify regulations

In 2013 and 2014, amid a then-17-year period in which planetary temperatures did not rise at all, and in the wake of “Climategate” and other scandals, the IPCC issued its Fifth Assessment Report. This one finally acknowledged the warming “pause” and backtracked somewhat on prior warnings about the collapse of the Arctic, Antarctic, and Greenland ice sheets, with a consequent dramatic rise in sea levels.³

However, it continued to emphasize “manmade catastrophes,” due to the climate’s “extreme sensitivity” to even small increases in atmospheric CO₂ and methane. The report insisted that IPCC computer models provide reliable climate

forecasts, and that the world must take immediate, drastic actions to prevent “unprecedented” climate and weather events. IPCC co-chair Thomas Stocker [declared](#) that human-induced warming “threatens our planet, our only home.”

Relying heavily on the IPCC work, the White House issued a new [National Climate Assessment](#) (NCA), under the auspices of the \$2.5-billion-a-year Global Change Research Program (GCRP). The May 2014 report spanned 829 pages, plus a 127-page “summary,” and detailed “the multitude of ways climate change is already affecting and will increasingly affect the lives of Americans.” The release was accompanied by press releases, television appearances, interviews, and photo ops with victims of recent tornadoes.

President Obama’s impassioned statements went well beyond what even the IPCC and NCA reports had said. Human-induced climate change, “once considered an issue for the distant future, has moved firmly into the present,” he claimed. It is “affecting Americans right now,” disrupting the weather and people’s lives. The effects “are already being felt in every corner of the United States.”

Corn producers in Iowa, oyster growers in Washington, maple syrup producers in Vermont, crop-growth cycles in Great Plains states, and many more “are all observing climate-related changes that are outside of recent experience,” Mr. Obama insisted. Wildfires and extreme weather events “have become more frequent and intense.” This is happening because “carbon pollution in our atmosphere has increased dramatically.” Furthermore, “97% of scientists” agree with these dire assessments.

The President also made it clear that, “If Congress won’t act, I will.” In fact, Congress has [rejected](#) nearly 700 cap-and-trade and other climate-related bills. It has done so because not enough members have been persuaded that anti-fossil fuel, anti-carbon dioxide laws, and regulations would actually control Earth’s perpetually changing climate or reduce alleged dangers like those cited by the President, the NCA, and the IPCC. Senators and congressmen were also concerned that other countries would not follow U.S. initiatives, and that climate-related actions would harm America’s economy, manufacturing jobs, and living standards while having no measurable effect on the climate.

True to his word, President Obama directed his EPA and other agencies to continue issuing rules that restrict hydrocarbon energy use and “greenhouse gas” emissions. Citing climate change, hurricanes, rising seas, endangered species, ocean acidification, and even mercury, soot (carbon), and asthma to justify the increasingly draconian rules, federal bureaucrats imposed regulations requiring that vehicles get [54.5 miles](#) per gallon, delayed or prohibited onshore and offshore oil and gas leasing and drilling, further delayed construction of the [Keystone XL](#) pipeline, and closed down hundreds of coal-fired power plants while preventing construction of new coal-based generators.

For good measure, the regulators also devised vague and open-ended “sustainable development” and “social justice” policies to buttress their climate change and other environmental decisions and to justify further expansion of their budgets, personnel, and agency missions.⁴

Most recently, President Obama and Secretary of State John Kerry announced that they may pursue a sweeping international “accord” to control emissions of CO₂ and other greenhouse gases – even without congressional approval. Their plan is to draft a global agreement that (they say) falls short of the kind of “treaty” that would require the “advice and consent” of the U.S. Senate, and then present it at the 2015 UN climate conference in Paris. A key component of the plan is that countries would agree to emission reductions, but would face few or no penalties if they do not achieve their “goals” – whereas U.S. companies would be obligated to slash emissions or face severe penalties.⁵

The end result of all these regulations – if not their deliberately intended effect – is to put the federal government and UN firmly in charge of virtually everything Americans make, grow, ship, eat, drive, and do. It means government regulators will control people’s lives, livelihoods, liberties, living standards, and even life spans – all in the name of safeguarding Planet Earth from the purported ravages of “dangerous manmade climate change.”

Climate policies will adversely affect people’s lives and living standards

The regulations mean the price of everything people do **will** skyrocket: heating and air conditioning, lights and refrigeration, televisions, computers, medical equipment, machinery, and everything else that runs on electricity or requires transportation fuels. Poor, minority, and blue-collar families will have to find hundreds of dollars a year somewhere in their already stretched budgets to pay the rising bills.

Shops and other small businesses will have to find thousands of dollars, by delaying other purchases or laying people off. Factories, malls, school districts, hospitals, and cities will have to send out search parties to locate millions a year at the end of rainbows. Many businesses will simply close, as Obama policies “fundamentally transform” America’s constitutional, economic, and social structure, as promised.

Hundreds of thousands will lose their jobs – in coal mines, power plants, factories, shops, and other businesses. Entire families and communities will be impacted and impoverished. Real people’s hopes, dreams, pride, and work ethic will be replaced by despair and dependency. Bread winners will be forced to work multiple jobs, commute longer distances if they can find work, and suffer sleep deprivation.

Studies show that this often leads to increasing numbers of people who must cope with stress, depression, drug and alcohol abuse, and spousal and child abuse. Nutrition and medical care will also likely suffer. More people can be expected to have strokes and heart attacks. More will likely die prematurely or commit suicide. *For no measurable climate benefits.*

The rules will slowly eliminate fossil fuels that now provide over 80% of the energy that powers the United States. What would replace those fuels? Probably not hydroelectric and nuclear energy, since radical environmentalists oppose those sources just as vigorously as they detest hydrocarbons. Most likely, the replacements would be wind, solar, biofuel, and geothermal energy – which are far more expensive and far less reliable, and which impact the environment in many more ways than do fossil fuels.

These “replacements” would also require that Americans accept much lower expectations and lower standards of living than they enjoy today – and get used to having electricity only [when it is available](#), rather than when it’s needed. Most appalling and immoral, the regulations mean the lives of people in the most impoverished, energy-deprived, malnourished, diseased, and destitute nations on Earth will be improved only at the margins, but will never enjoy anything near current U.S. standards.

Moreover, these absurdly expensive climate rules will be *on top of* the [\\$1.9 trillion](#) in regulatory compliance costs that American businesses and families already pay every year. That is 11% of the entire U.S. economy (gross domestic product), and EPA rules already account for \$353 billion of this total. Their impacts on innovation, job creation and preservation, and economic growth are already serious.

With so much at stake, it is absolutely essential that any climate change regulations, treaties, restrictions, and obligations be *based on solid science and irrefutable evidence*. Unfortunately, that is not the case. In fact, supposed scientific support for EPA, NCA, and IPCC hype and hysteria over “climate chaos” and their “solutions” to this “crisis” is illusory – a house of cards.

It is a leaning Tower of Pisa, built on quicksand and requiring repeated reengineering to strengthen its flimsy foundation and keep it from collapsing – via constant machinations, carefully selected studies, reformulated computer models, manipulated data, secretive working sessions, and vicious attacks on any scientists or other experts who disagree with their “science,” conclusions, and calamitous forecasts.

Sioux Indians – renowned in environmental lore as pursuing the epitome of sustainable lifestyles – would describe climate science in their native Lakota language as *tatonka chesli*: big bull bison doodoo.

A brief review of climate change realities underscores the bogus nature of climate catastrophe claims. Computer models and headlines versus reality

The White House, the EPA, the IPCC, well-paid alarmist scientists, and “mainstream” media stories continue to disseminate a steady diet of cataclysmic events that they say are due to “dangerous” carbon dioxide (CO₂) emissions from hydrocarbon energy use. This climate cabal uses computer models to conjure up countless “scenarios” and “projections” of what will happen if CO₂ and other “greenhouse gas” levels continue to rise in Earth’s atmosphere. Their claims do not withstand scrutiny.

Computer models reliably predict global temperatures and climate changes. No, they don’t. Computer models used by the IPCC cannot possibly forecast future global temperatures, climate conditions, or flood, drought, hurricane and other events.

The models employ highly simplified configurations of Earth’s extremely complex climate systems; greatly exaggerate climate sensitivity to CO₂ levels; assume all warming since the industrial revolution began are due to human CO₂; input data contaminated by urban heat island effects; and assume rising CO₂ will have only “positive feedbacks” and will only

increase global warming (as by increasing cloud cover that will only trap more heat, rather than also reflecting the sun's rays and heat back into outer space). They also ignore most of the powerful natural forces that we know affect our planet's climate, such as solar variations, cosmic ray fluxes, winds, clouds, precipitation, ocean currents, recurrent phenomena like the Pacific Decadal Oscillation (El Niño and La Niña), atmospheric and volcanic dust, urban and other land use changes, the tilt of the Earth's axis, and Earth's position in an elliptical orbit that constantly and significantly changes its relationship to the sun and other planets.⁶

In computer lingo, this can be summarized as: Faulty assumptions, faulty data, faulty codes and algorithms, simplistic analytical methodologies and other *garbage in – predictive garbage out*.

A graph in the IPCC's 2013 draft report [dramatically demonstrated](#) that every single climate model used between 1990 and 2012 predicted that average global temperatures would be as much as 0.9° C (1.6° F) *higher* than they actually were! The graph was *deleted* from the final IPCC report, to make it appear that its computer models actually predicted temperatures with reasonable accuracy.

These computer models are built on unproven alarmist assumptions, and they have never been “validated” by being tested against actual temperature and weather observations. In fact, they are contradicted by real-world evidence, meaning their results are worthless as a basis for public policy, yet they drive policy.

The notion of using computer “scenarios,” “projections” or “predictions” to determine energy, economic and environmental policies is as absurd as using a computer model focused on the play of a theoretical guard and safety to predict Super Bowl winners ten or twenty years from now.

Planetary temperatures are rising dramatically. No, they are not. As the Nongovernmental International Panel on Climate Change (NIPCC) and many other experts have documented, Earth's average temperature *has not risen for 18 years* – even as atmospheric CO₂ levels continued to increase steadily.⁷ As to supposed “record high” temperatures in recent years, while scary news stories declared that 2005 and 2010 were the “hottest” years on record, a closer examination revealed that the claims were based on year-to-year temperature data that differ by only [a few hundredths](#) of a degree Fahrenheit.⁸ The claims are also wrong.

The highest temperature ever recorded in Alaska was 100° F on June 27, 1915, in Fort Yukon. A number of Alaskan communities established new [record highs](#) during the summer of 2013, but most U.S. states and cities set their records for the highest temperatures during the decades of the *1930s and 1950s*. Maps like this one [for Wisconsin](#) dramatically illustrate the wild temperature swings that can occur within a single state over the course of a century or so for one summer month: a record high of 114° F on July 14, 1936 – and a record low of 0° F on July 4, 2003!

It's a fact that Detroit temperatures didn't dip below freezing in January and February in '79 – followed by a [frost in June](#). But that was 1879! “Not only in summer, but in the winter, the ocean was free of ice, sometimes with a wide strip of water to at least 200 miles from the shore in the Bering Sea,” Swedish explorer Oscar Nordkvist reported – in 1822. “We were astonished by the total absence of ice in Barrow Strait. [Six years ago the area was] still frozen up, and doubts were entertained as to the possibility of escape,” Captain Francis McClintock wrote in his ship's log – in 1860.⁹

And don't forget the Medieval Warm Period, the Little Ice Age, and the five frigid epochs that buried North America, Europe, and Asia under glaciers a mile thick. Or the [4,000-year-old trees](#) that recently emerged as modern glaciers melted back – proving that a forest grew in the same Alps just 40 centuries ago.

Thus it has been throughout Earth and human history: wild weather and climate swings on a recurring basis. But now, climate chaos cultists want us to believe such events began only recently, and we could stop today's climate and weather aberrations – if we would just eliminate fossil fuels, destroy our economies, and condemn Third World families to permanent poverty and disease.

Any planetary warming of more than a degree would be dangerous. No, it wouldn't. Moderate warming up to 2° C (3.6° F) would cause no net harm to the environment or human well-being, numerous experts emphasize. Indeed, it would likely be *beneficial*, lengthening growing seasons and expanding croplands and many wildlife habitats, especially in conjunction with more carbon dioxide, which helps plants grow faster and better, even [under adverse conditions](#) like pollution, limited water, or high temperatures.¹⁰ By contrast, even 2° C of *cooling* could be disastrous for agriculture and efforts to feed growing human populations without plowing under more habitats.

Rapidly melting polar ice packs will cause oceans to rise dangerously. It's not happening. Sea levels have risen some 400 feet since the end of the last ice age -- 10,000 years ago. The National Oceanic and Atmospheric Administration says

sea level is rising very slowly, and a recent [peer-reviewed study](#) found that sea level rise has *decreased* over the past 10 years. Oceans are currently rising at just [7 inches per century](#) – hardly a cause for alarm, and a rate not likely to flood coastal cities anytime soon.

Most of the fear about rising sea level is based on computer models that predict rapid melting of polar and Greenland ice fields, and on inane claims by alarmists like Al Gore, who asserted in 2007 that the Arctic ice cap “could be completely gone in summer in as little as 7 years.” By the summer of 2014, that same expanse of ice had expanded by up to 63% since 2012, according to satellite measurements by the U.S. National Snow and [Ice Data Center](#). In other words, an area the size of Alaska that was open water during August 2012 but was completely covered in ice by the end of August 2014.¹¹

There have been similar Arctic melting ice panics in the past. A November 2, 1922, [Washington Post article](#) was headlined “Arctic Ocean getting warm: Seals vanish and icebergs melt.” The Arctic Ocean is warming, icebergs are growing scarcer, and in places the seals are finding the water too hot, it said.

Hurricanes are growing in number, intensity, and destructive force. No, they’re not. As of fall 2013, it had been 8 years since a Category 3 to 5 hurricane made landfall in the United States. That is the longest such period [since 1900](#) or even [the 1860s](#).

According to National Oceanic and Atmospheric Administration data, the worst decade for major (category 3, 4, and 5) hurricanes was the 1940s, and overall global tropical cyclone activity has decreased to historically low levels during the past 5 years. Scientists have also [rejected climate change links](#) to “superstorm” Sandy that hit the East Coast in October 2012. As hurricane expert Prof. Roger Pielke, Jr., explained, “Sandy was terrible, but we’re currently in a relative hurricane ‘drought.’ Connecting energy policy and disasters makes little scientific sense.”¹²

Tornadoes are growing in number, intensity, and destructive force. No, they are not. Actually, “there has been a downward trend in strong (F3) to violent (F5) tornadoes in U.S. since 1950s,” climatologist [Dr. Roy Spencer](#) points out. In fact, global warming will supposedly occur primarily in the northern latitudes – which would *reduce* tornado frequency and intensity, as it would mean *warmer* Arctic air coming into the Great Plains states and other areas – whereas violent thunderstorms and tornadoes form and intensify when *colder* air mixes with warm, moist Gulf of Mexico air.

Even with the recent Midwestern and East Coast twisters, U.S. tornado frequency remains close to a [record low](#). Would President Obama and other climate change alarmists attribute *that* as due to CO₂ emissions?

Property damage and insurance claims from tornadoes and hurricanes have certainly increased since the 1930s and 1950s. However, that is because more people are building more [expensive homes](#) in the paths of violent storms that do occur.

Wildfires are getting more frequent and devastating. Forest fires have nothing to do with “global climate change,” though regional droughts can make fires more likely and damaging. U.S. [National Interagency Fire Center](#) and Canadian data show that the number of wildfires is actually about half of what occurred 50 years ago. Moreover, contrary to White House claims, the Center’s latest data reveal that, as of September 5, 2014, burned acreage for the year was 1.1 million acres less than the burned acreage by that date in 2013 – and was less than one-half the 10-year average of 6.2 million acres.

Despite these facts, Obama science advisor John Holdren claimed in an August 2014 video that climate change is making U.S. fire seasons “longer and, on average, more intense.” The May 2014 National Climate Assessment report likewise makes the completely false claim that longer, drier summers supposedly caused by CO₂ emissions will “continue to increase the frequency and intensity of large wildfires in the United States.”

Devastating U.S. wildfires are due primarily to a [failure to thin](#) forests or remove dead and diseased trees – due largely to environmentalist protests and lawsuits – and failure to use available modern fire control technologies. Fires that occur today are far more devastating than timber harvesting and clear cutting.

Western state infernos exterminate wildlife habitats, roast eagle and spotted owl fledglings alive in their nests, boil away trout and trout streams, leave surviving birds and mammals to starve for lack of food, and incinerate every living organism in the thin soils. Downpours and snowmelts in the ensuing years cause massive erosion that clogs streambeds and kills new fish. Many areas will not recover their foliage or biodiversity for decades. Better forest management and firefighting practices are the answer.

Recent droughts are due to man-made global warming. Nonsense. Across time scales required for any meaningful analysis, “droughts have generally become shorter, less frequent, and cover a smaller portion of the U.S. over the last

century,” [Professor Roger Pielke, Jr.](#) observes. “That is not skepticism; that's according to the UN Intergovernmental Panel on Climate Change,” he adds.

Even U.S. government scientists have admitted that recent droughts are not due to climate change. “This is not a climate change drought,” [said Dr. Robert Hoerling](#), a NOAA research meteorologist who served as the lead author of the U.S. Climate Change Science Plan Synthesis and Assessment Report: “The good news,” he emphasized, “is that this isn’t global warming. This is not the new normal in terms of drought.”

Nor has U.S. flooding increased over the past 85 to 127 years, Pielke adds. Indeed, the world’s ten deadliest floods all occurred before 1976, when CO₂ was well below 350 parts per million (ppm) – or 0.04% of Earth’s atmosphere, and before it rose to its current 400 ppm level. A U.S. Geological Survey study found that in some parts of the U.S. “floods became *less severe* as greenhouse gas emissions increased.”

Oxygen represents 21% of atmospheric gases (210,000 ppm). Argon is 0.93% (9,300 ppm). About 90% of the “greenhouse effect” is from water vapor – another byproduct of burning fossil fuels, although it is not as politically convenient as CO₂. Furthermore, roughly 95% of the annual addition to atmospheric CO₂ levels is from volcanoes, subsea vents, and other *natural* sources.

Carbon pollution threatens all life on the planet. When President Obama talks about “carbon pollution,” remember: It’s not “carbon” – another term for soot. It’s *carbon dioxide*. And it’s not “pollution.” CO₂ is the plant-fertilizing gas that makes all life on Earth possible.

Misusing legal and scientific terminology in this way is nothing more than a deliberate attempt to mislead people, change the subject from the absence of global warming and climate change over the past 18 years, and distract attention from the Obama Administration’s huge foreign and domestic policy failures.

Human carbon dioxide emissions are making oceans more acidic. This is a ridiculous statement – another attempt to replace exaggerated, disproven climate scares with a new panic. Earth’s oceans have never been acidic; they are alkaline, by a wide margin. It is impossible for their vast volumes of water to become acidic from mankind’s fossil fuel combustion: that is, to drop from their current pH of 8.1 into the acidic realm of 7.0 on this logarithmic scale. (Most rainwater is pH 5.6.)

What has been observed in recent years is a decline of about 0.034 pH unit on a 14-point scale. At this rate, marine scientists say (and assuming human CO₂ emissions continue at their current rate, which is highly unlikely, since energy technologies change greatly over time) it would take some 700 years for the oceans to become even minimally acidic. The effects of any pH (potential of hydrogen) changes on marine life are hard to determine, since most organisms are quite resilient and have adapted to numerous seawater and other changes for countless millennia. But the impacts will certainly not be cataclysmic.¹³

Climate change regulations also reduce asthma in children. Not only is this another attempt to change the subject. It is also false. Carbon dioxide from cars and coal-fired power plants has nothing to do with asthma – nor do mercury, soot, or other emissions from those sources. The EPA’s claim that shutting down coal-fueled generators will have “ancillary health benefits” like reduced asthma is simply false.

In fact, asthma rates have been going *up* for years, while pollution levels have been going *down* (which does not mean we should increase pollution to reduce asthma). The real causes of asthma, according to health experts, are that [young children](#) live in tightly insulated homes, spend less time outdoors, don’t get exposed to enough allergens to reduce immune hyperactivity and allergic hypersensitivity, engage in sedentary activities, and get insufficient exercise to keep their lungs robust and control asthmatic reactions.

Scientists agree that humans are causing dangerous climate change. No, they don’t. When the President claims “97% of scientists say” such things, remember: This assertion is based on 75 of 77 “climate scientists” who were carefully selected from [a 2010 survey](#) that went to 10,257 scientists. To call that a consensus of scientists is deliberately false and misleading.

A 2014 study by Professor John Cook at the University of Queensland purported to demonstrate that 97.1% of published scientific papers reflected a consensus that humans had caused at least half of the 1.3° F (0.7° C) global warming since 1950. That analysis was likewise shown to be wrong and misleading. In reality, only 41 of the 11,944 papers that Cook examined (0.3%) explicitly said this.¹⁴

Probably no scientist on Earth says the climate does not change, and nearly all agree that humans contribute in some ways to recent and ongoing changes. However, more than [1,000 climate scientists](#), [31,000 American scientists](#), and [48% of U.S. meteorologists](#) say there is no evidence that humans are causing dangerous warming and climate change.¹⁵

Even saying humans are “contributing to” climate change is meaningless. Is it a 1%, 5%, 20%, or 90% contribution? Is it local or global? Is it due to CO₂ or land use changes and urbanization? Do scientists know enough to separate human factors from the numerous, powerful, interrelated solar, cosmic, oceanic, terrestrial, and other forces that have repeatedly caused minor to major climate changes, climate cycles, and weather events throughout human and geologic history? At this point, they do not.

Other countries are working hard to prevent dangerous climate change. Not so. Europe certainly went down the “Green energy” path, but at the price of skyrocketing energy prices, millions of lost jobs, and thousands of people *dying from hypothermia* in cold homes because they could no longer afford to heat them properly. Spain had led the way on wind and solar power, but it slashed subsidies after realizing its policies had cost numerous jobs and devastated its economy. Now Spain, Germany, and other EU countries are building dozens of coal-fired power plants, while some 1,200 are being built worldwide.

In 2012, the world emitted 31 gigatons of CO₂, and China alone was responsible for one-fourth of that, the International Energy Agency reports. India, other Asian countries, African nations, and much of Latin America are also using coal to energize their economies and lift billions of people out of poverty. That means atmospheric CO₂ levels will continue to rise, no matter what the United States does.

What is really behind any “international cooperation” on climate change is a determined effort by developing countries to use this issue to secure billions of dollars annually in “compensation, reparation, mitigation, and adaptation” money from wealthier countries that the IPCC, the EPA, and other alarmists blame for “climate disruptions” that they claim are occurring. Indeed, Christiana Figueres, chief secretary of the UN Framework Convention on Climate Change, has said the next climate treaty will bring about a “complete economic transformation of the world.” IPCC Working Group III co-chair Ottmar Edendorfer has admitted that international climate policy is not even about environmental protection; it is about “how we redistribute the world’s wealth.”¹⁶

Exactly how that next treaty will be negotiated, signed, and implemented is a mystery, however. Chinese President Xi Jinping, Indian Prime Minister Narendra Modi, and German Chancellor Angela Merkel early on announced their intention to skip the 2014 UN climate conference in New York (set for September 22-28). Their decisions to snub Ban Ki-Moon’s invitation strongly suggest that efforts to forge a replacement for the now-defunct Kyoto Protocols ahead of the 2015 summit in Paris have already all but collapsed.¹⁷

That means Obama Administration efforts to slash fossil fuel use and replace hydrocarbons with renewable energy will have no effect on atmospheric CO₂ levels – and will reduce average global temperatures by a meaningless and undetectable 0.03° F by 2100 (if the U.S. completely eliminates fossil fuel use, and assuming IPCC and EPA claims about CO₂ are correct).¹⁸

In sum, climate catastrophists have *no evidence* to support their disaster claims – or their assertions that “the international community” is reducing greenhouse gas emissions to prevent climate change.

To deal with these hugely inconvenient realities, purveyors of climate change Armageddon scare stories resort to a number of ingenious strategies that most people would likely view as questionable, dishonest or even fraudulent, if they knew what was actually going on.

The EPA trumpets models to instill fear and grab power

The Information Quality Act and relevant Office of Management and Budget guidelines require that all federal agencies ensure and maximize “the quality, objectivity, utility, and integrity of information disseminated by Federal agencies.” The rules also call for proper peer review of all “influential scientific information” and “highly influential scientific assessments,” particularly if they could be used as the basis for regulatory action. They direct federal agencies to provide adequate administrative mechanisms enabling affected parties to review agency failures to respond to requests for correction or reconsideration of the scientific information. The EPA routinely violates all these requirements.

The EPA simply ignores both these requirements and the real-world facts presented in the previous section. It trumpets computer model “projections” that bear no resemblance to actual planetary events and treats the projections and “scenarios” as actual facts.

The agency does virtually no original climate research. Instead, it relies on IPCC analyses, which as explained below are erroneous, deceptive, and meaningless. It cherry-picks data and studies that support its agenda, ignores libraries of contradictory research, attacks experts whose analyses question EPA conclusions, and pays advisors and activists millions of dollars annually to rubberstamp its regulations.

The EPA refuses to divulge its data and internal analyses, even to members of Congress. The agency claims these materials are somehow “proprietary,” even though they have been paid for with tax dollars – and are being used to justify onerous regulations that dictate and impair our livelihoods, liberties, and living standards. EPA Administrator Gina McCarthy says she intends to “protect” the agency’s work product from those who she determines “are not qualified to analyze it.” As with the IPCC and Al Gore, EPA officials will not debate experts who question assertions that climate change is dangerous and manmade.

In violation of constitutional “separation of powers” doctrines, the EPA rewrote the Clean Air Act provisions that specify 250-ton-per-year emission limits for critical pollutants. So that those limits could be used to shut down coal-fired power plants, without immediately impacting millions of other facilities, the agency illegally and arbitrarily raised the threshold to 100,000 tons per year for CO₂, and ignored the fact that in 692 bills [Congress never contemplated](#) applying the Clean Air Act to greenhouse gases.

Thankfully, the [Supreme Court blocked](#) the 250-becomes-100,000 regulatory sleight-of-hand trick. However, the EPA continues to impose climate change rules, with the goal of ultimately controlling millions of natural gas generators, refineries, factories, paper mills, shopping malls, apartment and office buildings, hospitals, schools, and churches. And the courts have let most of the agency’s other climate actions stand, saying they will continue deferring to “agency discretion,” no matter how damaging.

The EPA and other federal agencies have paid billions in taxpayer dollars to finance and hype “research” that makes ludicrous claims that manmade global warming is hidden in [really deep ocean waters](#) or obscured by [pine tree vapors](#); that tens of thousands of [offshore wind turbines](#) could weaken hurricanes; and that climate change will cause more [rapes and murders](#), to cite just a few of thousands of examples.

The EPA’s Clean Air Scientific Advisory Committee (CASAC) reviews the agency’s CO₂ and pollution data, studies, and conclusions. For these services, the EPA has paid CASAC’s 15 members [\\$180.8 million](#) since 2000. CASAC excludes from its ranks industry and other experts who might question EPA findings. The agency has also given the [American Lung Association](#) nearly [\\$25 million](#) in grants over the past 15 years, for applauding and promoting government regulatory decisions. Big Green foundations bankrolled the ALA with an additional [\\$76 million](#), under 2,806 grants.

These payoffs raise serious questions about the integrity and credibility of the EPA, CASAC, and the ALA.

In violation of the Information Quality Act and other federal laws, the EPA hypothesizes or exaggerates almost every conceivable “social cost of carbon “ that it can attribute to CO₂ emissions – every conceivable impact on agriculture, forests, water resources, coastal cities, human health and disease, ecosystems, and wildlife. However, it *completely ignores* even the most obvious and enormous *benefits* of using fossil fuels and emitting plant-fertilizing carbon dioxide: affordable heat and electricity, jobs, transportation, better crop growth and nutrition, and improved living standards, health, and welfare.

The agency claims its latest coal-fueled power plant rules (requiring a 30% reduction in CO₂ emissions by 2030) would bring \$30 billion in “climate benefits” – versus “only” \$7.3 billion in costs. Even the liberal [Brookings Institution](#) has said the agency’s analysis is erroneous and illegal. Contrary to clear legal requirements, the EPA calculated its highly conjectural and exaggerated benefits on a *global* basis, to inflate them as much as possible; however, the (low-balled) costs imposed by its regulations will be paid solely by American taxpayers, consumers, families, businesses, and workers.

The U.S. Chamber of Commerce calculates EPA regulations will actually **reduce** our nation’s Gross Domestic Product – and thus cost American families and businesses – by almost [\\$51 billion per year](#). They will also result in 224,000 fewer U.S. jobs being created every year through 2030. These adverse impacts are far in excess of what the EPA claims its rules will cost.

Approaching the issue from a different perspective, energy analyst Roger Bezdek estimates that the benefits of using carbon-based fuels outweigh any hypothesized “social costs of carbon” by [orders of magnitude](#): *50-to-1* (using the inflated SCC of \$36/ton of CO₂ concocted by the EPA and other federal agencies in 2013) – and *500-to-1* (using the equally arbitrary \$22/ton estimate that they cooked up in 2010). For the EPA to flout the imaginary costs of using carbon-based fuels while ignoring the incredible benefits that those fuels continue bringing to modern civilization is arbitrary, capricious, and illegal.

When questions arise, the EPA stonewalls and slow-walks FOIA requests and denies requests for correction and reconsideration. One lawyer who has filed FOIA cases since 1978 says the Obama Administration is bar-none “the worst” in history on transparency. Even members of Congress get nowhere, resulting in testy confrontations with Ms. McCarthy and other EPA officials.

The EPA also does all it can to incorporate the views and concerns of environmentalist pressure groups that style themselves as “stakeholders.” It routinely engages in “sue and settle” litigation, which allows the EPA to settle out of court with radical Green groups that bring the lawsuits and thus deny parties actually affected by the shady maneuvers their day in court.¹⁹

All these deceitful, conniving schemes mean the real stakeholders – families and companies that will be severely impacted by the rules, and organizations and experts that try to protect their interests – are systematically denied access to data, scientific assessments, and fair treatment by the EPA.

The EPA won’t even hold hearings in Coal Country or states that will be hardest hit by soaring electricity costs. Instead, it hosts showy hearings and “listening sessions” in big cities like Atlanta, Chicago, San Francisco, Seattle, and Washington, D.C. – where it knows passionate lefty students and eco-activists will dominate. People who will be grievously impacted by the draconian job-killing regulations must travel long distances and pay for expensive hotels and meals ... or remain silent and ignored.

That stacks the deck – the same way the “public comment” process is tilted in favor of ultra-rich Big Green agitators who have the funding and organization to generate thousands or millions of comments.

The EPA has done all of this knowingly and deliberately, to drive an anti-hydrocarbon agenda, without regard for the consequences that its agenda will inflict on countless American businesses and families.

This goes far beyond mere sloppiness or incompetence. It is dishonest. It violates the law. If the EPA’s actions were examined according to legal standards that government agencies routinely apply to taxpayers and businesses, they would be rejected, prosecuted, and penalized as *fraudulent*.

The damage is far greater than the harm inflicted by ObamaCare, which affects one-sixth of the economy. By controlling the energy that powers our nation, the EPA’s carbon and CO₂ policies affect and hobble virtually *100% of our economy*. They will wipe out millions of jobs, impair the health and welfare of numerous citizens, and kill thousands of people – *for no health or environmental benefits*.

The National Climate Assessment report is pseudo-science at its worst

As noted earlier, in May 2014, the White House released the U.S. Global Change Research Program’s latest [National Climate Assessment](#). Its 829-page report and 127-page “summary” were quickly followed by press releases, television appearances, interviews, and photo ops with tornado victims – all to underscore President Obama’s central claim: “once considered an issue for the distant future,” human-induced climate change “has moved firmly into the present.” It is “affecting Americans right now,” disrupting their lives in countless ways, as enumerated above.

It was pretty scary sounding – and much of the White House and media spin went far beyond what even the NCA report actually said. For example, the report said “there has been no universal trend in the overall extent of drought across the continental U.S. since 1900.” But the President and his spin doctors claimed droughts were getting much worse. The fear-mongering was essential.

First, the report and spin were designed to distract voters from topics that the President and Democrats do not want to talk about: ObamaCare, IRS scandals, Benghazi, foreign policy failures and a steady rise in aggression and terrorism, still

horrid jobless and workforce participation rates, and an abysmal *minus* 0.5% first quarter 2014 GDP growth rate that reminded many voters of the Great Depression.

Second, fear-inducing “climate disruption” claims are needed to justify job-killing, economy-choking policies like carbon dioxide restrictions; still more wind, solar, and ethanol mandates, tax breaks, and subsidies; and regulatory compliance costs that have reached [\\$1.9 trillion](#) per year – nearly one-eighth of the entire U.S. economy – with \$353 billion of those costs coming from EPA alone.

Third, scary hyperventilating serves to obscure the realities examined above, concerning Earth’s actual weather and climate, and the fact that all the end-of-Earth cataclysms were conjured up by computer models and a close-knit group of scientists, activists, and bureaucrats who are working desperately to protect their turf, reputations, funding, and power.

The United States government alone doles out some [\\$2.6 billion annually](#) in grants for climate research – but only for work that reflects White House, EPA, and IPCC perspectives. Billions more support subsidies and loans for renewable energy programs that represent major revenue streams for companies large and small, and part of that money ends up in campaign war chests for (mostly Democrat) legislators who support the **climate change scientist-government-industrialist complex**.

None of them is likely to admit any doubts, alter any claims or policies, or reduce the increasingly vitriolic attacks on skeptics of “dangerous manmade global warming.” They do not want to risk being exposed as false prophets, or worse. To understand the true situation, simply *follow the money*.

Last, and most important, climate disruption claims drive a regulatory agenda that few Americans support. Presidential candidate Obama said his goal was to “fundamentally transform” the United States and ensure that electricity rates “necessarily skyrocket.” On climate change, President Obama has made it clear that he will not wait for a “dysfunctional Congress” to do its job. “Where they won’t act, I will,” he said, and his EPA, Departments of the Interior and Energy, and other officials are zealously implementing his anti-hydrocarbon policies.

This agenda translates into greater government control over energy production and use, job creation, and economic growth – and over people’s lives, livelihoods, living standards, liberties, health, and welfare. It means fewer opportunities and lower standards of living for elderly, poor, minority, and middle class working Americans. It means greater power and control for politicians, bureaucrats, activists, and judges – but with little or no accountability for mistakes made, damage done, or health and economic penalties deliberately exacted on innocent people.

A strong economy, modern technologies, and abundant, reliable, affordable energy are absolutely essential if we are to adapt to future climate changes, whatever their cause – so that we can survive the heat waves, cold winters, floods, droughts, and vicious weather that will most certainly continue coming.

It’s no wonder then that many experts raked President Obama’s 2014 National Climate Assessment report over the coals. One group of 15 scientists and meteorologists called it “a masterpiece of marketing” that is trying to scare people but is devoid of actual evidence to support its claims. Independent experts need to be involved in an open, robust debate on these issues – not just those scientists who are “paid to support the administration’s version of ‘global warming,’ ‘climate change,’ ‘climate disruption,’ or whatever their marketing specialists call it today,” those critical experts said.²⁰

Other climate specialists called the NCA report “pseudo-science,” said it was a “total distortion” of actual weather and climate records, and pointed out that “lead authors” for the report included activists from the radical Union of Concerned Scientists, Planet Forward, and the Nature Conservancy.

Climatologist Dr. Judith Curry noted that the report is based on “the false premise that any change in the 20th Century has been caused by anthropogenic global warming.” Added climate scientist Dr. Roy Spencer, parts of the report are “simply made up. There is no fingerprint of human-caused climate change” that can be separated from naturally occurring changes.

University of Colorado environmental studies professor Roger Pielke, Jr., observed that the NCA report claims “risks associated with extreme events like hurricanes are increasing” – whereas in reality “U.S. hurricane landfalls have decreased by 25% since 1900.” Weather Channel co-founder John Coleman blasted the report as a “600-page litany of doom,” a “total distortion of the data” and an “agenda-driven, destructive episode of bad science gone berserk.”

And yet the National Climate Assessment report is being employed as yet another justification for highly destructive energy, economic, and wealth redistribution policies. Incredibly, Secretary of State John Kerry even called climate change “the world’s most fearsome weapon of mass destruction” – even as true weapons of mass destruction were increasingly

falling into the hands of the most vicious butchers and terrorists since the Nazi SS death camps ... or perhaps in human history.²¹

The IPCC: The foundation of climate fraud

The Intergovernmental Panel on Climate Change (IPCC) remains the primary foundation for the National Climate Assessment report and for the vast majority of climate studies and regulations developed by the EPA, the Departments of Energy and the Interior, and similar government agencies worldwide. IPCC findings also form the basis for restrictions on fossil fuel use and CO₂ emissions, for hundreds of billions of dollars in renewable energy programs – and for the vast consortium of scientists, research institutions, activist groups, politicians, journalists, and companies that collectively profit from the contrived hysteria over manmade global warming.

It is therefore absolutely essential that IPCC work products be honest, accurate and credible, and that the resultant energy and climate policies be based on sound, replicable science.

Unfortunately, IPCC efforts are defective in every aspect. Indeed, the organization has continued many of the misleading and deliberately deceitful practices it employed in every previous Assessment Report.

For instance, contrary to repeated claims by IPCC Chairman Rajendra Pachauri (and the EPA) that the Panel's reports rely solely, entirely, and exclusively on scholarly peer-reviewed source material, *fully 30% of the papers and other references cited in the IPCC's 2007 Fourth Assessment Report (AR4) were not peer reviewed*, and many of the IPCC's authors and lead authors were not independent Ph.D. scientists, but instead were graduate students or even environmental activists working for Greenpeace, the World Wildlife Fund, and similar groups.²²

In fact, many of the IPCC's scariest, most headline-grabbing, most frequently repeated claims of climate disasters deviated flagrantly from basic standards of scrutiny, credibility and integrity. To cite just two of many egregious examples from the 2007 AR4:

- Claims that droughts caused by global warming would destroy 40% of the Amazon rainforest were premised on a World Wildlife Fund press release, which was based on "research" by two young activists who predicated their analysis on a science journal article that addressed forest *logging and burning by local people*, and said nothing whatsoever about rainfall or climate change.²³
- Claims that Himalayan glaciers would "disappear by the year 2035," depriving communities of water, were based on yet another World Wildlife Fund press release. The release was based on a non-peer-reviewed article in a popular science magazine – which was based on an email from a single glaciologist, who later admitted his prediction was pure "speculation." The IPCC lead author in charge of this section subsequently confessed that the glacial "meltdown" had been included – despite his *knowing* of its false pedigree – because he thought highlighting it would "encourage" policy makers and politicians "to take concrete action" on global warming.²⁴

Previous Assessment Reports also featured and relied on computer models, such as the one that generated Michael Mann's infamous "hockey stick" graph, to support IPCC claims that previously "unprecedented" global warming would soon cause global catastrophes. Those prominent claims were subsequently demolished by independent experts, like Ross McKittrick and Steve McIntyre, who demonstrated that Mann's computer program would generate the same graph even if random telephone numbers were fed into it. IPCC stalwarts, typically, vilified these experts as "climate change deniers" who should be ignored, banished from meteorology societies, or even jailed.

The IPCC's Fifth Assessment Report (AR5) continued many of these deceitful practices – although it also finally admitted that there had been no global warming for 17 years. Indeed, the final draft AR5 contained a graph that dramatically showed how far actual measured global temperatures deviated from every IPCC computer model temperature projection – and how the discrepancies between planetary reality and computer forecasts became worse with every passing year.

As McKittrick, an economics professor at the University of Guelph in Canada and one of the world's leading authorities on climate data, put it at the time: "Everything you need to know about the dilemma the IPCC faces is summed up in one remarkable graph" that shows how significantly its models "over-predicted the warming effect of CO₂ emissions for the past 22 years."²⁵

The climate model predictions were based primarily on the assumption that rising atmospheric CO₂ would send temperatures upward, and that this effect would be amplified by “positive forcing” from water vapor and other greenhouse gases. The actual observed global temperatures were measured by satellites and temperature stations, in the real world outside the computer modelers’ windows.

How did the IPCC deal with this hypothesis-shattering information? A previous IPCC report had “used Mike’s *Nature* [magazine] trick ... to hide the decline” in global temperatures, referring to Dr. Mann’s clever apples-and-oranges tactic of combining recent instrumental temperature data with reconstructed and averaged tree ring data. (That analysis also assumed wider tree rings were due only to warmer temperatures, but ignored the important role that rainfall also plays in tree growth).²⁶

This time the IPCC simply *deleted the graph from the final report*, so that it could claim its models were correct and the climate change situation is far worse than anyone thought it could possibly be.

In 2009, climate scientist Kevin Trenberth had said, “The fact is that we can’t account for the lack of warming at the moment, and it is a travesty that we can’t.” The same year, in another leaked ‘Climategate’ email, Professor Phil Jones, head of the East Anglia University Climatic Research Unit, said the lack of warming “has to continue for a total of 15 years before we get worried.”²⁷

By the end of 2013, the absence of warming had continued for some 17 years, and it had been 8 years since a category 3-5 hurricane had struck the United States. Moreover, in 2010, leading IPCC officials were already saying, “the next climate warming report will be dramatically worse.” Former executive secretary of the UN Framework Convention on Climate Change Yvo de Boer had predicted that the next report “is going to scare the wits out of everyone,” and that failure to devise a new climate treaty “could plunge the world into conflict.”

IPCC Chairman Rajendra Pachauri had said his organization would be “at the beck and call” of the governments that fund it. He has also admitted that the purpose of IPCC reports is to make the case that “action is needed on climate change.” And Dr. Mann had said it is essential that the world switch to “a carbon-free economy” to “solve this [climate] problem that threatens us all.”²⁸

Leading U.S. politicians added to the Al Gore *Earth in the Balance* clamor. Senator Barbara Boxer (D-CA) proclaimed: “In California we can just look out the window and see climate change’s impacts.” Senator Debbie Stabenow (D-MI) insisted: “Global warming increases volatility, and I can feel it when I’m flying.”

These comments underscore how totally invested the “climate establishment” is in maintaining perceptions that fossil fuel emissions are the primary or sole cause of global warming, climate change, or climate “disruption” (whatever they currently call it), and the results will be disastrous.

Everything you need to know about the IPCC’s “integrity” and the credibility of manmade climate change hysteria is embodied in those statements and the deletion of that terribly inconvenient graph. As Dr. Roy Spencer observed, “We are now at a point in the age of global warming hysteria where the IPCC global warming theory has crashed into the hard reality of observations.” But the situation gets much worse, and even more farcical and embarrassing.

Despite the increasing amount of real-world evidence aligning against IPCC hype and hypotheses, Mr. Pachauri continues to insist, “There’s definitely an increase in our belief that climate change is taking place and that human beings are responsible.” Now his organization is 95% confident it’s been right all along – an increase from just 90% confidence in 2007, when Earth’s temperatures had failed to increase for only 10 or 11 years.

Other researchers have raised the ante even higher, claiming it is now a “99.999% certainty” (one chance in 100,000) that the average global temperature since 1954 would not have risen so much if it had not been for human greenhouse gas emissions. (Whether the human contribution was 1% or 99.999% they would not say; nor did they bother to examine the undeniable role of multiple, powerful, complex and interrelated *natural forces* in causing numerous climate fluctuations throughout the course of planetary and human history.)

Dr. Judith Curry, professor and former chair of the School of Earth and Atmospheric Sciences at the Georgia Institute of Technology, summed the situation up perfectly: “As temperatures have declined, and climate models have failed to predict this decline, the IPCC has gained confidence in [its predictions of] catastrophic warming.” In other words, **the more they are wrong about nearly everything, the more confident IPCC officials have become that they are right about nearly everything.**²⁹

Equally disturbing and damning is the unscientific and deceptive study, review, summary, and public relations process that the IPCC engages in, to ensure that its final conclusions will always be that humans are responsible for climate change – and that the changes are increasingly dangerous and destructive.

According to ClimateDepot.com, the IPCC is essentially “a political body masquerading as a science body.” It always makes its science fit its political agenda. It examines numerous studies that support its “dangerous manmade climate change” hypothesis, while ignoring or dismissing studies that contradict its assumptions, assertions, and conclusions. Then, after it has spent years in that process, it hosts “detailed discussions with politicians, UN officials, and government delegates to the IPCC conference.” There its supposedly scientific conclusion are discussed, revised, and agreed to line by line for its Summary for Policymakers (SPM). Each IPCC report, he says, “represents the culmination of years of predetermined science,” in which even rape statistics and avocado shortages are presented as evidence of human-caused climate change.

In many cases, reports ClimateDepot.com, this process discovers that the authors of the various scientific chapters made significant “errors” that have to be corrected. Some truly are simple mistakes – math errors, for example. But others involve instances where “peer-reviewed” scientific studies turn out to have been activist press releases or articles from ski or hiking magazines. And many other “errors” are actually policy, political, or public relations decisions made for the SPM that now must be reflected in the main body of scientific literature. In the 2013 Fifth Assessment Report, Chapter 2’s 52 authors made 18 scientific errors that had to be fixed; Chapter 5 authors made 11 mistakes; and Chapter 11 had 21 errors.³⁰

The entire summary was negotiated behind closed doors, with the public and news media barred, and no television cameras allowed. One sentence after another was projected onto large screens, IPCC analyst and critic Donna Laframboise wrote. “Diplomats, bureaucrats, and politicians from dozens of UN nations [then] haggle, horse trade, and negotiate [every one of them]. Eventually, phrasing that everyone can live with [is] agreed upon. Then they move on to the next sentence.” The 2013 process involved 66 supposed expert authors (a number of whom are actually environmentalist activists), 271 politicians and bureaucrats from 115 countries, and 57 observers.³¹

As statistician and analyst [Steve McIntyre explained](#), there was a 3-month delay between publication of the SPM and release of the actual Working Group 1 Scientific Report on Physical Science for the Fourth Assessment Report. The delay was needed so that the reviewers and original scientists would have time to “make any ‘necessary’ adjustments to the technical report,” to ensure that it would “match the policy summary.” McIntyre is the ClimateAudit.org editor who with Ross McKittrick was most responsible for debunking Dr. Michael Mann’s infamous “hockey stick” temperature graph.

McIntyre pointed out that entire paragraphs were inserted into the scientific reports, dates and numbers were altered, italics were added to highlight certain passages, and some material simply disappeared -- including graphs and scientific explanations and conclusions that are “inconvenient to” or “in conflict with” the political Summary for Policymakers and its “manmade climate chaos” claims. That’s how the IPCC did it in 2007 – and how it did it again in 2013.

“Can you imagine what securities commissions would say if business promoters issued a big promotion, and then the promoters made the ‘necessary’ adjustments to the qualifying reports and financial statements, so that they matched the promotion? Words fail me,” McIntyre said.

But should anyone really be surprised by any of this? As climate scientist Bob Tisdale pointed out in a letter to Secretary of State John Kerry: In reality, “the vast majority of the scientific research reflected in [the IPCC Summary for Policymakers] was funded by governments. As a result, the summary presents only research efforts that adhere to the agendas of the political entities that financed it.”³²

Then why isn’t the IPCC completely revamped or simply scuttled? Because tens of billions of taxpayer dollars are devoted annually to climate change and renewable energy programs. There are just too many professional and political budgets and reputations to be protected, too many companies and universities and government agencies with huge stakes in keeping this money train on track, not to keep the “dangerous manmade climate change” illusion alive.

CONCLUSION: Our energy and economic futures are at stake

If any business engaged in duplicitous actions like these, it would be prosecuted for fraud and its officers likely jailed. Indeed, the anti-human nature of IPCC and EPA actions is underscored by the fact that they are driven by a determination to impose anti-hydrocarbon energy policies that will hamper economic growth, redistribute wealth, kill jobs, impair human health and welfare, and cost lives.

It's no wonder that [fewer than half](#) of Americans believe climate change is manmade or dangerous – and far fewer support these punitive policies. A May 2014 [Gallup poll](#) found that 56% of respondents said the economy, unemployment, and dissatisfaction with government are the most serious problems facing our nation; only 3% said environmental issues are of paramount concern, and climate change represented only a small segment of that low number. An August 2014 [Pittsburgh Post-Gazette poll](#) echoed those results.

Top Chinese, Indian, German, and Australian leaders pointedly declined to attend the September 2014 UN climate change summit in New York City. In an action that suggests Europe is shifting its focus from climate change to economic recovery, competitiveness and energy prices, the EU Commission announced that it will consolidate its energy and environmental functions, eliminating what had been a separate climate office. The decision reflects growing business, consumer and family concerns about access to reliable, affordable electricity and motor fuels, experts said.³³

That means that, at least for now, the U.S. may be almost the only nation whose government is forcing its citizens to accept draconian, even suicidal, energy and climate policies.

Perhaps worse, those rules will be implemented not in the form of laws enacted by duly elected representatives, but through regulations imposed by increasingly dictatorial Executive Branch agencies.

Meanwhile, the Middle East and other parts of world are exploding and imploding in a frenzy of butchery, beheadings, rapes and genocide – and Islamic State terrorists are threatening to spill more American blood on American soil. These realities are pushing “climate disruption” even further down voters’ lists of priorities, and making more voters outraged that the Obama Administration is still fixated on the notion that climate change is “the world’s most fearsome weapon of mass destruction.”³⁴

The issue is not whether climate and weather are changing. Of course they are. They change all the time and have done so throughout history. The issues are whether, and to what degree, humans are affecting Earth’s climate – and whether slashing fossil fuel use and reducing our economic growth and living standards will stop climate change. Put another way: Can we control our planet’s climate and weather, by addressing one politically motivated factor (CO₂), while having no effect whatsoever on the myriad of powerful natural forces that affect climate change? It is ludicrous to think we can.

What can be done?

Citizens and voters should remind their legislators of these facts through letters, at town meetings, and when they go to the polls. However, other proactive actions will also be required.

Governors, state attorneys-general, other elected officials, and affected companies and communities should file lawsuits under the Freedom of Information Act, the Information Quality Act, and related laws. Such legal actions can compel the EPA, the IPCC, and alarmist scientists to release data and analyses to outside experts who up to now have been denied the right to review and challenge the scientific, health and economic claims that these entities use to justify efforts to slash fossil fuel use in the name of stabilizing planetary climate and weather that have been anything but stable since time immemorial.

Governors, state attorneys general, other elected officials, and affected companies and communities should also resist any attempts by the EPA and other government officials to impose economy-crippling, job-killing, health-impairing “climate change” regulations.

They should also demand debate – force the IPCC, the EPA, and alarmist scientists and bureaucrats to defend their science and policies in public. Force them to present their data and analyses for citizens and experts outside their now-closed circle of like-minded, self-interested reviewers – and prove with clear and convincing evidence that their claims of

“dangerous manmade climate change” are correct. Force them to prove that the harmful effects of climate change truly are far worse than the enormous harm that their anti-energy, anti-growth regulations will perpetrate and perpetuate, especially on America’s and the world’s poorest citizens.

If they have nothing to hide, they should be happy to do so.

The U.S. Senate and House of Representatives should trim billions of dollars from the annual EPA and IPCC budgets. That money is currently being used to advance research focused almost solely on carbon dioxide and “dangerous manmade climate change,” and on regulations designed to drive anti-hydrocarbon and renewable energy agendas, regardless of the economic and human costs.

Elected officials from the United States and all countries should also act to amend or clarify IPCC and GCRP missions and directives – to make it clear that these organizations are not to focus only on CO₂ or greenhouse gases as they explore climate change causes and effects. At this time, the most glaring omissions from these research portfolios are studies that would help scientists better understand, assess, and factor in the powerful, complex, interrelated *natural* forces that drive climate fluctuations, cycles, and changes. If such changes are not forthcoming, the U.S. should pull out of the UN climate process altogether.

Only when these changes are implemented will we be able to discern and separate significant human influences – and begin to predict why, when, how, and where Earth’s climate is likely to change in the future. That is essential because, as many scientists have observed, the sun seems to have entered a “quiet phase” that may mark a return to Little Ice Age conditions over the coming decades. The impacts on weather, agriculture, and food production would be profound -- and humanity needs to be prepared.

Only by *accurately* predicting future climate fluctuations will nations and communities be able to prepare for and adapt to future climatic conditions. Humans have always adapted to climate change. We have had no choice but to do so, because powerful natural forces completely dwarf anything humans might muster up in feeble attempts to control climate and weather.

However, our constantly growing wealth and improving technologies will make adaptation and mitigation much easier in the future – if we do not stifle those abilities by imposing misguided regulations.

The **climate change scientist-government-environmentalist-industrialist climate complex** is well funded and powerful. But it is also arrogant and dishonest, and its assertions are so far removed from reality that they can no longer survive scrutiny and challenge. The time has come to end its attempt to control our lives, livelihoods, liberties, living standards, and life spans.

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His articles have appeared in newspapers (*Wall Street Journal*, *Washington Times*, *Investor's Business Daily*, *New York Post*, *Houston Chronicle*, and others) and magazines (*Risk Management*, *American Coal*, *Hispanic Times* and others) and on news and opinion websites in the United States, Canada, Germany, Italy, Peru, Venezuela, South Africa, Uganda, Bangladesh and other countries.

Driessen's book, *Eco-Imperialism: Green Power - Black Death*, documents the harm that restrictive environmental policies often have on poor people, especially in developing countries, by restricting their access to life-enhancing modern technologies. It is in its second U.S. printing and has also been published in Argentina (Spanish), India (English), Germany (German), and Italy (Italian).

He was editor for *Energy Keepers - Energy Killers: The new civil rights battle*, by CORE national chairman Roy Innis and *Rules for Corporate Warriors: How to fight and survive attack group shakedowns*, by Nick Nichols. He has also written detailed reports on the role of CO₂ in enhancing plant growth, modern mining methods in Peru, sustainable development, and EPA regulations.

Driessen's studies and analyses have also appeared in *Conserving the Environment* (Doug Dupler, editor), *Resurgent Diseases* (Karen Miller, editor) and *Malnutrition* (Margaret Haerens, editor), all part of the Thomson-Gale "Opposing Viewpoints" Series used in many high schools and colleges; *Redefining Sovereignty: Will liberal democracies continue to determine their own laws and public policies, or yield these rights to transnational entities in search of universal order and justice?* (Orin Judd, editor); and other publications. He played a lead role in the "Kill Malarial Mosquitoes Now" campaign, an international effort that restored the use of DDT to African and other malaria control programs, and served as an advisor to the film "3 Billion and Counting," examining how the environmentalist and EPA campaign against DDT has had devastating impacts on families in poor developing countries.

Paul received his B.A. in geology and field ecology from Lawrence University and a J.D. from the University of Denver College of Law, before embarking on a career that also included tenures with the United States Senate, U.S. Department of the Interior and an energy trade association.

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¹⁰ See Paul Driessen, *Carbon Dioxide: The gas of life – Tiny amounts of this miracle molecule make life on Earth possible*, Washington, D.C.: Committee For A Constructive Tomorrow (2013), <http://www.cfact.org/pdf/CO2-TheGasOfLife.pdf>.

¹¹ Mr. Gore is also famous for absurdly misinforming his 2009 “Tonight Show” audience that the [Earth’s interior](#) is “really hot, several million degrees” – the *core* is actually 9,000° F – and for [refusing to debate](#) anyone on climate change or even take audience questions that he has not preapproved. Perhaps in his defense, Nobel Laureate Gore managed [only a C+ and a D](#) in the only college-level science courses he ever took.

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¹⁹ It has been suggested that these activist “stakeholders” hold the stakes that government bureaucrats are driving into the hearts of American companies, working families, and communities.

²⁰ Marc Morano, “Climate hustle or American doomsday: Obama climate report panned by scientists,” a Climate Depot Special Report, May 7, 2014: <http://www.climatedepot.com/2014/05/07/climate-hustle-or-american-doomsday-obama-climate-report-panned-by-scientists-pseudoscience-sales-pitch-follow-the-money-total-distortion/>; Michael Bastasch, “Skeptical scientists debunk White House global warming report,” *The Daily Caller*, May 16, 2014: <http://dailycaller.com/2014/05/16/skeptical-scientists-debunk-white-house-global-warming-report/#ixzz3BdG4Z8ED>

²¹ UN IPCC Working Group III co-chairman Ottmar Edenhofer put it bluntly: “One has to free oneself from the illusion that international climate policy is environmental policy,” he said. It is about “how we redistribute the world’s wealth.” See <http://www.WashingtonTimes.com/news/2013/nov/10/Rothbard-Pressing-ahead-on-climate-salvation/?page=all>. Simon Denyer, “Addressing students in Indonesia, Kerry calls climate change a weapon of mass destruction,” *Washington Post*, February 16, 2014.

²² See Donna Laframboise, *The Delinquent Teenager Who Was Mistaken for the World’s Top Climate Expert: An IPCC expose*; Toronto: Ivy Avenue Press (2011); pp. 184-185 (the citizen audit of AR4); D. Laframboise, *Into the Dustbin: Rajendra Pachauri, the Climate Report & the Nobel Peace Prize*, Seattle, WA: CreateSpace Independent Publishing Platform (2013); Tim Ball, *The Deliberate Corruption of Climate Science*, Mount Vernon, WA: Stairway Press (2014); and various books and articles about Climategate.

²³ Jonathan Leake, “UN climate panel shamed by bogus rainforest claim,” *Sunday Times* (London), January 31, 2009; Richard Gray and Ben Leach, “The never-ending scandal: New list of errors in IPCC report,” *Sunday Telegraph*, February 7, 2010. See CFACT’s [amicus curiae brief](#) to the U.S. Supreme Court in *Southeastern Legal Foundation, et al. v. United States Environmental Protection Agency, et al.*

²⁴ Jonathan Leake and Chris Hastings, “IPCC mislead world over Himalayan glacier meltdown,” *The Times* (London), January 17, 2010; Gerald Traufetter, “Can climate forecasts still be trusted? Confidence melting away,” ABC News Internet Ventures, January 28, 2010; F. William Engdahl, “Glacier Meltdown: Another Scientific Scandal Involving the IPCC Climate Research Group,” Global Research, January 27, 2010; David Rose, “Glacier scientist: I knew data hadn’t been verified,” London *Daily Mail*, January 24, 2010. *The Times* of London reported that India’s top glaciologists called Hasnain’s claims about imminent glacial meltdown “inherently ludicrous.” India’s most renowned glacier experts had just completed an exhaustive study that found no evidence of unusual temperature upturns in the Himalayas and said it would take 300 years for the glaciers to melt.

²⁵ Ross McKittrick, “IPCC models getting mushy,” *Financial Post*, September 16, 2013: <http://opinion.financialpost.com/2013/09/16/ipcc-models-getting-mushy/>

²⁶ The quote about using a “trick” to “hide the decline” comes from an email released in the first group of Climategate emails and other documents. The email was sent by climatologist Phil Jones to the original hockey stick authors: Michael Mann, Raymond Bradley and Malcolm Hughes. See Anthony Watts, “Mike’s Nature trick,” <http://wattsupwiththat.com/2009/11/20/mikes-nature-trick/>

²⁷ See Anthony Watts, “Kevin Trenberth struggles mightily to explain the lack of global warming,” May 22, 2013, <http://wattsupwiththat.com/2013/05/22/kevin-trenberth-struggles-mightily-to-explain-the-lack-of-global-warming/>; James Delingpole,

“There has been no warming since 1998,” *The Telegraph*, July 6, 2011: <http://blogs.telegraph.co.uk/news/jamesdelingpole/100095506/there-has-been-no-global-warming-since-1998/>

²⁸ See Suzanne Goldenberg, “IPCC chairman dismisses climate report spoiler campaign: Rajendra K Pachauri says ‘rational people’ will be convinced by the science of the forthcoming blockbuster climate report,” *The Guardian*, September 19, 2013, http://www.theguardian.com/environment/2013/sep/19/ipcc-chairman-climate-report?CMP=twf_fd

²⁹ Judith Curry, “IPCC diagnosis – permanent paradigm paralysis,” September 28, 2013, <http://judithcurry.com/2013/09/28/ipcc-diagnosis-permanent-paradigm-paralysis/>. Dr. Curry has called for abolishing the IPCC, because of its demonstrated inability to be honest and objective. She has also pointed out that Antarctic ice sheet collapses “have happened in the past” without human-caused global warming, “and they will inevitably happen sometime in the future, with or without AGW” [anthropogenic global warming].

³⁰ Marc Morano, “This new IPCC report represents the culmination of years of predetermined science,” March 31, 2014, <http://www.climatedepot.com/2014/03/31/climate-depots-morano-statement-on-new-un-ipcc-report-this-new-ipcc-report-represents-the-culmination-of-years-of-pre-determined-science/>; “Political manipulation of a ‘scientific’ document?! 10 pages of UN IPCC science mistakes?” <http://www.climatedepot.com/2013/10/02/10-pages-of-un-ipcc-science-mistakes-in-chapter-2-alone-the-52-authors-are-collectively-responsible-for-18-instances-of-scientific-mistakes-that-now-need-fixing-political-manipulation/>

³¹ Donna Laframboise, “10 pages of IPCC science mistakes?” Political manipulation of a scientific document – or pages upon pages of newly discovered scientific errors? You decide.” October 2, 2013, <http://NoFrakkingConsensus.com/2013/10/02/10-pages-of-ipcc-science-mistakes/>; Suzanne Goldenberg, “IPCC report: climate change felt ‘on all continents and across the oceans’,” *The Guardian*, March 28, 2014, http://www.theguardian.com/environment/2014/mar/28/ipcc-report-climate-change-report-human-natural-systems?CMP=twf_gu

³² Bob Tisdale, Open Letter to the Honorable John Kerry U.S. Secretary of State, September 30, 2013, <http://wattsupwiththat.com/2013/09/30/open-letter-to-the-honorable-john-kerry-u-s-secretary-of-state/>

³³ “The climate: biggest loser of the new Commission?” *EurActive.com*, September 12, 2014, <http://www.euractiv.com/sections/climate-environment/climate-biggest-loser-new-commission-308420>; Michael Bastasch, “EU Dismantles Its Climate Commission Amid Economic Struggles,” *Daily Caller*, September 12, 2014, <http://dailycaller.com/2014/09/12/eu-dismantles-its-climate-commission-amid-economic-struggles/>

³⁴ Just two months after calling climate change “the world’s most fearsome weapon of mass destruction” – and amid radical Islamist chaos and conflagrations across the Arab world – on September 3, Mr. Kerry said “Muslim-majority countries are among the most vulnerable” to climate change. “Scriptures,” he claimed, make it clear that Americans have a “responsibility” to prevent this calamity.



Committee For A Constructive Tomorrow

1875 Eye Street NW, 5th Floor

Washington, DC 20006

(202) 429-2737 ♦ www.cfact.org

November 19, 2014

TO: Environmental Protection Agency

From: Troy Mader, House Representative (HD 52) - Wyoming

RE: Clean Power Plan Proposed Rule – Docket ID: EPA-HQ-OAR-2013-0602

Hello:

Your proposed rule of 1,100 lbs per mega-watt hour for new coal-fired generation plants is impractical and doesn't make any sense for the following reasons:

1. The best industry standards I can find state 1,800 lbs per mega-watt hour is feasible. So what you're proposing is unobtainable. So rather than seeking to improve air quality, it appears you are in lock-step with Greenpeace, Sierra Club and other non-governmental organizations (NGOs) to shut down one of the cleanest, most affordable sources of reliable energy in the world. And for what reason? You certainly don't have solid, peer-reviewed science to support your standards.

Question: Have the above-mentioned NGOs EVER offered any determinable contribution of any sort to energy production so as to provide for the energy needs of the businesses and citizens of this country? If the answer is "No" then why are you siding with them?

2. Your rule assumes CO₂ is a pollutant – an erroneous assumption. It's NOT! CO₂ is a naturally-occurring element essential to life itself. We CANNOT survive without it.
3. Your rule also assumes increased CO₂ is harmful. It's NOT! At least the peer-reviewed scientific literature I've read (I have access to more than 2,000 pages of data) doesn't show any significant problems with increased CO₂. In fact, quite the contrary, peer-reviewed literature reveals a \$2.3 trillion increase in crop production (1960 to 2013) due to slight increases of CO₂ in

**Troy R. Mader, Representative
Wyoming House District 52**

the atmosphere. So why don't you folks ever reveal the verifiable benefits of increased CO₂? Isn't it true CO₂ would have to be 17.5 times the current levels to even be considered harmful?

Speaking of benefits, have any of you read Management Information Services' article: "The Social Costs of Carbon? No, The Social Benefits of Carbon" where they found the benefits of fossil fuel energy to society outweighing the social costs of carbon somewhere between 50 to 500 times than of any supposed detriment?

It's also important to emphasize the benefits of "clean coal" technology in that key emission rates have been reduced by 90% since 1970.

4. Your proposed rule is very, very costly. Didn't the U.S. Chamber of Commerce brand this rule as the "largest, most costly... rule" in EPA history? Isn't it estimated your faulty, unsubstantiated rule will cost Americans and businesses more than \$50 billion a year?

And what about job loss? We know job loss will be substantial. We just don't know how substantial – anywhere from 250,000 to 800,000 jobs over the next few years and maybe up to 250,000 jobs per year until 2030. For what benefit?

Perhaps here is a good place to insert the EPA's own assessment of benefit if all coal-fired generation plants in the U.S. were shut down: Possibly 1/20th of 1 degree of temperature change. That's it! In other words: undetectable benefit.

Keep in mind India and China, who are expanding their economies, are building coal-fired power plants at a rate of 4 new plants coming on line per month per country.

So is EPA's real agenda simply to wreak havoc with America's economy by denying affordable energy to this countries' businesses and citizens thereby making the US less competitive on the world market?

5. What alternative energy does the EPA propose that can match coal-fired generation plants for efficiency and cost effectiveness? Don't alternative energy sources cost anywhere from 4 to 16 times that of coal-generated energy?

Speaking of alternative energy sources and problems therewith, why isn't there any consideration, under your proposed rule, of the known harmful impacts from alternative energy such as killing of millions of birds and bats from wind and solar farms? Hasn't it been shown that the average wind farm kills up to 1.4 million birds and bats per year?

**Troy R. Mader, Representative
Wyoming House District 52**

What about “Steamers?” Steamers are birds that venture over solar farms and are fried by the reflected rays off solar panels. Let’s see, aren’t about 30 birds killed per hour during daylight hours? If there’s ten hours of daylight, isn’t that about 300 birds a day? So doesn’t that equate to nearly 110,000 birds killed per year at each solar farm?

How do you justify such an actual loss of wildlife year after year which will exponentially increase with more wind and solar farms in light of the possibility of reducing global temperature by 1/20th of one degree?

Question: How do you sleep at night embracing such hypocrisy?

6. It’s my understanding the EPA supports the findings of the United Nations’ Intergovernmental Panel on Climate Change (IPCC). Now as a point of clarification, wasn’t the IPCC’s purpose, upon formation in 1986, to prove that anthropogenic warming created abrupt climate change, i.e. “a change in climate which is attributable directly or indirectly to human activity that alters the composition of the atmosphere”? In other words, they had a specific goal before they conducted any studies. Or, to put it another way, “Don’t bother them with facts, their mind was already made up.”

Now the real problem with IPCC’s predetermined goal is this: Neither IPCC nor any individual, non-biased scientist has provided ANY empirical evidence that anthropogenic warming has caused abrupt climate change.

Yet you folks are still ok with parroting their phony findings! Why?

Now, let’s get down where the rubber meets the road:

- A. Isn’t it true IPCC’s findings are more political than scientific? In fact, isn’t it true IPCC’s reports either “gloss over” or simply ignore any inadequacies and/or uncertainties within the IPCC models used to determine “man-caused” climate change? Further, doesn’t IPCC’s findings also ignore the massive amount of peer-reviewed research that directly contradicts IPCC’s conclusion that carbon dioxide is the main factor affecting climate change? *(Note: Remember I’ve got more than 2,000 pages of such research if you’re interested in the truth about climate change.)*
- B. Now let’s clear up a lie you folks parrot often: There’s 95% agreement among scientists that “man-caused” climate change is occurring! Wow, what a high figure especially when IPCC openly admits there is growing disparity and disagreement between actual observed global temperatures and IPCC’s model projections.

**Troy R. Mader, Representative
Wyoming House District 52**

Now the problem with that statement are the words “man-caused.” It’s true climate change is occurring. Scientists readily agree on that point. However, there is much debate and speculation about whether it’s “man-caused.” Right now all we have is hypothesis, i. e assumption, with no substantive peer-reviewed data to back up such a claim.

Nor is there significant agreement among many scientists as to whether climate change is beneficial or detrimental. There is, however, much peer-reviewed data to support considerable benefit from increased CO₂ in the atmosphere. I’d be glad to supply you folks with some great reading if you’re interested in some real scientific facts.

- C. Another thing the IPCC did wrong was choosing of “selective” evidence to support its projected claims, i.e. using only the time period of 1970 to 1997 as “evidence” that CO₂ was increasing. What was ignored was over an entire century of available data that tells quite a different story. Further, didn’t IPCC derive all their projections, even from their selective time period, from computer models that were never validated as is required under credible scientific research?

Oh, and one more thing. Didn’t IPCC conveniently leave out the well-established Medieval Warm Period (circa 900-1400) and the cool Little Ice Age (circa 1450-1800) in an attempt to show global temperatures supposedly “constant” until 1975?

Now let’s look at the last century for some evidence of climate change. Wasn’t there alternating warming and cooling periods of 25 to 30 years? Example: Some warming from 1910 to 1940; Cooling from 1940 to 1970; Warming again from 1970 to 1997? And NO warming since 1997?

So doesn’t this evidence show the IPCC selectively picked a “warming” time period to support their predetermined conclusion while ignoring years and years and years of evidence that showed otherwise?

Conclusion:

1. The Environmental Protection Agency (EPA) is proposing a rule on carbon emission for new coal-fired generation plants that is currently unobtainable and unknown to be obtainable in the future.
2. The EPA is using faulty data and information from a political rather than scientific organization, i.e. the IPCC, who had a predetermined conclusion prior to studies it conducted based on projections from non-validated computer models.

**Troy R. Mader, Representative
Wyoming House District 52**

3. The EPA is ignoring a plethora of peer-reviewed scientific research that clearly contradicts IPCC findings.
4. The EPA is joining with NGOs who have never, ever contributed or offered any sort to energy production so as to provide for the energy needs of the businesses and citizens of this country.
5. The EPA is clearly and actively seeking to destroy the most reliable, cost-effective source of energy available to the businesses and citizens of the United States.
6. The EPA, by destruction of said reliable coal-fired energy, is mandating the annual slaughter of millions of wildlife species, i.e. specifically birds and bats.
7. The EPA is, by proposing this unreasonable, unobtainable rule is, in fact, engaging in Crony Capitalism. When they attack reliable coal-fired energy, they are supporting taxpayer-subsidized development of “lower-energy-density high-cost” wind, solar and bio-fuels.

Note this quote: “Green energy initiatives in wind and solar projects with high investment costs sustained by federal subsidies produce electricity with far less energy density than fossil fuel equivalents and, with comparably high kilowatt-hour costs, cannot compete in the market economy. Many of these projects – at least 30 that have been supported by national taxpayer dollars – have failed, are in bankruptcy proceedings, or are teetering on such a fate.”
(Note: This quote made in 2012) (Source: Climate Change, Energy Policy, and National Power by Admiral Thomas B Hayward, U.S. Navy (Ret), Vice Admiral Edward S. Briggs, U.S. Navy (Ret), and Captain Donald K. Forbes, U.S. Navy (Ret))

Thank you for your time.

Respectfully Submitted,

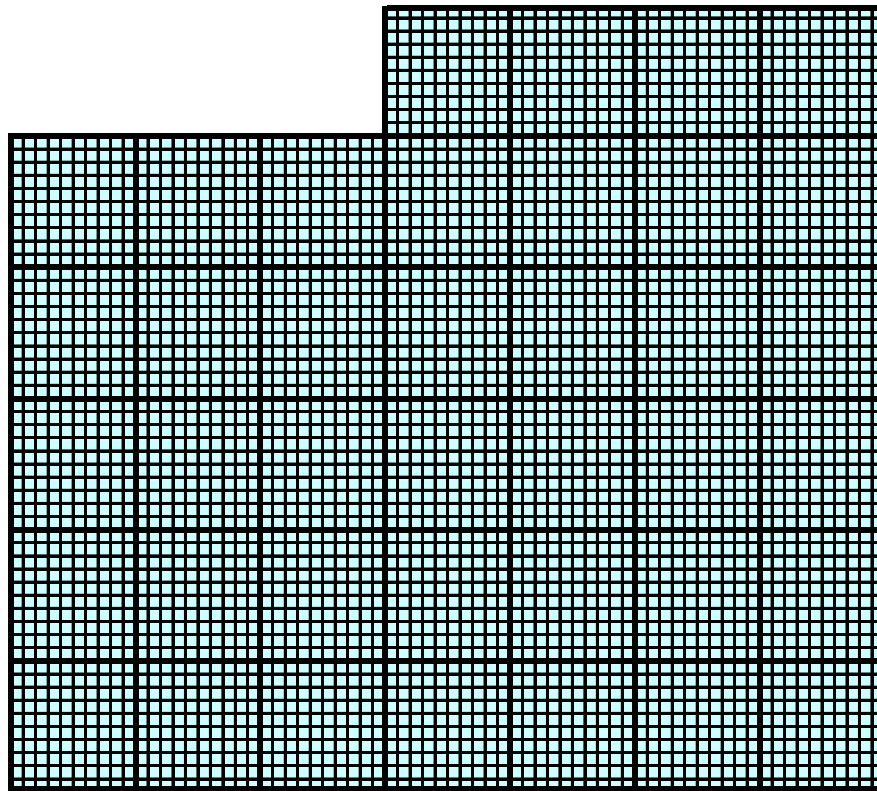
Troy R. Mader, Representative
Wyoming House District 52

Environmental Protection Agency
EPA Docket Center (EPA/DC)
Mailcode 28221T
Attention Docket ID No. OAR-2013-0602
1200 Pennsylvania Ave NW
Washington, DC 20460

**Troy R. Mader, Representative
Wyoming House District 52**

Spending trillions of dollars to reduce man-generated CO2 will not have any measurable impact on the climate.

Water in the atmosphere causes 95% of the greenhouse effect and thank God for it or Earth would be a frigid planet. CO2 is insignificant.



The light blue area represents 39,000 billion tons of CO2 in the oceans.

The dark blue area represents 750 billion tons of CO2 in the atmosphere.

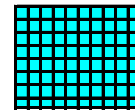
The green area represents the 75 billion tons of CO2 that plants need each year.

The red bar represents the 6 billion tons of CO2 generated by man each year WORLDWIDE.
The USA produces only 14% of that.

The tiny red rectangle represents the man-generated CO2 that the Government wants to try to eliminate by spending trillions of dollars.

CO2 continuously moves between the oceans and the atmosphere. In high latitudes, cold oceans gain CO2. In low latitudes, warm oceans expel CO2 into the air. A very small percentage of CO2 in the oceans expelled into the atmosphere makes man-generated CO2 insignificant.

Plants need all the anthropogenic (man-generated) CO2 plus much more from natural sources including CO2 expelled by oceans.



Are you willing to bankrupt our economy in a futile attempt to eliminate CO2 represented by this little red dot with no benefit to the environment? Let your Congressman and Senator know your thoughts.

If ALL CO2 generated by mankind in the USA were eliminated, it would not have measurable effect on the climate.

CLIMATE CHANGE

Dr . Peter C. Farrell, FTSE, FAIM, FAICD, AM
Chairman and Founder,
ResMed, Inc. San Diego

Based upon talks given at Stanford, the MIT
Club of San Diego, and updated, 2010-2014.

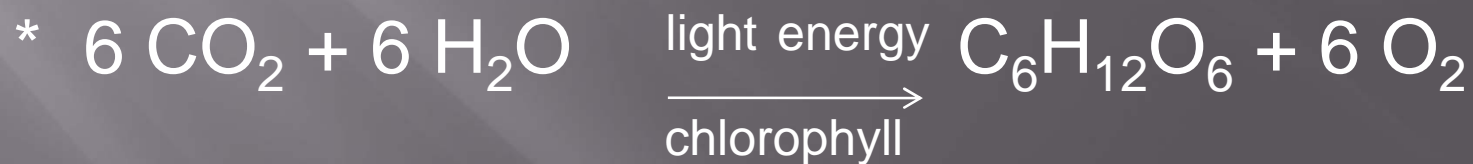
Introduction

‘Our neurotic obsession with carbon betrays an inability to distinguish between pollution and the stuff of life itself. We are a country of standards and laws. Yet we are moving perilously in the direction of abolishing notions of discretion and judgment.’

Bret Stephens, WSJ, 1/05/10

A Few Facts About Carbon Dioxide .I.

1. It is a colourless, odorless, harmless and non-flammable gas.
2. It is essential for photo-synthesis and hence crop growth, which is essential for life*.
3. The by-product of photo-synthesis is oxygen, also essential for life.
4. Humans produce CO_2 as the by-product of metabolism and it is expired in our breath.



A Few Facts About Carbon Dioxide .II.

1. CO_2 has a molecular weight of 44 and is present in the atmosphere at a concentration of 0.04% or 400 ppmv.
2. When we breathe out the average CO_2 concentration in our breath is 4.5% or 45,000 ppmv, or > 100 times atmospheric levels.
3. NASA and the Navy maintain CO_2 levels < 8000 ppmv in spacecraft and nuclear submarines, or > 20 times atmospheric levels.
4. Total man-made CO_2 production is $\sim 3\%$ of total annual CO_2 released to the atmosphere; the rest is non man-made (soils, vegetation, volcanos, the oceans, etc.)

AGW Past History. I.

‘The deepest sin against mankind is to believe things without evidence.’

Thomas Henry Huxley (1825-95)

AGW was an off beat theory in the late 1970s and was adopted by a group of about 45 atmospheric modellers and physicists.

AGW Past History. II.

A relatively small group (including alarmist James Hansen of GISS and the climategate team of Jones, Mann, Trenberth, Briffa, Wigley et al., who have dominated climate science input to the IPCC) peer reviewed each other's papers and hindered competing ideas by underhandedness and dishonesty. The Hadley CRU emails suggest that the junk science behind AGW is part of an orchestrated attempt to commit scientific fraud on a global scale.

AGW Recent History. I.

Perhaps the latest most disturbing example of deceit was accomplished on the most used information source of all time: Wikipedia (L. Solomon, Financial Post, Dec. 19, 2009)

AGW Recent History. II.

An activist Green Party member, part of the realclimate.org blog, and a so-called climate scientist, the UK's William Connolley, became a website administrator for Wikipedia and proceeded to rewrite over 5000 climate entries, deleted hundreds of contrarian AGW articles, debarred 2000 climate scientists from entering data on the site, including blackballing renowned climate scientists from both MIT and Harvard.

Correlation versus Causation. I.

From 1975 to 1998, global temperatures trended up. What is the cause of the warming? First, examine where the warming occurred, since each cause heats the atmosphere differently. The pattern of warming is the cause's signature.

(IPCC AR4 [2007]; Chapter 9)

Correlation versus Causation. II.

The predicted signature of increased GHGs consists of two features:

1. A hotspot ~10km above the equator and
2. Broad tropospheric warming, concomitant with broad stratospheric cooling.

Correlation versus Causation. III.

Radiosondes (weather balloon temperature measuring devices) for the period 1979-1999 do indeed show broad stratospheric cooling and tropospheric warming but no hotspot whatsoever, not even a trace.

(Evans, D. Dec. 19, 2008 & US CCSP, now USGCRP, [2006])

Correlation versus Causation. IV.

Is there any observational evidence favoring AGW?

Apart from model speculation, the only supporting evidence for AGW was old ice core data (c. 1985) which suggested that, during the past 500,000 years, the earth's temperature and CO₂ were in lock-step.

Was man-made CO₂ the culprit?

Correlation versus Causation. V.

These ice core data (ca. 1985) were a few thousand years apart.

In the late 1990s better techniques, covering a few hundred years apart, showed categorically that temperature increases preceded CO₂ increases by ~800 years.

'The facts don't change because
they are ignored.'
Aldous Huxley

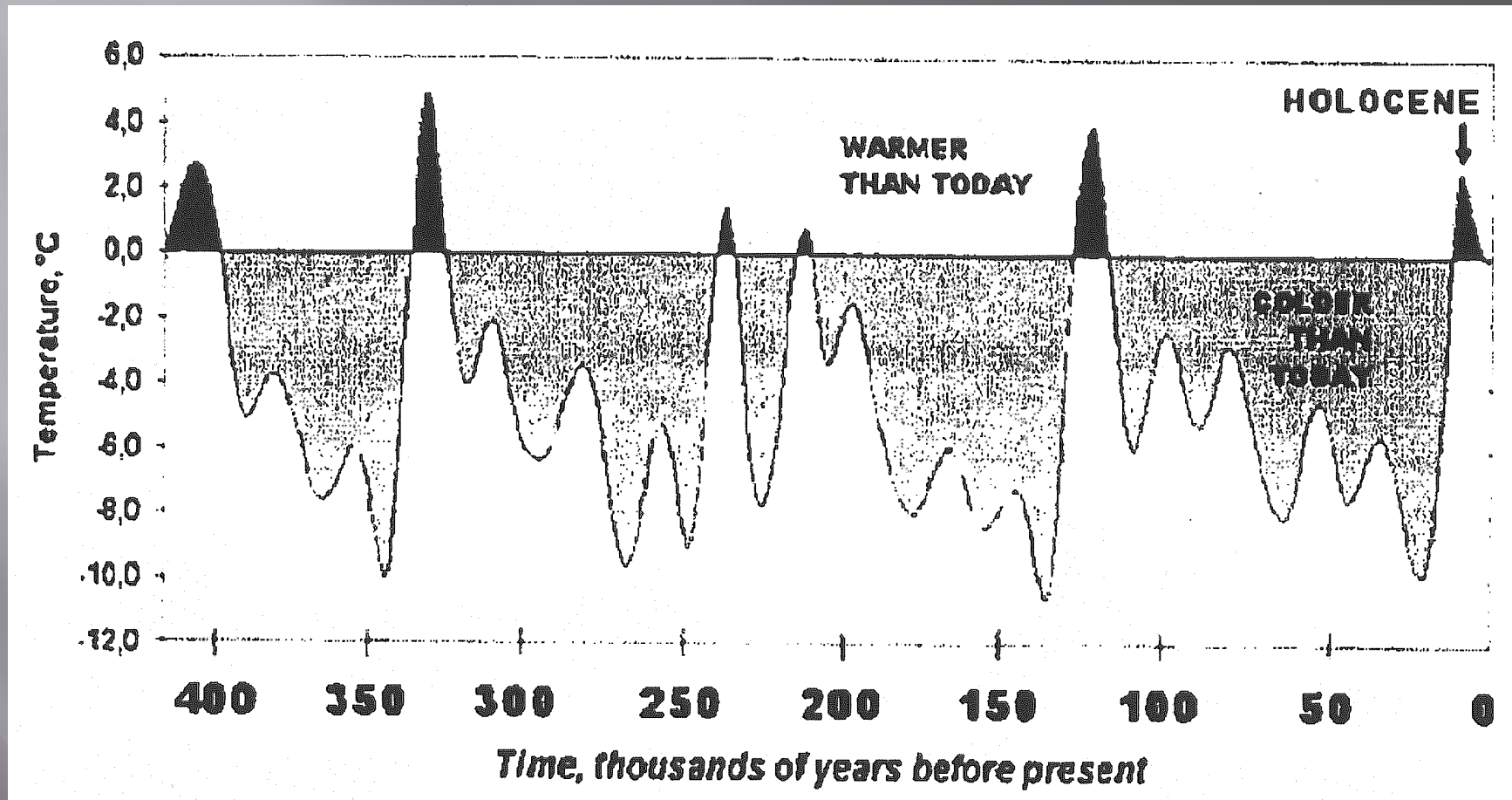
AGW alarmists have only 2 counter points:

1. CO₂ is a GHG but, since there is no hotspot, its affect is minimal and
2. GCMs predict that increasing CO2 levels will cause global temperatures to increase and, therefore, increase oceanic evaporation and create more clouds. However, GCMs are theory, not evidence; simply put, models are not data.

More questions for the AGW cabal. I.

If the warming experienced between 1979 and 1998 (the late 20th century phase of global warming) is not outside the expected norm, why the alarm? And if the warming was well within previously observed historic temperature changes, how can man-made CO₂ emissions be deemed responsible?

Surface air temperature at Vostok station, Antarctica over the last 400,000 years (proxy: deuterium isotope ratios in ice core (Salamatin et al. 1998))



Salamatin A.N., V. Ya. Lipenkov, N.I. Barkov, J. Jouzel, J.R. Petit and D. Raynaud (1998). Ice-core age dating and palaeothermometer calibration based on isotope and temperature profiles from deep boreholes at Vostok Station (East Antarctica), *Journal of Geophysical Research*. 1-3: 8963-87977

More questions for the AGW cabal. II.

If CO₂ levels increased ~10% since 1998, while global temperatures have not changed over the ensuing 17 years, how can man-made CO₂ emissions be to blame for dangerous levels of warming?

More questions for the AGW cabal. III.

All GCMs predicted a steady increase in temperature for the period 1990 to 2014. In fact, there were 8 years of warming, followed by 16 years of cooling. And there was no evidence of any hotspots, which all GCM models predicted.

If so, why is it assumed that these flawed GCMs are suitable as a basis for public policy-making?

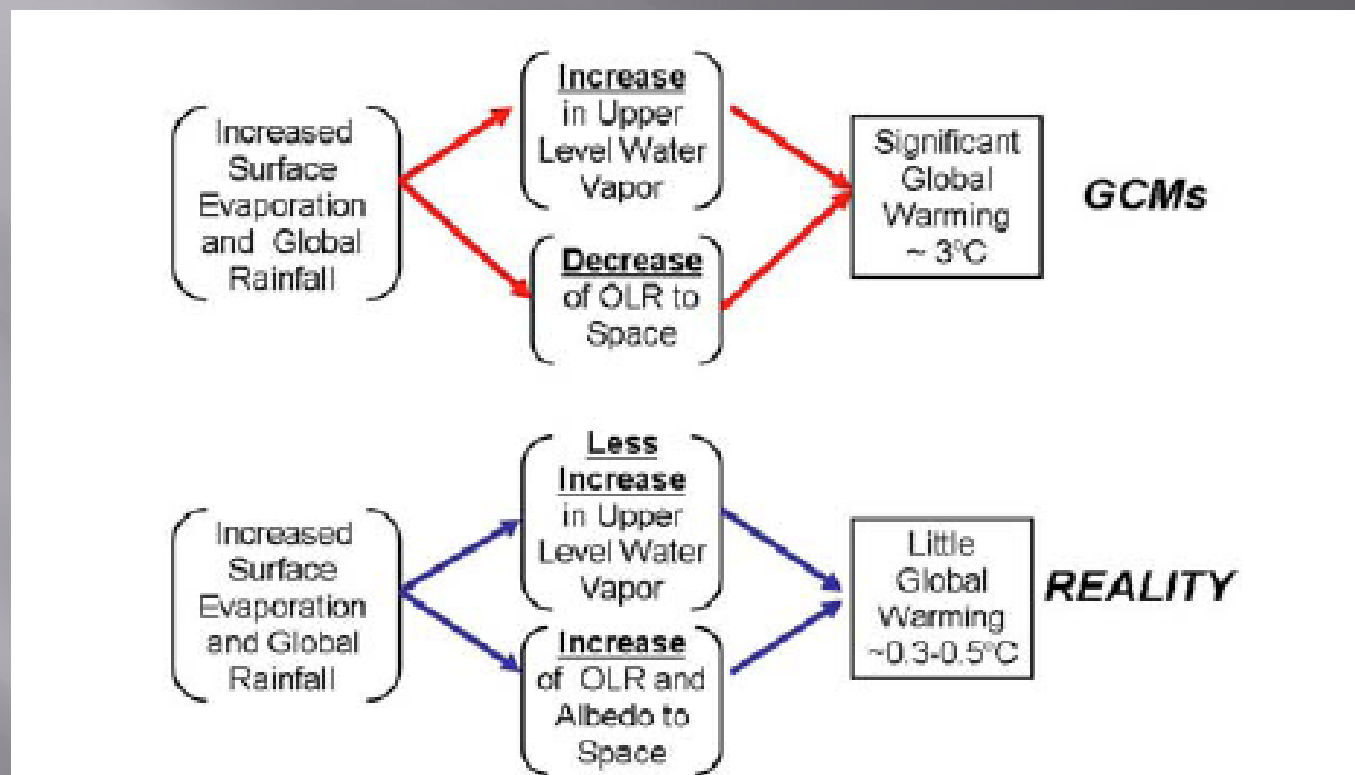


Figure 5. A view of the physical process differences between the global warming for a doubling of CO₂ from the GCMs (top) and hypothesized reality (bottom).

More questions for the AGW cabal. IV.

- ▣ It is stretching credulity to connect AGW to catastrophic events which are multi-factorial in nature. This is nothing more than pure speculation since no evidence exists to connect the two.
- ▣ Ocean temperatures, where increased heat must go, have been stable for 68 years (David Douglas & Bob Knox, University of Rochester (2009)). So why the alarm and the apocalyptic comments about global flooding from melting ice?

More questions for the AGW cabal. V.

The 'cloud-albedo-feedback' system (Roy Spencer et al, UoA, Huntsville (2009)) shows that more solar radiation is reflected back into space with more high-level clouds, so the net effect is actually cooling.

The missing troposphere hotspot now has both a theoretical and evidentiary basis for its non-existence. Paltridge et al (ANU, Canberra, 2009) showed that as T and H₂O rise in the troposphere, water vapor goes to lower altitudes.

More questions for the AGW cabal. VI.

- ▣ 'It seems that governments are indeed becoming captive to a scientific & technological elite – an elite which is achieving its ends by manipulating fear of climate change into the world's greatest example of a religion for the politically correct.'
- ▣ Garth Paltridge: "The Climate Caper" , Connor Court, Ballan, Australia, 2009.

Climate Change in Catastrophic Free Fall .I.

For years, skeptics have been pointing out serious defects/ gross exaggerations in the climate narrative -- glaciers that weren't actually melting; weak or incomplete surface temperature data purportedly proving unprecedented warming. And there is a complete lack of backup for claims that storms and drought are growing more severe.

Climate Change in Catastrophic Free Fall .II.

Now the latest bombshell is that Phil Jones, the scientist at the center of the "Climategate" scandal, says his raw data is in disarray and can't be replicated and that the MWP was probably as warm as today. Moreover, he agrees that there has been no statistically significant warming for the last 16 years.

The “Issue–Attention Cycle” .I.

This is a 5 stage process.

1. The public, activists and media first discover an issue.
2. They grow euphorically alarmed, generate scary headlines and agitate for action.
3. When the public recognize that the issue has been exaggerated or misconceived, they begin to take notice of the price tag (e.g. “cap and trade”)
4. Public interest declines and media attention shifts.
5. The post-problem stage. Attention and interest fade.

Anthony Downs

The “Issue–Attention Cycle” .II.

The climate-change circus isn't ready to join such past enthusiasms as Ehrlich's 'Population Bomb' or Forrester's Club of Rome's 'Limits to Growth' nonsense because there is too much political and institutional momentum behind it and there is no other ready outlet for the nearly endless supply of environmental zealotry.

Steven Hayward,
New York Post (Feb. 19, 2010)

The “Issue–Attention Cycle” .III.

‘The whole climate campaign now resembles a Broadway musical that has run too long, with a sagging box office and declining enthusiasm from a dwindling audience. Someone needs to break the bad news to the players that it’s closing time for the climate horror show.’

Steven Hayward,
New York Post (Feb. 19, 2010)

And.....

- ▣ Lindzen et al (MIT) recently showed , Geophysical Research Letters, August, 2009, that the positive feedbacks ,that GCMs depend upon to produce significant warming, turn out to be negative feedbacks in nature. Thus, the claim of some economists that climate uncertainty involves a fat tailed probability distribution that allows the possibility of catastrophic warming is simply wrong.

Finally.....

- ▣ Lord Monckton (London, 2009) showed that a doubling of CO₂ in the atmosphere will cause some modest warming but the predicted figure is 1/6 that claimed by the IPCC GCMs, or less than 1 degree C for a doubling of CO₂.
- ▣ So why the alarm?

Summary. I.

- ▣ The case for AGW, due to CO₂, let alone climate alarmism, is not backed up by circumstantial evidence from well-respected climatologists.
- ▣ The IPCC, and their alarmist allies, would have done well to heed the words of one of the most brilliant experimentalists and theoreticians of all time, Michael Faraday:
 - ‘ One should hold one’s theories by one’s fingertips so that the least breeze of fact might blow them away.’

Summary. II.

- ▣ Finally, nature is not into positive feedbacks (as per the GCMs) but stabilizes the climate with negative feedbacks. There is too much empirical evidence to suggest otherwise.

“One reliable observation is worth a thousand models and a million speculations.”

‘The only relevant test of the validity of a hypothesis is comparison of its predictions with experience.’ Milton Friedman (1953)

Summary. III.

‘What we see then, is that the very foundation of the issue of global warming is wrong. In a normal field these results would pretty much wrap things up but global warming-climate change has developed so much momentum that it has a life of its own removed from science.’

Dr. Richard Lindzen, Alfred P Sloan Emeritus Professor of
Atmospheric Sciences, MIT

For more information consult: www.climatedebatedaily.com

To Virginia Harris and Members, West Virginia Board of Education:

Webster defines "science" as "a. possession of knowledge as distinguished from ignorance or misunderstanding b. knowledge attained through study or practice." The pursuit of scientific knowledge has been governed by The Scientific Method, first proposed by Aristotle as *the laws of logic*. It refers to a body of techniques for investigating phenomena, acquiring knowledge or correcting and integrating previous knowledge. The Scientific Method requires one to: 1. Define the problem; 2. Research the problem to see if it needs investigation; 3. Form the hypothesis; 4. Test the hypothesis by collection of data and experimentation; 5. Analyze the data; 6. Interpret the data and draw conclusions; 7. Report the work. Science is actually a form of Social Contract which requires: open debate, peer review; transparency in methodology, sharing of data and trust. This practice, known as "full disclosure" allows statistical measure of the reliability of data to be established. These were standard practice in academia and elsewhere for hundreds of years until the past several decades.

As a botanist, I am a scientist and know whereof I speak and come from a family of chemists and physicists. In 1966, I graduated from WVU with a BA in Botany under Dr. Earl L. Core. My MA in Botany, specializing in Plant Taxonomy and Plant Ecology, was awarded by The University of North Carolina, Chapel Hill, in 1969. My thesis involved the flora of Alder Run Bog on Dolly Sods, Tucker County. Following that, I was employed for a number of years in the US National Herbarium, Botany Department of the Smithsonian Institution, Washington, DC. I returned to UNC, Chapel Hill, obtaining my PhD in Botany in 1986. My research field was in an area known as Ecosystematics which investigates plant distribution of a defined area as related to climate, soils, geology, hydrology (water movement), topography and physiography (regional traits). My dissertation: "The Relation of Vegetation to Diabase Dikes and Sills of the Gettysburg Basin, PA."

My first encounter with The Scientific Method was as a student at Suncrest-Flatts Junior High School in Morgantown. It followed me through my academic pursuits and my professional career. Now, it would seem, The Scientific Method, is no longer welcome in the West Virginia School curriculum.

Seven years ago, I gave a talk to students at WVU on "The Myth of Man-Made Global Warming." Of course, when it was found that the climate had actually been cooling for the past 18 years, it had to be changed to "Man-Made Climate Change." It is still a myth, or hoax, if you will. I was stunned after my talk when students came up to me and said they did not know about climate changes or climate cycles of the past. I knew those from that same Suncrest-Flatts Junior High School in the 1950's.

The current "climate change" hysteria is based on politics and a desire to damage or destroy our system of capitalism. The dire predictions, which change daily, are based on computer models. Computer models have never been correct and never will be correct for one simple reason: one simply cannot know enough about a plant, animal, system, atmosphere or grouping to make a model meaningful. It is a form of the old "garbage in...garbage out" adage. Those involved in The University of East Anglia, Climate Research Unit (CRU) "Climategate," admitted to cherry picking data to fit their determination that CO₂ was causing "warming." They also used a method which would not be reliable for CO₂ determination. A true desire for accuracy would demand they use ice core analysis. Out of that group was Michael Mann of the infamous "hockey stick curve" purporting to show a check-mark rise in CO₂. Found emails showed that he had thrown out all data points which gave the normal curve until he came up with what he wanted. In other emails among that group of East Anglia "scientists": data sharing refused (others could not test their results), editors of journals which published opposing views threatened or removed; such journals boycotted; etc. CRU is responsible for data used by the IPCC. When alerted to peer-reviewed research refuting the results of CRU, they declined to include it. This is the climate "research" used by the UN and it is bogus.

The supposed "97% of scientists agree...." seems to carry a lot of weight. In today's education climate, if you do not kowtow to the "environmentalist movement": 1. you will likely not be hired in the academia 2. if your research does not coincide with the "man-made climate change" theme it will not be published in so-called "peer reviewed journals" and 3. government institutions such as The National Science Foundation have had a policy for several decades not to fund research which does not adhere to the environmentalist/climate cause.

All of that aside, science is not and cannot be a "consensus." Science is what is. It is subject to further interpretation when new methods or truths come to light, but it should never be by consensus. By consensus we feared sailing off the edge of the earth, but Columbus and Magellan put that to rest by proving their hypothesis, that earth was round. Galileo bucked the "consensus" of European scientists when he declared that earth revolved around the sun and not the approved opposite. Eventually the Inquisition forced Galileo to publically refute his claims. This seems very similar to what is happening in science and education today. The "Science/Education Inquisition" is out to destroy anyone who dares to hold a different opinion. Again, that is politics and not science.

Alfred Wegener, a German polar researcher geophysicist and meteorologist, advanced a theory of "continental drift" based on his research and observations. I read a translation of his book in the 1960's and was fascinated. At that time, however, it was poo-pooed, in spite of his evidence. Botanists and zoologists were on board as it explained the unusual worldwide distributions and relationships of flora, fauna and fossils. Adherents to "continental drift" were treated to derision much as today's "man-made climate change skeptics." However, their careers, publication opportunities, etc. were not destroyed as they are today in the cause of "climate." Not too long after I read the book, continental drift was shown to be the engine with the discovery of the sea-floor spreading and subduction zones associated with trenches.

Finally, the earth is dynamic and not static. Natural components of the atmosphere, such as CO₂ are correctly referred to as "atmospheric gases." The so-called "greenhouse gases" are only found within the confines of a greenhouse. Climate is primarily driven by sunspots and moisture distribution, not by man's activities. During the past 2 million years, earth has gone through several glacial/interglacial episodes. Ice sheets advanced and now are retreating. The triggers and mechanisms are not understood. Polar bears, as a species, are 4 million years old. In the scientific world, we refer to them as being "genetically pre-disposed", meaning that if they survived one glacial episode followed by the sometimes rapid warming period, the species can survive another. They are doing well.

It would be an extreme disservice to science and education in West Virginia to follow the proposed changes in the Science Standards for the West Virginia public schools. These changes will serve to stifle true scientific investigation. They seek to codify in the education of West Virginia public school students, what is definitely a truly un-researched hypothesis by cutting off debate. This is not education. Rather it is indoctrination and propaganda. The changes previously made and then removed should be reinstated to restore standards which are accurate and objective.

Sincerely,



Joan R. Gibson, PhD
1104 Koontz Ave.
Morgantown, WV 26505
botanyjrg@frontier.com

UN IPCC MAN-MADE EMISSIONS GROSSLY OVERSTATED

13 June 2008 by Alan Siddons

Reports by the US Dept of Energy (DOE) indicate that 97% of the annual carbon dioxide emissions come from Nature itself. The report also indicates that more than 98% of all the carbon dioxide emissions are absorbed again by Nature.

What does this mean?

It means that since the start of the Industrial Revolution the increase in carbon dioxide levels of about 103ppmv are 97% due to Nature itself, that is to say that only about 3ppmv of that increase is due to man-made emissions.

The absorption by Nature of 98.5% of all carbon dioxide also means that of the annual man-made carbon dioxide emissions, only 1.5% stays behind in the atmosphere - 346 million tonnes in 2004, which is the equivalent of just 0.04% of the total annual carbon dioxide emissions by Nature and mankind combined.

Irrespective of its residence time or the absolute quantities, it shows that Nature is not only the main driver of carbon dioxide emissions but also that Nature is perfectly capable of dealing with those emissions, both natural and man-made.

UN IPCC is shown to have grossly overestimated the amount of man-made carbon dioxide in our atmosphere and has also grossly underestimated the amount of carbon dioxide that Nature absorbs and Nature can not distinguish man-made carbon dioxide from the naturally occurring variety.

Immediate demands should be made of the UN IPCC to stop its advice to Policymakers for drastic carbon dioxide emission reductions and all carbon trading schemes should be abandoned.

UN IPCC advice is destroying economies around the world for no reason and neither emission reductions nor carbon trading will have any effect whatsoever on the naturally occurring carbon dioxide cycle. The greenhouse hypothesis – what most climatologists call "the basic science" – offers a solution to a problem that doesn't exist. What passes for climate science today is mostly science fiction.

Table 3. Global Natural and Anthropogenic Sources and Absorption of Greenhouse Gases in the 1990s

Gas	Sources			Absorption	Annual Increase in Gas in the Atmosphere
	Natural	Human-Made	Total		
Carbon Dioxide (Million Metric Tons of Gas) ^a	770,000	23,100	793,100	781,400	11,700
Methane (Million Metric Tons of Gas) ^b	239	359	598	576	22
Nitrous Oxide (Million Metric Tons of Gas) ^c	9.5	6.9	16.4	12.6	3.8

Emissions of Greenhouse Gases in the United States 2004

Energy Information Administration
Office of Integrated Analysis and Forecasting
U.S. Department of Energy

Source: Intergovernmental Panel on Climate Change, *Climate Change 2001: The Scientific Basis*
(Cambridge, UK: Cambridge University Press, 2001).

<http://tonto.eia.doe.gov/FTPROOT/environment/057304.pdf>

Exhibit 2-1. Global Natural and Anthropogenic Sources and Absorption of Greenhouse Gases

Gas	Biogenic Sources	Anthropogenic Sources	Absorption	Annual Increase in Gas in Atmosphere
CO ₂ (mmtCE)	150,000	7,100	154,000	3,100–3,500
CH ₄ (mmt gas)	110-210	300-450	460-660	35–40
N ₂ O (mmt gas)	6-12	4-8	13-20	3–5

Source: US Department of Energy, Energy Information Administration, *Emissions of Greenhouse Gases in the United States, 1995*, p. 3, citing ranges from Intergovernmental Panel on Climate Change, *Climate Change 1995: The Science of Climate Change* (Cambridge, UK: Cambridge University Press, 1996).

Source: Transportation and Global Climate Change: A Review and Analysis of the Literature

Federal Highway Administration

http://www.fhwa.dot.gov/environment/glob_c2.pdf

Document sources:

<http://tonto.eia.doe.gov/FTPROOT/environment/057304.pdf>

<http://tonto.eia.doe.gov/FTPROOT/environment/057394.pdf>

<http://tonto.eia.doe.gov/ftpoot/environment/057399.pdf> and www.fhwa.dot.gov/environment/glob_c2.pdf

see also www.jennifermarohasy.com/blog/archives/003165.html for yet more gross IPCC deceptions.

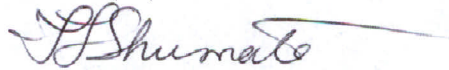
January 12, 2015
Loria Shumate, BA, LMT, NCMT
RR 1, Box 385, Ronceverte, WV 24970
304-645-5587
loriashumate@gmail.com

Michael Martinaro, Ed.D.
1900 Kanawha Blvd. East
Charleson, WV 25305

Dr. Martinaro;

I am writing to express my concern at the change in CSO's and textbooks in relationship to climate change science in West Virginia. I believe it is an unconscionable set of actions. Our West Virginia children deserve to be taught the truth. They can not adequately compete in the world unless they are equipped to see the entire picture and consider both sides of this issue. I am disgusted that anyone, much less our Department of Education, would have our children's knowledge bases and mindsets manipulated. Creating a veil of denial over this issue is evil. I have a child at Greenbrier East. I am personally encouraging him to speak up against these changes. I ask you to fire Ms. Manchin and Mr. Linger. Their irresponsibility is a tremendous liability to our state. I have included a copy of the United Nations Synthesis Report for your attention.

Thank you,
Loria Shumate

A handwritten signature in dark ink, appearing to read "L Shumate", with a long, sweeping horizontal line extending to the right.

UN AND CLIMATE CHANGE

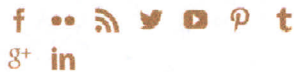


Climate change threatens irreversible and dangerous impacts, but options exist to limit its effects

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Climate change threatens irreversible and dangerous impacts, but options exist to limit its effects

IPCC PRESS RELEASE

COPENHAGEN, Nov 2 – Human influence on the climate system is clear and growing, with impacts observed on all continents. If left unchecked, climate change will increase the likelihood of severe, pervasive and irreversible impacts for people and ecosystems. However, options are available to adapt to climate change and implementing stringent mitigations activities can ensure that the impacts of climate change remain within a manageable range, creating a brighter and more sustainable future.

These are among the key findings of the [Synthesis Report](#) released by the [Intergovernmental Panel on Climate Change \(IPCC\)](#) on Sunday. The Synthesis Report distils and integrates the findings of the IPCC Fifth Assessment Report produced by over 800 scientists and released over the past 13 months – the most comprehensive assessment of climate change ever undertaken.

"We have the means to limit climate change," said R. K. Pachauri, Chair of the IPCC. "The solutions are many and allow for continued economic and human development. All we need is the will to change, which we trust will be motivated by knowledge and an understanding of the science of climate change."

The Synthesis Report confirms that climate change is being registered around the world and warming of the climate system is unequivocal. Since the 1950s many of the observed changes are unprecedented over decades to millennia. "Our assessment finds that the atmosphere and oceans have warmed, the amount of snow and ice has diminished, sea level has risen and the concentration of carbon dioxide has increased to a level unprecedented in at least the last 800,000 years," said Thomas Stocker, Co-Chair of IPCC Working Group I.

The report expresses with greater certainty than in previous assessments the fact that emissions of greenhouse gases and other anthropogenic drivers have been the dominant cause of observed warming since the mid-20th century.

The impacts of climate change have already been felt in recent decades on all continents and across the oceans.

The more human activity disrupts the climate, the greater the risks. Continued emissions of greenhouse gases will cause further warming and long-lasting changes in all components of the climate system, increasing the likelihood of widespread and profound impacts affecting all levels of society and the natural world, the report finds.

The Synthesis Report makes a clear case that many risks constitute particular challenges for the least developed countries and vulnerable communities, given their limited ability to cope. People who are socially, economically, culturally, politically, institutionally, or otherwise marginalized are especially vulnerable to

Popular

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IPCC Report: 'severe and pervasive'



impacts of climate change will
be felt everywhere

31 March 2014

Bamboo Bikes
Initiative in Ghana

11 August 2014



African Carbon Asset
Development (ACAD)

13 August 2014

climate change.

Indeed, limiting the effects of climate change raise issues of equity, justice, and fairness and is necessary to achieve sustainable development and poverty eradication. "Many of those most vulnerable to climate change have contributed and contribute little to greenhouse gas emissions," Pachauri said. "Addressing climate change will not be possible if individual agents advance their own interests independently; it can only be achieved through cooperative responses, including international cooperation."

"Adaptation can play a key role in decreasing these risks," said Vicente Barros, Co-Chair of IPCC Working Group II. "Adaptation is so important because it can be integrated with the pursuit of development, and can help prepare for the risks to which we are already committed by past emissions and existing infrastructure."

But adaptation alone is not enough. Substantial and sustained reductions of greenhouse gas emissions are at the core of limiting the risks of climate change. And since mitigation reduces the rate as well as the magnitude of warming, it also increases the time available for adaptation to a particular level of climate change, potentially by several decades.

There are multiple mitigation pathways to achieve the substantial emissions reductions over the next few decades necessary to limit, with a greater than 66% chance, the warming to 2°C – the goal set by governments. However, delaying additional mitigation to 2030 will substantially increase the technological, economic, social and institutional challenges associated with limiting the warming over the 21st century to below 2°C relative to pre-industrial levels, the report finds.

"It is technically feasible to transition to a low-carbon economy," said Youba Sokona, Co-Chair of IPCC Working Group III. "But what is lacking are appropriate policies and institutions. The longer we wait to take action, the more it will cost to adapt and mitigate climate change." The Synthesis Report finds that mitigation cost estimates vary, but that global economic growth would not be strongly affected. In business-as-usual scenarios, consumption – a proxy for economic growth – grows by 1.6 to 3 percent per year over the 21st century. Ambitious mitigation would reduce this by about 0.06 percentage points. "Compared to the imminent risk of irreversible climate change impacts, the risks of mitigation are manageable" said Sokona.

These economic estimates of mitigation costs do not account for the benefits of reduced climate change, nor do they account for the numerous co-benefits associated with human health, livelihoods, and development. "The scientific case for prioritizing action on climate change is clearer than ever," Pachauri said. "We have little time before the window of opportunity to stay within 2°C of warming closes. To keep a good chance of staying below 2°C, and at manageable costs, our emissions should drop by 40 to 70 percent globally between 2010 and 2050, falling to zero or below by 2100. We have that opportunity, and the choice is in our hands."

Comprehensive assessment

The Synthesis Report, written under the leadership of IPCC Chair R.K. Pachauri, forms the capstone of the IPCC Fifth Assessment Report. The first three volumes, based on outlines approved by the IPCC's 195 member governments in October 2009, were released over the past fourteen months: The Physical Science Basis in September 2013, Impacts, Adaptation and Vulnerability, in March 2014 and Mitigation of Climate Change in April 2014.

IPCC reports draw on the many years of work by the scientific community investigating climate change. More than 830 coordinating lead authors, lead authors and review editors from over 80 countries and covering a range of scientific, technical and socio-economic views and expertise, produced the three working group contributions, supported by over 1000 contributing authors and drawing on the insights of over 2,000 expert reviewers in a process of repeated review and revision. The authors assessed more than 30,000 scientific papers to develop the Fifth Assessment Report. About 60 authors and editors drawn from the IPCC Bureau and from Working Group author teams have been involved in the writing of the Synthesis Report. Their work was made possible by the contributions and dedication of the Synthesis Report Technical Support Unit.

"I would like to thank the hundreds of experts from the world's scientific community who have given freely of their time and expertise to produce the most comprehensive assessment of climate change yet undertaken," said Pachauri. "I hope this report will serve the needs of the world's governments and provide the scientific basis to negotiators as they work towards a new global climate agreement."

For more information contact :

How the UN System Supports Ambitious Action on Climate Change

ARCHIVES

December 2014 (24)

November 2014 (15)

October 2014 (2)

September 2014 (2)

August 2014 (29)

July 2014 (1)

June 2014 (10)

May 2014 (2)

April 2014 (11)

March 2014 (10)

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January 2014 (4)

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November 2012 (14)

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September 2012 (3)

July 2012 (2)

May 2012 (1)

1/12/2015

Climate change threatens irreversible and dangerous impacts, but options exist to limit its effects - UN and Climate Change

IPCC Copenhagen Press Office, +45 45 99 00 77, Email : ipcc-media@wmo.int

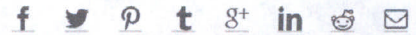
Jonathan Lynn, +41 22 730 8066 or Nina Peeva, +45 23 49 75 94

IPCC Press Office in Geneva, +41 22 730 8120

For further information about the IPCC, including links to its reports, go to: www.ipcc.ch

2 November 2014

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December 2011 (13)

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 **UN NEWS CENTRE**

10 years after Indian Ocean tsunami, Asia-Pacific region better prepared: UN

Peru: UN experts warn indigenous peoples' rights at risk if polluted land re-licensed

COP20: Ban Ki-moon hails delegates for paving way to 'meaningful' climate agreement

Central America drought turning into humanitarian crisis, UN warns

'The more we delay, the more we will pay,' says Ban, urging action on climate

'Only by acting together' will world transform climate challenge into opportunity – Ban

At Lima climate talks, UN launches new coalition to promote renewable energy

Ban urges Lima conference to agree draft text as basis for 2015 climate deal

Earth at 'tipping point,' UN General Assembly President warns, urging climate reform

'We will provide whatever is needed,' UN pledges response to Philippines typhoon

Please excuse this letter
not being typed.

I am 75 yrs. old and I
do not have a computer.

Thank you

P.S.

Thank you for your assistance
Ms. Sizemore. I appreciated your help.

Feb. 6, 2015

W.V. Dept. of Education

Attn: Robin Sizemore

Bldg. 6 Rm. 603

1900 Kanawha Blvd. E.

Charleston, W.V. 25305

Re: Climate Change - Amendment to Instruction

To Whom it May Concern,

I support the vote to scrap an admendment to instruction on Climate Change. I suggest the B.O.E. may want to investigate reports that the following professionals have released in the past.

Steve Goreham - Climate Science Coalition of America
The Pacific Decadal Oscillation, which is the temperature cycle in the northern Pacific shows it has been in a cool phase since 2005. Also, the Sun has moved into a cool phase in regards to sun spots.

Patrick J. Michaels, PhD
CATO Center for Study of Science
Advises there are 42 explanations in scientific and public literature why the earth is not warming.

Dale Hurd

Reports the Antarctic stopped warming 18 yrs ago.
Its sea ice is the largest it has been since
measurements began 35 years ago.

The little Ice Age lasted between 1645 and 1715.
When the earth tilts differently toward the sun our
climate changes. The ocean conveyor belt is disrupted.
The Gulf Stream no longer brings warm temperatures
to Europe due to water and wind changes. The
once green Sarah Desert turned to sand, the Tethys
Sea is formed and disappears and the Alps glaciers
start destroying villages. When mankind can control
the Sun's radiation, stop the Volcano's Sulfur Dioxide,
hold back the ocean's tide, stop the winds, and the
earth's tectonic plates from moving, I will listen.

A few more references:

Columbia Univ. - Richard Seager PhD

Columbia Univ. - Peter de Menocal PhD - Ocean Geologist

Rutgers Univ - James Masschaele PhD - Medieval History

Kings College London - Nick Drake PhD - Geologist

Wash. Univ of St Louis - Jen Smith PhD - Geologist

Do we pollute, yes, but can we control the weather, no.

Sincerely,

Ninia Morehead

2304 44th ST.

Parkersburg, WV 26104

304-422-5994



We, the undersigned members of the
Glenville State College Alpha Iota Chapter
Of CHI BETA PHI

National Science Honorary

petition the

West Virginia State Board of Education

**to adopt the Next Generation Science Standards
as drafted and edited by thousands of scientists and science
educators across the nation, including hundreds of West Virginians,
and released by Achieve.**

Respectfully,

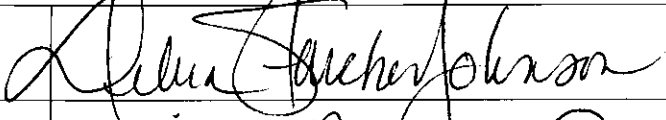
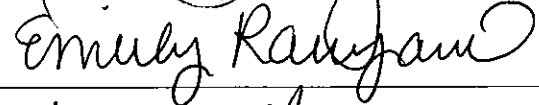
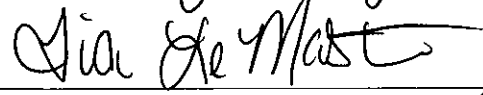
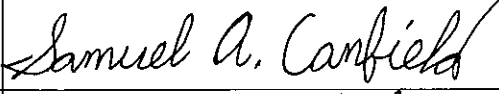

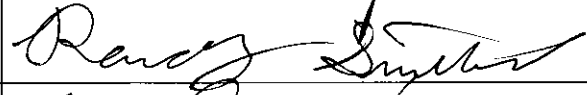


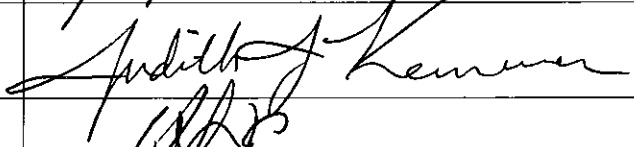
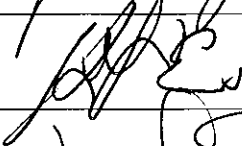

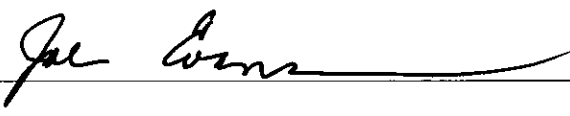
Printed Name

Signature

Paul S. Peck	Paul S. Peck
LARRY R. BAKER	Larry R. Baker

Printed Name

Signature

Debra Starcher-Johnson	
Emily Ramezan	
Tia LeMaster	
Samuel Canfield	
Charles F Schmidt Jr	
Randy Smith	
Joseph Overbaugh	
Joseph Wood	
Judith Kennen	
Kevin L. Evans	
WENWEN DU	
Joe Evans	

February 13, 2015

To: W.Va. Board of Education

From: Robert Kota, 146 Spring Hill Lane, Wheeling, W, Va. (304) 336-7186

Subject: Comments on Policy #2520.3/Achieve Standard for Science for W.Va. students

This letter and information is directed to the subject stated above. In reviewing the W.Va. Board of Education's website, there is a statement and goal that the standards are to "equip children with critical thinking and analytical skills" so they may achieve "holistic understanding".

The Board previously made revisions to the subject Achieve standards which revisions were proper to allow the children to meet the above-stated goals. Then someone must have challenged the revisions, and the standards are now open for comment.

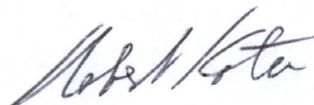
It is my understanding that Achieve, the organization, does not allow changes to the Achieve standards by a state without the state then being forced to withdraw from Achieve. This approach, if true, is certainly dictatorial at best, and if Achieve standards are improper, any state SHOULD revise them for the children's correct learning experience, and if need be, withdraw from such a dictatorial organization.

The great state of West Virginia has long been an important producer of fossil fuels and use of such for the production of mainly electric power and steel. Many of our citizens have worked in the fossil fuel industry (mainly coal, oil and gas) and the electric power industry. Relatively recently there has been a concerted move by certain groups and politicians to disallow, mainly the production and use of coal due to their agenda without care for the damage that it will do to coal and utility workers and companies and to the consumers of the reasonably priced electric power.

The standards now being reviewed certainly have to do with the subject of "global warming" (i.e. man-made) which these groups and politicians contend have been caused by the burning of fossil fuels. Although these people contend that man-made global warming is "settled science", it is far from it! (These same people have had to go as far as having to change the catchy name of their agenda subject to "climate change" since the public wasn't buying their story—the public doesn't believe it).

Besides changing the name of their agenda, it has surfaced that deception and actual fraud has occurred by scientists who have championed man-made global warming. It was found that they literally changed previously actual, reported temperatures to reflect what they wanted to show—that the world was warming. Many well-known and respected scientists do not believe that man-made global warming is occurring or is causing climate change. Man-made global warming is NOT settled science, so let's not teach our children a lie! Let's let them think for themselves.

I have attached several articles and papers that support the fact it is not settled science. I respectfully request that the W.Va. Board of Education adopt their earlier revised standards to S.6.ESS.6, S.9.ESS.14 and S.H.S.ENV.17. I assume these are contained in Policy 2520.3.

A handwritten signature in dark ink, appearing to read "Robert Kota", is located at the bottom right of the page. The signature is fluid and cursive, with the first name "Robert" and last name "Kota" clearly distinguishable.

Climategate 2.0: New E-Mails Rock The Global Warming Debate

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Image via Wikipedia

A new batch of 5,000 emails among scientists central to the assertion that humans are causing a global warming crisis were anonymously released to the public yesterday, igniting a new firestorm of controversy nearly two years to the day after similar emails ignited the Climategate scandal.

Three themes are emerging from the newly released emails: (1) prominent scientists central to the global warming debate are taking measures to conceal rather than disseminate underlying data and discussions; (2) these scientists view global warming as a political “cause” rather than a balanced scientific inquiry and (3) many of

these scientists frankly admit to each other that much of the science is weak and dependent on deliberate manipulation of facts and data.

Regarding scientific transparency, a defining characteristic of science is the open sharing of scientific data, theories and procedures so that independent parties, and especially skeptics of a particular theory or hypothesis, can replicate and validate asserted experiments or observations. Emails between Climategate scientists, however, show a concerted effort to hide rather than disseminate underlying evidence and procedures.

“I’ve been told that IPCC is above national FOI [Freedom of Information] Acts. One way to cover yourself and all those working in AR5 would be to delete all emails at the end of the process,” writes Phil Jones, a scientist working with the United Nations Intergovernmental Panel on Climate Change (IPCC), in a newly released email.

“Any work we have done in the past is done on the back of the research grants we get – and has to be well hidden,” Jones writes in another newly released email. “I’ve discussed this with the main funder (U.S. Dept of Energy) in the past and they are happy about not releasing the original station data.”

The original Climategate emails contained similar evidence of destroying information and data that the public would naturally assume would be available according to freedom of information principles. “Mike, can you delete any emails you may have had with Keith [Briffa] re AR4 [UN Intergovernmental Panel on Climate Change 4th Assessment]?” Jones wrote to Penn State

University scientist Michael Mann in an email released in Climategate 1.0. "Keith will do likewise. ... We will be getting Caspar [Ammann] to do likewise. I see that CA [the Climate Audit Web site] claim they discovered the 1945 problem in the Nature paper!!"

The new emails also reveal the scientists' attempts to politicize the debate and advance predetermined outcomes.

"The trick may be to decide on the main message and use that to guid[e] what's included and what is left out" of IPCC reports, writes Jonathan Overpeck, coordinating lead author for the IPCC's most recent climate assessment.

"I gave up on [Georgia Institute of Technology climate professor] Judith Curry a while ago. I don't know what she thinks she's doing, but its not helping the cause," wrote Mann in another newly released email.

Climategate II? Scientific community accused of muzzling dissent on global warming

By Doug McKelway

Published May 16, 2014 | FoxNews.com

Some are calling it the new "Climategate."

A paper by Lennart Bengtsson, a respected research fellow and climatologist at Britain's University of Reading, was rejected last February by a leading academic journal after a reviewer found it "harmful" to the climate change agenda. The incident is prompting new charges that the scientific community is muzzling dissent when it comes to global warming.

"[Bengtsson] has been a very prolific publisher and was considered one of the top scientists in the mainstream climate community," said Marc Morano, of the website ClimateDepot.com, which is devoted to questioning global warming.

Bengtsson had grown increasingly skeptical of the scientific consensus, often cited by President Obama, that urgent action is needed to curb carbon emissions before climate change exacts an irreversible toll on the planet with extreme drought, storms and rising seas levels.

The president repeatedly has rejected naysayers in the climate debate -- most recently, when he spoke May 9 in Mountainview, Calif. "We've still got some climate deniers who shout loud, but they're wasting everybody's time on a settled debate," he said.

The administration recently released a comprehensive climate report that critics worry will be used to justify additional environmental regulations.

Bengtsson's paper, submitted to the journal Environmental Research Letters, found that greenhouse gas emissions might be less harmful and cause less warming than computer models project. For that, Morano said, Bengtsson paid a steep price.

"They've threatened him. They've bullied him. They've pulled his papers. They're now going through everything they can to smear his reputation. And the 'they' I'm referring to is the global warming establishment," Morano said.

The Times of London reported that Bengtsson resigned from the advisory board of a think tank after being subjected to "McCarthy-style pressure" from other academics. Pressure even reportedly came from one U.S. government scientist.

Bengtsson told the Times of London this week: "It is an indication of how science is gradually being influenced by political views. The reality hasn't been keeping up with computer models."

He added, "If people are proposing to do major changes to the world's economic system we must have much more solid information."

His view helps to illustrate the cavernous divide in this debate. Climate scientists who question the consensus often say they're demonized -- unable to publish, unable to find research funding. The scientific establishment presses on -- frustrated with anyone who, in their view, would impede saving the planet.

The debate raises a question about whether consensus in science is even relevant. As the novelist and global warming skeptic Michael Crichton argued, "The greatest scientists in history are great precisely because they broke with consensus."

The Bengtsson allegations recall a similar controversy in 2009, dubbed "Climategate," when hundreds of emails were leaked, several of which raised questions about whether scientists were overstating the climate change case.

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More Than 1000 International Scientists Dissent Over Man-Made Global Warming Claims

Challenge UN IPCC :Panel

By [Global Research News](#)
[Global Research](#), September 21, 2014
[Climate Depot](#) 8 December 2010

Theme: Environment, Science and Medicine
In-depth Report: Climate Change

946
155 15

3694



Note: This report was originally published in 2010. It is of utmost relevance to the ongoing debate on climate change. .

[Link to Complete 321-Page PDF Special Report](#)

More than 1,000 dissenting scientists (updates [previous 700 scientist report](#)) from around the globe have now challenged man-made global warming claims made by the United Nations Intergovernmental Panel on Climate Change (IPCC) and former Vice President Al Gore. This new 2010 321-page Climate Depot Special Report — updated from the 2007 groundbreaking U.S. Senate Report of over 400 scientists who voiced skepticism about the so-called global warming “consensus” — features the skeptical voices of over 1,000 international scientists, including many current and former UN IPCC scientists, who have now turned against the UN IPCC. This updated 2010 report includes a dramatic increase of over 300 additional (and growing) scientists and climate researchers since the last update in March 2009. This report’s release coincides with the 2010 UN global warming summit in being held in Cancun.

The more than 300 additional scientists added to this report since March 2009 (21 months ago), represents an average of nearly four skeptical scientists a week speaking out publicly. The well over 1,000 dissenting scientists are almost 20 times the number of UN scientists (52) who authored the media-hyped IPCC 2007 [Summary for Policymakers](#).

The chorus of skeptical scientific voices grew louder in 2010 as the Climategate scandal — which involved the upper echelon of UN IPCC scientists — detonated upon on the international climate movement. “I view Climategate as science fraud, pure and simple,” said [noted Princeton Physicist Dr. Robert Austin](#) shortly after the scandal broke. Climategate prompted UN IPCC scientists to turn on each other. UN IPCC scientist [Eduardo Zorita](#) publicly declared that his Climategate colleagues

Michael Mann and Phil Jones “should be barred from the IPCC process...They are not credible anymore.”

Zorita also noted how insular the IPCC science had become. “By writing these lines I will just probably achieve that a few of my future studies will, again, not see the light of publication,” Zorita wrote. A UN lead author Richard Tol grew disillusioned with the IPCC and lamented that it had been “captured” and demanded that “the Chair of IPCC and the Chairs of the IPCC Working Groups should be removed.” Tol also publicly called for the “suspension” of IPCC Process in 2010 after being invited by the UN to participate as lead author again in the next IPCC Report. *[Note: Zorita and Tol are not included in the count of dissenting scientists in this report.]*

Other UN scientists were more blunt. A South African UN scientist declared the UN IPCC a “worthless carcass” and noted IPCC chair Pachauri is in “disgrace”. He also explained that the “fraudulent science continues to be exposed.” Alexander, a former member of the UN Scientific and Technical Committee on Natural Disasters harshly critiqued the UN. ““I was subjected to vilification tactics at the time. I persisted. Now, at long last, my persistence has been rewarded...There is no believable evidence to support [the IPCC] claims. I rest my case!” See: S. African UN Scientist Calls it! ‘Climate change – RIP: Cause of Death: No scientifically believable evidence...Deliberate manipulation to suit political objectives’ [Also see: New Report: UN Scientists Speak Out On Global Warming -- As Skeptics!] Geologist Dr. Don Easterbrook, a professor of geology at Western Washington University, summed up the scandal on December 3, 2010: “The corruption within the IPCC revealed by the Climategate scandal, the doctoring of data and the refusal to admit mistakes have so severely tainted the IPCC that it is no longer a credible agency.”

Selected Highlights of the Updated 2010 Report featuring over 1,000 international scientists dissenting from man-made climate fears:

“We’re not scientifically there yet. Despite what you may have heard in the media, there is nothing like a consensus of scientific opinion that this is a problem. Because there is natural variability in the weather, you cannot statistically know for another 150 years.”

— UN IPCC’s Tom Tripp, a member of the UN IPCC since 2004 and listed as one of the lead authors and serves as the Director of Technical Services & Development for U.S. Magnesium.

“Any reasonable scientific analysis must conclude the basic theory wrong!!” — NASA Scientist Dr. Leonard Weinstein who worked 35 years at the NASA Langley Research Center and finished his career there as a Senior Research Scientist. Weinstein is presently a Senior Research Fellow at the National Institute of Aerospace.

“Please remain calm: The Earth will heal itself — Climate is beyond our power to control...Earth doesn’t care about governments or their legislation. You can’t find much actual global warming in present-day weather observations. Climate change is a matter of geologic time, something that the earth routinely does on its own without asking anyone’s permission or explaining itself.”

— Nobel Prize-Winning Stanford University Physicist Dr. Robert B. Laughlin, who won the Nobel Prize for physics in 1998, and was formerly a research scientist at Lawrence Livermore National Laboratory.

“In essence, the jig is up. The whole thing is a fraud. And even the fraudsters that fudged data are admitting to temperature history that they used to say didn’t happen...Perhaps what has doomed the Climategate fraudsters the most was their brazenness in fudging the data”

— Dr. Christopher J. Kobus, Associate Professor of Mechanical Engineering at Oakland University, specializes in alternative energy, thermal transport phenomena, two-phase flow and fluid and thermal energy systems.

“The energy mankind generates is so small compared to that overall energy budget that it simply cannot affect the climate...The planet’s climate is doing its own thing, but we cannot pinpoint significant trends in changes to it because it dates back millions of years while the study of it began only recently. We are children of the Sun; we simply lack data to draw the proper conclusions.”

— Russian Scientist Dr. Anatoly Levitin, the head of geomagnetic variations laboratory at the Institute of Terrestrial Magnetism, Ionosphere and Radiowave Propagation of the Russian Academy of Sciences.

“Hundreds of billion dollars have been wasted with the attempt of imposing a Anthropogenic Global Warming (AGW) theory that is not supported by physical world evidences...AGW has been forcefully imposed by means of a barrage of scare stories and indoctrination that begins in the elementary school textbooks.”

— Brazilian Geologist Geraldo Luís Lino, who authored the 2009 book “The Global Warming Fraud: How a Natural Phenomenon Was Converted into a False World Emergency.”

“I am an environmentalist,” but “I must disagree with Mr. Gore” — Chemistry Professor Dr. Mary Mumper, the chair of the Chemistry Department at Frostburg State University in Maryland, during her presentation titled “Anthropogenic Carbon Dioxide and Global Warming, the Skeptic’s View.”

“I am ashamed of what climate science has become today.” The science “community is relying on an inadequate model to blame CO2 and innocent citizens for global warming in order to generate funding and to gain attention. If this is what ‘science’ has become today, I, as a scientist, am ashamed.”

— Research Chemist William C. Gilbert published a study in August 2010 in the journal Energy & Environment titled “The thermodynamic relationship between surface temperature and water vapor concentration in the troposphere” and he published a paper in August 2009 titled “Atmospheric Temperature Distribution in a Gravitational Field.” [Update December 9, 2010]

“The dysfunctional nature of the climate sciences is nothing short of a scandal. Science is too important for our society to be misused in the way it has been done within the Climate Science Community.” The global warming establishment “has actively suppressed research results presented by researchers that do not comply with the dogma of the IPCC.”

— Swedish Climatologist Dr. Hans Jelbring, of the Paleogeophysics & Geodynamics Unit at Stockholm University. [Updated December 9, 2010. Corrects Jelbring's quote.]

“Those who call themselves ‘Green planet advocates’ should be arguing for a CO₂- fertilized atmosphere, not a CO₂-starved atmosphere...Diversity increases when the planet was warm AND had high CO₂ atmospheric content...Al Gore’s personal behavior supports a green planet – his enormous energy use with his 4 homes and his bizjet, does indeed help make the planet greener. Kudos, Al for doing your part to save the planet.”

— Renowned engineer and aviation/space pioneer Burt Rutan, who was named “100 most influential people in the world, 2004” by Time Magazine and Newsweek called him “the man responsible for more innovations in modern aviation than any living engineer.”

“Global warming is the central tenet of this new belief system in much the same way that the Resurrection is the central tenet of Christianity. Al Gore has taken a role corresponding to that of St Paul in proselytizing the new faith...My skepticism about AGW arises from the fact that as a physicist who has worked in closely related areas, I know how poor the underlying science is. In effect the scientific method has been abandoned in this field.”

— Atmospheric Physicist Dr. John Reid, who worked with Australia’s CSIRO’s (Commonwealth Scientific and Industrial Research Organization) Division of Oceanography and worked in surface gravity waves (ocean waves) research.

“We maintain there is no reason whatsoever to worry about man-made climate change, because there is no evidence whatsoever that such a thing is happening.” — Greek Earth scientists Antonis Christofides and Nikos Mamassis of the National Technical University of Athens’ Department of Water Resources and Environmental Engineering.

“There are clear cycles during which both temperature and salinity rise and fall. These cycles are related to solar activity...In my opinion and that of our institute, the problems connected to the current stage of warming are being exaggerated. What we are dealing with is not a global warming of the atmosphere or of the oceans.”

— Biologist Pavel Makarevich of the Biological Institute of the Russian Academy of Sciences.

“Because the greenhouse effect is temporary rather than permanent, predictions of significant global warming in the 21st century by IPCC are not supported by the data.” — Hebrew University Professor Dr. Michael Beenstock an honorary fellow with Institute for Economic Affairs who published a study challenging man-made global warming claims titled “Polynomial Cointegration Tests of the Anthropogenic Theory of Global Warming.”

“The whole idea of anthropogenic global warming is completely unfounded. There appears to have been money gained by Michael Mann, Al Gore and UN IPCC’s Rajendra Pachauri as a consequence of this deception, so it’s fraud.” — South African astrophysicist Hilton Ratcliffe, a member of the Astronomical Society of Southern Africa (ASSA) and the Astronomical Society of the Pacific and a Fellow of the British Institute of Physics.

End of Selected Excerpts

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The rapidity of the global warming establishment's collapse would have been unheard of just two years ago. Prominent physicist Hal Lewis resigned from American Physical Society, calling "Global warming the greatest and most successful pseudoscientific fraud I have seen in my long life." UK astrophysicist Piers Corbyn was blunt about what Climategate revealed: "The case for climate fears is blown to smithereens...the whole theory should be destroyed and discarded and UN conference should be closed."

Even the usually reliable news media has started questioning the global warming claims. Newsweek Magazine wrote in May 2010 about the "uncertain science" and how "climate researchers have lost the public's trust" from a "cascade of scandals" from the UN IPCC. Newsweek compared the leaders of the climate science community to "used-car salesmen. "Once celebrated climate researchers are feeling like the used-car salesmen" and the magazine noted that "some of IPCC's most-quoted data and recommendations were taken straight out of unchecked activist brochures, newspaper articles...Just as damaging, many climate scientists have responded to critiques by questioning the integrity of their critics, rather than by supplying data and reasoned arguments." For full list of Climategate related scandals See: [Climate Scandals: List Of 94 Climate-Gates — 94 climate-gates total — 28 new gates — 145 links to reports with details](#)

As the global warming edifice crumbled in 2010, the movement lost one of its leading lights due to the Climategate revelations. Dr. Judith Curry, the chair of Earth & Atmospheric Sciences at GA Institute of Tech, explained her defection from the global warming activist movement. "There is 'a lack of willingness in the climate change community to steer away from groupthink...' They are setting themselves up as second-rate scientists by not engaging," Curry wrote in 2010. Curry critiqued the UN IPCC for promoting "dogma" and clinging to the "religious importance" of the IPCC's claims. "They will tolerate no dissent and seek to trample anyone who challenges them," Curry lamented. "The IPCC assessment process had a substantial element of schoolyard bullies, trying to insulate their shoddy science from outside scrutiny and attacks by skeptics...the IPCC and its conclusions were set on a track to become a self fulfilling prophecy," Curry wrote. Curry called the Climategate fallout nothing short of a "rather spectacular unraveling of the climate change juggernaut...I immediately realized that [Climategate] could bring down the IPCC...I became concerned about the integrity of our entire field...While my colleagues seemed focused on protecting the reputations of the scientists involved and assuring people that the 'science hadn't changed.'" [Note: Curry is not included in the count of dissenting scientists in this report.] Also see: ['High Priestess of Global Warming' No More! Former Warmist Judith Curry Admits To Being 'Duped Into Supporting IPCC' — 'If the IPCC is dogma, then count me in as a heretic'\]](#) [Note: There were many Climategate inquiries that sought to downplay Climategate, but they fell short of their goal and were labeled as nothing more than the "global warming establishment exonerating the global warming establishment." See [here](#), [here](#), and [here](#). The InterAcademy Council (IAC) was the most competent of the inquiries.]

As new data and science continued to call into question man-made global warming claims, one of the movements leading fear promoters shocked the world by beginning to retreat from his dire predictions. Green guru James Lovelock warned in 2007 that, "Before this century is over, billions of us will die and the few breeding pairs of people that survive will be in the Arctic." Lovelock illustrates how the climate of the climate change movement has been transformed in the last year. In May 2010, Lovelock shocked the world by announcing: "Everybody might be wrong. Climate

change may not happen as fast as we thought, and we may have 1,000 years to sort it out.” Lovelock went even farther by noting how the science of global warming is in its infancy and “we haven’t got the physics worked out yet.” “The great climate science centers around the world are more than well aware how weak their science is. If you talk to them privately they’re scared stiff of the fact that they don’t really know what the clouds and the aerosols are doing. They could be absolutely running the show. We haven’t got the physics worked out yet,” Lovelock explained. Lovelock now openly praises skeptics and worries that climate fear promotion is akin to religion. In March of 2010, Lovelock said: “The skeptics have kept us sane...They have kept us from regarding climate science as a religion. It had gone too far that way.” [Note: Lovelock is not included in the count of dissenting scientists in this report.] [Note: Even the UN has grown more uncertain about the science. See: UN Fears (More) Global Cooling Commeth! IPCC Scientist Warns UN: We may be about to enter 'one or even 2 decades during which temps cool' -- Admits 'Jury is still out' on ocean cycle's temp impact!]

More woes for the movement were felt when left-leaning environmental activists began jumping ship. See: Left-wing Env. Scientist Denis Rancourt Bails Out Of Global Warming Movement: Declares it a ‘corrupt social phenomenon...strictly an imaginary problem of the 1st World middleclass’ & Meet the green who doubts ‘The Science’: Environmentalist Peter Taylor ‘explains why he’s skeptical about manmade global warming — and why greens are so intolerant’ & Activists at green festivals expressing doubts over man-made climate fears. “One college professor, confided to me in private conversation that, ‘I’m not sure climate change is real,’” according to a report from the New York Green Festival.

2010 saw the once vaunted UN IPCC now become the object of ridicule and scrutiny. In June 2010, Climate Scientist Mike Hulme took apart a key claim. Hulme noted that claims such as “2,500 of the world’s leading scientists have reached a consensus that human activities are having a significant influence on the climate” are disingenuous. Hulme noted that the key scientific case for CO₂ driving global warming was reached by a very small gaggle of people. “That particular consensus judgment, as are many others in the IPCC reports, is reached by only a few dozen experts in the specific field of detection and attribution studies; other IPCC authors are experts in other fields.” [Note: Hulme is not included in the count of dissenting scientists in this report.]

In another blow to the UN IPCC’s carefully crafted image, was Scientist Dr. William Schlesinger admission in that only 20% of UN IPCC scientists deal with climate. Schlesinger said, “Something on the order of 20 percent [of UN scientists] have had some dealing with climate.” By Schlesinger’s own admission, 80% of the UN IPCC membership has no dealing with the climate as part of their academic studies. Also note, that climate requires a wide range of disciplines: See: ‘There are more than 100 expert sub disciplines involved in climate change studies’ & Science magazine confused about who is a ‘prominent climate scientist’ — ‘there is no specific climate discipline’ & Claims of ‘overwhelming majority’ of scientists exposed as laughable! ‘There are just 94 authors responsible for compiling the report in which...the [UN IPCC’s] modeling case for alarm rests’

The notion of climate “tipping points”, popularized by former Vice President Al Gore and NASA Scientist James Hansen, became the object of derision as well in 2010. See: 190-year climate ‘tipping point’ issued — Despite fact that UN began 10-Year ‘Climate Tipping Point’ in 1989! Climate Depot Factsheet on Inconvenient History of Global Warming ‘Tipping Points’ — Hours, Days, Months, Years, Millennium — Earth ‘Serially Doomed’

Once respected global warming stalwarts like NASA's James Hansen descended into political and ideological activism by being arrested multiple times protesting coal use. Hansen also endorsed a book which calls for "ridding the world of Industrial Civilization". Hansen declared the author "has it right...the system is the problem." Hansen did this despite the fact that the book proposes "razing cities to the ground, blowing up dams and switching off the greenhouse gas emissions machine." The Grist eco-magazine writer David Roberts noted in August 2010: "I know I'm not supposed to say this, but James Hansen managed his transition from scientist to activist terribly. All influence lost." Energy Sec. Chu came under fire for claiming science told him what the world was going to be like 100 years from now. See: Obama's 'Climate Astrologer': Energy Sec. Chu claims he knows 'what the future will be 100 years from now'

Obama Science Advisor John Holdren found his knowledge of the science of climate change come under scrutiny after he issued a bizarre warning about the possible loss of WINTER sea ice in the arctic. See: Obama science advisor: John Holdren ridiculed for claiming Arctic could be ICE FREE IN WINTER!

The U.S. Congressional cap-and-trade bill collapse and the UN climate treaty failure has left disillusioned within the global warming movement. Gore has admitted to feeling "a little depressed." And it has left a spectacle of world leaders promising verbal non-binding agreements to limit the earth's temp have left modern society attempting to ape primitive cultures efforts to control the climate. See: Blaming all recent weather events on man-made global warming is akin to astrology & Climate Astrology — 'It Has Been Foretold' of Extreme Weather; 'UN IPCC science has a status similar to interpretations of Nostradamus and the Mayan calendars'

In addition, the scientific underpinnings and the public support around the globe has dropped so significantly that there is now open talk of moving on to the "next eco-scare" Demoted: UN officially throws global warming under the bus: UN now says case for saving species 'more powerful than climate change' — May 21, 2010 & Time for next eco-scare already?! As Global Warming Movement Collapses. Activists Already 'Test-Marketing' the Next Eco-Fear! 'Laughing Gas' Crisis? Oxygen Crisis? Plastics?

The carefully crafted "consensus" of man-made global warming has unraveled. See:

Prominent Geologist Dr. Easterbrook Slams Geological Society of America's climate statement 'as easily refuted by data that clearly shows no correlation between CO2 and global climate change' & American Meteorological Society Members Reject Man-made Climate Claims: 75% Do Not Agree With UN IPCC Claims — 29% Agree 'Global Warming is a Scam' & Meteorologists Reject U.N.'s Global Warming Claims: Only 1 in 4 American Meteorological Society broadcast meteorologists agree with UN

In 2009, the world's largest science group, the American Chemical Society (ACS) was "startled" by an outpouring of scientists rejecting man-made climate fears, with many calling for the removal of the ACS's climate activist editor.

A 2010 Open Letter signed by more than 130 German scientists urging German Chancellor to "reconsider" her climate views. See: 'Consensus' Takes Another Hit! More than 130 German Scientists Dissent Over Global Warming Claims! Call Climate Fears 'Pseudo 'Religion'; Urge Chancellor to 'reconsider' views — August 4, 2009 More than 100 international scientists challenged President Obama's climate claims, calling them "simply incorrect." In December 8 2009, 166

scientists from around the world wrote an Open Letter to the UN Secretary-General rebuking the UN and declaring that "the science is NOT settled." On May 1, 2009, the American Physical Society (APS) Council decided to review its current climate statement via a high-level subcommittee of respected senior scientists. The decision was prompted after a group of over 80 prominent physicists petitioned the APS revise its global warming position and more than 250 scientists urged a change in the group's climate statement in 2010. The physicists wrote to APS governing board: "Measured or reconstructed temperature records indicate that 20th – 21st century changes are neither exceptional nor persistent, and the historical and geological records show many periods warmer than today." An American Physical Society editor conceded that a "considerable presence" of scientific skeptics exists.

Russian scientists "rejected the very idea that carbon dioxide may be responsible for global warming". India Issued a report challenging global warming fears. International Scientists demanded the UN IPCC "be called to account and cease its deceptive practices," and a 2008 canvass of more than 51,000 Canadian scientists revealed 68% disagree that global warming science is "settled."

Scientific meetings are being dominated by a growing number of skeptical scientists. The prestigious International Geological Congress, dubbed the geologists' equivalent of the Olympic Games, was held in Norway in August 2008 and prominently featured the voices of scientists skeptical of man-made global warming fears. [See: [Skeptical scientists overwhelm conference: '2/3 of presenters and question-askers were hostile to, even dismissive of, the UN IPCC' & see full reports here & here](#) - Also see: [UN IPCC's William Schlesinger admits in 2009 that only 20% of IPCC scientists deal with climate](#)]

Despite these developments, global warming promoters have sought to cite a survey alleging 97% of climatologists agree with the "consensus" view. But the survey does not hold up to scrutiny. See: ['Consensus' claims challenged: Only 77 scientists were interviewed to get 97.4% agreement — 'It would be interesting to learn who these individuals are' & Climate Con: 97% 'Consensus' Claim is only 76 Anonymous Self-Selected Climatologists](#)

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This Climate Depot Special Report is not a "list" of scientists, but a report that includes full biographies of each scientist and their quotes, papers and links for further reading. The scientists featured in the report express their views in their own words, complete with their intended subtleties and caveats. This report features the names, biographies, academic/institutional affiliation, and quotes of literally hundreds of additional international scientists who publicly dissented from man-made climate fears. This report lists the scientists by name, country of residence, and academic/institutional affiliation. It also features their own words, biographies, and web links to their peer reviewed studies, scientific analyses and original source materials as gathered from directly from the scientists or from public statements, news outlets, and websites in 2007 and 2008.

The distinguished scientists featured in this new report are experts in diverse fields, including: climatology; geology; biology; glaciology; biogeography; meteorology; oceanography; economics; chemistry; mathematics; environmental sciences; astrophysics, engineering; physics and paleoclimatology. Some of those profiled have won Nobel Prizes for their outstanding contribution to their field of expertise and many shared a portion of the UN IPCC Nobel Peace Prize with Vice

President Gore. Additionally, these scientists hail from prestigious institutions worldwide, including: Harvard University; NASA; National Oceanic and Atmospheric Administration (NOAA) and the National Center for Atmospheric Research (NCAR); Massachusetts Institute of Technology; the UN IPCC; the Danish National Space Center; U.S. Department of Energy; Princeton University; the Environmental Protection Agency; University of Pennsylvania; Hebrew University of Jerusalem; the International Arctic Research Centre; the Pasteur Institute in Paris; Royal Netherlands Meteorological Institute; the University of Helsinki; the National Academy of Sciences of the U.S., France, and Russia; the University of Pretoria; University of Notre Dame; Abo Akademi University in Finland; University of La Plata in Argentina; Stockholm University; Punjab University in India; University of Melbourne; Columbia University; the World Federation of Scientists; and the University of London.

Background: Only 52 Scientists Participated in UN IPCC Summary

The notion of “hundreds” or “thousands” of UN scientists agreeing to a scientific statement does not hold up to scrutiny. (See report debunking “consensus” [LINK](#)) Recent research by Australian climate data analyst John McLean revealed that the IPCC’s peer-review process for the Summary for Policymakers leaves much to be desired. ([LINK](#)) ([LINK](#)) ([LINK](#)) & ([LINK](#)) (Note: The 52 scientists who participated in the 2007 IPCC Summary for Policymakers had to adhere to the wishes of the UN political leaders and delegates in a process described as more closely resembling a political party’s convention platform battle, not a scientific process – [LINK](#))

Proponents of man-made global warming like to note how the National Academy of Sciences (NAS) and the American Meteorological Society (AMS) have issued statements endorsing the so-called “consensus” view that man is driving global warming. But both the NAS and AMS never allowed member scientists to directly vote on these climate statements. Essentially, only two dozen or so members on the governing boards of these institutions produced the “consensus” statements. This report gives a voice to the rank-and-file scientists who were shut out of the process. ([LINK](#))

The NAS has come under fire for its lobbying practices. See: [NAS Pres. Ralph Cicerone Turns Science Org. into political advocacy group: \\$6 million NAS study is used to lobby for global warming bill & Cicerone’s Shame: NAS Urges Carbon Tax, Becomes Advocacy Group — ‘political appointees heading politicized scientific institutions that are virtually 100% dependent on gov’t funding’](#) MIT’s Richard Lindzen harshly rebuked NAS president Cicerone in his Congressional testimony in November 2010. Lindzen testified: “Cicerone [of NAS] is saying that regardless of evidence the answer is predetermined. If government wants carbon control, that is the answer that the Academies will provide.” [Also See: [MIT Climate Scientist Exposes ‘Corrupted Science’ in Devastating Critique – November 29, 2008](#)]

While the scientists contained in this report hold a diverse range of views, they generally rally around several key points. 1) The Earth is currently well within natural climate variability. 2) Almost all climate fear is generated by unproven computer model predictions. 3) An abundance of peer-reviewed studies continue to debunk rising CO₂ fears and, 4) “Consensus” has been manufactured for political, not scientific purposes.

Scientists caution that the key to remember is “climate change is governed by hundreds of factors, or variables,” not just CO₂. UK Professor Emeritus of Biogeography Philip Stott of the University of London decried the notion that CO₂ is the main climate driver. “As I have said, over and over again,

the fundamental point has always been this: climate change is governed by hundreds of factors, or variables, and the very idea that we can manage climate change predictably by understanding and manipulating at the margins one politically-selected factor is as misguided as it gets," Stott wrote in 2008. Even the climate activists at RealClimate.org let this fact slip out in a [September 20, 2008 article](#). "The actual temperature rise is an emergent property resulting from interactions among hundreds of factors," RealClimate.org admitted in a rare moment of candor.]

#

January 12, 2015

Gayle C. Manchin, President of West Virginia Board of Education
and Members of the West Virginia Board of Education

Re: Modifications to Next Generation Science Standards

Dear President Manchin and Members of the WV Board of Education:

We, the undersigned faculty from West Virginia University, are concerned that modifications made to the WV Science Standards by the WV State Board of Education are not consistent with scientific consensus on climate change and urge you to take action to adopt the national Next Generation Science Standards as conceived and developed by The National Research Council, the National Science Teachers Association, the American Association for the Advancement of Science, and Achieve to ensure that K-12 students in West Virginia are provided with the best STEM education.

It has become axiomatic that the American public is increasingly unable to comprehend the complex scientific information needed to make rational policy decisions concerning the rapid changes in the sciences. We believe that it is important to teach students at a young age to think critically and challenge them to learn the underpinnings of all scientific issues so that they may participate intellectually in the series of ongoing debates and discussions about current events, such as global climate change. The proposed modifications to the WV Science Standards that deliver a deceptive interpretation of the scientifically accepted human influence on current climate change provides a great disservice to our young students and our teachers in West Virginia.

As teachers of higher education and concerned citizens in West Virginia, we urge you to reconsider the amendments that you have made that add erroneous interpretations of climate change science to the WV Science Standards. Thank you for your consideration of this request, and please do not hesitate to contact us if you would like more information and/or to discuss these issues further.

Sincerely,



Richard B. Thomas
Professor and Chair of Biology

James McGraw
Eberly Professor of Biology

Gay Stewart
Director, WVU Center for STEM Education
Professor of Physics

Department of Biology

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February 16, 2015

Ms. Robin Sizemore, Science Coordinator
Office of Secondary Learning
West Virginia Department of Education
Capital Building 6, Room 603
1900 Kanawha Blvd, East
Charleston, WV 25305-0330

Subject: Policy 2503.3C Comments

Dear Ms. Sizemore,

Thank you for the opportunity to comment on the science standards for K-12.

I have identified those Standards that I feel are totally inappropriate for the K-12 science program and request proper attention by the Board, and have extracted them along with specific comments. They will be found at the end of this note. The identified Standards represent total capitulation to a global political environmental movement abetted by own government's acquiescent to environmental extremists. There is no place for political indoctrination in the US educational program. Specifically:

- Science in this program should not be looking at social issues – such studies belong in other programs - politics, social science, humanities, etc.
- No Science Standards should have either implied or explicit boundaries – to do so is tantamount to “indoctrination.”
- Science Standards must envelope the basics and be the building blocks for the next step – synthesizing and application. Synthesis and Applications (solving problems and/or advancements in technology) are cases in point where the sum of the parts is greater than the whole. It is these parts that constitutes and defines the world of science. With that comes intuition, theories, testing of theories all done so in an open, uninhibited, and challenging environment. Climate Change is at best a thread in a very complex field of Climatology. More specific, changing of climate goes far beyond any influence by human activities, yet the proposed standards infer that it is an only outcome of human activities. This is very dangerous for many reasons, one being that there is not one shred of evidence connecting human activities to any climate or weather event. More specifically, each day brings new findings that suggests today's higher level of CO2 is a benefit to both human sustainability and the biosphere. One example relates to 2014 as the record year of world food production. Another example is the increased greening of the earth as shown by satellite imaging.
- If Climate Change caused by human activities is deemed a priority in K-12 education, then it should be contained in a separate program where the tools of science fundamentals are employed and presented in an environment of complete openness. More importantly such a program would be capable to adjustment as the science matures which will be the case.
- The desired outcome of K-12 Science curriculum must be solid understanding of fundamentals, high level intuitive levels, ability to “think.”
- Most important – the concept that the statement and the implied connotation that “The Science is Settled” is absolutely wrong and no student should ever be exposed to such boundaries. Science is never settled.

- The Board of Education has been purposely established to be “honest” brokers with respect to the education process. The positions are by appointment and thus all functions are to be isolated from political interference. Thus it is mandatory that the Board be fully aware of the ever so many external agendas that attempt to undermine the process and outcomes. To do less is a disservice to our youth and to those that selected each Board member for this critical endeavor.

I would like to discuss what is behind this environmental extremism - a movement that has been ongoing for some time and is now becoming a threat to the educational system. I begin with a recent quote by Dr. Tim Ball, an international recognized and acclaimed Climatologist and university professor who has been involved in the many year debate concerning this environmental movement and its effect on education:

“Education was always about indoctrinating children to think the way the powerful in society wanted. This was done openly and primarily centered on a religious belief. Now the indoctrination is denied because they claim education is not about religion. In fact, it is about the new religion of environmentalism that is being used to create equally, if not more indoctrinated, young minds. Few parents have any idea what their children are learning in the schools. It is not the wide ranging, free thinking, investigative experience they think. One way this is apparent is in the movement of young people through the education system. Historically they entered university and challenged the prevailing wisdoms. Now they come fully indoctrinated with environmentalism that ignores facts, manufactures false information and blames humans for everything. It is significant that challenges come from much older people who know and understand the fallacies. Everyone knows that information is power, but it's exploitation of power that has allowed a few to control and manipulate people.”

One has to assume that the Board is aware of Agenda 21, its promoted international environmental movement, and its many other “government’s know and do all for the masses” activities. This all began in the mid 1970’s under the United Nations as a means to establish a One World Government – one that has total control of every individual’s daily life and one that has a mission to invalidate the sovereignty of the United States. Massive wealth re-distribution and equalizing what everyone has is its core mission. The tenants of Agenda 21 have made great in-roads both internationally and our nation impacting every aspect of our daily lives and is now working to control the K-12 education process. The situation has now reached alarming proportions. The identifying language and “boundaries” that appear innocent from this movement in the Science Standards include: (“...including human; reduce the impact of humans; reduce the impacts of natural Earth processes on humans; clarify evidence of the factors that have caused the rise in global temperatures over the past century; increases in human population and per-capita consumption of natural resources impact Earth’s systems; flow of energy into and out of earth systems result in changes in climate, sustainability of human populations and many more – see others in the included marked up Standards). We are at the cross roads of determining the direction of this nation – education will decide.

Perhaps a refresher on the background would be valuable at this point:

- ❖ The movement has its roots with Karl Marx’s theories which became fully developed and operational by V. Lenin. They state:
 - The State controls, No Unalienable Rights, No Private Property,
 - “Give me four years to teach the children and the seed I have sown will never be uprooted”
 - “Give us the child for 8 years and it will be Bolshevik forever.”
- ❖ The United Nations formalized the movement based on Marx and Lenin doctrine with a program that began in 1976:
 - Habitat 1 – UN Conference on Human Settlements - Agenda Item 10 which signaled the end of private property ownership (pre-cursors to “Sustainability and Social Justice).
 - UN creates Sustainable Development in 1987
 - Earth becomes biosphere
 - Transfer of Wealth becomes Economic Growth
 - Energy Rationing becomes Lifestyle Adjustment
 - Carbon Dioxide (CO2) becomes Global Warming (no science, just a proclamation)

- UN Bruntland Report issued 1987 (Chapter 1)
 - "Sustainable development does imply limits Meeting essential needs requires assurance that those poor get their fair share requires that those who are more affluent adopt lifestyles within the planet's ecological means – in their use of energy"
 - "With exception of CO2, air pollutants can be removed at costs below the caused damage...all nations may suffer from the releases by industrialized CO2 gases..."
- UN establishes the Intergovernmental Panel on Climate Change (IPCC) 1988 – one year after CO2 declared a problem:
 - "Assess data pertaining to human induced climate change via complex mathematical models."
 - Political organization, most governments involved, reports begin with writing the summary first, faulted for lack of peer review for its publications, exposed fraud by Climate Gate.
 - Models output have been 100% wrong in its 27 year old history.
- ❖ UN Earth Summit – 1992 – Establishes Agenda 21 (goal to have a fully educated and operational international program by the beginning of the 21st century).
 - "Humanity stands at a defining moment in history – we are confronted with perpetuation of disparities between and within nations, a worsening of poverty, hunger, ill health and illiteracy, and the continuing deterioration of the ecosystem integration of environment and development concerns will lead to fulfillment of basic needs .. managed ecosystem....."
 - Goals:
 - Enforceable environmental laws and regulations based on sound social, economic and scientific principles.
 - Control atmospheric emissions – greenhouse gases – CO2
 - Promote energy efficiency and emission standards
 - Implement broad education process of sustainability development
 - Children and Youth in Sustainability Development – Agenda 21, chapter 25
 - Youth In Sustainability Development

"Youth comprises 30% of the world's population. Their involvement in the environmental decision making process is vital and critical to the long-term success of Agenda 21. As such it is imperative that youth from all parts of the world be actively engaged in real time in all aspects of economic and social development."
 - Children in Sustainability Development

"Children will inherit responsibility of caring for the planet, they comprise 30-50% of earth's population, they are vulnerable to effects of environmental degradation, they are highly aware supporters of environmental thinking. Specific interests of children must be included in all aspects of environmental activities to safely guard the future of sustainability."
- ❖ President George Bush (41) accepted Agenda 21 – never passed Congress.
- ❖ Under Clinton, Pelosi submitted legislation to "Assume a strong leadership role in implementing decisions at UN's Earth Summit Conference and to develop a national strategy to implement Agenda 21." Congress did not act on this legislation.
- ❖ Clinton signs Executive Order 12852, June 29, 1993 which created "President's Council on Sustainable Development." Council issues report May 1999:
 - Report is a redo of Agenda 21 –states: "we adapt the Bruntland Commission's definition of Sustainable Development."
 - Climate Change is the central theme of the report. There is one underlying premise regarding Climate Change, which is strongly implied, "Climate Change is serious and its cause is uniquely tied

to CO2 from fossil sources.” It attempts to offer solutions, use of gas, renewables, etc., and never mentions— nuclear which produces no CO2. Its data are extracted from IPCC findings.

- Climate Change, Sustainable Development, Social Justice, and Education are in essence one program.
- ❖ Agenda 21 is being implemented in the US via Executive Orders and by one political party. It is in high gear with the Obama administration highlighted by the recent statement that Climate Change is a greater threat to the US than any terrorist threat.
- ❖ The GOP platform in the last election contained a full repudiation of Agenda 21.

Climate Change as it is being promoted by the UN and the US is not the least bit understood by the public, most of our law-makers, and the media. The media has been effectively commandeered to be the spokesmen for communication to the public. What fuels the media in Climate Change is a well-orchestrated agenda managed by the government and supported with the “power of the purse.” Those that question are immediately identified as “Deniers,” denied an open friendly forum and relegated to oblivion or to the back pages of the press. However the body of “Deniers” is growing exponentially and their findings and challenges are making a significant impact. The often stated “The science is settled” is now becoming, “there is no science at all.”

Key Aspects Regarding Climate Change – Why the Science Standards Require Changing:

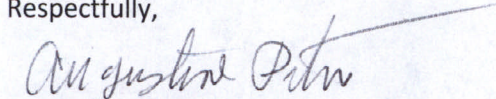
- Climate Change alarms emanate from one source, the data forthcoming from the IPCC. The Climate Change program is mandated to “isolate human effects on Climate” – not the complete domain of Climatology. The IPCC issues reports on a 6 year cycle. AR-5 was released in 2014.
- IPCC is a politically driven organization and has been severely criticized for its less than stellar work. Summaries are written in advance of the detail reports, there is very little peer reviewed work, they function on models, there have been numerous cases of faulty reports and manipulation of data, there is lack of transparency, and there is a program of deliberate miscommunication. E-mails from Climate-gate presented a disturbing picture of outright mistruths and effort to “skew” data. , Most importantly IPCC predictions have a 100% failure rate spanning a quarter of a century of work. Predicted higher temperatures have not occurred and now the earth has had no temperature increases in 17 consecutive years. Confidence in their work is low.
- It is unfortunate that the IPCC output dictates and controls the media via of its makeup of governments which in turn infuse the system with enormous amounts of money and thus control of research. Moreover the open hostility to any challenge is well documented including testimony to Congress.
- The IPCC work which is increasingly showing questionable results has spurned a huge and ever growing body of independent scientists that have and are challenging their work with enormous success. A few examples that are enlisting more and more independent scientists and some of their findings include:
 - Reasons why none of the IPCC predicted temperature increases have occurred. One being the complexity of the equations – most, if not all, are non-linear. Non-linear equations at times are non-solvable (requires huge computer power) and more importantly are not applicable in extrapolation. Many scientists have stated that there is a need for over 1000 times increases in computer power over today’s state of the art computers to obtain confidence in outcomes. Perhaps the most telling example of an out of line model result outcome is the 17 year no temperature increase, yet CO2 concentrations have continued upward which supports Independent science work claiming CO2 has no effect on temperatures and if does it would be cooling, not heating. This independent work disproved the Greenhouse Effect (GHE) theory employed by the IPCC. GHE claims the earth’s atmosphere behaves like a glass lid, retaining heat and radiating back energy to the earth’s surface – a clear violation of the Laws of Thermodynamics.

- The IPCC models assume that while CO₂ is a very small percentage of the atmospheres greenhouse gases it uniquely has a leverage effect on other parts of the system – called “forcing.” Many years of satellite data show no such “forcing.”
- The predicted huge numbers of hurricanes, have not occur, just the opposite – we are one of the longest sustained hurricane “quiet period.”
- The Mann Hockey stick, work by now discredited Michael Mann was a major underpinning of the IPCC’s effort. It took two individuals many years to obtain a forum exposing the errors of Mann’s work. Mann conveniently “cherry picked” the data to convey an Armageddon forecast of runaway temperatures. His curve failed to show the warming period in the 1st millennium, yet was accepted by the IPCC as “gospel.”
- Increases in CO₂ follow increases in temperatures not the other way around as was cited by Al Gore in his “Inconvenient Truth.” The British courts found 9 alleged errors in “Inconvenient Truth” and ruled that any showing of the film in schools must be accompanied by counterpoints.
- The IPCC’s basic model for energy balance of the earth has never been disclosed, but when synthesized by the independent researchers shows massive errors in its failure to describe the kinematics of the earth which is a three dimensional world. The IPCC model is two dimensional, the earth is depicted as a disc (not a sphere), and since their model does not rotate so there is no night. The energy balances were totally incorrect as the flux was treated as energy which is totally wrong. The IPCC must employ the GHE to achieve balance since the model has the incoming sun energy heating the surface to minus 40 degrees – totally impossible. The earth’s water cycle does not exist in the IPCC model.
- While CO₂ is called a greenhouse gas, the understanding of its behavior is incorrect. Water vapor is also a greenhouse gas, but its role in the IPCC work is ignored or at best minimized –yet it is the water vapor and clouds that dominate weather and climate. It was uncovered in the IPCC work that not only was water vapor not adequately treated, it is misrepresented as: “well mixed greenhouse gases.” Tables and figures portraying greenhouse gases often fail to show water vapor. NASA Goddard, the champion of AGW issued this comment regarding water vapor: “we find water vapor is the dominant contributor (~50%) of the effect, followed by clouds (~25%) and CO₂ with (~20%). Note that to confuse the reader, clouds and water vapor are identical – clouds are water vapor – thus the numbers should be water vapor (~75%), CO₂ (~20%). The issue here is most fundamental and exposes the entire advertised Climate Change effort. One reason it is not made a major effort of the IPCC work is expressed with this IPCC quote, “Water vapor is the most abundant and important greenhouse gas in the atmosphere, however human activities have only a small direct influence in the amount of atmospheric water vapor.” Since CO₂ is a very small percentage of the greenhouse gases, how can one ignore the one that has the most impact on weather and climate?
- There are many science papers examining CO₂ properties. Simply stated CO₂ is gas that can absorb and emit longwave radiation. These types of gases do so on a well-defined time basis – radiation energy moves at specific wavelengths. CO₂ in a mixture of air is heated from the earth’s surface by conduction – not radiation and does so with the great gas molecule velocities known as kinetic molecular action. It is this molecular energy that establishes temperatures that can be measured by thermometers. It is not radiation. The transfer of heat from the surface to the atmospheric gases occurs much faster than the CO₂ molecule can emit radiation. The heated CO₂ molecule is carried upward to the troposphere where it can radiate to space. In this mode CO₂ is actually providing a cooling function. Many recent scientific investigations discuss this issue. Also worthy to note, past ice ages have occurred with very high concentrations of CO₂.

- Recently considerable interest is emerging regarding volcanos. Not much is known about volcanos, particularly those on the ocean floor. Some technical papers are showing that many of the CO2 measuring stations are in volcanic active areas (which raises questions on the CO2 sources being read), that the number of ocean floor volcanos are in the three million plus range and many highly active. These submarine volcanos lie in the line of tectonic plates and that their postulated emitted CO2 far exceeds that from fossil fuels. Much of the work has looked at how does one distinguish AGW CO2 from natural sources? So far there is no identified signature mechanism. Such uncertainty completely brings into question any IPCC work that automatically begins with a pre-judged input regarding the genesis of CO2.
- With respect to the water vapor and clouds, there is much unknown and much not considered about cloud formation and their dynamics. Not included is the effect of cosmic particles in cloud formation. Cosmic particles provide the nucleus for water droplet formation which in turn forms clouds. No one can dispute the role clouds and water vapor play in the earth's climate (anyone in doubt need only to compare the moon with the earth). Cosmic particles entering the earth's atmosphere are a function of the sun's activity – when the sun is active its magnetic fields are greater which deflect many cosmic particles away from earth, thus less cloud formation and hotter earth temperatures. A quiet sun does the opposite, less heat to the earth, more cosmic particles, more clouds, cooler earth. The currently 17 year no temperature increases could very well be related to less cloud formation which in turn reflects a quieter sun (less sunspots). The current “quiet sun” is now becoming a front and center discussion with predictions of an emerging sustained “quiet” period and with that a much cooler planet – some predict a coming ice age.
- Last point. Earth climate changes occur in geological time frames, not a few decades. It is folly to begin a problem or an analysis with narrow boundaries. The earth interglacial periods are on 10,000 year cycles. The last identified ice age bottomed in the time frame of George Washington initiating a warmer period which appears to have ended in the past decade. The correlation (actual data) of increasing earth temperature with the luminosity of the sun is remarkable – the 20th and 21st century fossil CO2 had no effect on the relationship.

A table of those Standards that raises concerns from the standpoint of establishing a pre-judged outcome is provided. Today there is a growing body of science suggesting that CO2, particularly that from use of fossil fuel is benign with respect to affect Climate Change. To conduct a science program with such a weak underpinning raises very serious questions to motives. I urge the Board to give these comments the utmost consideration before finalizing.

Respectfully,



Augustine Pitrolo
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Science Standards of Concern

Standard	As Written	Comments/Recommended Action
General Science Content		
S.K.GS.4	Construct an argument supported by evidence for how plants and animals (including humans) can change the environment to meet their needs.	Humans have the ability to change its local environment, plants and animals cannot only by adaption. This is indoctrination, not science
S.K.GS.6	Communicate solutions that will reduce the impact of humans on the land, water, air, and/or other living things in the local environment.	Conveys the impression that impacts are only negative – this is indoctrination. Why not “enhance the outcome” Providing shelter to homeless as an example – not science - indoctrination
S.K.GS.10	Use tools and materials to design and build a structure that will reduce the warming effect of sunlight on an area.	Conveys that only heat from sun needs to controlled – cooling. Negates the other side – “use the sun’s energy to provide heating, e.g., passive solar heating. Indoctrination
S.1.GS.6	Read texts and use media to determine patterns in behavior of parents and offspring that help offspring survive	If this includes humans, it is out of place in these science standards. Could well be indoctrination.
S.4.GS.14	Generate and compare multiple solutions to reduce the impacts of natural Earth processes on humans.	Not science. This is specialized engineering and way beyond the province of the best professionals, let alone teachers and 4 th grade students. As written, begins the issue with a pre-judged input that all impacts are negative. Indoctrination
Earth and Space Science Content		
S.6.ESS.6	Ask questions to clarify evidence of the factors that have caused the rise in global temperatures over the past century.	Several issues: why only one century and why only temperature rise? In the past 100 years there were cooling periods of the size to believe we were entering an ice age. Indoctrination
S.6.ESS.7	Analyze and interpret data on natural hazards to forecast future catastrophic events and inform the development of technologies to mitigate their effects	Far beyond 6 th grade and even today’s best scientists.
S.7.ESS.7	Apply scientific principles to design a method for monitoring and minimizing a human impact on the environment.	Blatant indoctrination. Not science, at best this is sophisticated engineering. Of course taken to its intended outcome, one could come forth with the argument to reduce population - one of the in-place hidden agendas.
S.8.ESS.1	Construct an argument supported by evidence for how increases in human population and per-capita consumption of natural resources impact Earth’s systems	Not science – this is political science, underpinnings of social justice, and a suggestion that humans are the problems for the earth. This would be good class for policy makers and have as an object the use of science and technology to provide a high quality of life for the population. Again indoctrination.
S.9.ESS.13	Use a model to describe how variations in the flow of energy into and out of Earth systems result in changes in climate.	Incredible. The only way any student could comply would be to research the media. The media categorically is biased and has no real scientific know-how. Indoctrination – no science
S.9.ESS.14	Analyze geoscience data and the results from the global climate models to make an evidenced-based forecast of the current rate of global or regional climate change and associated future impacts to earth systems	First, all models are 100% failures. Second there is no definition of Climate. Third there is no baseline of the baseline from which one would desire a change. Fourth, there is not one, not one, credible example that connects the villain (Fossil CO2) to any climate event, either good or bad. Indoctrination – false science at play
S.9.ESS.15	Construct an explanation based on evidence for how the availability of natural resources, occurrences of natural hazards, and changes in climate have influenced human activity,	This appears to be a social science effort or perhaps a class in Humanities. Is out of place in these K-12 Standards. This is clearly implementation of Agenda21 in spades.
S.9.ESS.16	Evaluate competing design solutions for developing, managing, and utilization energy and mineral resources, the sustainability of human populations, and diversity	Delete – Indoctrination – Agenda 21 Social justice Sustainability Redistribution of wealth
S.9.ESS.17	Create a computational simulation to illustrate the relationships among management of natural resources, the sustainability of human populations, and diversity	Loss of private property ownership State replaces unalienable rights
S.9.ESS.18	Evaluate or refine a technological solution that reduces impacts of human activities on natural systems.	
S.9.ESS.19	Use a computational representation to illustrates the relationships among Earth systems and how those relationships are being modified due to human activity	

Biology		
S.10.LS.13	Design, evaluate, and refine a solution for reducing the impacts of human activities on the environment and biodiversity.	This is not biology – this is social science and social engineering. Indoctrination
S.10.LS.15	Create or revise a simulation to test to mitigate adverse impacts of human activity on biodiversity.	
Environmental Science (Elective)		
S.HS.ENV.1	Compare and contrast the rate elements, cycle through the ecosphere, describing natural and human influences on reaction rates: carbon; nitrogen, phosphorus, oxygen, sulfur	Not science – human involvement is a variable and any action taken by humans is subjective. Indoctrination.
S.HS.ENV.9	Evaluate the leading causes of species decline and premature extinction: habitat destruction and degradation; invasive species; pollution; human population growth; over exploitation.	Agenda 21 and the hidden agenda of population control and sustainability. Indoctrination.
S.HS.ENV.12	Compare and contrast legislation and international agreements associated with protecting habitats, ecosystems, and species: superfund; Surface Mining Control and Reclamation Act; Wilderness Act; Endangered Species Act; Marine Mammals Act.	Well beyond a high school science class – should be incorporated in the political science and international affairs curriculum.
S.HS.ENV.17	Debate climate changes as it relates to greenhouse gases, human changes in atmosphere concentrations of greenhouse gases, and relevant laws and treaties	No connection by any so called greenhouse gas has been made to any climate change event. Implying such and having a debate may be OK, but not in a class whose mission is to teach fundamentals of science, here we have Agenda 21 in full force. Indoctrination
S.HS.ETS.1	Analyze a major global challenge to specify qualitative and quantitative criteria and constraints for solutions that account for society needs and wants.	
S.HS.ETS.3	Evaluate a solution to a complex real-world problem based on prioritized criteria and trade-offs that account for a range of constraints, including cost, safety, reliability, and aesthetics, as well as possible social, cultural, and environmental impacts.	
S.HS.ETS.4	Use a computer simulation to model the impact of proposed solutions to a complex real-world problem with numerous criteria and constraints on interactions within and between systems relevant to the problem	
Forensic Science (Elective)		
S.HS.ETS.1-4	Engineering Design	Same as Science Standards. Note the Forensic Science Standards are exemplary – what is the purpose of these engineering standards – fish out of water?
Human Anatomy and Physiology (Elective)		
S.HS.ETS.14	Engineering Design	Same as Science Standards. Like the Forensic Standards, these are also exemplary - what is the purpose of these engineering standards – fish out of water?

February 16, 2015

To: Michael J. Martirano, Ed.D.

Cc: Members of the West Virginia Board of Education

Dear Dr. Martirano and Fellow West Virginians:

We are writing this brief letter to address the proposed modification of the Next Generation Science Standards (NGSS). As you know the science content is based on the document entitled “A Framework for K-12 Science Education” (<http://www.nap.edu/catalog/13165/a-framework-for-k-12-science-education-practices-crosscutting-concepts>) from the National Research Council. Moreover, the scope, sequence, and wording were thoroughly reviewed by relevant teachers in addition to education and science-content experts during the writing of the NGSS. Altering the wording runs the risk of undermining the credibility of the document and circumventing the already extensive review process.

Lonnie Thompson and I are fellow West Virginians. Lonnie graduated from Gassaway High School (Braxton County) and I graduated from Nitro High School (Kanawha County). We are 1970 graduates of Marshall University and are now both Distinguished University Professors at the Ohio State University and we have both been elected to the National Academy of Sciences. Our areas of specialty are climatology, Earth Science and glaciology. We are climate scientists who have spent our academic careers studying Earth’s climate system and the history of Earth’s climate as preserved in the ice cores we have collected from ice sheets and glaciers around the world. Last year on March 10 we had the privilege of addressing over 600 West Virginia citizens at the Clay Center in Charleston where we gave a joint lecture entitled “Climate Change: The Evidence, People and Our Options.” This presentation is available at <https://www.youtube.com/watch?v=Yv0D4eJtDDE>. Lonnie and I were also featured in West Virginia Public Broadcasting’s Inspiring West Virginians series segment entitled “Ice Hunters.” You can view this at <http://www.streamica.com/#!/eNmYLvvE7iQ>. (It takes a few minutes to load so please be patient).

As climate scientists we are concerned that the science of climate change that is presented be consistent with the body of knowledge presented in the peer-reviewed literature and the assessment of that knowledge by the major scientific organizations. Data collected globally confirm that the Earth system is warming and that the concentrations of greenhouse gases such as carbon dioxide and methane have been rising since the advent of the Industrial Revolution. The ice core research has been essential in reconstruction the long history of the concentration of these gases. The role these gases play in warming the planet is well understood and the science rests on over 250 years of research extending back to the work of Fourier in the late 18th century. It is critical that the minds of West Virginia’s most precious resource, its bright young people, be presented with information that has been vetted through the peer-review process and that they understand the importance of critically reviewing the data that underpin the science they are studying, whether it be climate science, earth science, biology or chemistry. With regard to climate science and global climate change, the public policy actions that could or should be taken are open for discussion or debate; however, the science of global climate change was decided long ago. Earth is warming and most of the warming in the last 50 to 60 years is the result of human emissions of greenhouse gases. We have attached a page that contains many sources of information relative to global climate change and upon which the conclusions stated above are based. We hope that you will find these helpful in resolving any questions you have about climate science. The sources on this sheet include the major national and international climate assessments as well as other

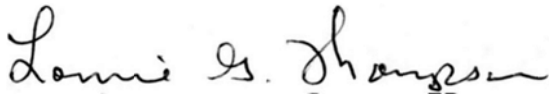
peer-reviewed information. Lonnie and I would be happy to talk with you directly regarding global climate change if that would be helpful in your decision making process. Our contact information is provided below.

You are in a powerful position with the opportunity to influence young minds and prepare West Virginia's next generation of citizens to contribute their time and talents for the benefit of society. We urge you to retain the original, peer-reviewed, language of the Next Generation Science Standards (NGSS).

Best regards,



Ellen Mosley-Thompson
Byrd Polar and Climate Research Center, Director
Department of Geography, Distinguished University Professor
thompson.4@osu.edu



Lonnie G. Thompson
Byrd Polar and Climate Research Center, Senior Research Scientist
School of Earth Science, Distinguished University Professor
thompson.3@osu.edu

Sources for Global Climate Change (GCC) Information (updated: January 5, 2015)

The following information is provided for those who wish to learn more about global climate change. These materials are organized from the most basic information to more complex issues. Included are a number of the international and national assessments that represent the general scientific consensus on specific topics. It is important to remember that scientists are naturally skeptical and constantly test and retest their hypotheses as more observations are obtained and as knowledge advances. Climate science, like all the sciences, builds on current knowledge to generate deeper and broader understanding. This is an ongoing process that underpins the scientific method.

Below are websites where you can explore the fundamentals of the role of greenhouse gases in maintaining Earth's energy balance, and the role of additional (anthropogenic) greenhouse gases that result in an enhanced warming of the planet. The latter is called the enhanced Greenhouse Effect (GHE) and is an important mechanism contributing to global climate change or what is popularly called "global warming". Global warming is a "catch all" term meaning that Earth's globally averaged surface temperature has warmed (~0.80 °C since 1900).

Understanding global climate change:

1) The United States' National Academy of Sciences (NAS) has a website devoted to Global Climate Change (GCC) (<http://nas-sites.org/americasclimatechoices/>). This is an excellent first step to learn more about the basics of GCC. You might start with their 2012 booklet entitled Climate Change: Evidence, Impacts and Choices (<https://nas-sites.org/americasclimatechoices/more-resources-on-climate-change/climate-change-lines-of-evidence-booklet/>).

2) More recently (February, 2014) the United States' National Academy of Sciences (NAS) and the British Royal Society jointly released a report entitled "Climate Change: Evidence and Causes" that is freely available (<http://dels.nas.edu/resources/static-assets/exec-office-other/climate-change-full.pdf>). It is accompanied by a freely available 8 page overview of climate change basics (<http://dels.nas.edu/resources/static-assets/exec-office-other/climate-change-basics.pdf>).

3) The U.S. Global Change Research Program (USGCRP) coordinates and integrates federal research on changes in the global environment and their implications for society (<http://www.globalchange.gov/>).

4) **The most authoritative documents** on the issue of global climate change are produced by the Intergovernmental Panel on Climate Change (called the IPCC). The IPCC assessments are available at <http://www.ipcc.ch>. The Fifth Assessment has been released over the last year. The Summary for Policymakers is an excellent place to start http://www.ipcc.ch/pdf/assessment-report/ar5/syr/SYR_AR5_SPM.pdf

In addition to the Summary for Policymakers there are reports from 3 different Working Groups (WG): WG1 (The Physical Science Basis), WG2 (Impacts, Adaptation and Vulnerability) and WG3 (Mitigation of Climate Change). There is also a Synthesis Report for the entire 5th Assessment. This is longer than the Summary for Policymakers but is a distillation of the three working group reports.

5) The Pew Center provides well balanced information (<http://www.pewclimate.org/>). The document entitled Climate Change 101 is excellent and available at <http://www.c2es.org/science-impacts/climate-change-101>. The Environmental Protection Agency (EPA) recently released its Report on the Environment (<http://cfpub.epa.gov/roe/index.cfm>),

You can review U.S. efforts on the environment and global climate change at <http://www.whitehouse.gov/energy/climate-change>.

The 2014 National Scientific Climate Assessment Report has been released and is available at <http://nca2014.globalchange.gov/downloads>. There is a factsheet giving the highlights at (http://downloads.globalchange.gov/factsheets/NCA_factsheet.pdf).

The National Research Council's National Academy of Sciences recently (2014) released a report entitled "The Arctic in the Anthropocene: Emerging Research Questions. It is freely available for download at http://www.nap.edu/catalog.php?record_id=18726. You only have to answer a few questions regarding how you plan to use the report.

The State of the Arctic Report Card is published annually and is available at <http://www.arctic.noaa.gov/reportcard/>.

Addition resources:

- The Yale School of Forestry and Environmental Studies' website has excellent content including economic information (<http://environment.yale.edu/>).
- The *New Scientist* has posted an article entitled: Climate change: A guide for the perplexed. May 16 2007 at <http://environment.newscientist.com/channel/earth/dn11462>. This reviews 26 of the most commons myths and misconceptions about climate change.
- The NAS has an excellent website on energy (<http://needtoknow.nas.edu/>) and has an excellent publication titled: What you need to know about energy? available as a free download at http://www.nap.edu/catalog.php?record_id=12204
- Another valuable website for data & graphs is the Goddard Institute for Space Studies: <http://www.giss.nasa.gov/>. There is much information and many data sets available here.
- Another valuable website for data & graphs is the Climate Research Unit at the Univ. of East Anglia. <http://www.cru.uea.ac.uk/>.
- For those who follow blogs and information sites: <http://www.realclimate.org/>; <http://climatenexus.org/>; <http://www.climatecentral.org/>; <http://www.climate.org/>

Books on the topic include:

- Andrew Dessler. Introduction to Modern Climate Change, Cambridge University Press, 2012.
- Andrew Dessler and Edward Parson: "The Science and Politics of Global Climate Change: A Guide to the Debate", 2nd Edition, Cambridge Press, 2010.
- David Archer, *Global Warming: Understanding the Forecast*, 2nd Edition. Blackwell, Malden, MA., 2011.
- Burton Richter, *Beyond Smoke and Mirrors: Climate Change and energy in the 21st Century*, Cambridge University Press, 2010.
- Henry Pollack, *World Without Ice*, Penguin Books, London, 2009.
- David Archer, *The Long Thaw: How Humans are Changing the Next 100,000 Years of Earth's Climate*, Princeton University Press, 2009.
- Spencer Weart: *The Discovery of Global Warming* online: <http://aip.org/history/climate/index.html>

This summary was prepared by Dr. Ellen Mosley-Thompson (thompson.4@osu.edu).

Much information is available on the Byrd Polar Research Center Website (<http://bprc.osu.edu/>).

Our group's publications are available at (<http://bprc.osu.edu/Icecore/>).



GLENVILLE STATE COLLEGE

Department of Science and Mathematics

We, the undersigned members of the Glenville State College Department of Science and Mathematics, petition the West Virginia State Board of Education to adopt the Next Generation Science Standards as drafted and edited by thousands of scientists and science educators across the nation, including hundreds of West Virginians, and released by Achieve.

Respectfully,

Mary Z. Morris, Chair 2.9.15

Kevin Evans

Ross Conover

Joe Evans

Sara Sawyer

LARRY R. BAKER

Joseph Wood

Debra Starcher Johnson

Dan Bailey

Paul S. Peck

WENWEN DU

Avan I. McHenry

Gary Z. Morris

Kevin Evans

Ross Conover

Joe Evans

Sara Sawyer

LARRY R. BAKER

Joseph Wood

Debra Starcher Johnson

Dan Bailey

Paul S. Peck

WENWEN DU

Avan I. McHenry

West Virginia Board of Education
1900 Kanawha Boulevard East
Charleston, WV 25305

February 6, 2015

The Heartland Institute submits this comment in response to the West Virginia Board of Education (WVBE) voting to reject a version of state standards aligned with the Next Generation Science Standards (NGSS), particularly due to language over climate change.

West Virginia was one of 26 states to adopt NGSS as the framework for state science standards. In December, WVBE approved the “rigorous” and “research-based” West Virginia Next Generation Content Standards and Objectives for Science.¹ The approved standards included changes over the language regarding climate change, outlined below, which were later reverted back to the NGSS’s language and reopened for public comment.

The Heartland Institute is a 31-year-old national nonprofit research organization dedicated to developing and promoting ideas that empower people. Our research finds there’s no justifiable reason to revert back to the NGSS’s language over climate change. NGSS should be abandoned entirely.

Outlined below are the aforementioned changes.

Original Version

S.6.ESS.6 ask questions to clarify evidence of the factors that have caused the rise in global temperatures over the past century.

Altered Version

S.6.ESS.6 ask questions to clarify evidence of the factors that have caused the rise and fall in global temperature over the past century.

Original Version

S.9.ESS.14 analyze geosciences data and the results from global climate models to make an evidence-based forecast of the current rate of global or regional climate change and associated future impacts to Earth systems.

Altered Version

S.9.ESS.14 analyze geosciences data and the predictions made by computer climate models to assess their creditability for predicting future impacts on the Earth system.

¹ “Rigorous and Research-based Science Standards Approved,” West Virginia Department of Education, December 15, 2014, <http://wvde.state.wv.us/news/3106/>.

Original Version

S.HS.ENV.17 debate climate changes as it relates to greenhouse gases, human changes in atmospheric concentrations of greenhouse gases, and relevant laws and treaties.

Altered Version

S.HS.ENV.17 debate climate changes as it relates to natural forces such as Milankovitch cycles, greenhouse gases, human changes in atmospheric concentrations of greenhouse gases, and relevant laws and treaties.

Climatology is an extremely advanced topic, and it is still a relatively young field of science. New discoveries are being made every day in peer-reviewed literature, and because it borrows from a wide range of disciplines, there is far more disagreement in the scientific community than is often projected by media reports.

For example, more than 50 scientists from all over the world make up the Nongovernmental International Panel on Climate Change (NIPCC), an international panel of nongovernment scientists and scholars who do not believe climate change is caused by human greenhouse gas emissions and are thus able to look at evidence the Intergovernmental Panel on Climate Change (IPCC) ignores. Through this process, NIPCC develops scientific opinions that are very different than IPCC's, and far more reliable.²

Given climatology's complexity, rapid developments, and wide range of contrasting views, a highly disproportionate amount of media and WVBE attention is being paid to the trivial, subjective changes of the standards' language over climate change and far less than to whether NGSS is beneficial to K–12 science education at all.

A comprehensive review of NGSS by a team of scientists, mathematicians, and curriculum experts – published by the Fordham Institute, a public policy research organization that supports national education standards in the form of Common Core – found NGSS omits crucial scientific information.³

In that review, the authors found large sums of basic physics to be “missing entirely.” There was also almost nothing written about acids and bases in chemistry, and despite boasts about its compatibility with Common Core math, “quantitative work is dodged and avoided throughout.”

If NGSS supporters are merely looking out for the integrity of science and are not trying to slant the standards in line with their political beliefs, as they strenuously claim, one would think they would be just as vocal over severe omissions to basic physics and chemistry as they are about the subjective alterations to the language about climate change.

² “About NIPCC,” website of the Nongovernmental International Panel on Climate Change, accessed February 11, 2015, <http://www.nipccreport.org/about/about.html>.

³ Paul R. Gross, *et al.*, “Commentary & Feedback on Draft II of the Next Generation Science Standards,” Thomas B. Fordham Institute, January 29, 2013, <http://heartland.org/policy-documents/commentary-feedback-draft-ii-next-generation-science-standards>.

As science writer Matt Ridley wrote, “No prediction, let alone in a multi-causal, chaotic and poorly understood system like the global climate, should ever be treated as gospel. With the exception of eclipses, there is virtually nothing scientists can say with certainty about the future.”⁴ In other words, regardless of which version of the standards’ climate change language is preferable, far larger problems make the use of NGSS unworkable for West Virginia’s K–12 students.

Conversations about and intellectual challenges to climate change didn’t have to devolve into an acrimonious debate, but the politicization that comes with increased government involvement inevitably made it so. It would be wise if elected officials avoided a similar fate for education. With U.S. science literacy scores below the Organisation for Economic Co-operation and Development (OECD) average, politicians are unlikely to find a magic bullet with national standards.⁵ Student achievement and the rigor of state standards have been found to have no correlation, according to a series of data analyses from the Brookings Institution.⁶ One important improvement, however, would be if NGSS standards were repealed and replaced with the higher-quality 2001 Massachusetts Science and Technology/Engineering Curriculum Framework.⁷

#

For more information about The Heartland Institute’s work, please visit our websites at www.heartland.org or <http://news.heartland.org>, or call Taylor Smith at 312/377-4000 or reach him by email at tsmith@heartland.org.

⁴ Matt Ridley, “My life as a climate lukewarmer,” January 30, 2015, <http://rationaleoptimist.com/blog/my-life-as-a-climate-lukewarmer.aspx>.

⁵ “Science Literacy: Average Scores,” *Program for International Student Assessment*, National Center for Education Statistics, December, 2013, http://nces.ed.gov/surveys/pisa/pisa2012/pisa2012highlights_4a.asp.

⁶ Tom Loveless, “How Well Are American Students Learning?” *The 2012 Brown Center Report on American Education*, Volume III, Number 1 (February 2012), Brookings Institution, www.brookings.edu/~media/research/files/reports/2012/2/brown%20center/0216_brown_education_loveless.pdf.

⁷ Massachusetts Science and Technology/Engineering Curriculum Framework, Massachusetts Department of Education, May 2011, <http://www.doe.mass.edu/frameworks/scitech/2001/0501.pdf>.

Robin Sizemore, WVDE Science Coordinator

2/16/15

Dear Ms. Sizemore,

The West Virginia Science Teachers Association (WSTA) and the 200 signers of this petition endorse the currently posted version of Policy 2520.3C *Next Generation Content Standards and Objectives for Science in West Virginia Schools*. The organization endorses this version policy due to the widespread involvement of West Virginia K-16 science educators and stakeholders in the development and review of the *Next Generation Science Standards*. We believe these standards will support high quality science education in West Virginia and improve opportunities for our students.

It is essential that fidelity to the language in the NGSS remain. Modification of the standards negates our national recognition as an NGSS state. Uninformed and random modifications to the standards cast doubt on the credibility of the standards and do not serve our students well and will lead to misconceptions.

	Name	From	Comments
1.	Todd Ensign	Morgantown, WV	Please don't subvert a multi-year process involving dozens of West Virginia educators, scientists, and experts with the views of one appointed board member.
2.	C Bradley	HOOD RIVER, OR	
3.	Jocelyn Valdez-Agosto	BRONX, NY	

	Name	From	Comments
4.	sara hello	FLUSHING, NY	
5.	Kevin Silvey	SEMINOLE, FL	
6.	Donna Tanner	CONCORD, MA	
7.	Stardust Noel	ALACHUA, FL	
8.	lynda leigh	SANTA CRUZ, CA	
9.	Becky Martinez-Kroeger	YUMA, AZ	
10.	pam wright	PASADENA, CA	
11.	Spencer Young	SCHAUMBURG, IL	
12.	Kathleen Mireault	JAMAICA PLAIN, MA	
13.	Grant Garson	MILWAUKEE, WI	
14.	Jason Schmidt	KANSAS CITY, MO	
15.	Stephanie Khoo	HUNTINGTON, WV	
16.	Tracy Trexler	BRAMWELL, WV	
17.	Denise Denton	HASTINGS, MI	
18.	Jeffrey Carver	Morgantown, WV	
19.	Karen Kettler	West Liberty, WV	
20.	Mary Ellen Sullivan	Mannington, WV	
21.	Ralph Wojtowicz	YELLOW SPRING, WV	I have taught undergraduate mathematics and science for over 15 years, worked for private scientific research firm for 7 years and have run a scientific consulting firm in WV for almost 4 years. I am disappointed in the ignorance demonstrated by the changes in the wording of the science standards. Such ignorance reflects poorly on our state at both a national and global level. It makes us less competitive in the global technology-intensive economy. I urge you to restore the science standards to their original wording.
22.	Charles Woodliff	CORNELIA, GA	
23.	Vanessa Licwov-Channell	Mill Creek, WV	"Leadership without mutual trust is a contradiction in terms." Warren Bennis
24.	Robert Ortiz	PHOENIX, AZ	
25.	Adam Osborne	Hurricane, WV	
26.	Robert E. Strong	Wheeling, WV	Let the Politicians decide Politics. Let Scientists decide Science. Let our Students decide for themselves from evidence supported facts and critical thinking.
27.	Shanti Srinivas	Birmingham, United Kingdom	
28.	Tamaria Withrow	Leon, WV	

	Name	From	Comments
29.	Mark Holmgren	St. Petersburg, FL	Yes. Fair process.
30.	will horton	princeton, WV	
31.	Kathryn Williamson	Green Bank, WV	
32.	Michelle Turner	Wintersville, OH	
33.	Barbara Vieira	STATEN ISLAND, NY	Please replace all altered content in Policy 2520.3C (Next Generation Content Standards and Objectives for Science in West Virginia Schools) with the original peer-reviewed science standards written in part by West Virginia scientists and science educators.
34.	Katie McDilda	Fraziers Bottom, WV	
35.	Deb Hemler	Fairmont, WV	
36.	Dulcie Cattrell	WEIRTON, WV	
37.	Derek Lambert	Weston, WV	Those at the State Board of Education responsible for this institutionalized fiasco should promptly resign their positions. It's a shameful act, arrogant and cowardly shoved down everyone's throat. How can such ignorant, closed minded people be trusted to bring West Virginians to the 21st Century.
38.	Jennifer McClanahan	Princeton, WV	
39.	Jose Rodriguez	Green Bank, WV	
40.	Elizabeth Gallaher	Wallback, WV	
41.	Gary Butler	Brisbane, Australia	I feel that the standards that were submitted and reviewed by numerous educators and agencies should be accepted. The ideas and views of one (or two)member(s) should not outweigh the views of thousands.
42.	Gregory Puskar	Morgantown, WV	
43.	Mary Burns	MARLINTON, WV	While assessing the data is important, it is also essential to assess the validity of the data. It is equally important, perhaps more so, to have confidence that data is collected in scientifically valid ways and not just assume that the data is valid.
44.	Terry Wheeler	BRADENTON, FL	
45.	Hugh Smith	Barnsley, United Kingdom	Please restore the original content and the true science to West Virginia's standards!
46.	Kathy Jacquez	Barrackville, WV	
47.	Tina Cartwright	Huntington, WV	
			Please replace all altered content in Policy 2520.3C (Next Generation Content Standards and Objectives for Science in West Virginia Schools) with the original peer-reviewed science standards written in part by West Virginia scientists and science educators.

	Name	From	Comments
48.	Nellie Johnson	BRIDGEPORT, WV	Tell the truth. The whole truth. Global warming is fact. Kids are the future, and need to know the truth in order to find solutions to save our world.
49.	Kathy Coffield	TRIADELPHIA, WV	
50.	Debbie Clark	Wheeling, WV	
51.	Sandra K. Walker	GREENSBORO, NC	
52.	Cathy Barnabei	Weirton, WV	Please replace all altered content in Policy 2520.3C (Next Generation Content Standards and Objectives for Science in West Virginia Schools) with the original peer-reviewed science standards written in part by West Virginia scientists and science educators.
53.	Pam Casto	Morgantown, WV	I feel this was done quietly so that people would not realize that these few words were changed. The action of changing these words without announcing that there had been changes made, undermined the trust I had in the State Board of Education.
54.	Frances Poodry	BEAVERTON, OR	
55.	Leann Sayre	Rivesville, WV	
56.	Charles Wilson	Martinsburg, WV	Please allow science teachers to set science standards.
57.	Anna Landia	WESTMINSTER, CA	Falsifying text books doesn't make religious believes true.
58.	Laura Newton	WILLIAMSBURG, VA	
59.	Barbara Johnston	Morgantown, WV	
60.	I.r perry	KISSIMMEE, FL	
61.	Jaime Ford	Fairmont, WV	Beyond the fact that Climate Change as a science should be taught in the classroom, no one person should be able to change the NGSS by themselves. This is very offensive to the groups that have worked laboriously on the the standards for the last 2 years.
62.	Michelle Reichmann	MIDLAND, MI	
63.	Steven Hosford	Sumner, WA	
64.	Marjorie Rose	Harrisville, WV	The change in the wording for the Next Generation Standards relating to climate change is political. No doubt about it!
65.	Fernando Valentin	POUGHKEEPSIE, NY	
66.	Ben Brod	Sydney, Australia	
67.	Myriaha Felker	Hurricane, WV	
68.	Elizabeth Strong	Wheeling, WV	Please restore the standards to their original wording to insure the fidelity to the language of the NGSS and the scientific integrity of the standards.
69.	Sue Harrington	MARTINEZ, CA	

	Name	From	Comments
70.	Natasha McMann	Marlinton, WV	As a scientist and a native West Virginian I am appalled at the idea of changing the wording to meet political agendas. If you truly understood science, you would know the rigorous amount of detail and time it takes to publish scientific papers or produce viable theories.
71.	Dr. Rita Boone	ALBUQUERQUE, NM	
72.	steve finger	BOONE, NC	
73.	JL Angell	RESCUE, CA	
74.	Lydia Santiago	JACKSON, NJ	
75.	Kathryn White	ARBOVALE, WV	
76.	Genee McNier	BOYNE CITY, MI	
77.	Jo Sullivan	FRESH MEADOWS, NY	
78.	jennell connelly	EDGEWATER, MD	
79.	Sonya Picklesimer	Williamson, WV	
80.	Edward Laurson	DENVER, CO	
81.	Eugene Hull	Winfield, WV	
82.	Cherry Hayes	Duncan, Canada	
83.	Erica Harvey	Fairmont, WV	
84.	Patricia Walls	CLARKSBURG, WV	
85.	Michael Criswell	COLORADO SPRINGS, CO	
86.	Paul Miller	MORGANTOWN, WV	Science is important. Our society depends on it in more ways than most people understand. The WV State School Board needs to reverse this embarrassing error and get it right for our kids.
87.	Frances Tolley	Hurricane, WV	
88.	Angela McKeen	Reynoldsville, WV	
89.	Linda Fonner	New Martinsville, WV	
90.	dagmar karin dag	buenos aires, Argentina	
91.	Kristen Wince	Pennsboro, WV	
92.	Mark Flood	Reynoldsville, WV	
93.	Rebecca Crawford	Eleanor, WV	
94.	Christine Smith	Hillsboro, WV	
95.	P. Amith	Seattle, WA	
96.	Cristina Opdahl	Fayetteville, WV	Let science be science and keep politics and the fossil fuel industry out of it.

	Name	From	Comments
97.	Kris Phares Snyder	Glenville, WV	In this day and age one would THINK the rule of government officials would support science and not try to rewrite. It has not worked in the past. "Truth will prevail."
98.	Paula Tremba	Shepherdstown, WV	
99.	Paul Taylor	Charleston, WV	
100.	Gloria Maddox	Hurricane, WV	
101.	Bryan Lemasters	Reader, WV	
102.	Katie Inderbitzen	Marina, CA	
103.	Katie Barker	Pine Grove, WV	
104.	Cody Blankenship	Nitro, WV	
105.	Stephanie Hysmith	Charleston, WV	Let scientists teach science. In his report on the water crisis, Gov. Tomblin wrote, "state officials...should have made clear that while they understood the concerns of citizens, answers regarding water safety (substitute climate change here) should come from scientists, not lay persons."
106.	Cheryl Strother	Sand Fork, WV	To placate the coal industry, we ignore science.
107.	Teresa Stephens	Hurricane, WV	
108.	Amy Coleman	Green Bank, WV	
109.	Jim Cozort	Oceana, WV	
110.	Jennifer Riedel	Wheeling, WV	
111.	Stefan Smolski	Fairmont, WV	
112.	Sherry O'Sullivan	Grafton, WV	
113.	Kathleen Loughman	Wheeling, WV	
114.	Angela alvaro	MOUNT CLARE, WV	Did you think we wouldn't notice that you tried to change the facts? We are paid to check papers, you know. F-
115.	Joanna Burt-Kinderman	Hillsboro, WV	
116.	Lainie Farence	Fairmont, WV	
117.	Patricia L Miller	Leroy, WV	
118.	Jennifer Stewart	Nettie, WV	
119.	Catman Purrfect	ATHENS, GA	
120.	Chris Morehouse	Shepherdstown, WV	
121.	Anne Haarhoff	George, South Africa	Our children and our economy deserve a 21st century science education.
122.	Heidi Aubrey	LEMON GROVE, CA	
123.	Recycled Teenager	TOULOUSE, France	
124.	Amy Fisher	SANTA MONICA, CA	

	Name	From	Comments
125.	Richard Sharpe	Huntington, WV	
126.	Jordan Gl	HARTSDALE, NY	
127.	Olga Troyan	Taraz, Kazakhstan	
128.	Barbara Tomlinson	Seattle, WA	
129.	Richard Bramham	Cragg Vale, United Kingdom	
130.	Pam Barciszewski	O FALLON, MO	
131.	Julia Brady	Buckhannon, WV	
132.	Stacy Schonhardt	SEATTLE, WA	
133.	Bill C	Kempton, Germany	
134.	William Gower	AZUSA, CA	
135.	David Mitchell	Morgantown, WV	
136.	Faith Harper	Glenville, WV	
137.	Marty Burke	St. Albans, WV	
138.	linda y. onganian	BLUE POINT, NY	
139.	One Heart inc	BARABOO, WI	
140.	Spring Hull-Lamb	SOUTHAVEN, MS	
141.	Eva Ice	JACKSONBURG, WV	
142.	Jennifer Hardy	New Cumberland, WV	
143.	Ryan Asbury	Wheeling, WV	
144.	Heidi Hohman	Wheeling, WV	Please understand the work that went into this product...so much thought and consideration for what is needed for our students. Do not change any part! Thanks!
145.	Ty Beh	RIO RANCHO, NM	
146.	Carrie Hancock	Wolff creek, WV	
147.	Tim Hancock	sinks grove, WV	
148.	D GRAY	PINELLAS PARK, FL	
149.	Richard Pollack	Wheeling, WV	Restore the original standards please.
150.	F Alessi	Orange Park, FL	
151.	olivia litman	Wheeling, WV	Education should always come first. Our childrens minds will determine our future!
152.	Brian Johnson	BRIDGEPORT, WV	
153.	Cheche Price	WELLSBURG, WV	
154.	Jessie Ferrari	Steubenville, OH	Please restore the standards to the original wording, as science educators we have a responsibility to teach our students the information that is supported by scientific evidence

	Name	From	Comments
155.	Patrick Plunkett	Wheeling, WV	
156.	Bettina Lorenz	Rhede, Germany	
157.	Jose Sainz	Santiago de Compostela, Spain	
158.	Natasha Salgado	Toronto, Canada	
159.	Crystal Parsons	Wheeling, WV	
160.	Fred Schmick	PRESTON, MD	
161.	janice mcfadden	wellsburg, WV	
162.	Michael `Condon	HILLSBORO, WV	We want real science and math taught to our students, not industry slanted, pollution promoting misinformation.
163.	Margaret Abbott Fowler	Gettysburg, PA	I am no longer a resident of WV. However, this is a very needed effort. The WV School Board is in breach of their own mission and should return the document(s) to the original wording and intent.
164.	Charles Wood	Wheeling, WV	WV students have so many hurdles to reach the national average - don't make it harder by forcing teaching of incorrect science.
165.	Ted Spickler	Dagsboro, DE	As a former resident of West Virginia I retain an interest in science education in the state. The original wording as approved by the WVSTA is better than the new wording which expects too much evaluation on the part of kids just beginning to learn something about science. They are not in a position to judge the efficacy of computer simulations or details on so-called controversies between the 97% of real climate scientists and a small number of malcontents funded by industry.
166.	Mary Ellen Cassidy	Wheeling, WV	
167.	Nancy Holdsworth	NEW CUMBERLAND, WV	Please restore the standards to the original wording.
168.	Mason Rourman	Sierra Madre, CA	
169.	Cassie Doty	FROSTBURG, MD	As a scientist, a curriculum developer and a West Virginian (once a Mountaineer, always a Mountaineer), I am greatly concerned about the duplicitous revision of professionally-developed scientific education standards to yield to the pressures of politicians and business owners. Not only is the practice dishonest, but more importantly it is setting WV students up to be misinformed and less well-equipped to be the strong science leaders we need for tomorrow. This political move only serves to further "dumb down" our youth and perpetuates the idea that WV is only concerned with the extraction of fossil fuel from our mountains.
170.	Ray Garton	Barrackville, WV	glad that WVSTA is watching out for our childrens education

	Name	From	Comments
171.	Lambros Tsuhlares	Short Creek, WV	This is an embarrassment to our state. We can't let the extraction industry control science.
172.	Erica Williams	CHICAGO, IL	
173.	Patricia Jacobson	Wheeling, WV	
			Restore the original wording of The Next Generation Science Standards (WV Policy 2520.3C). Our children need to be taught real science. Rapid climate change is something our children will have to deal with, and they need to be truthfully educated about it..
174.	Russ McKeen	reynoldsville, WV	
175.	Jessika L Thomas	Morgantown, WV	
176.	Michelle Rohde	New Martinsville, WV	
177.	Jan Foose	Wheeling, WV	
178.	Dorothy Waddell	Suffolk, VA	
179.	Tammy Wells	Pine Grove, WV	
180.	Brandon Martyn	Jacksonburg, WV	
181.	Ruth Fluharty	New Martinsville, WV	
182.	karen walberg	FAYETTEVILLE, WV	
183.	Wende Preaskorn	bridgeport, WV	
184.	John Brewer	MARIETTA, OH	
185.	Melinda Carpenter	Craigsville, WV	
186.	James Keith	Washington, IN	
187.	Ben Schneider	Wheeling, WV	Like the text book war of 1974, WV is again made into the laughing stock of the world by school board members who consider their views more correct than the science. Will we ever learn the truth? Or will our future Citizens carry the mistaken message corporate leaders want them to have into the future?
188.	Michael Stein	Wheeling, WV	
189.	Daniel Owens	Weirton, WV	
190.	Stephen White	Cambridge, MA	From my experience at MIT with students from hundreds of school districts, from every state, and over 100 countries, that the new NGSS are definitely NOT going in the right direction. I've met kids from third world countries with better science background than WV students.
191.	Davita Melander	FALLING WATERS, WV	
192.	Helen Sitler	Ligonier, PA	Let the scientists do their work!
193.	Brandon Chiasera	Lansing, MI	

	Name	From	Comments
194.	Annie Boyd	Morgantown, WV	"The Next Generation Science Standards, which were developed over several years with input from WV educators, higher ed faculty, scientists, and government agencies, were changed at the behest of a single board member before being put up for comment in October. This effectively hid the fact that any changes had been made, and so escaped public notice." - Local Science teacher This is BOGUS, and I will not have my future children educated from a POLITICAL standpoint when the SCIENCE so trumps the politics. Adding the word "and fall" is a COMPLETELY under-handed tactic and I believe this needs to be eliminated again until and unless education professionals and actual teachers want to adapt it. Not only does this policy deserve to be kicked the the curb - THE MAN WHO MADE IT THIS WAY DESERVES TO BE FIRED AS WELL.
195.	Sonja Melander	Lansing, MI	
196.	Julia Colaw	PETERSBURG, WV	
197.	Janice Banks	CENTER BARNSTEAD, NH	
198.	Travis Miller	WELLSBURG, WV	Let those with experience in the field inform decisions. Equal governance is a must for the state to evolve and grow.
199.	Jennifer czeszycki	wellsburg, WV	
200.	Courtney Cyphert	WELLSBURG, WV	
201.	Kellen Calinger	Wheeling, WV	
202.	Wesley Shanholtzer	Huntington, WV	Keep science from politics!
203.	Amy Henry-Morgan Henry-Morgan	Marlinton, WV	
204.	Kathleen Hill	Wheeling, WV	Please replace all altered content in Policy 2520.3C (Next Generation Content Standards and Objectives for Science in West Virginia Schools) with the original peer-reviewed science standards written in part by West Virginia scientists and science educators.
205.	Jennifer Nail	Marlinton, WV	As an educator I want my student to see information backed by research, and I want standards supported by educators.

1. Susan Crawford Powell, OH	20. Jean Friday Belle Vernon, PA	39. Masako Okamoto Cerritos, CA
2. Carolyn Vaughan Scottsdale, AZ	21. Edward Schutz Utica, MI	40. Bianca Molgora San Francisco, CA
3. James Cook Waterloo, IA	22. M Leszczynski Lapeer, MI	41. Erika Munk New York, NY
4. Chris Danne Gainesville, FL	23. Tracey Eakin Canonsburg, PA	42. Erika Munk New York, NY
5. Jeanette McDonald Washington, DC	24. Nancy Price Davis, CA	43. Erika Munk New York, NY
6. Robert Oelman Delray Beach, FL	25. Fran Stallings Bartlesville, OK	44. Aaron Gayken Sioux Falls, SD
7. Heather Sherman Westport, CT	26. Kathleen Keller St. Louis, MO	45. Jean Germain Sarasota, FL
8. Penny Hammack North Richland Hills, TX	27. Roy Hebert Thibodaux, LA	46. Marilyn Noguera Washington, DC
9. Dianne Barth Cincinnati, OH	28. Lindsay Keith West Bridgewater, MA	47. Monica Knaack Burnsville, MN
10. e Briley briley	29. Xxx Xxxxxx xxx xxx, NJ	48. Kimberly Clemens Reading, PA
11. Kristine Cassar Newark, DE	30. Clayton Jones Seattle, WA	49. Logan LaVail Montclair, NJ
12. Jeanette McDonald Washington, DC	31. Leilani Clark Captain Cook, HI	50. J Angell Rescue, CA
13. Herman Hardy Pittsburgh, PA	32. Helen Hanna Sacramento, CA	51. jerry mylius Austin, TX
14. Kevin Duong Littleton, CO	33. Brad Colden Whittier, CA	52. Evelyn Greenwald San Luis Obispo, CA
15. David Meese Myrtle Beach, SC	34. Shaun Murphy fayetteville, NC	53. MArianne bergman Bethlehem, PA
16. Jeanne Brunson Centereach, NY	35. Daniel Eck Ohio City, OH	54. Rex Messick Harrod, OH
17. Julia Wade Arlington Heights, IL	36. Erin Quist	55. Edmund Weisberg Philadelphia, PA
18. Joel Platt Pittsburgh, PA	37. Jean Forsberg Julian, PA	56. Barbara Freeman Remsen, NY
19. Heather Cornwell Big Rock, IL	38. James Mulder Wappingers Falls, NY	57. Selena Henderson, NV

58. Patrice MARTIN	Traverse City, MI	90. Robert Hart
59. John & Shirley Valney	72. Ashley Allen	Barrington, RI
Reno, NV	Long Beach, CA	
60. Sara Lazarus	73. Lynne Glaeske	91. Kate Bradley
Millburn, NJ	Denver, CO	Berea, OH
61. Antanaja Holberg	74. Richard Mckendry	92. Angela Miller
Knoxville, TN	Lyons, MI	Temperance, MI
62. Michael Spitzer	75. Helen Ownby	93. Sharon DeLiso
Durango, CO	Saint Marys, GA	Utica, MI
63. Miles McLennan	76. Georgiann Schulte	94. Amy Houchen
Santa Barbara, CA	Oak Park, IL	Portland, OR
64. Randy Power	77. Jason Bradley	95. Clarence Fountain
65. Julie Fissinger	Winooski, VT	Schenectady, NY
Brooklyn, NY	78. Andrew Herbele	96. Greg Allbee
66. Marianne B	Springfield, MA	Bedford, TX
Sudbury, MA	79. Pamela Zuppo	97. Kathryn Plitt
67. Betsy Coffey	San Francisco, CA	Gig Harbor, WA
Louisville, KY	80. Bruce Eggum	98. Juliet Menditto
68. Nancy Wedow	Gresham, WI	Ridgewood, NY
Palatine, IL	81. Linda Hixson	99. Amie Alter
69. Lori Gudmundson	Ludington, MI	San Luis Obispo, CA
Bellingham, WA	82. Lewis Hotchkiss	100. Sandra Daigneaux
70. Aleks Kosowicz	Minneapolis, MN	Overland Park, KS
Hayward, WI	83. Jim Welms	101. John Wilson
71. As a physician, everything I do to help patients is based on peer-reviewed science. Our children deserve to be taught peer-reviewed science regarding climate change. There is no longer any more question about whether man is significantly contributing to climate disruption than there is that smoking cigarettes is harmful to one's health. Our children deserve to know and understand this so that they can make better decisions than we have. —Elizabeth Del Buono	84. Tim Miller	102. Jo Tate
	Philadelphia, PA	Brighton, MA
	85. Victoria Miller	103. Phyllis Snyder
	Encino, CA	Somers, NY
	86. Bernice Born	104. Shaun Dakin
	Pittsburgh, PA	Falls Church, VA
	87. Alan Papsun	105. Delvan Ramey
	Glendale, MA	Louisville, KY
	88. e	106. William Pell
	Byron Center, MI	Newark, NJ
	89. Russ & Roxie Campbell	107. David Bliss
	Troy, MI	Staffordsville, KY
		108. Martha Gunnarson
		Oxford, MA

109. **Sandra Daigneaux**
Overland Park, KS

110. **Alma Spragg**
Kansas City, MO

111. **Laura Gandolfo**
Ridgewood, NY

112. **David Faust**
Saint Paul, MN

113. If you don't want to teach climate change, how about also NOT teaching that the Earth isn't flat, gravity is real, man did travel to the moon, and scientists know more than you ignorant twits.
—**David Kaye**
Sarasota, FL

114. **Aaron Novack**
Tempe, AZ

115. Without an educated public, we can expect to go like lambs to the slaughter with climate change. An educational system that doesn't teach good science about this issue doesn't deserve the name of education, doesn't deserve tax dollars, and hands out meaningless diplomas.
—**Karen Hodges**
Charlotte, NC

116. **Greta Gaard**
MINNEAPOLIS, MN

117. **Dc Katten**
Cave Creek, AZ

118. **Paul Fox**

119. **Kerry Kovarik**
Seattle, WA

120. Please give the kids the chance to make up their own minds on this topic. They

dear that much respect wouldn't you think?
—**Werner Fritzsching**
Brooklyn, NY

121. **Nathan Searle**
Augusta, GA

122. Being anti-science is backward and ignorant, and is a disservice to our students and our planet.
—**Tim Groeger**
Buffalo, NY

123. **Mark Morden**
Port Huron, MI

124. **Lisa Bearden**
Hillsdale, MI

125. **Karla Hinton**
Ponca City, OK

126. **David Scott**
Ontario, CA

127. **Diane Hendricks**
Olney, TX

128. **Charlotte Thompson**
Uniontown, PA

129. **Breta Westlund**
Urbandale, IA

130. **Larry Wallace**
West Palm Beach, FL

131. **Melinda Hellyer**
Santa Barbara, CA

132. **Andrew Costigan**
Norwood, MA

133. **Jorge Martinez**
Long Beach, CA

134. **David Korman**
New York, NY

135. **Raymond Briggs**
Grants Pass, OR

136. **Robert Culligan**
Glendale, AZ

137. **Gordon Art & Design**
Seattle, WA

138. **Randy Harrison**
Eugene, OR

139. **Jill Nicholas**
Penfield, NY

140. **Stephen Budzinski**
Kalamazoo, MI

141. We don't have time to debate the reality of Climate Science....IT'S TIME FOR SOLUTIONS...our kids are watching and this is our time to TAKE ACTION!!!!
—**Paul Thompson**
Minneapolis, MN

142. The rich, especially those whose wealth is derived from, what should be common assets, hate science for revealing the apocalypse that will result from ignoring the truth about fossil fuel consumption. Good education does not suit their greedy interests.
—**Gene Marsh**
Halstead, KS

143. **Dean Esch**
Las Vegas, NV

144. **Richard Rutherford**
Staunton, VA

145. **Janis Todd**
Princeton Jct., NJ

146. **Thomas Stuckey**
Mount Horeb, WI

147. **Allison Bening**
Toledo, OH

148. **John McCormick**
N. Wildwood, NJ

149. **Aaron Dukes**
Hood River, OR

150. **Adam Race**
Denver, CO

151. **Chris Barker**
Great Falls, VA

152. **Rosemarie Zuppo**
Morton, PA

153. **Linda Mulder**
Northville, MI

154. **Randall Nerwick**
Milwaukie, OR

155. **Ralph Drake**
Mesquite, NV

156. **Stanley Becker**
Long Beach, NY

157. **Bill Rosenthal**
Rego Park, NY

158. **Maureen Burke**
Palm Beach Gardens, FL

159. **Rehana Huq**
Ithaca, NY

160. **Thomas Cranston**
Elgin, TX

161. **Mark Himan**
Ames, IA

162. **Wendy Fast**
Dansville, NY

163. I am a rural Kansas Republican, but I am also a science educator. If we don't teach our students about the state of current science and its possible consequences we are making the future they will face far worse. I am tired of my party being represented by forces of ignorance. It is time to step up and move away from the dark ages.

—**Raymond Pierotti**
Oskaloosa, KS

164. **John Cochrane**
Akron, OH

165. **Rachel Krucoff**
Chicago, IL

166. **Thomas Sellars**
Akron, OH

167. **Marc Benedict**
Rochester, WA

168. **Bret Sher**
Vernon Hills, IL

169. **Shirley Kallio**
Rockford, MI

170. **Keith Augusto**
Las Vegas, NV

171. **Allan Lerner**
Corvallis, OR

172. **Jeffrey Milden**
Cherry Hill, NJ

173. **M Struble**
Philadelphia, PA

174. **Harry Dill**
Cottondale, AL

175. **Anita Alcantara**
Chicago, IL

176. **Karen Donaldson**
Grass Valley, CA

177. **Jessica Scheick**
Orono, ME

178. **Alan Wells**
Pittsburgh, PA

179. **Matilda Purnell**
Free Union, VA

180. **Matilda Purnell**
Free Union, VA

181. **Lany Clough**
Ballwin, MO

182. **Zachary Nelms**
Portland, OR

183. **Ted Davis**
Boonton, NJ

184. **Lisa Culp**
Evanston, IL

185. **Randolph Schoedler**
Milwaukee, WI

186. **Daniel Coyne**
Kalamazoo, MI

187. **Alana Schwartz**
Schodack Landing, NY

188. **Leona Grage**
Wood Dale, IL

189. **Mary Gold**
Fort Washington, PA

190. **Mary Thoma**
Dayton, OH

191. **Anne Seidlitz**
Washington, DC

192. **Edward Haggard**
Crestwood, IL

193. **Carol Hlestand**
Chatsworth, CA

194. **Nancy Claus**
Wheaton, IL

195. **Dan Schneider**
Seattle, WA

196. **Raymond Briggs**
Grants Pass, OR

197. **Angel Reed**
San Francisco, CA

198. **John Moreland**
Long Beach, CA

199. **Jill Haverland-Wilder**
Astoria, OR

200. **Brook Heimbaugh**
Austin, TX

201. **Glenn Gevedon**
West Liberty, KY

202. **Patricia Savage**
Mammoth Lakes, CA

203. Do you want your children to have real jobs based on real science or do you want them to die in a coal mine working for a rich jerk who will declare bankruptcy the minute he gets caught?
—**Richard Wesley**
Seattle, WA

204. **Joan Caiazzo**
Fresh Meadows, NY

205. **Laurie Rowan**
Kittery, ME

206. My mother graduated from WVU in 1929. She came from a small coal town named Freeman. My part of the family lives further south in GA these days but we well know how to be the laughing stock of the nation here as well as in WV. If Montani Semper Liberi is to truly ring true, then our children need to receive an education that means something, that is worth something that can carry them on in this world past camps that are deteriorating and mountain tops that are being removed. The Marcellus Shale can offer a future for some of these kids if we don't treat it like coal, and if we learn how to extract it safely. Both sides of this argument are lying to us, but the climate science has only one science behind it and ignoring this will only bring more financial and social degradation to WV. It's time

to enter the 21st century.
—**David Moore**
Acworth, GA

207. **Pauline Druffel**
Spokane, WA

208. **J Maurer**
Cincinnati, OH

209. My mother graduated from WVU in 1929. She came from a small coal town named Freeman. My part of the family lives further south in GA these days but we well know how to be the laughing stock of the nation here as well as in WV. If Montani Semper Liberi is to truly ring true, then our children need to receive an education that means something, that is worth something that can carry them on in this world past camps that are deteriorating and mountain tops that are being removed. The Marcellus Shale can offer a future for some of these kids if we don't treat it like coal, and if we learn how to extract it safely. Both sides of this argument are lying to us, but the climate science has only one science behind it and ignoring this will only bring more financial and social degradation to WV. It's time to enter the 21st century.

—**David Moore**
Acworth, GA

210. **Gay Dalzell**
Stewart, OH

211. **Bev and Dave Hannon**
Marion, IA

212. **Rita Kain**
Earlville, IL

213. **Diane Clement**
Los Osos, CA

214. **K Scott**
Bel Air, MD

215. **Karen Arrington**
Gainesville, FL

216. Do not turn science into propaganda - stick with the original scientist endorsed climate science standards.
—**John Kesich**
Venice, FL

217. **Joyce Banzhaf**
Grass Valley, CA

218. Science matters...Understanding it and accepting reality makes a difference. Let's use the best information possible to educate our children.
—**Janice Vakili**
Vancouver, WA

219. **Linda Herscher**
BIRCHWOOD, WI

220. **Mark Laity-Snyder**
Ferrum, VA

221. **John Stanfa**
Chicago Heights, IL

222. **I Smith**
West Hollywood, CA

223. **Paul Eisenberg**
Bloomington, IN

224. Today's kids are going to have to clean up the environmental mess we've created. Our political leaders and our corporations are lying. Our schools need to tell the truth.

—**Tom Leonard**
Boone, NC

225. **Robert Anderson**
Hampton, VA

226. **Gwyneth Bowman**
Ashland, OR

227. **Cheryl Whittaker**
Kennett Square, PA

228. **Maloney James**
New York, NY

229. **Mary Bristow**
Brentwood, TN

230. **Marlene Payette**
Gainesville, FL

231. **Ken Schulman**
Mundelein, IL

232. **Brenda Norris**
Brookhaven, PA

233. **Betsy Ruhe**
Louisville, KY

234. **Bert Miller**
Mount Pleasant, IA

235. **J Barringer**
Tucson, AZ

236. **Michael Zuckerman**
Philadelphia, PA

237. **Jim Snee**
Center Rutland, VT

238. **Irene Franck**
New York, NY

239. **Beate Lohser**
Oakland, CA

240. **Fran Ragan**
Gastonia, NC

241. **David Hawk**
Fairfield, IA

242. **David Hawk**
Fairfield, IA

243. **Jeff Phillips**
Shelburne, VT

244. **Harold Richardson**
Shrewsbury, MA

245. **Joan Andon**
Portland, OR

246. **Janet Robinson**
Boca Raton, FL

247. **Melvin Siegel**
Flushing, NY

248. **Robin Patten**
Oklahoma City, OK

249. **Becky Hall**
Iowa City, IA

250. **Lorraine Doherty**
Rochester, MN

251. **Mike Schmitz**
Bend, OR

252. Your great grandchildren will hold you in contempt if you continue to deny or pretend that human-induced climate change is not happening. Do some reading. This is not some liberal plot - it is about pollution and preserving God's beautiful creation for many, many more generations to come.
—**Stephen Kriz**
Osseo, MN

253. **Valerie Tucker**
Spring, TX

254. **Roth Woods**
Ann Arbor, MI

255. Climate science is irrefutable. It is science, not just whim or silliness. All you deniers say you're not scientists, so....let the scientists who HAVE studied climate change and its causes start getting the whole world on-board with the science!!!!

—**Georgia Carrasco**
Waukegan, IL

256. **Robert d.**
Olympia, WA

257. **Dennis O'Brien**
Milton, DE

258. **Richard Han**
Ann Arbor, MI

259. **Trudy kenny**
Reno, NV

260. **Frank Mazuca**
Lakeland, FL

261. **Pam Hasegawa**
Morristown, NJ

262. **Charles Connolly**
Carlton, GA

263. We ought to consider the work of Daniel Kahneman as an appropriate foundation for the type of thinking that underlies the lack of a consensus on climate change. Knowing how Type 1 thinking functions to render a belief system impervious to analysis may help us to plan effective counters to the what might be awaiting us in the schools.

—**Robert d.**
Olympia, WA

264. **Shirley Comes-Jeffrey**
McPherson, KS

265. **Robert Hooper**
Raymore, MO

266. **Ana**
Fort Lauderdale, FL

267. **Brett Fox**
Anacortes, WA

268. **Robert Drysdale**
Hanover, NH

269. **Ardeth Weed**
Edmonds, WA

270. **Cliff Parmer**
Saint Charles, MO

271. **Steve Yaffee**
Long Beach, CA

272. **Jonathan Memmert**
New York, NY

273. **Kerry Clark**
Reno, NV

274. **Sheila Ward**
San Juan, PR

275. **Michael Bondoc**
New York, NY

276. **Rhonda Bozovich**
Alton, IL

277. **James McConkey**
DeKalb, IL

278. **Katherine Goetz**
Lexington, KY

279. **Suzanne Kirby**
Sag Harbor, NY

280. **William Howald**
Marysville, WA

281. **Cynthia Doughty**
Port Charlotte, FL

282. **Alexander Honigsblum**
Dubuque, IA

283. **Ron Saderholm**
Summer Shade, KY

284. **Cherie Connick**
Crescent City, CA

285. **Marketa Anderson**
Lebanon, OH

286. **Sheri Rollison**
Novato, CA

287. **Laurenlee Lee**
Dorchester, MA

288. **Jenny Minier**
Lexington, KY

289. **Steven Larson**
Lewis Center, OH

290. **Nancy Salvatierra**
arlington, TX

291. **Rebecca Burmestet**
Raleigh, NC

292. **Deborah Lyons**
Oxford, OH

293. **Cindi Kestrel**
Loveland, CO

294. **Anne Ekblad**
Windsor, CO

295. **robert mayton**
Owensboro, KY

296. **la Alaniva**
South Padre Island, TX

297. **la Alaniva**
South Padre Island, TX

298. **Gregg Gaia**
Struthers, OH

299. **Tara Kerr**
Sylacauga, AL

300. **Tami Palacky**
Springfield, VA

301. **Richard Roe**
Brooklyn, NY

302. **Carla Weil-Martin**
Prescott Valley, AZ

303. **R Bridges**
Rancho Cucamonga, CA

304. **George and Mary Burazer**
Charlotte, NC

305. **Kathleen Kiely**
Branford, CT

306. **Tom Nulty Jr**
Dana Point, CA

307. **Patricia Blevins**
San Jose, CA

308. **Penelope Mazza**
FAIRFIELD, IA

309. **Daniel Cavanaugh**
Belleville, MI

310. **Lyle Funderburk**
Portland, OR

311. **Ric Zarwell**
Lansing, IA

312. **Don Waller**
Rio Vista, CA

313. **Stephen Hokanson**
Three Oaks, MI

314. **Nancy philips**
Norwich, VT

315. **Michael Rothstein**
Brooklyn, NY

316. **Susan Kohlhagen**
Saint Louis, MO

317. **Laurie Nichols**
Blandford, MA

318. **Patricia Grames**
Tucson, AZ

319. **Patricia Lent**
Royal Oak, MI

320. **Linda Alfredson**
Asheville, NC

321. **Joan Scofield**
Boise, ID

322. **Sandra Conlon**
Tarpon Springs, FL

323. **Barry Curran**
Riverside, CA

324. **Michael Lillian**
Brighton, MA

325. Ruth Kay Souder Red Hill, PA	342. Raymond Zahra Florissant, MO	360. Janice K Ponte Vedra Beach, FL
326. William Borgeld Boyne City, MI	343. Evan Krichevsky Potomac, MD	361. James Mickelson Rochester, MN
327. Enid Breakstone Manchester, CT	344. Jordan Van Voast Seattle, WA	362. David Beavers Ambler, PA
328. Neal Fuller Edmonds, WA	345. Milt Klaudt Clatskanie, OR	363. Erin Zerio Novi, MI
329. Nancy Ward New York, NY	346. John Alameda, CA	364. Todd Kahovec New Buffalo, MI
330. Jerry Charlson Oregon City, OR	347. Richard and Carolyn Rosenstein Los Angeles, CA	365. Henry Albert Elkins Park, PA
331. Frances Wade Bigfork, MT	348. Aki Alaraatikka Liminka	366. Frieda Brock Thousand Oaks, CA
332. Suzanne Peña Fullerton, CA	349. Gregory Joel Fort Worth, TX	367. James McManus Concord, NC
333. Subrata Sircar Sunnyvale, CA	350. Connie Lippert Seneca, SC	368. Glenda Gray Canton, GA
334. Russell Pesko Plainfield, IL	351. Gretchen Berger New York, NY	369. Deborah Hagerman Lansing, MI
335. Katrina Kay San Jose, CA	352. Tamsen Benson Olympia, WA	370. Betty Schuessler Tucson, AZ
336. Dave Frank Ankeny, IA	353. A Zamudio St. John, IN	371. Hope Farrior Bethesda, MD
337. Kevin Avery Ridgefield Park, NJ	354. Michele Smith RENO, NV	372. Felice Schlesinger Monroe Township, NJ
338. Betty Porter Moreno Valley, CA	355. Chris Calvert Philadelphia, PA	373. Jean Olivett Blue Hill, ME
339. Science will save the human race which includes almost no body in West Virginia. — Samuel Dunlap Stevenson, WA	356. John Peck Brunswick, ME	374. Jon Nelson Oxnard, CA
340. Scott Carroll Seattle, WA	357. Beth Darlington Poughkeepsie, NY	375. William Whitaker La Grande, OR
341. Victor Miiller Des Moines, IA	358. Dwight Krehbiel North Newton, KS	376. F Taylor Hilton Head, SC
	359. Ellen Edelman Chicago, IL	377. N Refes New York, NY
		378. Philip Sokes Palm Bay, FL

379. **Terry Butcher**
Chelsea, MI

380. **Patrick Murphy**
Long Beach, CA

381. **Teresa Carstensen**
Columbus, OH

382. **Dorothy Stoner**
Bartlett, IL

383. **Clayton Conway**
Seattle, WA

384. **Joan Raphael**
San Diego, CA

385. **Dehra Iverson**
Costa Mesa, CA

386. **Mary Breece**
Davison, MI

387. **Walter Dean**
Huntington Woods, MI

388. **Tom Brink**
York, NE

389. As a past West Virginia educator I support this note.
—**John sievers**
San Diego, CA

390. **Stephen Bartlett-Re**
San Francisco, CA

391. **Jeff Beck**
San Francisco, CA

392. An attack on climate science is basically an attack on science. If not for science we wouldn't have all the great medicines, cars and trucks, wonderful technology. Why do you want to eliminate science? Is the idea to become a third world country? Even if you want to deny human-accelerated climate change, we're nevertheless in an 8,000-year warming trend,

and that knowledge is brought to us by paleoecologists, archaeologists, climatologists and other SCIENTISTS.
—**Mike Bilbo**
Fort Stanton, NM

393. **Dana Quintel**
Scottsdale, AZ

394. **Andre Cavalier**
Winooski, VT

395. **Mary Bundy**
Hot Springs Village, AR

396. **Dan Miner**
Long Beach, CA

397. **David Kelm**
Oak Park, IL

398. **Sally Hurst**
Seattle, WA

399. **Cairns John**
Plymouth Meeting, PA

400. **Catherine Carlin**
Fairview Park, OH

401. **Terry Horowit**
Albany, NY

402. **Eileen Nelson**
San Jose, CA

403. **Lela Perkins**
Everett, WA

404. **Lana LaFata**
Florissant, MO

405. **Bruce Rutherford**
Steubenville, OH

406. **Heidi Zahrt**
Camarillo, CA

407. **Whitney Thorniley**
Oakland, CA

408. **Barbara Holcomb**
Cadmus, MI

409. **Lara Lorenz**
Seattle, WA

410. **Stanley Wecker**
lake city, FL

411. **Stephanie Holmes**
New York, NY

412. **Julie Squire**
Raytown, MO

413. **Kathleen Kuczynski**
Lake Forest, CA

414. **Janet Dougherty**
Schertz, TX

415. **Werner Fuss**
Tucson, AZ

416. **Susan Watts**
Riverside, CA

417. **Henry Rosenfeld**
Riverside, CA

418. **Lynn Wilbur**
Sitka, AK

419. **Claire Chambers**
Murrieta, CA

420. **Laura Epstein**
Kapolei, HI

421. **Joan Paul & Sullivan**
Ventura, CA

422. **Letitia Dace**
Miami, FL

423. **Jason Mocanu**
Stockton, CA

424. **Mark Choi**
Pittsburgh, PA

425. **Michael Prete**
Tucson, AZ

426. Refusing to educate4 students about the realities

of their world is professional malpractice. If the FFF [Fossil Fuel Fiends] are bribing some board members, just ignore them. Teaching anti-science will make your state appear ridiculous and jeopardize its economy.

—**Judith Burke**
Branford, CT

427. **Matthew McPike**

428. **Kevin Butler**
Littleton, CO

429. **Donald Priest**
Petoskey, MI

430. **Kathleen Heady**
Havertown, PA

431. **Tabatha chapman**
Nashua, NH

432. **Tabatha chapman**
Nashua, NH

433. **Rev Millard**
Newport News, VA

434. **Vincent Iazzetta**
Annapolis, MD

435. **Joan Ferrante**
New York, NY

436. **Kent Duren**
Eules, TX

437. **Gail Fiebig**
Cincinnati, OH

438. **Kent Henderson**
Nesconset, NY

439. **Deborah Judy**
Melbourne Beach, FL

440. **Jesse Ashcraft**
Lakeside Park, KY

441. **BARRY ROSEN**
STORMVILLE, NY

442. **Laura Carroll**
Saint Paul, MN

443. **James Cleland**
Warren, MI

444. **Kara Hodges**
Cassopolis, MI

445. **Rand Fazar**
Roanoke, VA

446. **Jan Hoffman**
Saginaw, MI

447. **Annette Gurdo**
Waterville, NY

448. **Veronica Gomes**

449. **Richard Sears**
New York, NY

450. **John GIBSON**

451. **Ajaesh Raj**
Not provided

452. **Peg LeClair**
Lee, MA

453. **Michael Sileno**
Greensboro, NC

454. **Mary Schultz**
New Brighton, MN

455. **John Felmey**
Swedesboro, NJ

456. **Savannah Butcher**
Norristown, PA

457. **Steven Kostis**
New York, NY

458. **Karen Karste**
Milford, CT

459. **Katy Scott**
Old Orchard Beach, ME

460. **Dianne Yonan**
Gaylord, MI

461. **Linda B. Carmichael**
Swainsboro, GA

462. **Larisa Moore**
Seattle, WA

463. **Bonnie Hearthstone**
Vergennes, VT

464. **Frederica Steller**
Lansing, MI

465. **Teresa Densmore**
Rotonda West, FL

466. **Justin Miracle**
Richmond, KY

467. **Margaret Rogers**
Redwood City, CA

468. **Phyllis Koerv**
Chapel Hill, NC

469. **Chris Carroll**
Chickasha, OK

470. **Mobi Warren**
San Antonio, TX

471. **Ilsa Lottes**
Ellicott City, MD

472. **Scott Benson**
Marion, IA

473. **Sarah Lindholm**
Carrollton, TX

474. **Jacqueline Strzesak**
Beverly, MA

475. **Carlos Correia**

476. **William Cox**
Grosse Pointe, MI

477. **Claire Morgan**
Lafayette, LA

478. **Don Hawkins**
Pittsburgh, PA

479. **Dina Warner**
Stroudsburg, PA

480. **Wendy**
Brighton, MA

481. **Taran Wender**
San Jose, CA

482. **Kristin Osterhoff**
Muncie, IN

483. **Kristin Osterhoff**
Muncie, IN

484. **Kristin Osterhoff**
Muncie, IN

485. **Kristin Osterhoff**
Muncie, IN

486. **John Hendricks**
Albany, NY

487. **Barb Leahy**
Brighton, MI

488. **Joanna Stalker**
Margate, FL

489. **Anita Gilbride-Read**
McKinleyville, CA

490. **Jeannie Steele**
Manitou Springs, CO

491. **Amy Douglas**
Socorro, NM

492. **Timothy Mieyal**
Parma, OH

493. **Nathan Savin**
Iowa City, IA

494. **Rick Baumhauer**
West Haven, CT

495. **Leo Durte**
Salem, OR

496. **Richard Glass**
Eugene, OR

497. **Carl Gershenson**
Somerville, MA

498. **Sally Jacques**
Austin, TX

499. **Brian Daily**
Blacksburg, VA

500. **Carol Severe**
Las Vegas, NV

501. **K G**
Orting, WA

502. **Sandra Silva**
chicago, IL

503. **Martha Lee**
Marshfield, WI

504. **Marge Fear**
Cleveland, OH

505. **Melanie dupre**
Providence, RI

506. **Patrick Metzger**
New York, NY

507. **Brooke Newell**
Jay, NY

508. **James Gramm**
Norfolk, VA

509. **Brad Carnes**
Huntsville, AL

510. **Audrey Liebl**
Springfield, MA

511. **Brian Beuerlein**
Kansas City, MO

512. **Amy Landis**
Oakland, CA

513. **Bonnie Bernstein**
Dobbs Ferry, NY

514. **Nanci Nelson**
Tucson, AZ

515. **Andrew Axelrod**
New York, NY

516. **Peter Townsend**
Ashland, MA

517. **Thomas Brenner**
Hollidaysburg, PA

518. **Christopher Valentino**
Huntingdon Valley, PA

519. **Arshad Ameen**
Memphis, TN

520. **Mildred Gordon**
Oceanside, CA

521. **Charles Kinsey**
Fort Wayne, IN

522. Hello... it's 2015. Get
this right!
—**David Perkins**
Santa Fe, NM

523. **Lisa Shroyer**

524. Teaching fantasy will
prepare WV students to vote
Republican.
—**Mitchell Diamond**
Sunnyvale, CA

525. **Ron Gary**
Chicago, IL

526. **Patricia Parker**
Lewisburg, PA

527. **Berton Stevens**
Las Cruces, NM

528. **Andrea Gillespie**
Jonesboro, AR

529. **Alan Musnikow**
Lexington, MA

530. **R Danek**
Lawrence Township, NJ

531. **Henry Weinberg**
Santa Barbara, CA

532. **Elena C**
Bayside, NY

533. **Gay Carroll**
evansville

534. **George Kauffman**
Fresno, CA

535. **June Stepansky**
Woodland Hills, CA

536. **Ryan Burgess**
Glen Ellyn, IL

537. **Jimmie Colburn**
Stockton, CA

538. **Cathy Trick**
Asheville, NC

539. **Andrea Zajac**
Williamston, MI

540. **Beatrice Michot**
Lafayette, LA

541. **Philip Myers**
Ann Arbor, MI

542. **James Ploger**
Seattle, WA

543. **Earl Lippold**
Lakewood, CA

544. **Grace Garrigan**
Charlottesville, VA

545. **Robin Craft**
Plain City, OH

546. **Geoff Drumm**
Chino Valley, AZ

547. **Kim silva**
Hartford, CT

548. **Daniel Levitt**
New York, NY

549. **Janet Maker**
Los Angeles, CA

550. **Joan Balfour**
Boynton Beach, FL

551. **Fran Watson**
Spring Valley, CA

552. **Kenneth Huey**
Portland, OR

553. **Luis Lozano**
Long Beach, CA

554. **Elizabeth Floersch**
Laughlin, NV

555. **Carol Thomas**
Aromas, CA

556. **Carol Thomas**
Aromas, CA

557. **Ray Couture**
Seatac, WA

558. **Carole Pappas**
Grand Blanc, MI

559. **Jeremy Kaplan**
West Bloomfield, MI

560. **Stefanie Holmes**
Oak Ridge, TN

561. **Bert Goff**
New Milford, CT

562. **John Conrad**
West Chester, PA

563. **Elaine Walsh**
Montclair, NJ

564. **Susan Shaak**
Reading, PA

565. **Roger Shilling**
Columbus, MS

566. **Frank Prideaux**
Saint Charles, MO

567. **Mehdie Vakili**
Waukegan, IL

568. **Camille Vardy**
Mountain View, CA

569. **Albert Nickerson**
Biddeford, ME

570. **Heather Payne**
Chapel Hill, NC

571. **Harriet Grose**
Morristown, NJ

572. **Nicholas Craig**
Ann Arbor, MI

573. **Jane Alexander**
Wilton, CT

574. **Cecilia
Gaines-Williams**
Miami, FL

575. **Rachel Wyon**
Cambridge, MA

576. **Margie Borchers**
Santa Barbara, CA

577. **Jeffrey Hurwitz**
San Francisco, CA

578. **Daniel Huser**
Chattanooga, TN

579. **Marcay Dickens**
Goshen, IN

580. **Carolyn Schellhorn**
Ardmore, PA

581. **Terry Anderson**
Lawrenceburg, KY

582. **Zygmunt Czykieta**
Chicago, IL

583. **Regina Flores**
Lake Elsinore, CA

584. **Casey Vickstrom**
EVANSTON, IL

585. **T Mitchell**
New York, NY

586. **Leigh Walker**
Atlanta, GA

587. **ken bobrow**
walla walla, WA

588. **George Bebensee**
Georgetown, KY

589. **Meghan Smith**
Bainbridge Island, WA

590. **Frank**
Tucson, AZ

591. Billy Ibarra blountsville, AL	610. Murray Jankus Morrisville, PA	629. Pamylle Greinke Peconic, NY
592. Keith Chapman London, OH	611. Rayna Caldwell Saratoga Springs, NY	630. Carolyn Shaw Middletown, CT
593. Allan Alexander Tucson, AZ	612. Anna Klene Missoula, MT	631. Fritzi Redgrave union bridge, MD
594. Shereen Hawkins Huntington Beach, CA	613. Robert Ewing Ames, IA	632. Susan Tocha Alden, NY
595. Beatrice Lacroix	614. mary Onufer	633. Ron Flax Boulder, CO
596. Kerry McGee Whippany, NJ	615. Joseph Klimovitz Hesperia, MI	634. Mayellen Henry Bellevue, WA
597. Taggart Howland Portland, OR	616. Patrick Keller Champaign, IL	635. Amy Ryberg Farmington Hills, MI
598. Rebecca Grayson Silver Spring, MD	617. Marisa Gonzalez San Antonio, TX	636. Katrin Rosinski Roseville, MI
599. Bob Culpepper Reno, NV	618. Arthur noble Bandon, OR	637. Irene Fabin New York, NY
600. Matt Burns Grand Rapids, MI	619. William Dudley Jackson, NJ	638. Brian Osborne Nyack, NY
601. Jake Terpstra Grand Rapids, MI	620. T Cho Bklyn, NY	639. Lori Snyder New Oxford, PA
602. Dameon Torrey Atlanta, GA	621. Allison Fradkin Northbrook, IL	640. Merrill Cole Macomb, IL
603. Thad Danielson Cummington, MA	622. Timothy Hyles Arcata, CA	641. Margaret Loomis Silver Spring, MD
604. Kate Kenner Jamaica Plain, MA	623. Lowell Gilbert Moline, IL	642. Lawrence East Jacksonville, NC
605. Eve Swiacki Philadelphia, PA	624. Jim Thompson Knox, PA	643. Paul Martin Danvers, MA
606. Brian Hartman Falls Church, VA	625. Lola Quinlan Fort Collins, CO	644. Denis Graves North Chesterfield, VA
607. Lea Thomas Bedford, NH	626. Sean Wayland Rohnert Park, CA	645. Ram Nair Farmington Hills, MI
608. Lillian Sills Dallas, TX	627. Kae Toguchi Mililani, HI	646. John Wert Wailuku, HI
609. Ken Klein Dallas, TX	628. Steven Prchal Tucson, AZ	647. E White Chattanooga, TN

648. **Michael Sarabia**
stockton, CA

649. **Jeff Hight**
Winston Salem, NC

650. **Eric Mattei**
Canoga Park, CA

651. **Shanna Dean**
Honolulu, HI

652. **Robert DiGiovanni**
Monterey, CA

653. **Dennis Steussy**
Des Moines, WA

654. **Dave Gliva**
Joliet, IL

655. **nick evans**
San Tan Valley, AZ

656. **J Smith**
Simpsonville, KY

657. **Kathy Aprile**
Califon, NJ

658. **Charles Cutler**
Rochester, MA

659. **Chris Saia**
Brooklyn, NY

660. **Jeannine Powers**
Denver, CO

661. **Marianna Mejia**
Soquel, CA

662. **Cathy Lewis-Dougherty**
Lake Oswego, OR

663. **Veronica Laney**
Austin, TX

664. **Joanne Wagner**
Madison, WI

665. Children need to know everything they can learn about the world they will

inherit.
—**Kristina Turechek**
Otego, NY

666. **Heather Adams**
Galena, OH

667. **J Beverly**
Urbana, IL

668. **Kathy Oppenhuizen**
West Olive, MI

669. **John Nelson**
Livingston Manor, NY

670. **Joyce Schulte**
Columbia, MO

671. It is inherently important that today's learners understand the fundamental aspects of weather and climate on a planet whose atmospheric content is rapidly changing.

—**Pierre de St. Croix**
Beaufort, NC

672. **Jane Wilson**
Oregon City, OR

673. **Judith DiNardo**
Stow, OH

674. **Cathy Scott**
Seattle, WA

675. **Jean Hulme**
Iowa City, IA

676. **William Mathews**
Rochester, NY

677. **MR. & MRS. BRUCE REVESZ**
Cedar Grove, NJ

678. **Maureen O'Neill**
Bandon, OR

679. **Beth arndtsen**
Medfield, MA

680. **S Smith**
New York, NY

681. **John Sachse**
Tucson, AZ

682. **Diane Cribley**
Elizabeth, CO

683. **Lauren Webster**
Oakland, CA

684. **Juliana Mazzeo**
Lynbrook, NY

685. **Iouis Ballou**
Lakewood, OH

686. **Sergio Rivera**
Chicago, IL

687. **LaVece Hughes**
Nicholasville, KY

688. **Avis Deck**
Andover, KS

689. **Scott Bishop**
Olympia, WA

690. **Patrick Jacobs**
Longmont, CO

691. **Barry Werber**
Pittsburgh, PA

692. **Chad Ransom**
Hatfield, PA

693. **Ellen Franzen**
Berkeley, CA

694. **Devin Henry**
Nichols, NY

695. **Elizabeth Iattanzi**
Montgomery, AL

696. **Mary Cunningham**
Manassas, VA

697. **Marilyn Hawthorn**
Bettendorf, IA

698. **Barbara MacAlpine**
San Antonio, TX

699. **Garrett Butler**
Medford, MN

700. **Kathleen Crespo**
Cayey, PR

701. **Elizabeth Klein**
Dallas, TX

702. **Claire McKay**
Austin, TX

703. **Mark Donaldson**
Melbourne, FL

704. **J Johnson**
Vancouver, WA

705. **Janet Matthews**
Rockville Centre, NY

706. **John Curry**
Bellows Falls, VT

707. **Stephan Armstrong**
Watson town, PA

708. **Pat Brooks**
Houston, TX

709. **Jack Neilly**
Delray Beach, FL

710. **Jack Neilly**
Delray Beach, FL

711. **Craig Mirijanian**
Van Nuys, CA

712. **Joe Neumann**
Seattle, WA

713. **Craig Mirijanian**
Van Nuys, CA

714. **Elizabeth Klein**
Dallas, TX

715. **Cave Man**
Newburgh, NY

716. **Katie Levine**
Los Angeles, CA

717. **Rachel Hangley**
East Falmouth, MA

718. **Les Rees**
Tempe, AZ

719. **Shawnee Overcast**
Champaign, IL

720. If you are educators, you must educate! The science is clear:the climate is changing for the worse, it will affect adversely our planet and humans are largely responsible. Please support the adoption of accurate science standards!
—**Carol Devoss**
Saint Charles, IL

721. **Greg Rich**
Shawnee, KS

722. **Christine Koehler**
Vineland, NJ

723. **Robert Charleston**
St John, VI

724. **Linda DeMartini**
Scappoose, OR

725. **Lisa Kavanaugh**
Oberlin, OH

726. **Marianne Lappin**
Las Cruces, NM

727. **Eric Lezotte**
Denver, CO

728.
Dgvanarsdale@livecom
vanArsdale
Burlingame, CA

729. **Heather Haverfield**
Langley, WA

730. Our children absolutely must be educated about climate change since they are the ones that will have to live with the consequences of the failure on the part of our government to address the disastrous effects on our

earth created by the energy companies and other polluters.

—**Suzanne Wood**
Three Rivers, MI

731. **A Raiser**
Saint Johns, FL

732. **Joel Baker**
San Jose, CA

733. **Daniel Chrest**
Canton, OH

734. **George Milkowski**
Chicago, IL

735. **Melinda Zuerlein**
Carlsbad, CA

736. **Joshua King**
Gordonsville, VA

737. **Cathy Bledsoe**
Portland, OR

738. Science should be taught in schools. What you teach in Sunday School is up to you.
—**Rachel Scarlata**
Divide, CO

739. **Liza Lorwin**

740. **Carol Mock**
Fremont, CA

741. **Michael Daniels**
Manassas, VA

742. **Bruce Doxey**
Zephyr Cove, NV

743. **RN Bryn Hammarstrom**
Middlebury Center, PA

744. **Robert Petty**
Lompoc, CA

745. **Steve Bubbenmoyer**
Rehoboth Beach, DE

746. Our children deserve to learn climate science in school!

—**Carol Gehl**
Chippewa Falls, WI

747. **Alix Keast**
New York, NY

748. **Michael McCauley**
cedar rapids, IA

749. **Alexander MacInnis**
Mountain View, CA

750. **Cathy Bledsoe**
Portland, OR

751. After years -- almost two decades -- of media and official debates about the veracity of climate change data, we seem to be on the verge of some grudging consensus. Those continuing to deny the science will more and more become outliers. There will soon be two groups of people: the large majority who have always known or have now come to accept the accuracy of complex climate change data, and the small but vocal minority who GET PAID by corporations and industries to muddy the waters in order to maintain profits. They are steering us toward disaster. However, those days are drawing to a close. Which group will you find yourself in? I've been on the side of James Hansen, Bill McKibbin and others from day one. They understand the science and the truly grave implications if government continues to procrastinate and allow vocal parties to continue to deny and lie. The education of children must create leaders who can

innovate and prepare. They cannot do so if they are subjected to industry-approved lies.

—**Mark McKennon**
Brooklyn, NY

752. **Fred Reiner**
Lewisburg, PA

753. I thought the goal of education was to inform, not to dumb down. I guess I was wrong. FYI, this is not the 19th century. Get with the program and teach science - unbiased, unfiltered and unrestrained.

—**David Brotman**
Gold River, CA

754. **Anita Waters**
Louisville, KY

755. **Megan Faber**
Denver, CO

756. **Stefan Shoup**
Marion, WI, WI

757. **John O'Connell**
Croton on Hudson, NY

758. Children are Waaaay ahead of the curve. Get up-to-par with climate science West Virginia. The science is already available to West Virginia students online, so you need to adopt this and discuss it with your students for the future.

—**Adrian Tafolla**
San Bernardino, CA

759. **Daniel Giesy**
Norfolk, VA

760. **Jeff Silvani**
Bellaire, MI

761. **Jeffry Yaplee**
Seattle, WA

762. **Russell Griffin**
Wilmington, IL

763. **Walter Custer**
The Sea Ranch, CA

764. **Pamela Cubberly**
Morgantown, WV

765. **Dan Fischbach**
Cherry Hill, NJ

766. **Wright Salisbury**
Lexington, MA

767. The money-grubbing scum don't even care about their own kids or grand kids. To them, the almighty dollar trumps everything. You have a chance to say no to that. Is there anything left in this country that's sacred and above greed? You have an opportunity to answer that question.

—**Gill Fahrenwald**
Olympia, WA

768. **Earl White**
Kent, WA

769. **Harvey Picker**
West Hartford, CT

770. **Joyce Niksic**
Hammond, IN

771. **Natasha Hopkinson**
San Francisco, CA

772. **Trevor Culhane**
Providence, RI

773. **Matthew Haugen**
Chicago, IL

774. **Nicolas Caballero**
Hazard, KY

775. **George Ferrell**
Santa Monica, CA

776. **Jessie Thomas**
Dallas, TX

777. **Herb Sayas**
New Orleans, LA

778. **David Zahrt**
Carson City, NV

779. Science education must involve the consensus and data of the best scientists in the field, and never mere opinions of nonscientists with an anti-science agenda.

—**Carol Steinhart**
Madison, WI

780. **Omar Beqaj**
Woodside, NY

781. **Marcus Lackey**
Nashville, TN

782. **Audrey Moskowitz**
Philadelphia, PA

783. Science is science and should not be politicized. The original standards are based on fact. Do the right thing and adopt them.

—**Timothy Barr**
Manassas, VA

784. **Virginia Wood**
Boulder, CO

785. **Matthew Kaminker**
Portland, OR

786. **Edward Dowgiallo**
Tall Timbers, MD

787. Time for WV to join the fact-based community.

—**Allen Hengst**
Washington, DC

788. **Terrance Shoemaker**
Parker, CO

789. Currently I'm the outreach director at MIT's Center for Environmental Health Sciences, working hard to create educational tools for teaching about

climate change and air pollution. I also spent 16 years as a 6th grade science teacher in the public schools. Please help the next generation start off learning climate change science from our best scientific minds! This is the world they will inherit. We owe the truth to them.

—**Kathleen Vandiver**
Lexington, MA

790. **Gustavo Sandoval**
San Mateo, CA

791. **Brooke Crowley**
Cincinnati, OH

792. **Nancy Snell**
Kalamazoo, MI

793. **William Stern**
Euclid, OH

794. **John Griffith**
Sequim, WA

795. **David Walker**
Avondale, AZ

796. **Don Stocker**
Naples, FL

797. **Edward Dowgiallo**
Tall Timbers, MD

798. **Carol Affleck**
Seattle, WA

799. **Terry Talbot**
Grand Junction, CO

800. **Margy Halpin**
Mc Lean, VA

801. **Cynthia Scott**
South Beach, OR

802. **Jeff Silvani**
Bellaire, MI

803. **Michael Putrelo**
Sauquoit, NY

804. **Esther Garvett**
Miami, FL

805. **Vanessa richie**
Vancouver, WA

806. **Loretta Larkin**
Jersey City, NJ

807. As a Christian and someone who appreciates the knowledge science offers, I urge West Virginia to honor science's guidance on our climate situation.

—**Chara Armon**
Wallingford, PA

808. My wife is a West Virginia native, so we feel we have a vested interest in how well she's doing in what are always pretty rough times in those beautiful hills. Please don't let politicians or those who believe they alone know God's will to force mis-education of West Virginia's next generation. Trust God to make His will known in His way.

—**Maynard Jerome**
Channahon, IL

809. **Edward Dowgiallo**
Tall Timbers, MD

810. **Antonella Antonini**
Bellingham, WA

811. **Christopher Key**
Bellingham, WA

812. **Stephanie Gaffney**
Gilroy, CA

813. **Michael Traa**
Cardiff by the Sea, CA

814. **Robert Gammon**
Hyattsville, MD

815. **Barbara Wyly**
Belmont, MA

816. **Jacqueline Tessman**
Benton Harbor, MI

817. Promoting unscientific views sabotages not only our young, but it weakens our nation. For those who are ill educated will never be able to become engineers and other professionals who create those things that makes our nation a strong world leader.

—**Stephen Villano**
Ridley Park, PA

818. **Tracey Miller**
Rockville, MD

819. **Cas ooverton**
Henrico, VA

820. **Teresa Daylight**
Denver, CO

821. **William Collier**
Daytona Beach Shores, FL

822. **Elizabeth Veillette**
Holyoke, MA

823. **Rev Dele**
Victoria, VA

824. **Mark Grzegorzewski**
Largo, FL

825. **Kris Rivard**
Sterling Heights, MI

826. **Tom Shearin**
Lexington, KY

827. **Elizabeth Calhoun**
Livonia, MI

828. **Debbie Slack**
Lynchburg, VA

829. **Mary Loomba**
Valhalla, NY

830. **Esther Garvett**
Miami, FL

831. **Judy Bochner**
College Station, TX

832. **Yolanda Mitchell**
Tucson, AZ

833. **John Gazurian**
Baltimore, MD

834. **Barbara Darling-Smith**
North Weymouth, MA

835. **Michael Miller**
Philadelphia, PA

836. **Fernand Ortiz**
Iowa City, IA

837. **Susan Leskiw**
Eureka, CA

838. **Cami Cameron**
Vancouver, WA

839. **John Csaszar**
Fleetwood, PA

840. **Susanne Hartwell**
Spokane, WA

841. **Rhonda Wright**
Atlanta, GA

842. It is both important and necessary to maintain a standard for the practical knowledge scientific inquiry requires; and the field of biology will be all the better if we cease catering to the religious agendas of oppressive institutions.

—**Peter Buller**
Portland, OR

843. **Michael Sasson**
Oakland, CA

844. **Sharyn Dreyer**
Denver, CO

845. **Annette Cleary**
Chelmsford, MA

846. **Linda Hoffmann**
Ithaca, NY

847. **Collette Halford**
Chippewa Falls, WI

848. **& Garner**
Colgate, WI

849. **David Nichols**
Portland, OR

850. **Patrick Beger**
Ann Arbor, MI

851. **Jane Roth**
Lexington, KY

852. **Chad Hillesland**
Tulsa, OK

853. **Evan Robertson**
Shawnee, OK

854. **Gertrude Robinson**
McDonough, GA

855. **Gary Jarvi**
Jerome, MI

856. I don't see how there should even be a question about this. Isn't education about learning about our world? Why would you teach someone something that isn't true and based on fact?

—**Bettie Fisher**
Dexter, MI

857. **Emily Hall**
Birmingham, AL

858. **John Brannan**
Denver, CO

859. **Lee Powelson**
Anchorage, AK

860. **William DeVault**
Sterling, VA

861. Science is not a matter of opinion. West Virginia politicians doesn't get to

chose what science they like. Your students need to be taught the science that more than 97% of the tens of thousands of climate scientist around the world agree on, not some nonsense that a few politicians and the coal industry in West Virginia have dreamed up because they can't face reality.
—**Richard Stuckey**
Chicago, IL

862. **Jim Lockhart**
Portland, OR

863. **Mark Ronning**
Overland Park, KS

864. **Edward Sprague**
Fort Lauderdale, FL

865. **Mary Olson**
Bethesda, MD

866. **Janet Carmichael**
Shawnee, KS

867. Appalled at the duplicity of the US in not giving the next generation, who will have to live with our mistakes, the tools needed to rectify the greed and ignorance we have fostered.
—**Judith Joy**

868. **John Spragins**
Clemson, SC

869. **James Hollomon**
Everett, MA

870. **Nannette Taylor**
Damascus, OR

871. **Alex Leaven**
Ann Arbor, MI

872. **Charles DeLancey**
Newark, OH

873. **Chris Krusa**
Glen Carbon, IL

874. **Kate Bartholomew**
Berkeley, CA

875. **Vicky Brandt**
New York, NY

876. **steven Presley**
Chaplin, CT

877. **Art Vatsky**
Teaneck, NJ

878. **A Zumchak**
Utica, NY

879. **Mary Tullock**
Rohnert Park, CA

880. **George Sjoberg**
Duxbury, MA

881. **Ann Eastman**
Littleton, MA

882. **Mary Luckey**
Oakland, CA

883. **Helen Curtis**
Spokane, WA

884. **Helen Curtis**
Spokane, WA

885. **Nick cordero**
Cave Springs, AR

886. **Byron Roe**
Ann Arbor, MI

887. **William Sharfman**
New York, NY

888. **Jonathan Potter**
Greeley, CO

889. **George Chambers**
Salt Lake City, UT

890. **George Chambers**
Salt Lake City, UT

891. **Barbara Sinclair**
Ypsilanti, MI

892. **Barbara Sinclair**
Ypsilanti, MI

893. **Addilade Windsor**
Ranchos de Taos, NM

894. **Suzanne Fournal**
Macks Creek, MO

895. **Jo Buxbaum**
Palatine, IL

896. **Glenn Freeman**
Grand Rapids, MI

897. **Kathy Hart**
Succasunna, NJ

898. **Bruce Justice**
Austin, TX

899. **beverly
williamson-pecori**
Mc Kees Rocks, PA

900. **Sustainable Initiative**
Kailua Kona, HI

901. **Danny Blitz**
Cupertino, CA

902. **J Rexroth**
Olympia, WA

903. **Joy LaClaire**
Bozeman, MT

904. **Christina Dias**
Irwin, PA

905. **Penny Altman**
Sharon, MA

906. **Maurene McGrain**
Gloucester, MA

907. **Marc Santora**
Takoma Park, MD

908. **Christine Mahon**
Westwood, MA

909. **Catherine Apostle**
Minneapolis, MN

910. Kenneth Large Harbor Springs, MI	925. Julie palumbo Seattle, WA	942. Debra Madison, WI
911. Deborah Greenblatt Avoca, NE	926. Cindra Sims Clinton Township, MI	943. Elisa Evett Brooktondale, NY
912. Donald and Lee Thwing East Tawas, MI	927. Charles buyrn Portsmouth, VA	944. Carolyn Norr Oakland, CA
913. Jeannie Cerulean Lupton City, TN	928. Claudia Gibson Fairfax, CA	945. Gloriana Sewell Milford Square, PA
914. Paul Carmi Saint Louis, MO	929. My wife works at an institution that is tasked with studying the climate. This is a simple matter of protecting the teaching science, period. — Jon Stubbs Lafayette, CO	946. mark Lovasz clio, MI
915. Hilton Bakker Dickinson, ND	930. Janice Carlson Las Vegas, NV	947. Marsha Malone Chino, CA
916. Nancy Krempa Davisburg, MI	931. Wilma Hendriks	948. RoswithaLugauer Lugauer Ann Arbor, MI
917. Reed Williams Reno, NV	932. Mark Waltzer Cherry Hill, NJ	949. Bob Clark St Joseph, MI
918. Susan Davenport Simi Valley, CA	933. Jane Schreiber Blanco, NM	950. Matt Kovalski Lubbock, TX
919. Jared Howe Seattle, WA	934. Patricia Williams Lewes, DE	951. Bob Zai Cincinnati, OH
920. Richard Arthur Phoenix, AZ	935. Michelle Cook Mound, MN	952. Joanne Hart Worcester, MA
921. Simply denying a fact that has been strongly supported by well documented, qualified scientific studies over many years does not nullify that fact - it just puts a wall in front of those who wish to take action to try to control the damage. — Martha Thomae Uwchland, PA	936. Cynthia Simpson Mission, KS	953. Shaina Leguizamon Riverview, FL
922. Brooke Kane Mc Lean, VA	937. Rebecca Kimsey Sublimity, OR	954. Dennis O Hoffman Est, IL
923. Patricia Williams Lewes, DE	938. Ann Lazaroff Edmonds, WA	955. Elisa Evett Brooktondale, NY
924. Pamela Cubberly Morgantown, WV	939. Jeanne Berea, KY	956. Lynn and Edward Red Feather Lakes, CO
	940. Jeanne Berea, KY	957. Adrian Tallent Anderson, SC
	941. Dwight Finkel Gold Canyon, AZ	958. Amanda Gilliam-Rose Leitchfield, KY
		959. Irene Philips Richmond, VA

960. **Dennis Dowell**
Fort Madison, IA

961. **Mary McFarland**
Keswick, VA

962. **Christian Bookter**
Goldendale, WA

963. **Richard Ouren**
Muscod, WI

964. **Gary McCuen**
Salem, OR

965. **Jamie Bartlett**
Pelham, AL

966. **George Reinhardt**
Fort Bragg, CA

967. **R Brown**
Reston, VA

968. Students should be taught the truth. We need a truly educated population not one who doesn't even believe dinosaurs once roamed the earth or understand our current climate situation.
—**Lynlee Edkins**
Burbank, CA

969. **Meg Dugan**
Tucson, AZ

970. **Paul Sanderson**
Ninole, HI

971. **David Ulibarri**
Chicago, IL

972. **Ron Weber**
Springfield, OH

973. **Margo Lesser**
Birmingham, MI

974. It is critically important that the youth of West Virginia be taught true science. They will not be equipped to take their

place in society and make decisions about their environment if they do not have the knowledge needed. I realize a lot of West Virginians depend on the coal trade for employment and there is fear about job losses in the energy trade. My father was born in Morgantown, WV. His father died of Black Lung, and he lost uncles to death working in the mines. I've been back there and I have seen firsthand some of the fracking devastation of one of the most beautiful places I have ever been. These woeful scars on the land could easily be turned into wind generator fields or solar arrays and miners can be taught new trades that are good for the environment and their own health and well being. I strongly urge you to do your true job, honestly educate your children.
—**Valerie Justus-Rusconi**
Watsonville, CA

975. **Catherine Cowan**
Grove City, OH

976. **Irene Bensinger**
Eatonville, WA

977. **Carles Bonavida**
Gibbstown, NJ

978. **Gene Gossett**
Portland, OR

979. **Sheila Schmeling**
Centennial, CO

980. **Kitty sheehan**
Thousand Oaks, CA

981. **John McCarthy**
Berkeley, CA

982. **Alan Carroll**
Abilene, KS

983. **Gene Grabiner**
Buffalo, NY

984. **Mark Cappetta**
Rancho Mirage, CA

985. **Genevieve Guzman**
Iowa City, IA

986. **James DeKay**
North Hollywood, CA

987. **Carol DeAntoni**
Crestone, CO

988. **Judy Embry**
North Adams, MA

989. **Margaret Goodman**
Glen Mills, PA

990. **Doug Wilson**
Little Deer Isle, ME

991. **Dan Finkle**
San Francisco, CA

992. **Lyn Miller**
Denver, CO

993. **Lora Malloy**
Springfield, KY

994. **Matthew Caretti**
Mercersburg, PA

995. **Angel Torres**
Oviedo, FL

996. **Robert Simmons**
Wadsworth, OH

997. **Ken Scheffer**
Olathe, KS

998. **Charlie Muskat**
Berlin, MD

999. **Vernon and Mary Dixon**
Hiawassee, GA

1000. **Robert Vodicka**
Ann Arbor, MI

1001. **Steve Campbell**
Eugene, OR

1002. **Claude Cornett**
Cleveland, OH

1003. **Howaes Weiss**
Wenonah, NJ

1004. **Emily Gross**
Houston, TX

1005. **William Geoghegan**
Santa Fe, NM

1006. **Jason Nardell**
Longmont, CO

1007. **Tami Linder**
Mountainair, NM

1008. **Cam Smith**
Cedar Falls, IA

1009. **Lesley Lusher**
Lancaster, KY

1010. **Kristin Green**
Sault, MI

1011. **Randy Dunton**
Phoenix, AZ

1012. **Roger Levine**
Los Angeles, CA

1013. **Jane Herron**
Franklin, TN

1014. **Richard Barnes**
Lynchburg, VA

1015. **Sherri Doiron**
Royse City, TX

1016. **Vivian Schatz**
Philadelph, PA

1017. **Tracy Soule**
South Lake Tahoe, CA

1018. **Kristin Rosenqvist**
Reno, NV

1019. **Nancy Wall**
Tucson, AZ

1020. **Kenneth Bickel**
Pittsburgh, PA

1021. **George Hare**
East Lansing, MI

1022. **Clyde Williams**
Portland, OR

1023. **John Lopez**
Reno, NV

1024. **Jennifer Zielinski**
New Providence, PA

1025. **Gerritt and Elizabeth Baker-Smith**
East Stroudsburg, PA

1026. **David Myers**
Framingham, MA

1027. **Robert Miller**
Portland, OR

1028. **Ja'Meka Armstrong**
Detroit, MI

1029. **Karen Joseph**
Grand Rapids, MI

1030. **R Guthrie**
Athens, AL

1031. **Paula Serraller**

1032. **Cindy Koch**
Long Beach, CA

1033. **Kevin Macdonald**
Belgrade Lakes, ME

1034. **Robert Rohner**
Groveport, OH

1035. **R Nielsen**
Cambria, IL

1036. **Chuck Atkinson**
Charlevoix, MI

1037. **Timothy Dunn**
Babylon, NY

1038. **Julia Amsler**
Clarion, PA

1039. **Alexander Wall**
Bellingham, WA

1040. **Kara Graul**
Houston, TX

1041. **David Klingel**
Pinckney, MI

1042. I am a scientist, a facts and figures person. I am also a mother and grandmother. The idea that truth will not be taught is appalling to me. The very health of this planet depends on the next generation knowing how to fix things for themselves.
—**Rose Bertrand**
Madison, WI

1043. **Gerald Mascavage**
Kennesaw, GA

1044. **Lee O'Brien**
Fort Collins, CO

1045. **Norman Baker**
Sequim, WA

1046. **Jill Koch**
Scottsdale, AZ

1047. **Glenn Williams**
Mystic, CT

1048. **Sandi Cornez**
Portland, OR

1049. **Brian Meadows**
West Chester, PA

1050. It is absolutely crucial that we teach our kids accurate scientific information about climate change. The vast majority of peer-reviewed climate science indicates that global warming is happening and that human activities are the cause. The next generation

must not be kept in the dark about these facts. They must be taught the truth since they will have to learn to make the social adjustments necessary for humans to have a prosperous economy without inflicting serious damage on the planet's ecosystems. Human health and survival depends on the health of the Earth: clean air, clean water, and sustainable energy for our communities.

—**Brian Gunn**

Auburn, WA

1051. **Ursula Neal**
Seattle, WA

1052. **denise Heikinen**
Houghton, MI

1053. **Mostyn Thayer**
Port. St. Lucie, FL

1054. **Paul Ramos**
Solvang, CA

1055. **Grant Power**
Beverly Hills, CA

1056. **Ron Melander**
Minden, NV

1057. As a teacher for over 40 years, I know how vital it is that we be honest with our students. The scientific evidence is clear and compelling. Most students already understand what is happening (sometimes more-so than their parents!). Our credibility as teachers and representatives of society is on the line. Please make sure that real science is being taught, not political talking points.

—**Tom Pipal**

Tulsa, OK

1058. **Nina Aronoff**
Jamaica Plain, MA

1059. **Billy Kemp**
Tacoma, WA

1060. **Richard Bradus**
San Francisco, CA

1061. **Randall Lee**
Fresno, CA

1062. **W**
Chicago, IL

1063. **Norma Fitzpatrick**
Milford, CT

1064. **Jane Travis**

1065. **Saran Kirschbaum**
Los Angeles, CA

1066. **Jeff Keyes**
Louisville, KY

1067. **J Thompson**
Eustis, ME

1068. **Brendan Schultz**
Niantic, CT

1069. **Peter Osborn**
Westfield, NJ

1070. **Celeste Wright**
Kingsland, TX

1071. **Richard Smith**
Melvindale, MI

1072. **Kathy Retherford**
Cornwall, PA

1073. **Jennifer Humiston**
Huntsville, AL

1074. **MaryAnn Burch**
Aurora, NY

1075. **Susan Valiga**
Rockville, MD

1076. **Jen Reynolds**
Berkeley, CA

1077. **Michael Newport**
Denver, CO

1078. **J Thompson**
Eustis, ME

1079. **William Anderson**
Philadelphia, PA

1080. **Scott Lefler**
Tempe, AZ

1081. **William Welkowitz**
Woodside, NY

1082. **Charles Shelton**
Grottoes, VA

1083. **Ron Melander**
Minden, NV

1084. **Darrol Bussler**
Waconia, MN

1085. **Karl Koessel**
Blue Lake, CA

1086. **Jim Gayden**
Vancouver, WA

1087. "We stand at a critical moment in Earth's history, a time when humanity must choose its future." - The Earth Charter Children already know about animals and ice caps suffering because of global warming. Most don't know yet about the reality of the climate crisis, but the media and social networking will take care of that. Our children deserve solid scientific evidence on which to base their future actions. The WV Board of Education will not want to be among those whose views are totally ignored as irrelevant in the face of the dramatic changes that we are already experiencing.

—**Sue Blythe**

Gainesville, FL	1103. Haven Knight Rochester, MI	1122. Peter Lehnert Iron Mountain, MI
1088. John Schaefer Mars, PA	1104. Mitchell Alperin Townsend, MA	1123. Pete Sea Columbia, MD
1089. Harold Copeland Houston, TX	1105. Lynette Ridder Concord, CA	1124. David Stoddard Silver Spring, MD
1090. K V Valparaiso, IN	1106. Terry Harvey Green Valley, AZ	1125. Joseph Ritacco Holmdel, NJ
1091. Esther Weaver Highland, NY	1107. Randy Chandler Prescott, AZ	1126. Doria Contessa Saint Petersburg, FL
1092. Jamie Caya	1108. Ron Callison Pahrump, NV	1127. Gérard COUCHOUD
1093. Jeanette Hills Carson City, NV	1109. John Kuentzel Plainsboro, NJ	1128. Laura Craig Lakewood, WA
1094. C Hunt Piscataway, NJ	1110. Matt Fournier Apopka, FL	1129. Lowell Palm Washington C H, OH
1095. As a former science teacher I know that there is more evidence for human caused climate change than there is for gravity! I can't imagine any State NOT adopting accurate truthful science. — Ann McInnis northport, MI	1111. Roxane Dow Las Vegas, NV	1130. Judith Herzfeld Newtonville, MA
1096. Laurence Topliffe Fairfield, IA	1112. David Wilson Belleville, MI	1131. Daniel Pfoztzer Albany, NY
1097. Amy Dingman albuquerque, NM	1113. Rozalia Kelemen west covina, CA	1132. Copas Copas Maple Valley, WA
1098. Susan Malbouef Washington, MI	1114. Carl Young Jackson, MS	1133. Donna Kowzan Moorpark, CA
1099. Scott Taylor Anna, TX	1115. Scott Taylor Anna, TX	1134. Anthony Rosner Brookline, MA
1100. Tyler Newton Cambridge, MA	1116. Pat and Gary Gover Fairhope, AL	1135. Judith O'Driscoll Brooklyn, NY
1101. Donna Delisi New Haven, MI	1117. Randall Herz San Jose, CA	1136. Ruth Miller Chapel Hill, NC
1102. Maureen Sheahan Southfield, MI	1118. Lee Schmidt Portland, OR	1137. Tony Lash Portland, OR
	1119. Robert Cassidy Harrison, ME	1138. Paul Carmi Saint Louis, MO
	1120. Edie Cowan New York, NY	1139. Wendy Barcomb Staunton, VA
	1121. AJ Averett Potsdam, NY	1140. I was born in W. Va. and would like my birthplace not to be known as an

unscientific laughing stock of a place.

—**W Arnett**

Tucson, AZ

1141. **Marc Garcelon**

Kansas City, MO

1142. **Ronnie Rouse**

Kingman, KS

1143. **Clare Kirkpatrick**

evanston, IL

1144. **Pamela Harms**

Dumfries, VA

1145. **James**

New York, NY

1146. **Teresa Pirone**

New Fairfield, CT

1147. **Jesse Larsen**

Bellingham, WA

1148. **Michael**

Meyers-Jouan

Wanaque, NJ

1149. **Richard Sheresh**

Chula Vista, CA

1150. **Anne Ricciardi**

Westlake, OH

1151. **Cenith Lacavera**

Snowflake, AZ

1152. **Edward Dombroski**

Jericho, VT

1153. **Hannah Banks**

Newton, MA

1154. **Irene Huskisson**

Springdale, AR

1155. **Ann Blanchard**

Rolling Meadows, IL

1156. **Dawn Lindsey**

Deltona, FL

1157. **Andy Ferguson**

Petaluma, CA

1158. What a Stupid move

teaching junk Science

—**Richard Day**

Leonardtown, MD

1159. **Eugene Mariani**

Pittsburgh, PA

1160. **terri DeFilippo**

Cedar, MI

1161. **Linda Maynard**

Apex, NC

1162. **Ann Bein**

Los Angeles, CA

1163. **Sally Simpson**

Garland, TX

1164. **Sharon Goldstein**

New York, NY

1165. **Richard Sheresh**

Chula Vista, CA

1166. Your decision will help

all USA citizens by paving

the way for other School

Boards to follow your

example.

—**Melanie Griffith**

Cear Falls, IA

1167. **Victor Magana**

Fresno, CA

1168. **Elaine Phillips**

edgewater, MD

1169. **L Hart**

Newark, OH

1170. **Larry Loar**

Dubuque, IA

1171. **Jason Endicott**

Alexandria, VA

1172. **Curt Carlson**

Burnsville, MN

1173. **Robert Arnet**

Estero, FL

1174. **Doris Stanley**

Orlando, FL

1175. As a retired earth science teacher, I think it is important that the curriculum contains accurate information.

—**John Cook**

Carroll, IA

1176. **James Trimm**

Falls Church, VA

1177. **Kelley Scanlon**

Syracuse, NY

1178. **Margi Willis**

Chevy Chase, MD

1179. **Kristina Cliff-Evans**

Philadelphia, PA

1180. **Dwight Allbee**

Waverly, IA

1181. **Laura Albert**

Algonquin, IL

1182. **Charles Warner**

Fontana, CA

1183. **Jason Llanes**

Las Vegas, NV

1184. **George Alderson**

Catonsville, MD

1185. **Richard Wosylus**

Smithton, IL

1186. To educate the public so that our children have the ability to live and work successfully, it is necessary that the information they receive is based on the most accurate information available . Anything less is dishonorable to our children and country and we adults will have not met our

responsibilities.

—**martha Dahlinger**
Portage, MI

1187. It is never wise to teach information known to be false. That is propaganda and leads to calamitous results. Please do it right.

—**Milton Moon**
Haymarket, VA

1188. **Linda Townill**
Plainfield, IL

1189. **Steve Miller**
Jasper, AR

1190. I am happy to read that West Virginia has changed direction and voted to teach accurate current knowledge about our climate to students in the state. These students are the future of this country. They need all the good information they can get. Thank you.....

—**Adele Kapp**
La Jolla, CA

1191. **Thomas Behrendt**
New Haven, CT

1192. I don't know what planet you thought future generations were going to live on when you took that first vote, but you were out to do your constituents harm. I am greatly relieved that you reversed your initial decision. Only by teaching the leaders of tomorrow what they are facing, will the damage done by current generations potentially be reversed. SWF

—**Sara Farneth**
Morrisville, PA

1193. **Alan Thayer**
Commerce Township, MI

1194. We need to give our children only the most accurate information, so they can stay competitive with the rest of the world.

—**Karen Cignoli**
Coram, NY

1195. **Jon McKenzie**
Littleton, CO

1196. **Suzanne Koury**
Iowa City, IA

1197. **Anton Feokhari**
Brooklyn, NY

1198. **del Arduengo**
Tampa, FL

1199. **Jennifer Pagliaro**
Portland, OR

1200. If you think telling children lies will stop what is happening in the real world, you should go back to school.

—**Lewis Taishoff**
New York, NY

1201. **Katherin Alden**
Plainfield, NH

1202. **Tom Beatini**
Hillsdale, NJ

1203. **Carol Green**
Minneapolis, MN

1204. **K**
Byron Center, MI

1205. **Vanessa Jamison**
Arlington, WA

1206. **Terry Palin**
Staten Island, NY

1207. **Deborah Schade**
Evansville, IN

1208. **Brendan Murphy**
Boulder, CO

1209. **Kenneth Miller**
Crystal Lake,, IL

1210. **Mary Helveston**
Highland Park, MI

1211. **Vicki Linkin**
Las Vegas, NV

1212. **Joe Mabel**
Seattle, WA

1213. **Edward Hubbard**
Madison, WI

1214. **Pat Vescio**
Cary, NC

1215. **Paula Kline**
West Chester, PA

1216. **Nancy Lines**
Overland Park, KS

1217. **Eileen Scheff**
Detroit, MI

1218. **Gerald Keller**
Brooktondale, NY

1219. **Trevor Brannon**
Virginia Beach, VA

1220. **Chris Worcester**
Truckee, CA

1221. **James Winn**
Reno, NV

1222. **Barbara Kantola**
Niles, MI

1223. It is vital to the future of our country that children (and adults) understand FACTUAL information about our environment and climate and not be subjected to industry propaganda or climate change denier idiocy! Students need to learn to think and base decisions on FACTS, not on misinformation or lies.

—**Edward Wang**

Bellingham, WA

1224. **Lorraine Kline**
Mira Loma, CA

1225. **Sandra Chalk**
Seattle, WA

1226. **Philip Murphy**
Bluffton, OH

1227. **Brian Oakes**
Lake Elsinore, CA

1228. **Jean Citron**
Seminole, FL

1229. **Carolyn Sol**
Phoenix, AZ

1230. **Diane Johnson**
Escondido, CA

1231. **Anton Feokhari**
Brooklyn, NY

1232. **David and Leah Weathers**
Marion, MI

1233. **Sharon Parshall**
Fall City, WA

1234. **Laurie Ryan**
Silver Spring, MD

1235. **Peter Masterton**
Mt. Prospect, IL

1236. **Ben King**
New York, NY

1237. **Randy Corbin**
Margate, FL

1238. **Joel Clasemann**
Duluth, MN

1239. **Keith Runion**
Little Rock, AR

1240. **Mike Ruddy**
Royal Oak, MI

1241. **Robert and Donna Janusko**

Bethlehem, PA

1242. **Cori Bishop**
Brigantine, NJ

1243. **ToNY Feokhari**
Brooklyn, NY

1244. Go further. Lead from the front, and make a long-term positive change for the country, the world, and the multitude of species on this planet that deserve a stable, nurturing climate.
—**Nathan Rice**
Ypsilanti, MI

1245. **Janet Falcone**
Louisville, KY

1246. **Walt Brown**
Roseville, CA

1247. **Anne Engelhart**
Lexington, MA

1248. **Joel Goshulak**

1249. **Nancy**
East Jordan, MI

1250. **Linda Massey**
Seattle, WA

1251. **Melissa Cleaver**
Houston, TX

1252. **Rosemary Hewett**
South Hamilton, MA

1253. Honestly, there is NO upside to denying reality. Science is about observable FACTS. There should be no question that accuracy for science standards should be adopted by any sane school oversight organization.
—**Kae Bender**

Lancaster, CA

1254. **Steve Sugarman**
Malibu, CA

1255. **Carol Johnson**
Littleton, CO

1256. **Aaeron Robb**
Baltimore, MD

1257. **Jennifer Yukl**
Cedar Rapids, IA

1258. **Father Connor**
Long Beach, CA

1259. **Judith O'Callaghan**
Deer Isle, ME

1260. **D Schholl**
Clrfd, UT

1261. **Charles Browning**
New York, NY

1262. **Nancy Marshall**
Monaca, PA

1263. **Jennifer Purcell**
Bellingham, WA

1264. **Holly Chisholm**
Oxford, MI

1265. **Theresa Scherf**
Berea, KY

1266. **Poune Saberi**
Philadelphia, PA

1267. **Gary Marshall**
Monaca, PA

1268. **Patti Smith**
Denton, TX

1269. **Krista Joy**
SANTA FE, NM

1270. **Tom Reichel**
Rochester, MI

1271. **Christian Hartleben**
Philadelphia, PA

1272. **Elliot Clymer**
Denver, CO

1273. It is always in the interest of the children you

are charged to educate to be taught fact from fiction, truth from falsehood. It is, however, quite amazing that in the year 2015 some of you need to be reminded of this basic point. Shame on those members of the state board of education who have gone this far in their efforts to miseducate their children.

—**ben Lichtin**
rochester, NY

1274. **Russel Deroche**
Gramercy, LA

1275. **Anne Fisher**
Lexington, MA

1276. **Russell Buckardt**
South Elgin, IL

1277. **Peter Meyer**
New York, NY

1278. **Zach Fried**
Bennington, VT

1279. **Steve Wilkes**
Ellerslie, GA

1280. **Bonnie Hughes**
Berkeley, CA

1281. **Tim Hughes**
Atlanta, GA

1282. **Barbara Bogard**
Mill Valley, CA

1283. **John Wesselink**
Bellingham, WA

1284. **Nick Barcott**
Lynnwood, WA

1285. **June Linhart**
Raleigh, NC

1286. **Gerald Cocking**
Sterling, IL

1287. **Michael Long**
Fort Lupton, CO

1288. **Tamara Ashley**
Mishawaka, IN

1289. **Vaughn Parker**
Philadelphia, PA

1290. **Donald Cronin**
Somerville, MA

1291. **SC Clarann Weinert**
Bozeman, MT

1292. **Brett Brown**
Van Nuys, CA

1293. **Amber Wesley**
APO, CA

1294. **Susan Inman**
Elk Rapids, MI

1295. **Janet Melander**
Gardnerville, NV

1296. **Nathalie Quesnel**

1297. **Gerald Cocking**
Sterling, IL

1298. **Linda Braun**
Crossville, TN

1299. **Susan Inman**
Elk Rapids, MI

1300. **Vincent DiTizio**
Staten Island, NY

1301. **Elizabeth Seltzer**
Brookhaven, PA

1302. **Larry Olsen**
Scranton, PA

1303. **David Hicks**
Apopka, FL

1304. **Carrie Walker**
Brattleboro, VT

1305. **Lori Del Negro**
Raleigh, NC

1306. **Kathleen Peters**
Oak Lawn, IL

1307. **Marya Spont-Lemus**
Chicago, IL

1308. **Elaine Tokarski**
Troy, MI

1309. **Rafael Alfaro**
Carolina, PR

1310. **Linda Williams**
Lexington, KY

1311. **Charlotte Drayer**
De Soto, KS

1312. **Sheila beer**
Charleston, SC

1313. **Robert Hasselbrink**
Pueblo, CO

1314. Don't disadvantage your students, future voters and workers, with inaccurate information!

—**Sherron Collins**
Spring Lake, MI

1315. **Florence Sandok**
ROCHESTER, MN

1316. **Richard Smith**
Arkport, NY

1317. **Caroline Binder**
Mc Connellsburg, PA

1318. **Charles Mullen**
Canton, OH

1319. **John Erskine**
Holland, MI

1320. **Andie D**
Brooklyn, NY

1321. **Deborah Parker**
Bellingham, WA

1322. **Joseph Naidnur**
Warrenville, IL

1323. **Marilyn Logan**
Prairie Village, KS

1324. The reality is that Climate Change is real. Refusing to allow students to have information upon which to base their on opinions, and what steps to take to resolve it is unacceptable.
—**Andrew Coutant**
North Haven, CT

1325. **Ernie Hopseker**
Newport, OR

1326. **Paul Horne**
Boynton Beach, FL

1327. **Patrick Blanton**
Phoenix, AZ

1328. **Roy Jensen**
Gardner, KS

1329. **Ilene Thompson**
Carmel, NY

1330. **Kathy Watt**
Dallas, TX

1331. **Rick Savage**
Cary, NC

1332. **Soretta Rodack**
New York, NY

1333. **Ann Bickel**
Louisville, KY

1334. **Ann Bickel**
Louisville, KY

1335. **Wayne Lewis**
Lubbock, TX

1336. **JC Bopwer**
Sumner, WA

1337. **Matthew Miner**
Portland, OR

1338. **David Lindsey**
Beaver Dam, KY

1339. Don't bring embarrassment to the State of West Virginia. Uphold

sound scientific standards in the teaching of climate science.

—**Thomas Frost**
Evansville, IN

1340. **Valerie Crews**
Columbus, OH

1341. **Susan Mamich**
Littleton, CO

1342. **Bill King**
Chicago, IL

1343. **Cynthia Kelley**
Sandpoint, ID

1344. As a retired teacher and educator, I am appalled by any attempt to politicize or control important educational content. Today's children must be prepared to deal with a world affected by climate change by having accurate information.

—**Anne Jacopetti**
Santa Rosa, CA

1345. **Ellen Phillips**
La Mesa, CA

1346. **Saul Greenhut.**
Aurora, CO

1347. **Gregory Rossi**
Waterford, MI

1348. **Mary Masters**
Orcas, WA

1349. **Timothy Taylor**
Los Angeles, CA

1350. **Rex Lisman**
Bluffton, AR

1351. **Dorothy Larsen**
Three Bridges, NJ

1352. **Stefanie Siegel**
Brooklyn, NY

1353. **CAL LaZier**
Pollock Pines, CA

1354. **John Farha**
Wichita, KS

1355. **Chasity Hungerford**
Kirkland, WA

1356. **Sylvia piskunov**
Paterson, NJ

1357. **Maryann Mason**
Seattle, WA

1358. **Sharon Weiner**
Scarsdale, NY

1359. **Ned Zimmerman**
Grand Rapids, MI

1360. **Robert Martin**
Fountain Hills, AZ

1361. ...if given a multiple-choice question of which state would choose to perpetuate the stigma of "backward-thinking" and "uneducated", I would have immediately chosen WV...and guess what? I would have been correct! Nice work, WV BOE
—**Nick Anthony**
Phoenix, AZ

1362. **Jan Hervert**
Woodstock, IL

1363. **Nancy Taiani**
Glen Ridge, NJ

1364. **Patricia Wasser**
MINNEAPOLIS, MN

1365. **Charles Lidz**
Ashland, MA

1366. **Jesse Reyes**
Maplewood, NJ

1367. **Justyna Wojciechowska**
Nashville, TN

1368. **Karen Wyatt**
Bordentown, NJ

1369. **Jill Harmer**
Louisville, KY

1370. As a retired research scientist in the field of biology I strongly support the action of the W. Va. Board of Education to present accurate climate science to students. Science is not a set of facts but a way of evaluating information. The scientific method is useful in making many decisions in life.

—**Joel Trupin**
Marshfield, VT

1371. **Thomas Humphrey**
Skokie, IL

1372. **Barbara Bibel**
Berkeley, CA

1373. **Jacqueline Newman**
Greenville, KY

1374. **Judith Thayer**
Coralville, IA

1375. **Mary-Elin Renzullo**
Winsted, CT

1376. **Eva Swidler**
Philadelphia, PA

1377. **John Smith**
Blackwood, NJ

1378. **Carolyn Freeman**
Dexter, OR

1379. **Elaine OMalley**
Falls church, VA

1380. **David Brown**
Ypsilanti, MI

1381. **Kathleen Schumacher**
New York, NY

1382. **mike lyons**
Denver, CO

1383. **Henry & Linda Berkowitz**
Sabinsville, PA

1384. **Arthur Gilroy**
Wharton, NJ

1385. **Dennis Anderson**
Snohomish, WA

1386. **John Harvey**
Lebanon, PA

1387. **Leah Franczek**
Arlington, TX

1388. **Harmony Reiner**
Elsmere, NE

1389. **Lorie Goulart**
Santa Clara, CA

1390. **Karel Bielstein**
Rapid City, SD

1391. **M Solomon**
Harrisburg, PA

1392. **Larry Gales**
Seattle, WA

1393. **Leah Santone**
Methuen, MA

1394. **Armando Toral**
Las Vegas, NV

1395. **Sonia Villanueva**

1396. **Anastasia Antonacos**
Portland, ME

1397. **Leslie Leslie**
Mill Valley, CA

1398. **Kathleen Myers**
Berea, KY

1399. **Susan Garzon**
Stillwater, OK

1400. **Debra Javeline**
South Bend, IN

1401. **Michael Gach**
Kihei, HI

1402. **Bg Kenley**
Mechanicsville, VA

1403. **Dick McDevitt**
Quincy, MI

1404. **Rosemary Caolo**
Scranton, PA

1405. **Clifford Provost**
New York, NY

1406. **Laquisha Jean**
Fort Lauderdale, FL

1407. **Arifa Goodman**
San Cristobal, NM

1408. **Marc VEZIAN**
San Jose, CA

1409. **J Van Wely**
Baltimore, MD

1410. **Croitene ganMoryn**
Ocala, FL

1411. **William Bridge**
Yonkedrs, NY

1412. **Douglas McNeill**
Greenbelt, MD

1413. **Linda Polk**
Cedar Falls, IA

1414. **Cynthia Folit**
Sarasota, FL

1415. **Rachael Schnurr**
Cary, IL

1416. **Stuart Weinstock**
New York, NY

1417. **Pamela Jiranek**
Earlsville, VA

1418. **Ann Stephens**
Corona, CA

1419. **Al Lane**
Berea, OH

1420. **Rick Smith**
Urbandale, IA

1421. **Alex Zackrone**
White Plains, NY

1422. **Gerrit Woudstra**
Pasadena, CA

1423. **Joel Berman**
Smithtown, NY

1424. **Christopher Zeh**
Springfield, VA

1425. **William Weller**
Crystal Lake, IL

1426. **David Horn**
Englewood, FL

1427. **Gloria Walker**
Overland Park, KS

1428. **Natalie Mannering**
Eureka Springs, AR

1429. **Alan Brommel**
Norwalk, IA

1430. **a L**
avoca, NY

1431. **Julie Pease**

1432. Knowledge is the foundation of democracy. Good science produces sound knowledge. Good science has demonstrated that global climate disruption is caused by our pouring huge amounts of carbon dioxide and other greenhouse gasses into our only atmosphere. West Virginia, please give your children and grandchildren the ability to make decisions based on knowledge.

—**Eldon Haines**
Portland, OR

1433. **Betty Anderson**
Bowling Green, KY

1434. **Scott Wasserman**
Scarsdale, NY

1435. **Gregry Loomis**
Seattle, WA

1436. **Rod Clark**
Dallas, TX

1437. **Diane Bilderback**
Bandon, OR

1438. **Michael Gagne**
Wallingford, PA

1439. **Ruth Steinberg**
Tinton Falls, NJ

1440. **Diane Good**
Bellaire, MI

1441. **Robin Kirschenbaum**
Cleveland, OH

1442. **Richard & Carol Mann**
Lake Wylie, SC

1443. **H Guh**
Addison, TX

1444. **Emily Meyer**
Avon, CO

1445. **Florence Wagner**
Lopez Island, WA

1446. **Kiu Leung**
Middleton, WI

1447. **Brian Henning**
Bloomington, MN

1448. **Carl Hoppough**
Benson, NC

1449. **Casey Anno**
Havre de Grace, MD

1450. Our schools need to teach our children critical thinking so that we have an educated and aware population to lead our country forward.

—**Susan McRae**
Olympia, WA

1451. **Kris scarci**
Pensacola, FL

1452. **Terry Tedesco-Kerrick**
Phoenix, AZ

1453. **Beth Phillips**
Bronx, NY

1454. **Susie Serreze**
Wellesley, MA

1455. **Timothy Schroeder**
Saint Joseph, MI

1456. **Don Geckle**
Southington, CT

1457. **Herman Rhein**
South Padre Island, TX

1458. **Victoria Furio**
Yonkers, NY

1459. **Susan MacQuarrie**
Berkley, MI

1460. **Honora remes**
Maryland Heights, MO

1461. **Walter Ramsey**
Oakley, CA

1462. **Felicia Bruce**
Fort Pierce, FL

1463. **Charles Harrell**
Arlington, TX

1464. **Phillip Alward**
Fenton, MI

1465. **Stephen Eklund**
Salinas, CA

1466. **Wendy Diamond**
Berkeley, CA

1467. **James Connolly**
Chico, CA

1468. **Joshua Loftis**
forestville, MD

1469. **Robert Jacobson**
Brooklyn, NY

1470. **Eileen Soderstrom**
Chicago, IL

1471. **Lesley Brill**
Alfred Station, NY

1472. **A Winsor**

1473. **Teresa Bippert-Plymate**
Big Bear City, CA

1474. **marguery lee zucker**
eugene, OR

1475. **Richard D'Arc**
Tucson, AZ

1476. **Arthur Thomas**
Harrisville, MI

1477. **James Shaw**
Dublin, OH

1478. **Christine Roane**
Springfield, MA

1479. **James Shaw**
Dublin, OH

1480. **Daniel Williams**
Saint Clair, MI

1481. **Manon Roberge**
South Burlington, VT

1482. **Carolyn Barrett**
Syracuse, NY

1483. **Franklin Kapustka**

1484. **Daniel Hudson**
Philadelphia, PA

1485. **M Andrews**
Clinton, NY

1486. **Mary-Ellen Maynard**
Canon City, CO

1487. **Heidi Karell**
Commerce Township, MI

1488. **Tracei Cagle**
Davis, OK

1489. **Kimberly mclaughlin**
Saint Peters, MO

1490. Thank you for removing the altered and misleading information. i hope you will consider giving your children all the facts and adopt accurate peer-reviewed science standards on climate change. Thank you. Your decision effects the future of these children and our country. Peace, Kelsey Keyes
—**Kelsey Keyes**
Saline, MI

1491. **Craig Farrow**
Shawnee, OK

1492. **eric swain**
Carpinteria, CA

1493. **Nancy Cubbage**
Seattle, WA

1494. **John Florack**
ft collins, CO

1495. **Garwood Wells**
Columbia, SC

1496. **Sue Halligan**
Saint Paul, MN

1497. **Ellen Katz**
Ann Arbor, MI

1498. **Jacqueline Kohl**
Ellis, KS

1499. **Robert Edwards**
Wilkes Barre, PA

1500. **Chuck Fisher**
Oakland, CA

1501. Denying students exposure to accurate peer-reviewed science condemns future generations to lives of unnecessary hardship. It is our responsibility as competent adults to provide the next generation with the skills needed to be successful members of the global family under increasingly challenging circumstances.
—**Maureen McCue**
Oxford, IA

1502. **August Scheer**
Ardsley, NY

1503. **Neil Freson**
Henrietta, NY

1504. **Barbara Sallee**
Bradenton, FL

1505. **Matthew White**
Seattle, WA

1506. **Don Lahti**
Beaumont, CA

1507. **J Caine**
Tallahassee, FL

1508. **Scott MacDougall**
Jersey City, NJ

1509. It is hard to believe that parents want their children be lied to. More important to put their kids at risk in discussions with others about science in general and climate science specifically. If I was a child and found my parents had deliberately conspired to withhold truth from me, I don't know when or how I would be able to forgive them, and I doubt I would ever trust them to be truthful again.
—**Jarryl Larson**

Edgecomb, ME	1525. Lawernce Merlino Saugerties, NY	1541. Susan McMullin Selma, IN
1510. Luca Manetta Not provided	1526. Phillip Markis westminster, CO	1542. Andrew Welsbacher Eighty Four, PA
1511. Shelley Dahlgren Issaquah, WA	1527. Jerry Ravnitzky Mahopac, NY	1543. Stacie Cox santa monica, CA
1512. Jill rupert Marco island, FL	1528. Francis Smith Katy, TX	1544. Robert McKinnie Salt Lake City, UT
1513. Susan Morgan Tucson, AZ	1529. Barbara Hegarty Sunnyside, NY	1545. Ramsay Kieffer Milford, DE
1514. Anglea Deerfield Beach, FL	1530. Dawn Bartok Rockwood, MI	1546. paul hatch Cypress, TX
1515. Don McKelvey Euclid, OH	1531. lynne ann los angeles, CA	1547. Martin Ettenberg Princeton, NJ
1516. Hugh McElwain Richmond, VA	1532. Alex Stavis New York, NY	1548. Karen Slote north tonawanda, NY
1517. David Henning Marshfield, WI	1533. Richard Salamanca Gaithersburg, MD	1549. James Hildebrand Mobile, AL
1518. looking like y'll need more science education or at least learn the scientific method. Scientist do not accept falsified data and unproven hypotheses. You action sadden me, a science educator. — Sheron Snyder Jackson, MI	1534. Andrea Lieberman Los Angeles, CA	1550. Jane Wasson DENVER, CO
1519. Karen	1535. science is the best answer to what we see around us it might not be perfectly accurate but is always under review to improve its accuracy — Paul Heloskie Seaford, NY	1551. Susan Smith Frankfort, KY
1520. William Armstrong Baton Rouge, LA	1536. Hillary Colby Aurora, IL	1552. Sylvia Duncan Plano, TX
1521. Renee Madera Fort Lauderdale, FL	1537. Mary Ryan Framingham, MA	1553. Esther Racoosin Ithaca, NY
1522. Janice Parker Toccoa, GA	1538. Polk Woolford Jacksonville, FL	1554. F Riedel Copper Center, AK
1523. Caroline McNeill Wilton, CT	1539. Teri Forester Citrus Heights, CA	1555. Jodie Leidecker Berea, KY
1524. Michael Diggs Wichita, KS	1540. Katherine Hawkins Summit, NY	1556. Sheila Rice Talbott, TN
		1557. Allen Rozelle Santa Cruz, CA
		1558. Mary Ryan Framingham, MA
		1559. Kay M. METAIRIE, LA

1560. **Valerie Baffa**
Berwyn, IL

1561. **Richard masters**
Hendersonville, TN

1562. **Lisa Sabatino**
Pompton Lakes, NJ

1563. **John Margerum**
Philadelphia, PA

1564. Please join us in the
21st century and stop the
ignorance!
—**Kristina Peterson**
Edmonds, WA

1565. **Victoria Wallington**
Reno, NV

1566. **Lori Anderson**
Vancouver, WA

1567. We all, even we who
do not live in West Virginia,
want the children of West
Virginia to get the best
education possible. We want
them to be able to
understand what is
happening in the world, be
able to learn to think for
themselves, and to be able
to fend for themselves when
they grow up.
—**Jo Hills**
Germantown, NY

1568. **Douglas Henderosn**
Wiscasset, ME

1569. **Carol Darrah**
Wichita, KS

1570. **Joseph Pivar**
Chocowinity, NC

1571. **Dee Johnson**
Chicago, IL

1572. **Ann Haley**
Camp Connell, CA

1573. **Merrily Butler**
New York, NY

1574. **Alan Ticotsky**
Lexington, MA

1575. **Carolyn Engel**
Mesquite, TX

1576. **Virginia**
Lenexa, KS

1577. **Kevin Tharp**
Santa Rosa, CA

1578. **John Sniegocki**
South Bend, IN

1579. The nation is watching
to see if West Virginia cares
enough about the future for
its children to accept the
evidence of science and
teach the most current
knowledge in its schools.
—**Martha Hyde**
Burbank, WA

1580. **Lori Mulvey**
Comstock Park, MI

1581. **Dorothea Leicher**
Philadelphia, PA

1582. **Keith D'Alessandro**
Canton, MI

1583. **Sherrie Heckendorn**
Portland, OR

1584. **Michele Langston**
Jacksonville, AR

1585. **Jim Magill**
Sturgeon, MO

1586. **Brian Kilgore**
Madison, WI

1587. **Gloria Levitt**
Fair Lawn, NJ

1588. **Kevin Powers**
Brick, NJ

1589. **Leslie Faris**
Seattle, WA

1590. **David McCormick**
Richmond, VA

1591. **Robert Weissler**
Hereford, AZ

1592. **melek korel**

1593. **Dan Ingall**
Lake Odessa, MI

1594. **Cynthia Bower**
Sonoita, AZ

1595. **James Dantz**
Dansville, NY

1596. **Justin Withers**
Ballwin, MO

1597. **Norma Ference**
Barboursville, VA

1598. **Dennis Feichtinger**
Trenton, MI

1599. **Anna Bower**
Williamsport, PA

1600. **Jim O'Neil**
Effingham, IL

1601. **Paul Schwartz**
Richmond Hill, NY

1602. **John Gluhak**
Peoria, AZ

1603. **Katie McDermott**
Cape May, NJ

1604. **Jason Reed**
Coos Bay, OR

1605. **Lori Smith**
Clovis, CA

1606. **John Ryan**
Fayetteville, AR

1607. **Bill Lavin**
Vienna, OH

1608. **Jennifer Cox**
Louisville, KY

1609. **Niki Learn**
New Brunswick, NJ

1610. **Gavin Bornholtz**
Grand Blanc, MI

1611. **Kevin Waldrip**
Matawan, NJ

1612. **Lyle Collins**
Yakima, WA

1613. **Jill**
Marco Island, FL

1614. **Sara Molyneaux**
Dover, MA

1615. **Judy Heumann**
Portland, OR

1616. **Patty Muhleman**
Cincinnati, OH

1617. **Teresa Gifford**
Mentone, CA

1618. **Averlon Hill**
Brooklyn, NY

1619. **Bill Grams**
Ann Arbor, MI

1620. **Mike Munhall**
Littleton, CO

1621. **Eric Robinson**
Memphis, TN

1622. **Kathie Weber**
Morton Grove, IL

1623. **Zachary Frank**
Los Angeles, CA

1624. **Debbie Imhoff**
Madison, WI

1625. **Alan Brown**
New York, NY

1626. Encouraging
ignorance and

misinformation is a
disservice to your students
and our future.

—**James Melloh**
Portland, ME

1627. **Nancy Traer**
Claremont, CA

1628. **William Hertlein**
Bronxville, NY

1629. **Mike Laquatra**
Long Beach, CA

1630. **Peter Kwass**
Jamaica Plain, MA

1631. **Mark Bowers**
Sacramento, CA

1632. **Robert Burch**
Coquille, OR

1633. **Tom Lynch**
Columbus, OH

1634. **Todd Crawford**
Holly Ridge, NC

1635. **Theresa Kremer**
LaVista, NE

1636. **Catherine Whiteside**
Katy, TX

1637. **Susan Preston**
La Crosse, FL

1638. **Loewyn Young**
Olympia, WA

1639. **Nancy Schimmel**
Berkeley, CA

1640. **Sheila Spencer**
Gresham, OR

1641. **Marilee Wood**
Friday Harbor, WA

1642. God did not give man
dominion to destroy the
earth. We were given
Stewardship over it.

Teaching propaganda for Big
Oil and Big Coal is teaching
that democracy is invalid and
the student should accept
being serfs. The Christian
Taliban will not be allowed to
rule unchecked.

—**Margaret Hooper**
Bartlesville, OK

1643. **Amanda Schmidt**
Fair Oaks, CA

1644. **Robert Ferguson**
Ann Arbor, MI

1645. **Leigh Jones**
Mount Juliet, TN

1646. **Brent Henschen**
New Knoxville, OH

1647. **Judith Gordon**
Evans, GA

1648. **Suzanne
Deerly Johnson**
Long Beach, CA

1649. **Benjamin Warfield**
League City, TX

1650. **Patricia Higgins**
Broken Arrow, OK

1651. **Scott Lundgren**
Chicago, IL

1652. **Barb Scavezze**
Olympia, WA

1653. **John Eschen**
Grand Coulee, WA

1654. **Linda Thompson**
Sherman Oaks, CA

1655. **Wanda Maurant**
Framingham, MA

1656. **Susan Ireland**
Guilford, CT

1657. **Kent Lambert**
Chicago, IL

1658. **Justin Gerstner**
Madison, WI

1659. **Annie McCombs**
Kalamazoo, MI

1660. **Harold Hodes**
Ithaca, NY

1661. **Chris Row**
Frederick, MD

1662. **Gregory Malueg**
Beloit, WI

1663. **Charlotte Zitis**
Rockledge, FL

1664. **Ann MacLeod**
Boca Raton, FL

1665. **Tom Lyons**
Louisville, KY

1666. **Laura Ackerman**
Spokane, WA

1667. **Susan Walp**
Pasadena, CA

1668. **Michael Regan**
Port Hadlock, WA

1669. **Sue Slinic**
Chicago, IL

1670. Climate science is science. Deniers merely advocate a position promoted by plutocrats. Isn't your state missing enough mountaintops, clean rivers and lakes, and suffered the loss of enough miners sacrificed on the alter of big businesses' profits. Allowing climate deniers' propaganda to be presented to children as a legitimate alternate view--which it isn't--will allow continued deterioration of your state education system. This will, in turn, continue to reduce employability and competitiveness to the

State's work force, just as would teaching Intelligent Design (which is neither) theology in your public schools. America rose to greatness, on the backs of citizens educated in science and , not religion. Religion can create a decent society, not an economy.

—**Marc Levin**
Rolling Meadows, IL

1671. **James Fydrych**
Albuquerque, NM

1672. **Sara Avery**
Lafayette, CO

1673. **Grace Burson**
Plymouth, NH

1674. **Jacqueline Drewes**
Eaton Rapids, MI

1675. **Judith Beltz**
La Porte, IN

1676. **Scott Brown**
Seattle, WA

1677. **Martin Horwitz**
San Francisco, CA

1678. **Andrew Frey**
Pasadena, CA

1679. **James Lobdell**
Santa Rosa, CA

1680. **Stephen Dutschke**
Louisville, KY

1681. **Christopher Kornmann**
Saint Paul, MN

1682. **Talia Aviani**
New York, NY

1683. **Raunette Elkins**
Lincoln Park, MI

1684. **Judy Moran**
Panama City, FL

1685. **Klaus Steinbrecher**
Angel Fire, NM

1686. **Marcia Bookoff**
Pikesville, MD

1687. **Darrell Budic**
Madison, WI

1688. **Kathleen Rengert**
Unionville, PA

1689. **Marilyn Long**
Grandview, MO

1690. **Marcia Halligan**
Viroqua, WI

1691. **Deborah Kavruck**
Washington, DC

1692. **Cheryl Dare**
Memphis, TN

1693. **Earle Kasregis**
Roxbury, ME

1694. **Kenneth Marks**
Apex, NC

1695. Y all must listen to Forrest Gump ! Stupid is as stupid does , momma always said . Being a goober doesn't qualify you to be well , stupid . Must be your momma didn't have a way to shut that whole thing down.

—**Don Derby**
Chittenango, NY

1696. **Bruce Cratty**
Denver, CO

1697. **Eileen Alba**
Henderson, NV

1698. **Robert Belknap**
Raleigh, NC

1699. **Barbara Dmukauskas**
Cicero, IL

1700. Praveen Misra Boston, MA	1718. Carina Ramirez EL Paso, TX	1731. Sally Moody Potomac, MD
1701. Adolfo Humphrey Santa Cruz, CA	1719. Nancy Pierce Gunnison, CO	1732. Anita Woodruff Seattle, WA
1702. Garret Hammond Downers Grove, IL	1720. Kim Kensler-Prager Toledo, OH	1733. Karen Dahmer Royal Oak, MI
1703. Jen e Beaverton, OR	1721. Richard Geiger Davenport, IA	1734. William Guthrie arlington, VA
1704. Teri Foster Knoxville, TN	1722. Nancy Seymour Minneapolis, MN	1735. Peter Marcoe Lacey, WA
1705. Bryan Bennett Kennesaw, GA	1723. Don't prove to the world that WV is the most backward state in the union. — Fred Lavy Harrisonburg, VA	1736. Charles Cole Warren, MI
1706. Bob Shippee Richmond, VA	1724. In 2015 it is impossible to ignore the dire effects of global warming. That it is man made is undeniable. — Jean Dowell Cincinnati, OH	1737. Joseph Bach Kimberly, WI
1707. Lee and Sue Scarborough fort davis, TX	1725. C'mon WV...get with the rest of the States that know that climate change is happening. Quit listening to the coal companies....they care only about themselves and their profits. — Dennis and Suzi Krizan Alpharetta, GA	1738. jan Schroeder Saugatuck, MI
1708. Melanie Trotz Auburndale, FL	1726. Peggy Lalor Hood River, OR	1739. Mary Georgiton Columbus, OH
1709. Barbara Cohn Carlsbad, CA	1727. Peter Homan Ocklawaha, FL	1740. I understand that climate science is "scary" because it teaches that we are responsible for the degradation of the environment and what we are doing -- the way we live -- has had a negative impact on the air we breathe and the way our planet operates. But it is an overwhelmingly accurate understanding of our climate and environment. All but a handful of scientists have reached this consensus globally. We must teach our children about this, and study it ourselves, because we owe it to future generations not to destroy what we inherited. — Paul Beck Sherman Oaks, CA
1710. Javon Monahan Walla Walla, WA	1728. Manuel Reyes-Otálora Brevard, NC	1741. Sam Collins Omaha, NE
1711. Arthur Hughes Marietta, GA	1729. Mike Bushaw Huber Heights, OH	
1712. Dick Hogle espanola, NM	1730. Randolph Hogan Falls Village, CT	
1713. Hallie Javorek Chagrin Falls, OH		
1714. Morgan Clark South Orange, NJ		
1715. Bob Sipe Auburn, ME		
1716. Sandra Heinen Richmond, VA		
1717. Ronald Ret Lansing, MI		

1742. Alan Eisenberg Brooklyn, NY	personal "beliefs" or "ideologies". — Richard Paugh Ocean View, DE	1777. Leigh Sands Denton, MD
1743. William Hutchings Birmingham, AL	1760. Marguerite Shuster Sierra Madre, CA	1778. Harry and Jill Brownfield Newport, PA
1744. Juliann Pinto Philadelphia, PA	1761. JoAnn Schropp Edgewater, MD	1779. Larry Hannon Charlotte, NC
1745. Bob Puchli Lindenhurst, IL	1762. Daniel Henninger Meadville, PA	1780. Andrew Perron Pittsburgh, PA
1746. Glenna Waterman Brookline, MA	1763. Mark Gallagher Haverhill, MA	1781. Neil Fisher Tulsa, OK
1747. Birgit Hermann San Francisco, CA	1764. Debra Griswold Selinsgrove, PA	1782. Paul Romney Baltimore, MD
1748. S McNamee corona del mar, CA	1765. Sam Collins Omaha, NE	1783. Daniel Ferra Palm Springs, CA
1749. Meredith Kearns Lanexa, VA	1766. Patricia Cipolla Haskell, NJ	1784. Janet Leavell Atlanta, GA
1750. Elmer Berger San Rafael, CA	1767. Roy Stock Albany, NY	1785. Amy Pemberton Somerset, KY
1751. Donna Sharp Veneta, OR	1768. M Shanks	1786. Lisa Benham San Jose, CA
1752. Marc Vendetti Fairfax, CA	1769. Eric Bello Miami, FL	1787. Darrell Noel New York, NY
1753. Richard Sposit North Royalton, OH	1770. Lester Evans Morehead, KY	1788. David Nettleton Roseville, CA
1754. Jane Nachazel Los Angeles, CA	1771. Ursula Mass La Conner, WA	1789. Harold Bland Winnetka, IL
1755. A Hayashi Oxnard, CA	1772. Kenneth Kay Narberth, PA	1790. Human caused climate change (global warming) is very real - the science confirming it is accurate. There is no valid reason not to acknowledge that in textbooks! — Dan Avery Butte, MT
1756. Lawrence Mick Dayton, OH	1773. Nan Johnson Herndon, VA	1791. Your denial of climate science derives from your selfish, self interested desire to maintain fossil fuels as a money maker. That is
1757. Ron Robinson Audubon, NJ	1774. Jared Cornelia Wilmington, DE	
1758. Judith Glixon Lexington, MA	1775. Rosa Cruzado Mayaguez, PR	
1759. Science is based in fact! That should be what is taught in all schools...FACTS! Not	1776. Martin & Christine Niemi Douglas, AK	

unethical and immoral. You should at least have the guts to own up to that.

—**Bishop Dansby**
Keezletown, VA

1792. **Bridget Spann**
Williamstown, MA

1793. **Karen Poels**
Wilkes Barre, PA

1794. **Pam Irminger**
Oak Ridge, TN

1795. **Charlene Boydston**
Pahrump, NV

1796. **Kathleen Seidler**
Downers Grove, IL

1797. **Catherine Crow**
Ashland, MA

1798. **Carmen Vera**

1799. **Buzz Marcus**
Langley, WA

1800. **Dion Neutra**
Los Angeles, CA

1801. **Tom McCalmont**
Palo Alto, CA

1802. **WILLIAM O'HARE**
Daly City, CA

1803. **James Miles**
W. Palm Bch., FL

1804. **Mark Nucker**
Ellicott City, MD

1805. **Anne Campbell**
Columbia, MO

1806. **Aileen Spillman**
Herbster, WI

1807. **charles page**
Vancouver, WA

1808. Do what's right for the planet - and the children of

West Virginia - and stand up against those denying science to maximise corporate profits. Science is science; it has no political leanings, although its findings may be uncomfortable to certain closed-minded people.
—**William von Zehle**
Ridgefield, CT

1809. **Cary Fischer**
San Francisco, CA

1810. **Jeff Hall**
Ames, IA

1811. **Scott B**
East Rockaway, NY

1812. **Christopher Kurecka**
Ann Arbor, MI

1813. **Ken Owen**
Roswell, GA

1814. It is the 21st-century thing to do!
—**R Bissell**
Ann Arbor, MI

1815. **Ron Nissen**
Santa Ana, CA

1816. **Kenneth Wheaton**
Ypsilanti, MI

1817. **Georgeanne Samuelson**
Oakridge, OR

1818. **Colleen Johnson**
Sacramento, CA

1819. **David Harralson**
Hollywood, CA

1820. **Elizabeth Schwartz**
Astoria, NY

1821. **Pamela Nordhof**
Hamilton, MI

1822. **Douglass Reeves**
New York, NY

1823. **Michael Caldwell**
Detroit, MI

1824. **Susan Klement**
Tucson, AZ

1825. **David Druding**
Fayetteville, AR

1826. **Robert D'Amato**
Morris, NY

1827. **John birkimer**
Louisville, KY

1828. **Savanna Williams**
Smyrna, GA

1829. **Dale Patrick**
Des Moines, IA

1830. **Maria Miller**
Grand Rapids, MI

1831. **George Simon**
Commack, NY

1832. **Elinor Miller**
Lansing, MI

1833. **Elinor Miller**
Lansing, MI

1834. **Jordan Goldman**
Culver City, CA

1835. **Glyn Travis**
Ashland, OR

1836. **Mona White**
Willsboro, NY

1837. **James Klein**
Corpus Christi, TX

1838. **Mark Bernard**
Kingston, NY

1839. **George and Cindy Waltershausen**
De Soto, WI

1840. **Nelly Badia**
New York, NY

1841. **Jane godlove**
Lawton, OK

1842. **S Klahn**
Wilmington, DE

1843. **Fay**
Issaquah, WA

1844. **Michael Levin**
Colorado Springs, CO

1845. **Steve Graff**
Los Angeles, CA

1846. **Gale Rullmann**
Youngsville, NC

1847. I certainly hope that WV, the State of my birth, will stand on the side of current scientific evidence concerning climate change, in spite of pressure from those with a conflict of interest who wish everyone to remain ignorant until they have squeezed the last living dime out of WV and left it a smoldering rubble heap.

—**John Zeigler**
Denton, TX

1848. You're creating a country of idiots and low-information voters/adults. Shameful. Keep science real, keep ideology and religion out of classrooms.

—**Judy L.**
Carson City, NV

1849. **Billy Mallery**

1850. **Holly Frey**
Verona, NJ

1851. **Judy Knopp**
Oakland Park, FL

1852. **Steven Benjamin**
Rochester, NY

1853. **Holly Hamby**
Denver, CO

1854. **Sally Fisher**
New York, NY

1855. **David Fiedler**
Bensalem, PA

1856. **Phillip Hope**
Brooklyn, NY

1857. **Betty Mato**
Rancho Mirage, CA

1858. **Robert Siegel**
Vienna, VA

1859. **Margaret Yelenik**
Englishtown, NJ

1860. **Robert Hall**
Hondo, TX

1861. **Bruce Hlodnicki**
Indianapolis, IN

1862. **Bernard Swierszcz**
Clifton, NJ

1863. Please make sure your students have accurate science statements on climate change.

—**Bea M**
Corvallis, OR

1864. **Betty Mato**
Rancho Mirage, CA

1865. **Patrick Divine**
Hopkins, MN

1866. **Aixa Fielder**
Los Angeles, CA

1867. **Rob Stonecipher**
Portland, OR

1868. **Judy Knopp**
Oakland Park, FL

1869. **Alfred Staab**
Wichita, KS

1870. **Michael Earle**
Ann Arbor, MI

1871. **Nick cordero**
Cave springs, AR

1872. **Wessman A.**
Pelham, NY

1873. **Nathaniel Harrington**
Saratoga Springs, NY

1874. **Robert Rivera**
Aston, PA

1875. **Elisabeth Bechmann**

1876. **Bob Quail**
Chagrin Falls, OH

1877. **Catherine McNamara**
Orlando, FL

1878. **Jeremy Levi**

1879. **John Hopkins**
Randolph, NJ

1880. **Gabrielle Baker**
Ft Mitchell, KY

1881. **Jeffrey Durbin**
Gaithersburg, MD

1882. **Rome Robinson**
Brevard, NC

1883. **Maurice Bennett**

1884. **Annette Hartshorne**
Fitchburg, WI

1885. **Mary Moore**
Wingo, KY

1886. **Ed Dunn**
Drexel Hill, PA

1887. **Michael Abrams**
PARKESBURG, PA

1888. **Hubert Walker**
Oak Ridge, TN

1889. Darryn Ambrose Portland, OR	1905. P Lassa Cupertino, CA	1924. Vanessa Bersani Geneva, NY
1890. Asano Fertig Berkeley, CA	1906. Avram Bell Philadelphia, PA	1925. Roland England Boonsboro, MD
1891. Mary Follis Kalamazoo, MI	1907. Charles Evans Champaign, IL	1926. Maryann Cherubini Spring City, PA
1892. Anthony King Ypsilanti, MI	1908. Makana McGee Lawrenceville, GA	1927. Jack Stansfield Stanwood, WA
1893. Linda Skonberg Winchester, OR	1909. Rebecca Canright Asbury, NJ	1928. Sally Gellert Woodcliff Lake, NJ
1894. Learning about the scientific view of climate change will enable students to be open to all the information, whether at school, at home, or in the media. — Barbara Johnston Baldwin City, KS	1910. Justin Singer	1929. Thomas Herzog South Salem, NY
1895. Kevin Oldham Shirley, NY	1911. Donald Dimock Monmouth, OR	1930. Nancy Powers Peck, KS
1896. Tony Tschida Rochester, MN	1912. Stephen Graff Herndon, VA	1931. James Ferguson Fallbrook, CA
1897. John Tovar Cedar Falls, IA	1913. Tim Smith Saint Paul, MN	1932. Richard McGrain Charlottesville, VA
1898. Rosalind North Newton, KS	1914. Jeri Pollock Altadena, CA	1933. William Stone Austin, TX
1899. Nydia Leaf New York, NY	1915. Cordale Brown Calumet Park, IL	1934. Linda Pearce Brentwood, TN
1900. Michelle Goldsmith Helper, UT	1916. Pamela Moreno Winfield, KS	1935. Joyce Benson Glenside, PA
1901. Deborah Rudnick Bainbridge Island, WA	1917. Bernardo Mujica surquillo, IA	1936. Georgia Labey Rancho Mirage, CA
1902. James Neely Austin, TX	1918. Alyce Brady Mattawan, MI	1937. Carol Johnson Winfield, IL
1903. Gabriel kirkpatrick denton, TX	1919. e Sawicki Jackson, MI	1938. Laurie Sandretto Getzville, NY
1904. Georgia Griffin Clinton Township, MI	1920. Matthew Adams Louisville, KY	1939. Jayson Luu Seattle, WA
	1921. Mike Hahn Farmington, MI	1940. Scott Wagner Klamath Falls, OR
	1922. Anne Parzick Corona del Mar, CA	1941. Laura Silverman West Nyack, NY
	1923. Mark Canright Asbury, NJ	1942. Sharon Baker Palmer Lake, CO

1943. Sharon Baker Palmer Lake, CO	1959. Jacki Hunter Los Angeles, CA	Malta, NY
1944. Dianne Douglas Phoenix, AZ	1960. Rae Pearson Seattle, WA	1977. Elise Schlaikjer Greenfield, MA
1945. Marion Brady Cocoa, FL	1961. Margaret Johnson Golden, CO	1978. James Boone Malden, MA
1946. Byoung Park Rancho Cucamonga, CA	1962. Joan Bathanti Vilas, NC	1979. Lansing Shepard Minneapolis, MN
1947. Charles Rush Pineville, MO	1963. James Sliney Robins, IA	1980. Randy Schwartz Mountain View, CA
1948. Science deniers rob their kids and their students of the education they need to make it in today's world. — Robert Thoryk Syracuse, NY	1964. Jennifer Davenport, FL	1981. Janice Krinsky Arlington Heights, IL
1949. Kathleen Wolfe Des Moines, WA	1965. Patricia Tice Potomac, MD	1982. Heather Bungard-Janney West Lafayette, IN
1950. Sara Hart North Myrtle Beach, SC	1966. Peter Schultz Downers Grove, IL	1983. Caroline Hair Columbia, SC
1951. Eliminate the creationist pseudo-science idiotcy and bring real science back to the schools. — John B Phoenix, AZ	1967. Norma Harris Sunnyside, NY	1984. Naomi Berg Portland, OR
1952. Anthony Vessicchio New Haven, CT	1968. Eric Reitz Sigel, PA	1985. Patricia Turner Jacksonville, FL
1953. Claire Coleman Dallas, TX	1969. Joseph Gray Kansas City, MO	1986. Judith Martinez Saint Augustine, FL
1954. Miriam Aguda Las Vegas, NV	1970. Dennis Willard Oxford, WI	1987. Mary Snow Columbia Station, OH
1955. Lois Allende Whitestone, NY	1971. Amy Hartzog Yadkinville, NC	1988. Bill baker Durham, NC
1956. Dörte Dethlefs	1972. Kids NEED to know FACTS not just wishes!!!! — Maria Miller Grand Rapids, MI, MI	1989. Bobby Belknap Frankfort, MI
1957. Jennifer Keys Ashburn, VA	1973. Lynne Preston San Francisco, CA	1990. Susan Pines New York, NY
1958. Fred Hitzhusen Columbus, OH	1974. Don Burkhart Morton, IL	1991. Jennifer Dubrow Bellingham, WA
	1975. Jeff Green Frankfort, IL	1992. Kathleen Smythe Cincinnati, OH
	1976. Erich and Joan Ruger	1993. Evelyn Pietrowski-Ciullo Salem, OR

1994. **Jocelyn Anthony**
Philadelphia, PA

1995. **Fay Barrows**
New York, NY

1996. **S**
Chicago, IL

1997. **Joseph Onello**
Saint Ignatius, MT

1998. **Ronald Richardson**
Missouri Valley, IA

1999. **Rhoda Levine**
New York, NY

2000. **Ken Tower**
Boise, ID

2001. **Daniel Hong**
Portland, OR

2002. **Jack West**
Portland, OR

2003. **Christina Dickson**
Black Mountain, NC

2004. **Basey Klopp**
Bend, OR

2005. **Barbara Johnston**
Ojai, CA

2006. **Deborah Gorman**
Hastings On Hudson, NY

2007. **Jim Watkins**
Grand Rapids, MI

2008. **Linda Friedman**
New York, NY

2009. **So Allen**
Mashpee, MA

2010. **John irby**
Colorado Springs, CO

2011. **Allan Chen**
Alameda, CA

2012. **Thomas Snow**
Oakmont, PA

2013. **Russell Jones**
Pahoa, HI

2014. **Ward McCreery**
Yucaipa, CA

2015. **Susan Vessicchio**
New Haven, CT

2016. **Donna
Brenner-Allmon**
Manistee, MI

2017. If we don't address the
issue of climate change at
every opportunity, future
generations will suffer.
—**Barbara and Jim Dale**
Decorah, IA

2018. **Rebecca Audet**
New castle, NH

2019. **Ronald Marcelle**
Novato, CA

2020. **Myrna Klotzkin**
South Salem, NY

2021. **Ellen Fiedler**
New Buffalo, MI

2022. **William Phillips**
Ann Arbor, MI

2023. **Kate Harder**
Glen Ellyn, IL

2024. Accurate and
complete scientific
information helped me in my
engineering career. I urge
you to give West Virginia
students the same
advantage I had -- a good,
scientific education. Thank
you.

—**Daniel Kamman**
New Bedford, MA

2025. **Scott Rivers**
Saint Petersburg, FL

2026. **Becky Painter**
Overland Park, KS

2027. **Becky Daiss**
Arlington, VA

2028. **Rosie Pfarr-Baker**
Minneapolis, MN

2029. **Martha Barrett**
Dallas, TX

2030. **Kathy Colton**
Cedar Rapids, IA

2031. Science and current
data tell us climate change is
real. We need to make sure
our children are educated
with scientific facts and
verifiable information.
—**Kenneth Riffel**
Hope, KS

2032. **Laurie Stone**
Missoula, MT

2033. **Thomas Bolker**
Middleburg, FL

2034. **Wilbur Little**
Denver, CO

2035. **Elizabeth Rosenberg**
Philadelphia, PA

2036. **Joanne Watchie**
Pasadena, CA

2037. **Sister C.PP.S.**
Saint Louis, MO

2038. **Beverly Horton**
West Chester, PA

2039. **Eric Holcomb**
Bend, OR

2040. **Arlen Everist**
Mossyrock, WA

2041. **William Dykoski**
New Brighton, MN

2042. **Elizabeth
McGraw-Austin**
Baltimore, MD

2043. Suzanne Dalton Canton, OH	diligence. — John Jorgensen Tucson, AZ	2076. Tim Dressel San Marcos, CA
2044. Bill Dubey Beaverton, OR	2059. James Tyree II Portland, OR	2077. Jay Trempler Algonac, MI
2045. Linda Everist Mossyrock, WA	2060. Diane Lewis Mandeville, LA	2078. Susan Hanger Topanga, CA
2046. Kate Nairn Lansing, MI	2061. Genon (HEAL)	2079. g;proa taber Bellevue, NE
2047. Susan Silber Berkeley, CA	2062. Judith Lienhard Portland, OR	2080. Janat Parker MIAMI, FL
2048. Debbie Bray Royse City, TX	2063. Jose Diaz Stanfordville, NY	2081. Juli Shields Conklin, NY
2049. Harold Barling Las Vegas, NV	2064. Bernardo Mujica Sioux City, IA	2082. Lynda Pauling Oak Park Heights, MN
2050. Janine Hoefler Glen Allen, VA	2065. Charlotte Husteck Cleveland, OH	2083. Carolyn redden
2051. Julia Radwany Akron, OH	2066. Kimberly Rigano York, ME	2084. Ellen Gold Palo Alto, CA
2052. Suzanne Geldys Dearborn Heights, MI	2067. Barbara Siems Bailey, CO	2085. Richard Mann Newport News, VA
2053. Katalin Spang Burlington, MA	2068. Dudley and Candace Campbell Valley Glen, CA	2086. Don't cave in to bad science. Use peer reviewed science in our text books. — David Blakely Topeka, KS
2054. James Spencer Glendale, AZ	2069. Paul Hofheins Buffalo, NY	2087. Dorothy Strotkamp Ann Arbor, MI
2055. Kelly OBrien Phoenix, AZ	2070. Jennifer La Due Des Moines, WA	2088. James Polichak Allston, MA
2056. Huts Erickson Peoria, IL	2071. Chris Scholl Neptune, NJ	2089. Jessica Brimley Long Beach, CA
2057. Annette Ancel-Wisner Shell Lake, WI	2072. John Randall Stoughton, WI	2090. Justine Johnson Coventry, RI
2058. I am a career science & math teacher with 17 years experience working with at risk teens. Now, all of our teens are at risk due to climate change. Please, adopt the science standards that were put forth after much study and due	2073. Janice Fortune-Smith Lake Oswego, OR	2091. Damian Madden Sacramento, CA
	2074. Kerry Coleman San Antonio, TX	2092. Isaac Salazar Los Angeles, CA
	2075. Claudine Butcher Longmont, CO	2093. Dennis Brown Weaverville, NC

2094. **Steve Hersch**
Kenmore, WA

2095. **Frank Ayers**
Hollidaysburg, PA

2096. **Jonathan Michaels**
Northampton, MA

2097. **Ryan Hanson**
New Orleans, LA

2098. **Destine Robertson**
Conifer, CO

2099. **April Schmitt**
Landenberg, PA

2100. **Benjamin Hubbard**
Costa Mesa, CA

2101. **Herman Diaz**
Brighton, MA

2102. **Cynthia Mahlau**
Portland, OR

2103. **Madeleine Bateman**
Portland, OR

2104. **Charles Bingham**
Sitka, AK

2105. **Nicola Nelson**
Bountiful, UT

2106. **Joan Torok**
West Linn, OR

2107. **Cheryl Mayo**
Pittsburg, KS

2108. **Dick Wimmers**
Salem, OR

2109. **David Daniels-Lee**
Ocean Shores, WA

2110. **Sue Walden**
San Francisco, CA

2111. **Deana Schneider**
Englewood, CO

2112. **Cassandra Browning**
Salem, OR

2113. **Mitch Dalition**
San Francisco, CA

2114. **Gary Lapid**
Mountain View, CA

2115. **J**
West Henrietta, NY

2116. **Ross and Judy Dill**
Sterling, IL

2117. The teaching of science should be based on the most up-to-date science...not dictated by those who don't believe in science.

—**Richard Bradshaw**
Las Vegas, NV

2118. **Donnie Huffman**
Jackson, MI

2119. **Carol McCarthy**
Winter Haven, FL

2120. **Kathy Magne**
Saint Paul, MN

2121. **Brent Gunderson**
Green Bay, WI

2122. What good are you doing for your young if you don't let them learn what their counterparts all around the world are learning? All that does is set their education behind and make them non-competitive (not to mention a laughing stock) in the global economy.

—**John Peters**
Saugatuck, MI

2123. **Amalie Callahan**
Rock Island, IL

2124. **Kevin Stephens**
Peoria, AZ

2125. **Debbie Thomas**
Fernley, NV

2126. **Eugene Ekaitis**
Monongahela, PA

2127. **Shelley Strohm**
Los Angeles, CA

2128. **Lisa Fues**
Alexandria, VA

2129. **Anne Block**
Mission Viejo, CA

2130. **Timothy Shanahan**
Fountain Valley, CA

2131. **Anthony Montapert**
Ventura, CA

2132. **Ahmid Al-Sharif**
Al Madinah, KS

2133. **Will H**
Roseville, CA

2134. **Robert stout**
Fairfax, CA

2135. Although I'm Canadian and live on the west coast, a long way from West Virginia, I am signing this letter because global climate change is just that: global. So my children will be impacted by your decision. As will the children everywhere, of all species. Not only that, but we often don't talk about the worst aspect of climate disruption -- the impact it's going to have (and is having already) on our food security and water sources. We humans have evolved over the last 10,000 years into a species that is dependent on agriculture -- and agriculture is dependent on a stable climate, something we had for 10,000 years -- until recently. Today's generation of students will be faced with rising food prices, then food

shortages, food riots, crop failures and, finally, famines. Yes, America's children will not be immune to famines caused by increased heat waves, droughts, floods and extreme storms. We can't grow food overnight, nor can we learn to grow food overnight. West Virginia needs to accept the science of climate change so that West Virginian students can get on with both mitigating the causes of climate change and becoming more resilient to its impacts. Please do the right thing for the children.
—**GreenHeart Education**

2136. **Mark Anderson**
Blaine, WA

2137. **April Velasquez**
North Aurora, IL

2138. Science IS evidence-based. To change that is to teach lies, not science.
—**C Zawadzki**
Schenectady, NY

2139. **James peloquen**
New York, NY

2140. **Marc Weber**
New City, NY

2141. **Leslie Geller**
Austin, TX

2142. **Linda Vietz**
Columbus, OH

2143. **Kelly Doolittle**
Locke, NY

2144. **Ray martinusen**
Mesa, AZ

2145. **James Smith**

2146. **Brent Holman**
Madison, WI

2147. **Judy Johnson**
Auburn, WA

2148. **Thomas Rogers**
Eagle, Idaho, ID

2149. **Deb Hughes**
Southaven, MS

2150. **Jennifer Cunningham**
Aurora, IL

2151. **Jason Sprott**
San Marcos, TX

2152. **P Scoville**
Hewitt, NJ

2153. **Gabriel Betty**
Hope Valley, RI

2154. **Pamela Vescera**
Pacific Grove, CA

2155. **Julie Blom**
Bloomfield Hills, MI

2156. **L**
Valparaiso, IN

2157. As an educator, it is extremely important to me that objective scientific facts are taught to students. This has nothing to do with anyone's religious beliefs.
—**MaryRose Randall**
Rock Hill, SC

2158. **Constance Dondore**
New York, NY

2159. **Fay Strobel**
Kenosha, WI

2160. **Glen Twombly**
Arcata, CA

2161. **Kenneth Clayman**
Fredericksburg, VA

2162. Give students an accurate science education and a good start in life.
—**Cathleen Real**
Davenport, IA

2163. Science, not created mythology or currently accepted beliefs, are and should be the basis for what our children learn in public schools. Information, peer reviewed and vetted by scientists schooled in that discipline, updated and current, is the best way to ensure that our schools address the challenges facing the future and those who will ultimately have to face the consequences of our actions today.
—**Rodney Whisenhunt**
Roseburg, OR

2164. **Elizabeth smith**
Kansas City, MO

2165. **David Edwards**
Olympia, WA

2166. **Tim Gundlach**
San Carlos, CA

2167. **Ben Huberman**
Miami Beach, FL

2168. **Joe Maurer**
Detroit, MI

2169. **Ken Burge**
new paltz, NY

2170. **Laura Wheeler**
Kalamazoo, MI

2171. **Bert Morris**
Maplewood, NJ

2172. **Jeanie Rodgers**
Durham, NC

2173. **Kae Toguchi**
Mililani, HI

2174. **Joshua Seff**
McKinney, TX

2175. **Robert Watson**
Iron River, MI

2176. **Robert Watson**
Iron River, MI

2177. **Philip Kippel**
Kissimmee, FL

2178. It's so important for our younger generation to be receiving real science information about the world they will inherit. Let's keep science honest. We need to prepare for the results of this climate change we have caused.

—**Janet Teffer**
North Eastham, MA

2179. **Mike Eddy**
Seattle, WA

2180. **Maureen O'Neal**
Portland, OR

2181. **Jeane Harrison**
Des Moines, IA

2182. **Carl Stone**
ARLINGTON, TX

2183. **Houston Wong**
Kirkland, WA

2184. **Mindy Botchuck**
Two Rivers, WI

2185. **Sherry Opalka**
Kalamazoo, MI

2186. **MaryAnn Bloedow**
Oshkosh, WI

2187. **Greg Zyzanski**
Cleveland, OH

2188. **Janice Hall**

2189. **Jerry Nailon**
Sacramento, CA

2190. **Sherry Toelle**
Atlantic, IA

2191. If you ignore the facts, it is not #Education, it's child #abuse.

—**USAF Regis P. White**
La Plata, MD

2192. **Vicki Spanogle**
Tijeras, NM

2193. **William Soronen**
Las Vegas, NV

2194. **Pat Mulawka**
Renton, WA

2195. **Carolyn Ryan**
st. Louis, MO

2196. **Art Hobson**
Fayetteville, AR

2197. **Russell Donnelly**
Framingham, MA

2198. **Stephen and Newberg**
North Granby, CT

2199. **Andrea Chisari**
Titusville, FL

2200. **Joshua Wood**
Schenectady, NY

2201. **David Moore**
Banning, CA

2202. **Saeid Nourian**
Lowell, MA

2203. **John Rowell**
Los Gatos, CA

2204. **Chelsea Collison**
Mount Airy, MD

2205. **Joan Wilson**
Ste Genevieve, MO

2206. **John Moore**
Farmingdale, NY

2207. **Ann Sparkes**
Wayne, PA

2208. **Suhas Malghan**
Baltimore, MD

2209. **Raffaela Kane**
Harrisville, RI

2210. **Wayne Straight**
Sykesville, MD

2211. **Joan Williamson**
Arlington, VA

2212. The scientific method means that everything is the best we know at this time. If and when new evidence is found that doesn't support current thought, then the explanation will change to fit the new understanding. We now know the earth circles the sun. There was a time when we didn't.

—**Donald Walker**
Conway, MA

2213. **Denise Thomas**
Saint Paul, MN

2214. **Patricia Archuleta**
Reno, NV

2215. **Sandra O'Flaherty**
south Hero, VT

2216. **Tom Tripp**
Fort Collins, CO

2217. **Al Daniel**
Grosse Pointe, MI

2218. **William Koopman**
Olympia, WA

2219. **Charlene Jandik**
Cypress, TX

2220. **Jeri Altman**
Longmont, CO

2221. **Lesley Woodward**
Rocky River, OH

2222. **Charles Winter**
Berkeley, CA

2223. **Sandra Laase**
Chicago, IL

2224. **Jean Templeman**
Ben Lomond, CA

2225. **John Bernard**
South Portland, ME

2226. **Doreen LeBel**
Moodus, CT

2227. **Deborah Gorman**
Hastings On Hudson, NY

2228. **Catherine Basile**
Cuy Falls, OH

2229. **Kathy Oppenhuizen**
West Olive, MI

2230. **Thomas Peterson**
Windham, ME

2231. **Judith Sandeen**
Hastings, NE

2232. **Karen Batroukh**
Moscow, ID

2233. Mountain State students deserve to learn the truth about the cause and effects of Climate Change -- it's their future.
—**Shireen Parsons**
Washington, DC

2234. **Sol Jerome**
Dallas, TX

2235. **Elisabetta Emaldi**

2236. **Linda Myers**
Louisville, KY

2237. What children are taught in any country today affects what happens throughout the world tomorrow. The world is watching what happens in

WV and begging you to make the right decision.
—**John Freeman**

2238. **Devon King**
Tewksbury, MA

2239. **Michael Bellinger**
Entiat, WA

2240. **David Bolman**
Leipsic, OH

2241. Or, we can just keep them dumb and choking to death.
—**Vincent Patti**
Long Beach, CA

2242. **Stacey Ward**
Los Lunas, NM

2243. Do you wish for your kids to grow up as Stupid as those in Bobby Jindal's State?????

—**Gerard Gaudin**
Metairie, LA

2244. **Adalberto Araiza**
Douglas, AZ

2245. **Robert Hiatt**
Reno, NV

2246. The original climate science content in the Next Generation Science Standards was written and peer-reviewed by scientists and science educators, and represents the scientific consensus on climate change.

—**Leonard Thomas**
Antelope, CA

2247. **Bob Standish**
Kenai, AK

2248. **Aleyah Miller**
Novato, CA

2249. **Ronald Katz**
Huntington Woods, MI

2250. **Lynda Wilson-Glenn**
Inkster, MI

2251. **Cherryll frick**
Houston, TX

2252. **Nick Berezansky**
Ridgewood, NJ

2253. **Michael Grieco**
Gainesville, GA

2254. **Frank Mertens**
Warminster, PA

2255. **Marie Leven**
Flushing, MI

2256. **Paul Brinegar**
Argillite, KY

2257. **Beatrice Nelson**
Hayward, CA

2258. **Dan Hitchman**
Loveland, CO

2259. **Dean Monroe**
Des Moines, IA

2260. **Ashley Walters**
Del City, OK

2261. **Robert Storer**
Solomon, KS

2262. **M Miller**
Lawrence, KS

2263. **michelle Krupkin**
Los Angeles, CA

2264. **Mary Scollins**
South Burlington, VT

2265. **Dorothy & Robert Osborn**
Durham, NC

2266. **Dan W**
Henrietta, NY

2267. **Gail Ohara**
Portland, OR

2268. The job of propagandists is to teach a lie, the job of educators is to teach the truth. Please make a wise choice.

—**Ed Parks**

Oklahoma City, OK

2269. **Bob Leyba**

Newberry Springs, CA

2270. **Steven Black**

Topeka, KS

2271. **Jacki Jean**

2272. **Alistair Bradley**

Hilliard, OH

2273. **Dan Davis**

Minden, NE

2274. **Circus Szalewski**

Los Angeles, CA

2275. **Avis Ogilvy**

New Orleans, LA

2276. **Charmaine Oakley**

Pleasantville, NY

2277. **Domenica Altieri**

Fullerton, CA

2278. **Dick Dierks**

Appleton, WI

2279. **Joanne Tollison**

Petersburg, MI

2280. **Jan Novotny**

Jacksonville Beach, FL

2281. **Ann Charland**

2282. **Dorothy Olson**

Plover, WI

2283. **Darlene Byrd**

Allenton, MI

2284. **Jim Ghormley**

Vancouver, WA

2285. **Anthony Morton**

Northfield, NJ

2286. **Jennifer Voorhees**

West Des Moines, IA

2287. **Mario Velarde**

Hialeah, FL

2288. **Dave Minsch**

Platte City, MO

2289. **Deborah King**

Albuquerque, NM

2290. **Michael Mattson**

Wahpeton, ND

2291. **Kyle Peterson**

Sterling Heights, MI

2292. **Larry Ulrey**

Indianapolis, IN

2293. **Paul Madzik**

Bethel, CT

2294. **Judy Savard**

Laona, WI

2295. **Donald Morrison**

West Windsor, VT

2296. Global warming is a terrible threat to our planet and therefore to all living things. We all need to be well informed about it, and in the we will need to have well prepared scientists to continue to study it. Some of your students might be among them, especially if they receive valid climate education.

—**Barbara Rystrom**

AIKEN, SC

2297. **Timothy Schacht**

Grosse Pointe Park, MI

2298. **Nora Polk**

Portland, OR

2299. **Theodore Beloin**

Tucson, AZ

2300. **Susan Wheaton**

Harrisonburg, VA

2301. **Christine**

Yellowthunder

Fairchild, WI

2302. **Javon Monahan**

Walla Walla, WA

2303. **Sean Cook**

Portland, OR

2304. **Jeff Smith**

Reisterstown, MD

2305. **Richard Nevins**

Milford, MI

2306. **Ruth Podolin**

Medford, NJ

2307. **Maria**

Esposito-Pickering

Amityville, NY

2308. **Bruce Warren**

San Antonio, TX

2309. **Brianna cooper**

Olympia, WA

2310. **Richard Booth**

Grosse Ile, MI

2311. **William Selig**

Seattle, WA

2312. **Henry Zucker**

Rome, NY

2313. **C Day**

Live Oak, FL

2314. **Jesus Rodriguez**

Austin, TX

2315. **Maureen Knutsen**

Naknek, AK

2316. **Jean Bails**

St. Clair Shores, MI

2317. **Christine rohde**
Boardman, OH

2318. **Gerhard Oertel**
Santa Rosa, CA

2319. **Susan Chandler**
Fort Pierce, FL

2320. **Diane Singler**
Irving, IL

2321. **Lucas Botan**
Geneva, NY

2322. **Jane Kepner**
White Salmon, WA

2323. **Margaret Eisenberger**
Chesterfield, MO

2324. **Joan Kirby**
New York, NY

2325. **Bruce Lowrey**
Independence, MO

2326. **Jennifer Herrington**
Clarinda, IA

2327. **Maureen Wheeler**
Silver Spring, MD

2328. **Joe Files**
Apache Junction, AZ

2329. **Kent Minault**
Sherman Oaks, CA

2330. **Tara Conaway**
Byron Center, MI

2331. **Harold Crow**
Chattanooga, TN

2332. **Cynthia Gilman**
Narberth, PA

2333. **Brian Otto**
Las Cruces, NM

2334. **Dale McCart**
Irvine, CA

2335. **Lynda Barondes**
Mesa, AZ

2336. **Lynda Barondes**
Mesa, AZ

2337. **Frank Wilsey**
Baltimore, MD

2338. **Dennis Balgemann**
North Fort Myers, FL

2339. **Jay Atkinson**
El Sobrante, CA

2340. **Charles Zogby**
Silver Spring, MD

2341. **Mike Trivich**
Sylmar, CA

2342. **Clarke owens**
Perrysville, OH

2343. **Lisa Lewis**
Stillwater, OK

2344. Burying your head in the coal dust does not change the facts. The whole point of education is to have access to accurate information on which to use the critical thinking skills that you should have learned in school.

—**Eric West**
Port Orange, FL

2345. **Jim Knight**
Aiken, SC

2346. **Matthew Tarpley**
McDonough, GA

2347. **Patricia Wilson**
Spreckels, CA

2348. **Amanda Gerber**
Columbus, OH

2349. **Karen McCarthy**
Naples, FL

2350. America wants our children in fact-based education!

—**Kathryn Wild, PhD**
San Diego, CA

2351. **Omar Shah**
Columbus, OH

2352. **Ken Berry**
Farmersville, TX

2353. **Joan McCormick**
Crystal Lake, IL

2354. **Helen Santiz**
Grosse Pointe, MI

2355. **Benjamin Page**
Cheshire, CT

2356. **Dylan Jones**
Springfield, MA

2357. **Daniel Honorio**
Ludlow, MA

2358. **Sandra Smith**
Seattle, WA

2359. **Paul Impola**
Albany, NY

2360. **James Giles**
Quilcene, WA

2361. **Peter Wright**
Henrico, VA

2362. **Shari Juranic**
Red Hook, NY

2363. **Shari Juranic**
Red Hook, NY

2364. **Simon Hellerstein**
Madison, WI

2365. **hal PILLINGER**
Port Chester, NY

2366. **Andy Winger**
Richardson, TX

2367. **Priscilla Chew**
Somerville, MA

2368. **Keith Kreuz**
Portland, OR

2369. **Judy Schilling**
Longmont, CO

2370. **Noreen Statham**
Houston, TX

2371. **Laura Napoleon**
Little Neck, NY

2372. **Anne & Jim Harnden**
West Bloomfield, MI

2373. **Michael MacDonald**
Natick, MA

2374. **Catherine Ross**
Edmonds, WA

2375. **J S**
North Bergen, NJ

2376. **Chilton Gregory**
Albuquerque, NM

2377. **Henry Narve**
Thousand Oaks, CA

2378. **M H**
Pittsburgh, PA

2379. **Douglas Kinney**
Otego, NY

2380. **Alex Meek**
Austin, TX

2381. **Laraine Winn**
Clearwater, FL

2382. **Grant Rich**
Oakland, CA

2383. **Andre Basler**
El Cerrito, CA

2384. **Joe Barber**
Madison, CT

2385. **Alexander Dalton**
Montpelier, VA

2386. **Petra Stang**

2387. what is this; another form of creationism vs Darwinism. children should be taught the science of climate change. no if, ands, or buts.

—**Kate Ruland**
Dorset, VT

2388. **Jenny McDermott**
Minneapolis, MN

2389. Has the Board joined the "Flat Earth Society " yet?
—**Anne & Jim Harnden**
West Bloomfield, MI

2390. **Jesse Rusoff**
Ardmore, PA

2391. **Ana Perkins**
Wimberley, TX

2392. **Ellen Gilbert**
Porter, TX

2393. **Kathleen Serra**
Lavallette, NJ

2394. **Joyce Bressler**
Stony Point, NY

2395. **Katherine Murdock**
Greenland, AR

2396. **Debra Rehn**
Portland, OR

2397. **Debra Rehn**
Portland, OR

2398. **Ruth Anderson**
Roy, WA

2399. **Joseph Kondrot**
Washington, DC

2400. **Orin Kotula**
New York, NY

2401. **Peter Menchini**
San Francisco, CA

2402. **Bo Bergstrom**
Silver City, NM

2403. **Douglas Mason**
Roxbury Crossing, MA

2404. **Fred Ponder**
Houston, TX

2405. **William Smithers**
Santa Barbara, CA

2406. **Margaret Romeril**
Lexington, KY

2407. **Cheryl Fisher**
Portland, OR

2408. **James Nowack**
Highland, NY

2409. **Sheila Brooks**
Danbury, CT

2410. **Chip Croft**
Los Angeles, CA

2411. **Lawrence Brown**
Larchmont, NY

2412. **melody smith**
Iowa City, IA

2413. **David Fork**
Mountain View, CA

2414. **Mary Gove**
Cleveland, OH

2415. **Carol McGrath**
Coatesville, PA

2416. **Sylvia Black**
Portland, OR

2417. **Rand Fazar**
Roanoke, VA

2418. **Douglas Benedict**
Santa Monica, CA

2419. **Neal Hemmelstein**
Lemont, PA

2420. **Carol Ruth**
Stanford, CA

2421. **Candace Jarrett**
Las Vegas, NV

2422. **Alison Zaharee**
Kalamazoo, MI

2423. **David Peterson**
San Diego, CA

2424. **James Mulcare**
Clarkston, WA

2425. **Rudd Crawford**
Oberlin, OH

2426. **Barbara Ward**
Phoenix, AZ

2427. **Claire Broome**
Berkeley, CA

2428. **June Picard**
Bay City, MI

2429. **K Collinson**
Bellingham, WA

2430. **Gail Alford**
santa rosa, CA

2431. **Gail Alford**
santa rosa, CA

2432. **Jerry Yeager**
Louisville, KY

2433. **Kelly Gerhold**
Bakersfield, CA

2434. **Anne Freas**
Lancaster, PA

2435. **Betty Brooks**
Hailey, ID

2436. **John Harris**
bay point, CA

2437. **Amanda Salvner**
Ann Arbor, MI

2438. **Donald Waltman**
State College, PA

2439. **Lawrence Moss**
Bloomington, IN

2440. **Jeanie Digiacomo**
Marienville, PA

2441. **Margaret Needham**
East Brunswick, NJ

2442. **Dee Avila**
Hialeah, FL

2443. **Sarah**
Louisville, KY

2444. **Peggy Page**
Stanwood, WA

2445. As a science teacher for 40 years, I urge you to uphold scientific content standards that are endorsed by 97% of climate scientists and the 200 world-wide scientific organizations. These agree with the statement "that climate change is caused by human action":
http://opr.ca.gov/s_listoforganizations.php

In the U.S. this includes the National Academy of Science and the American Association for the Advancement of Science among others. Don't shortchange your students with misinformation about science.

—**Fran Ludwig**
Lexington, MA

2446. **Paul Richey**
Portland, OR

2447. **Darlene Lovell**
Bakersfield, CA

2448. **Rex Messick**
Harrod, OH

2449. **Jan Casner**
Dallas, TX

2450. **Lorenz Steininger**

2451. Denying the scientific grasp of climate works to deny a good future for our children and their children.

—**John Gittins**
North Brookfield, MA

2452. **Gary Nelson**
Orrville, OH

2453. **Joann Kelly**
Medford, OR

2454. **Don walden**
Mahwah, NJ

2455. **Jeanne Govoni**
Middleboro, MA

2456. **Sandra Van Schaack**
Oswego, NY

2457. **James Hopson**
Ludington, MI

2458. **Tom Wenzel**
Prescott, AZ

2459. **Jon Wyss**
Southgate, MI

2460. **Faye Straus**
Lafayette, CA

2461. **Ann Wright**
Ann Arbor, MI

2462. **Shawn Thompson**
Portland, OR

2463. **Roger Haase**
Edgewater, NJ

2464. **John Hayes**
Lawndale, CA

2465. **Phyllis Ball**
San Francisco, CA

2466. **Dennie Carcelli**
Seattle, WA

2467. **Darius Mitchell**
seattle, WA

2468. Alexa McMahan Huntington Beach, CA	2483. Paulette Fiehrer Covington, KY	2502. Jose Garcia Vacaville, CA
2469. Brian Powell Portland, OR	2484. Karen Nieuwland Dolliver, IA	2503. Roberta Richardson Golden, CO
2470. Tom Wenzel Prescott, AZ	2485. Mike Schiller Jersey City, NJ	2504. Stephanie C. Fox Bloomfield, CT
2471. Cheri Moore Venice, FL	2486. H Gentry Oakland, CA	2505. Denise Bonk Philadelphia, PA
2472. Sharon Saunders Tacoma, WA	2487. Leonard Wright Sebring, FL	2506. A Stein Fresh Meadows, NY
2473. Sarah Gallagher New York, NY	2488. Pat Pullen-Jones Portland, OR	2507. John Paone Mashpee, MA
2474. As a people, we have to rely on facts, whether in science, history or any other discipline. We may not like the facts but failing to accept them only makes decisions made without acknowledging them detrimental to our future. — Aileen Spillman Herbster, WI	2489. Annie Prince Coopersburg, PA	2508. ray bellamy tallahassee, FL
2475. Ellen Shoun Bronson, MI	2490. Krista Munster Minneapolis, MN	2509. Jan Barshis Wilmette, IL
2476. Tom Pitman Burbank, CA	2491. lynda leigh Santa Cruz, CA	2510. Misti Dunnuck North Liberty, IN
2477. Lori Rodgers Clawson, MI	2492. Lou Plocher Millville, NJ	2511. Cathy Thornburnurn Los Angeles, CA
2478. Georgina Wright North Las Vegas, NV	2493. J Gurdin San Francisco, CA	2512. Kahlil Goodwyn Brooklyn, NY
2479. Danielle Callesen Charleston, SC	2494. Harlan Lebo La Mirada, CA	2513. Shawntane Long Roxboro, NC
2480. Dennis Cosentino North Fort Myers, FL	2495. Michael Totin Seattle, WA	2514. Lori Kegler San Pedro, CA
2481. Liberty! — David Eppelsheimer Milwaukee, WI	2496. Evan McDermitt Fullerton, CA	2515. Sylvia Eoff Rio Rancho, NM
2482. Nicole Gambino Staten Island, NY	2497. Arthur Ide Radcliffe, IA	2516. Yolani Moratz Hollywood, FL
	2498. Steve Kokol Wallingford, PA	2517. Bil Polesnak Troy, MI
	2499. Thomas Guaraldi Houston, TX	2518. Esha Chiochio Santa Fe, NM
	2500. Karin Bates Cedar Grove, NJ	2519. Ken Gigliello Centreville, VA
	2501. Christine Sepulveda Anaheim, CA	2520. Sylvia Eoff Rio Rancho, NM

2521. Debbie Woolley Baltimore, MD	Beaverton, OR	2556. Chris watts Anchorage, AK
2522. Carolyn Ricketts Edgewater, MD	2540. Katherine Holmes Ann Arbor, MI	2557. Joel Leitner Larchmont, NY
2523. Virginia McEwan Sugar Grove, OH	2541. Linda Donahue Alexandria, VA	2558. Kathleen McCourt Philadelphia, PA
2524. Jeffrey Cohen Rowley, MA	2542. Keyon Jeff Houma, LA	2559. James Rodriguez Clermont, FL
2525. Cheryl Laskasky Addison, IL	2543. Victor Kaplan Plano, TX	2560. Devin Fischer Broomfield, CO
2526. Cheri Vasek Honolulu, HI	2544. Peter Sullivan Santa Monica, CA	2561. Or else the CLIMATE WILL effect even to the rich. — Joe Sheats Tempe, AZ
2527. Emily Nguyen Platteville, CO	2545. Truth...observable truth must be imparted to our children and the process of determining that! — Rebecca Tippens Colrain, MA	2562. Tom Devine Olympia, WA
2528. Catherine Jurgensen Montgomery, IL	2546. Theda Zaretsky Los Angeles, CA	2563. Glenn Storrs Cincinnati, OH
2529. Michael Powell Miamisburg, OH	2547. Darren Skotnes Delmar, NY	2564. Brent and Turner Media, PA
2530. Timothy Hagerman Lansing, MI	2548. Amber Butler Jacksonville, FL	2565. Juanita Westberg Hesperia, CA
2531. Barry Saltzman Los Angeles, CA	2549. Jeannette Cunningham Murray, KY	2566. James Brunton Tampa, FL
2532. Pat Dunn Aurora, CO	2550. James Lipps Kansas City, MO	2567. Only if we educate our young people accurately, can we expect actions that will reduce America's carbon foot print. — Eva Adams Union, MO
2533. Jennifer Brees Cumberland, RI	2551. Noenoe Barney-Campbell Honolulu, HI	2568. raeann Scott Sumas, WA
2534. Dea Smith Loveland, CO	2552. Jane Wood Saint Louis, MO	2569. Michael Bugbee Battle Creek, MI
2535. Kathy Bourgoin Orono, ME	2553. Linda Gillaspay Reno, NV	2570. J Twain Portland, OR
2536. Lynn O'Shea New Orleans, LA	2554. Tina Zeeberg	2571. Cynthia Liss Brooklyn, NY
2537. Patrick O'Dell Harrisonville, MO	2555. Patr Baldwin Wilmington, DE	
2538. Elaine Kendall Friday Harbor, WA		
2539. Natalie Van Leekwijck		

2572. **James Wallrabenstein**
Spokane, WA

2573. **Richard Bourne**
Brookline, MA

2574. **Jo Harvey**
Pacific, WA

2575. **Adina C**
Santa Fe, NM

2576. **Jan Ebersole**
Chesterfield, MI

2577. **Suzi Hokonson**
Spokane, WA

2578. **Brent and Turner**
Media, PA

2579. **jesse williams**
cincinnati, OH

2580. **ML SCHIHL**
Fond du Lac, WI

2581. **John Barton**
Athens, GA

2582. **Laura Horowitz**
Pittsburgh, PA

2583. **Marcy Morgan**
Philadelphia, PA

2584. **Pat Peters**
Portland, OR

2585. **Jennifer Karr**
Lowell, OH

2586. **Ira Weissman**
Potsdam, NY

2587. **Dianne Gove**
Orleans, MA

2588. **T C**
Crest Hill, IL

2589. **John & Sandy Zinn**
Fountain Hills, AZ

2590. **T McCarthy**
Orlando, FL

2591. **Veronica stein**
Brooklyn, NY

2592. **Mary Hackman**
Covington, KY

2593. **Lee Martin**
Greenwich, OH

2594. **Kathrin Gallo**
Sayville, NY

2595. **Carol Doty**
Belding, MI

2596. **Patrice Anita**
Los Angeles, CA

2597. **Narayan Rajan**
Los Altos, CA

2598. **Elaine Camerota**
Covington, KY

2599. **Steven Sy**
East Lansing, MI

2600. **Andrew Lenz**
Leverett, MA

2601. **Joe Wehrle**
Punxsutawney, PA

2602. **Jessica Rocheleau**
Osseo, MN

2603. **Ken Ross**
Ann Arbor, MI

2604. **Anthony McCradic**
Grand Prairie, TX

2605. **Elizabeth Zarek**
Wilmington, DE

2606. **Laura Snyder**
Powell, OH

2607. My daughter is in 6th grade in PA and is learning the facts about climate science. It's so important that

our young people know the truth so that they will be prepared to deal with the consequences and work on innovative solutions.

—**Leah Schade**
Milton, PA

2608. **Erin Parker**
Blacksburg, VA

2609. **Robert Hodge**
Portland, OR

2610. School is the place recent knowledge can be used. the children in school today are those who will be deciding, not only, their future but mine. Give them the latest scientific facts.

—**John Aponick**
Harrisburg, PA

2611. **Mary Storsved**
Saint Paul, MN

2612. **Ray Kalinski**
Saint Cloud, FL

2613. **Janet Eddy**
Ashland, VA

2614. **Patricia Sobel**
Laurel, MD

2615. **Charles Klemm**
Macon, GA

2616. **Lisa Hoffman**
Matthews, NC

2617. **Julia Burke**
Sierra Vista, AZ

2618. **Anna Cushman**
Portage, MI

2619. **Don OBrien**
Rochester, NY

2620. **Charlene Lauzon**
Lynnwood, WA

2621. **Dolores Farrell**
Sitka, AK

2622. **Eric Baratta**
Burlington Twp, NJ

2623. **Debby Strauss**
Milwaukee, WI

2624. **Barry LeBeau**
Providence, RI

2625. **Douglas Waldroop**
Hyattsville, MD

2626. **Gilda Fusilier**
Sacramento, CA

2627. Let science be science.
—**Wallace Elton**
Saratoga Springs, NY

2628. **Brant Kotch**
Houston, TX

2629. **C Blackman**
Raleigh, NC

2630. **D Smith**
North Sutton, NH

2631. **Stephen Brittle**
Phoenix, AZ

2632. **Nat Bilsky**
Barrington, IL

2633. **Ryan Riddle**
Mount Vernon, KY

2634. **Victor Escobar**
Midlothian, VA

2635. **Jeannie Finlay-Kochanowski**
Toledo, OH

2636. **Richard Johnson**
Bellingham, WA

2637. **Meryle Korn**
Bellingham, WA

2638. Gentlemen: If you want your students to compete in the future global job market, they will need the honest facts that the educated world agrees upon. Allow West Virginia to stand tall with other enlightened young men and women.
—**Marion Schmidt**
Winnetka, IL

2639. **Judy Ripke**
Seward, NE

2640. **Beth shafer**
Huntington Beach, CA

2641. **Lisa Deckert**
Norfolk, VA

2642. **Annette**
Omaha, NE

2643. **Mary Keithler**
Englewood, CO

2644. **Darcy Lubbers**
Santa Monica, CA

2645. **Marysusan Welker**
Pinckney, MI

2646. **Peter Eliscu**
New York, NY

2647. **M Langelan**
Chevy Chase, MD

2648. **rachel kaplan-kinsey**
Petaluma, CA

2649. **James Presley**
Sedan, KS

2650. **Alison Lamothe**
Edwardsville, IL

2651. **Eldon Meyer**
Algona, IA

2652. **Lisa Grasso**
Marlborough, MA

2653. **Richard Aukerman**
Burgettstown, PA

2654. Please, let's wake up about climate change! West Virginia has a LOT to gain from a CLEAN energy economy rather than blowing up mountains and permanently ruining landscapes. VW can do better, I know it!
—**Nancy LaPlaca**
Denver, CO

2655. **Robin Hudson**
Tarpon Spring, FL

2656. **Brenda Barnes**
Lititz, PA

2657. **Dennis Allen**
Santa Barbara, CA

2658. **Jeff Smith**
Reisterstown, MD

2659. **Diane**
Wyoming, MI

2660. **Merrilee Cate**
Irving, TX

2661. **Erick Garcia**
Mesa, AZ

2662. **A Kasbarian**
Kenilworth, NJ

2663. **Michael Lahey**
Chicago, IL

2664. **Jeff Costello**
Staten Island, NY

2665. **Becky Wharton**
Campbell, TX

2666. **Nancy Casey**
Rochester, MN

2667. **Kari Walters**
Pacific Palisades, CA

2668. **John Edminster**
Jackson Heights, NY

2669. **Steve Muratore**
Scottsdale, AZ

2670. **Terry Wilson**
Goldsboro, NC

2671. **James Williams**
New York, NY

2672. **Colleen Martin**

2673. **Peggy Powell**
Providence, RI

2674. **Martha Graham-Waldon**
Felton, CA

2675. **hilarity capstick**
Tallahassee, FL

2676. **clayton murray**
Seattle, WA

2677. **James Combs**
Los Angeles, CA

2678. **Gina Digman**
Ankeny, IA

2679. **Daniel Carlson**
Baltimore, MD

2680. **Roger Gonnering**
Schaumburg, IL

2681. **Harold Nemecheck**
Battle Creek, MI

2682. **Nan Alderson**
Philadelphia, PA

2683. **Keith LaPointe**
Walled Lake, MI

2684. **Lisa Ramaci**
New York, NY

2685. **Steven Carrelli**
Chicago, IL

2686. **Paul Sullivan**
Bigfork, MT

2687. **Mary-Carol Lindbloom**
Dryden, NY

2688. **Jacob Melino**
Lovettsville, VA

2689. **Vivian Sovran**
Seattle, WA

2690. **Donna Malvin**
Williamsburg, VA

2691. **Larry Burgoon**
Dallas, TX

2692. Please ensure that CORRECT scientific information is continued to be presented; this country, which was once a leader in such things, is now a laughingstock thanks to the quality of the education religious right groups demand be crammed down students' throats.

—**Lisa Ramaci**
New York, NY

2693. **Andrew Chalnack**
Short Hills, NJ

2694. **Kevin Zellmer**
Milwaukee, WI

2695. **Noel Parenti**
Winston Salem, NC

2696. **Jim klimo**
Newbury, OH

2697. **Paula Wolslager**
San Angelo, TX

2698. **David Christman**
Oxford, OH

2699. **Johanna Twigg**
Portland, OR

2700. **Brady Watson**
Topeka, KS

2701. **Harold Bland**
Winnetka, IL

2702. **Kimberly Stevens**
League City, TX

2703. **Doris Buyarski**
Fence, WI

2704. **Jessie Malecki**
Schenectady, NY

2705. **Germaine Gogel**
Clinton, NY

2706. **Brandi McCauley**
Des Moines, IA

2707. **Barbara Schitz**
Belmont, CA

2708. Kids deserve to know the truth and have education that is fact and science based.

—**Mimi Hodsoll**
Falls Church, VA

2709. **Jesse Beller**
Croton on Hudson, NY

2710. **Peggy Drake**
Steuben, ME

2711. **Teresa Allen**
Deming, WA

2712. We need real science in our classrooms. Do not deny facts.

—**Lawrence Dillard**
San Francisco, CA

2713. **Betty Almand**
avondale est., GA

2714. I am concerned about the United States' lack of competitiveness on the global scale. Our kids need and deserve nothing less than the best education when it comes to facts, especially when it comes to climate change as it will

impact their future lives and the lives of their children.

—**Jim Poyser**
Indianapolis, IN

2715. Campaigns for voters only. Fight treasonous take over of American Sovereignty by campaign gifts from non-sovereigns!! The US Constitution makes each voter an equal share holder whose legislative responsibilities are given to those chosen by periodic elections: they are to be our board of directors. The "sovereign" of the USofA are voters who determine their 'board of directors' (ie House & Senate members and the President). Corps / PACs do not have the right to vote. Just as it would be fiduciary infidelity for a Board Member of General Motors to accept a gift (even a "qualified" campaign contribution) from Ford Motors, gifting Office Holders is not allowed by "non-sovereigns" (non-voters). The US Constitution makes Congress (NOT the Supreme Court) responsible for any exception to this rule. Get congress to uphold Article I, Section 9, Paragraph 8 of the USofA Constitution as it addresses receiving gifts from "non-sovereigns": "And no Person holding any Office of Profit or Trust under them, shall, without the Consent of the Congress, accept of any present, Emolument, Office, or Title, of any kind whatever, from any King, Prince, or foreign State." Uphold the integrity of our elections: get non-voters (PACs & Corps) out of our

elections of sovereignty now!! Get PACs & Corps out of our elections. Campaign contributions from registered voters - only! // Potential Solution:: Demand of all elected officials: Pledge to accept campaign contributions from registered USofA voters only. No monies from non-voters (eg PACs & Corps). Those who don't sign (or accept non-USofA voter campaign funds) are publically announcing they represent non-USofA voter interests which threatens the integrity of congress; the security of the nation. Why is this important? The sovereignty of the USofA (via its constitution) is placed in the hands of the voters who elect a "Board of Directors": Congress. Congress should owe and represent no-one but registered USofA voters: otherwise, it does not represent sovereign interests. Get America back on track to represent its people. Bring the sovereignty of the USofA back into the hands of the voters: keep it there !

—**John Kolstoe**
Okemos, MI

2716. **Bernice Gordon**
Brooklyn, NY

2717. **Terri Schneider**
Valley Cottage, NY

2718. **Ellen McNeirney**
Bethesda, MD

2719. **Sandra Cobb**
Moreland Hills, OH

2720. **Jen Sakers**
Owings Mills, MD

2721. **Cynthia Whertley**
Sacramento, CA

2722. **Mady Marantz**
New York, NY

2723. **Eric Dolph**
Yakima, WA

2724. **Domink Eckenstein**
Brooklyn, NY

2725. **R Bell-Tull**
San Pablo, CA

2726. **Rebecca Aguirre**
Los Angeles, CA

2727. **Russell Bair**
Jeffersonville, OH

2728. **Harold Johnsen**
Hammond, IN

2729. **Verrall Hoover**
Langley, WA

2730. Our children will not be well served if their education excludes accurate science. Climate change is their future and they must be prepared to deal with it.
—**Lorraine Priceman**
Woodland Hills, CA

2731. **Harold Frost**
Sheffield, VT

2732. **Tom Kennedy**
Rochester, NY

2733. **William Morrison**
Cedar Falls, IA

2734. **Dawn Wade**
Lincoln, CA

2735. **Kevin Curtin**
Cedaredge, CO

2736. **Cynthia Schleicher**
Hastings, NE

2737. **Alan Wojtalik**
Baltimore, MD

2738. **Kenneth Bogle**
Coopersburg, PA

2739. **David Worley**
Reno, NV

2740. **Teresa Wall**
Mesa, AZ

2741. **Scott Species**
Seattle, WA

2742. **Betty Phillips**
Topeka, KS

2743. **Susan Chaloupka**
Boise, ID

2744. **James French**
Seattle, WA

2745. **Bryan VanDuinen**
Saline, MI

2746. **Bonnie Pounds**
Boca Raton, FL

2747. **Debra Istvanik-Strotman**
Monongahela, PA

2748. **Rickie Byers**
Lynnwood, WA

2749. **Kenyon Donohew**
Oceanside, CA

2750. **Donna Thelander**
Kailua Kona, HI

2751. **Joanna Kling**
Urbana, IL

2752. **Teresa Sullivan**
Los Angeles, CA

2753. **Susanne Hesse & Dyer**
Alachua, FL

2754. **Marguerite Dykstra**
Princeton, NJ

2755. **Toni Garmon**
Dawsonville, GA

2756. **Beverly Barry**
Jefferson, LA

2757. **Marcella Barron**
Glenside, PA

2758. **Henry Morgen**
Los Angeles, CA

2759. **Beth Esser**
Madison, WI

2760. **Stuart Thornlund**
FREEPORT, IL

2761. **rebecca williams**
bethel, PA

2762. **Jill Timm**
Wenatchee, WA

2763. **Michael Bellmore**
Iron Mountain, MI

2764. **William Hassig**
Mount Prospect, IL

2765. **Daniel Hunter**
Tucson, AZ

2766. **Taggart Howland**
Portland, OR

2767. **Mari McShane**
Pittsburgh, PA

2768. **Barbara Nadel**
Milford, PA

2769. **Paul Markillie**
Grand Blanc, MI

2770. **Jeffrey Surovell**
New York, NY

2771. **Michael Glasheen**
Kodiak, AK

2772. **Judith and Bernard Heideman**
Hotchkiss, CO

2773. **Beulah White**
Middletown, OH

2774. **Jessica Miracola**
Brooklyn, NY

2775. **Jeffrey and Susan Evans**
Steubenville, OH

2776. **Carola Mnzano**
Maplewood, NJ

2777. **Robert Reynolds**
Fremont, CA

2778. **Michael White**
Middletown, OH

2779. **James Carley**
Keene, NH

2780. Global warming-climate change is a FACT and is presently occurring all over the world. Our young people, especially, should be educated about it, as it will affect THEIR futures far more than us oldsters. So teach them how to make necessary changes...NOW...in the hopes of reversing its negative impacts!
—**David Scheer**
Bellingham, WA

2781. **Theresa Lange**
Norfolk, NE

2782. **Richard Smythe**
Sister Bay,, WI

2783. **Lois Harris**
Claremont, CA

2784. **Stephen La Serra**
Stoneham, MA

2785. **Satish Kandisetty**
Sacramento, CA

2786. **Angelique St.Pierre**
Melbourne, FL

2787. **Gloria Berberich**
Mineola, NY

2788. **Lilly Knuth**
Garden City, NY

2789. **Karen Spradlin**
Jacksonville, AL

2790. **Keith Fannin**
Catlettsburg, KY

2791. **Brian Humphrey**
Pleasant Hill, IA

2792. **Jerry Rivers**
Roosevelt, NY

2793. **Marco Castellanos**
Phoenix, AZ

2794. **Rhea Osland**
Laurel, IA

2795. **Karen Anderson**
Spring Lake, MI

2796. **Darin Camin**
Clovis, CA

2797. **Kevin Held**
MARSHFIELD, MA

2798. **Daniel Erlander**
Freeland, WA

2799. **Valerie Mellerop**
Madison, WI

2800. **Amanda Yoder**
Chesapeake, VA

2801. **Robert Rogan**
Detroit, MI

2802. **Royal Graves**
Wethersfield, CT

2803. **Jack Dunham**
Sayre, PA

2804. **Brandon Kozak**
Edwardsville, IL

2805. **Gary Greif**
Green Bay, WI

2806. **Emily Sagovac**
Wellington, FL

2807. **PW Swafford**
Prairie Village, KS

2808. **Rodney Weaver**
Mill Hall, PA

2809. **James Kimes**
Prescott Valley, AZ

2810. **Gloria Morrison**
Pecos, TX

2811. **Lois Watson**
Scottsdale, AZ

2812. **Jean Marr**
Corvallis, OR

2813. **Rick Russell**
Bowling Green, OH

2814. **Bret Warner**
Rancho Cucamonga, CA

2815. **Anne Hoopes**
Wichita, KS

2816. **Jeff McCollim**
Concord Twp, OH

2817. **Melantha Bobrick**
Bend, OR

2818. **Linda Sampson**
Eugene, OR

2819. **Kirk Bails**
Harrison Township, MI

2820. **Theresa Roderigues**
Pinellas Park, FL

2821. **Cynthia Stevenson**
Stillwater, OK

2822. **Len Lorette**
Elk City, OK

2823. **Donald Sargent**
Colchester, VT

2824. **Walter McGerry**
Seattle, WA

2825. **Kevin FitzMaurice**
Portland, OR

2826. **Carol Fly**
Austin, TX

2827. **Melanie McDermott**
Highland Park, NJ

2828. **Syd Moore**
Pipe Creek, TX

2829. **Mark March**
Winston Salem, NC

2830. **Patricia Foschi**
Santa Fe, NM

2831. **H Fleishon**
Cambridge, MA

2832. **Mark Wirth**
Seattle, WA

2833. I am a retired teacher with more than 40 years of service to our children and our community. Climate change is one of the most important life changing events of our time. We cannot leave this out of our curriculum. To leave it out would be a travesty.
—**Jackie Scott**
Grand Blanc, MI

2834. **Amanda Smock**
Brooklyn, NY

2835. **Phyllis Park**
Chillicothe, OH

2836. **Saul Schreier**
Somerset, NJ

2837. **Richard Willis**
San Diego, CA

2838. **Susanne Jolicoeur**
Roxbury, CT

2839. **Julie Skelton**
Belleville, MI

2840. **Randy Lopez**
League City, TX

2841. **Brenda Black**
Louisville, KY

2842. **william
gerdes-mcClain**
NORMAN, OK

2843. do you want to raise
dummies in your state or do
you want to raise smart kids
to lead you into the future?
it's that simple.

—**Richard Smith**
Melvindale, MI

2844. **Ann Luft**
Douglas, MI

2845. **Lars Jefferson**
Albany, OR

2846. **Scott Ihlenfeld**
Santa rosa, CA

2847. **Steve Trammell**
Meeker, OK

2848. **Edward Schutz**
Utica, MI

2849. **Ann Van Hise**
Cream Ridge, NJ

2850. **Rob Roberts**
Warren, MI

2851. Our children deserve
to learn science as scientists
understand it. Otherwise
they will not be educated to
be functional in the future.

—**LM Holmes**
Honolulu, HI

2852. **Jacomina
Newman-Osmon**
Scottsdale, AZ

2853. **Theresa Johnson**
Saint Paul, MN

2854. **Debra Moore**
Clio, MI

2855. **Melissa Munich**
San Jose, CA

2856. **Robert Hamm**
Edmond, OK

2857. **Chris Greene**
Vacaville, CA

2858. **Paul Henry**
Stoneham, MA

2859. **Deborah Naujokas**
Taos, NM

2860. **Paul Root**
Charlotte, NC

2861. **Diane Ruedemann**
Detroit, MI

2862. **Trebor Gibson**
North Las Vegas, NV

2863. **Donna Kantner**
Glenmoore, PA

2864. **Cindi Dean**
Rye, NY

2865. **Mary Adams**
Indianapolis, IN

2866. **James Schiess**
Newport News, VA

2867. **casee maxfield**
Los Angeles, CA

2868. **Rosita Aranita**
Honolulu, HI

2869. **David Hancock**
Miami, FL

2870. **Veronica Alvarez**
Honolulu, HI

2871. **Lennie Lichter**
Cashton, WI

2872. **Paul**
Bath, PA

2873. **William Devick**
Sioux Falls, SD

2874. **Phil M**
Tucson, AZ

2875. **Tsee Lee**
New York, NY

2876. **Arlene Tilly**
Grand Rapids, MI

2877. **Janice Stapleton**
Keene, NH

2878. **Hillary Ostrow**
Encino, CA

2879. **Ronald Smith**
Riverside, IL

2880. **Jamison Cockerham**
Bloomington, IN

2881. **Randen Kane**
San Francisco, CA

2882. **Lucy Vandenberg**
Trenton, NJ

2883. **Kathleen Pavao**
San Francisco, CA

2884. **Joseph**
Plymouth, MI

2885. **Barbara Rosenkotter**
Deer Harbor, WA

2886. **Mitzi Frank**
Sharon Center, OH

2887. **Jeff Kiralis**
Fairlee, VT

2888. **Lisa Smith**
Hamilton, OH

2889. **Paul Blackburn**
Elizabethtown, KY

2890. **Nancy Yarosis**
Benson, NC

2891. **Lois Lommel**
Richmond, VA

2892. **Grace Walsh**
West es Moines, IA

2893. **Toddy Perryman**
Corvallis, MT

2894. **Robert Arbuckle**
Iowa City, IA

2895. More -not less-
science, please
—**D Daiute**
Sweet Home, OR

2896. **Carolyn Eden**
Bainbridge Island, WA

2897. **Jennie Blodgett**
Somerville, MA

2898. **Klaudia Englund**
Thousand Oaks, CA

2899. **Wayne Stalsworth**
Seguin, TX

2900. **Rhoda Slanger**
Albany, CA

2901. **Jules Fraytet**
Charlotte, NC

2902. **Gunta Alexander**
Glen Ridge, NJ

2903. These young people
are tomorrow's leaders. They
need accurate information to
make the best decisions for
the world's future. S.
Vandermosten
—**Shirley Vandermosten**
Gresham, OR

2904. Do the right thing.
Science takes us forward.
Close minded dogmatic
thinking takes us backwards.
—**Thomas Phillips**
Palisade, CO

2905. **Felicity Hohenshelt**
Jacksonville, FL

2906. **Donna Brooks**
Townville, SC

2907. **Deb Lincoln**
Urbandale, IA

2908. **Paul Densmore**
Minneapolis, MN

2909. **Shirley Salas**
La Joya, NM

2910. **Keith Myers**
Indianapolis, IN

2911. **Margaret Wills**
Beaverton, OR

2912. **Heather Wolver**
Madison, WI

2913. **Shirley Schue**
Cherry Valley, NY

2914. **John Dabrowski**
Burlington, MA

2915. **Edward McGraw**
Scranton, PA

2916. **Minette Plaza**
Sacramento, CA

2917. **Daviann McClurg**
Salina, KS

2918. **Kathleen Maher**
Ocean, NJ

2919. **Akankha Perkins**
Woodstock, VT

2920. **Alice Trexler**
Arlington, MA

2921. **Kenna Smith**
Richmond, KY

2922. **Marya Friedman**
New York, NY

2923. **Margaret Nyburg**
Beaverton, OR

2924. **Susan Wechsler**
Corvallis, OR

2925. **Peter Nelson**
Eau Claire, WI

2926. Evidence based
science will be the salvation
for our planet and humanity.
White-washing truth for
political or religious agendas
only goes to shoot ourselves
in the foot in the end. Please
show responsible education
leadership by adopting
accurate science standards.
—**Mary Masters**
Kula, HI

2927. **Jason Hayes**
Creswell, OR

2928. **Robert Gilliam**
Longwood, FL

2929. **Michael Strollo**
Jackson, NJ

2930. **Nicholas Pasqual**
chicago, IL

2931. **Derek Srisaranard**
Elmhurst, NY

2932. **Joseph**

2933. **York Quillen**
Knoxville, TN

2934. **Athena F.**
Bremerton, WA

2935. **Sheri Snyder**
Saint Louis, MO

2936. **W Blair**
Boise, ID

2937. Parents can tell their
children whatever they want,
but students in public
schools have the right to
receive accurate and valid
scientific information in
public schools, particularly

on issues that are critical for their generation such as climate change.

—**Lisa Petrie**
Carolina, RI

2938. **Alan Hansen**
Denver, CO

2939. **Nancy Freedland**
Big Bear City, CA

2940. **Michael Bertonaschi**
Trafford, PA

2941. **Donald Walloch**
Milwaukee, WI

2942. **Marshall Sass**
Austin, TX

2943. **Carolyn Pettis**
Canyon Country, CA

2944. **Russell Skinner**
Kimberly, WI

2945. **Joseph French**
Brick, NJ

2946. **April Atwood**
Seattle, WA

2947. **Linda Norris**
Hawthorne, FL

2948. **Teresa Sullivan**
Los Angeles, CA

2949. **Deborah Cate**
Philadelphia, PA

2950. **Beth Garcia**
Alpine, TX

2951. **Frederick Paper**
Ann Arbor, MI

2952. **Ken Bone**
Gilroy, CA

2953. **Clara Hayes**
SALINAS, CA

2954. **Ryan Ellis**
Kansas City, MO

2955. **Gerrit Crouse**
Nyack, NY

2956. **Eleanor Kaye**
Hallandale, FL

2957. **Purnima Barve**
King of Prussia, PA

2958. **Paul Zarchin**
Phoenix, AZ

2959. **Traver Cowles**
Branford, CT

2960. **Tiffany Witmer**
Stamford, CT

2961. **Joe Baggett**
Denver, CO

2962. **Paul Andrade**
Santa Cruz, CA

2963. **Edwin Covington**
Socorro, NM

2964. **Deborah Nicholson**
Silver City, NV

2965. **Robert Wolfe**
Mantua, OH

2966. **Stephanie Kenny**
Charlotte, NC

2967. **Linda Ng**

2968. **Lorrie Edmonson**
Los Angeles, CA

2969. **Linda Wilscam**
Rockville, CT

2970. **Geary Jones**
Grand Rapids, MI

2971. **Nivo Rovedo**
Lagrangeville, NY

2972. **Betty Olivolo**
Kittery, ME

2973. **Craig Owen**
Paw Paw, MI

2974. Children deserve nothing less than being taught what is recognized by the vast majority of climate scientists.

—**William Collins**
Summerville, SC

2975. **D Scott**
Caliente, NV

2976. **Mary McGeary**
Brooklyn, NY

2977. **Greg DeMasi**
Concord, CA

2978. **Paul Moss**
White Bear Lake, MN

2979. **Jahnavi Stenflo**
Boulder, CO

2980. **Barbara Warren**
Tucson, AZ

2981. **David Knight**
Winter Haven, FL

2982. **Robert Burk**
Los Angeles, CA

2983. **Chuck Quilty**
Moline, IL

2984. **Mana-Jean Wagnon**
Alameda, CA

2985. **Delores Grandaw**
Green Bay, WI

2986. **Mary Rodriguez**
Redwood City, CA

2987. **John Burt**
Draper, UT

2988. **Christopher Campbell**
San Francisco, CA

2989. **Cindy Chilton**
Charlotte, NC

2990. **Joanne Sininsky**
Lake Worth, FL

2991. **Dimitri Lefever**
Portland, OR

2992. **Sue Kellogg**
Houston, TX

2993. **Emily Ong**
Austin, TX

2994. **Edwina Caldwell**
Seaside, CA

2995. **Mickie Flanigan**
Charlottesville, VA

2996. **Susan Patton**
Farmington, MI

2997. This is important.
—**Phil Scott**
Vancouver, WA

2998. **Tracy Johnson**
Cincinnati, OH

2999. **Dwight Walls**
Huntingdon, TN

3000. **Pamela Lanagan**
Nacogdoches, TX

3001. **Donald Williams**
Somerville, MA

3002. **Susan Patton**
Farmington, MI

3003. **Susan Patton**
Farmington, MI

3004. **Kay Steinauer**
Council Bluffs, IA

3005. **Robert Haslag**
Centertown, MO

3006. **Egil Stigum**
Carmel by the Sea, CA

3007. **Egil Stigum**
Carmel by the Sea, CA

3008. **Steven Denmark**
Salinas, CA

3009. **Mark Amos**
Carbondale, IL

3010. **Tom Vafias**
Lancaster, PA

3011. **Yvonne Johnson**
Utica, OH

3012. **Patricia Soteropoulos**
Chatham, NJ

3013. **Diane and Jerry Tabbott**
Jacksonville, FL

3014. **Jessica Johnston-Walsh**
Valders, WI

3015. **Susan Spilecki**
Brighton, MA

3016. **Jada wills**
Pensacola, FL

3017. **K Lasker**
Philadelphia, PA

3018. **Jessica Johnston-Walsh**
Valders, WI

3019. **Marie Schopac**
Charlestown, RI

3020. **Don Dumond**
Eugene, OR

3021. **corinne Dodge**
Derry, NH

3022. **Walter Traxel**
Delavan, WI

3023. **Claire Fackler**
Santa Barbara, CA

3024. **Ed Jocz**
Freehold, NJ

3025. **Sue smith**
Cresson, PA

3026. **Daniel Frink**
Davis, CA

3027. **David Osinga**
San Rafael, CA

3028. **Lynn Matarelli**
Southlake, TX

3029. **Rlita Lucey**
Orlando, FL

3030. **Eric Engel**
Madison, WI

3031. **Betsy Conover**
Middletown, PA

3032. **Harold Meyer**
Washington Depot, CT

3033. **Arden Green**
Glen Allen, VA

3034. **Ronald Sverdlove**
Princeton, NJ

3035. **Lenore Swaim**
Colorado Springs, CO

3036. **Peter Kostik**
Somerset, NJ

3037. **Michael Lipinski**
San Mateo, CA

3038. Denying Climate Science denies ALL science programming. Whereas America is lagging behind all other leading nations in math and sciences. Deny Climate Science and you deny any progress in these vital areas and keeps American children ignorant..
—**Nick Beck**
Chicago, IL

3039. Nancy Conger North Branch, MN	being. — Chris Doob Woodbridge, CT	3072. Joel Kahaner West Bloomfield, MI
3040. Sue Delling		3073. Carrol Kuhlow Henderson, NV
3041. Catherine Pottinger Seattle, WA	3056. Gloriamarie Amalfitano San Diego, CA	3074. Charles Murray Fredericksburg, VA
3042. Michael Tribble Coos Bay, OR	3057. Steve Jonas Westminster, VT	3075. Nita Johnson Sioux Falls, SD
3043. Erik Herzog Ann Arbor, MI	3058. Dan Esposito Manhattan Beach, CA	3076. Beth Peterson Lincoln, NE
3044. K Arnone Brooklyn, NY	3059. Terraesa Gallardo Thornton, CO	3077. Gordon Gerbitz Santa Barbara, CA
3045. Macyle Candela East Berlin, PA	3060. Terraesa Gallardo Thornton, CO	3078. Christine Harvey Bronx, NY
3046. brett allison Tempe, AZ	3061. Sharon Wakefield Geneva, IL	3079. Linda Drescher Golden, CO
3047. Greg Stawinoga South Holland, IL	3062. James Skalsky Athens, OH	3080. Peter von Christierson Port Townsend, WA
3048. Ralph Roug Folsom, CA	3063. Stephen Friedrich Steilacoom, WA	3081. Maybe you should move into the 21st century!! Just because coal is mined there doesn't mean it's okay to use it in our current state of crisis. — Gib Butler Sheldon, IA
3049. Christine Blubaugh Salt Lake City, UT	3064. Jennifer Grabarschick Houston, TX	3082. Janice Mackanic Jersey City, NJ
3050. Mike Pickens Indianola, IA	3065. Janet McCalister Paradise, CA	3083. Robert Landolt Arlington, TX
3051. Marsha Manning Vancouver, WA	3066. Roger Tembreull Gladstone, MI	3084. David Schultz Aurora, CO
3052. Donna Bookheimer Douglassville, PA	3067. Barb S Redmond, WA	3085. Paul Szymanowski Curtice, OH
3053. Stephen Gliva Evanston, IL	3068. Tom Kruse Sequim, WA	3086. Matthew Boguske Kirkland, WA
3054. Eugene Woodward Cottage Grove, MN	3069. Roger Tembreull Gladstone, MI	3087. Julie Collins Northville, MI
3055. Nothing is more fundamental and essential than the assurance that children in school are learning the truth about important issues like climate science that affect their present and future well	3070. We must NOT hide the truth from our children. — Jane Hayward Lewisburg, PA	
	3071. Tom Kruse Sequim, WA	

3088. **Dana Bingham**
Corona, CA

3089. **Erin Glasser**
Columbus, OH

3090. **Daphne Bernard**
Brooklyn, NY

3091. Your state's education effects us all. Global warming effects us all. Coal ash, and mercury effects everyone in W.VA. A few bucks to miners with black lung does not justify letting industry control education.
—**Richard Creswell**
Denver, CO

3092. **Johanna Elias**
Brooklyn, NY

3093. **Dean**
Jacksonville, FL

3094. **Eliot Brown**
Telluride, CO

3095. **Gloria Muszynski**
Flagler Beach, FL

3096. **Sandra Atkins**
Wild Rose, WI

3097. **Douglas Firman**
Springfield, VA

3098. **Regina Barnes**
Ann Arbor, MI

3099. **Catherine Miller**
Charleston, SC

3100. **dorinda kelley**
Portland, OR

3101. **Samuel Goff**
Brooklyn Park, MN

3102. **Emma Shock**
Paoli, PA

3103. **Jean Gibson**
Forest, VA

3104. **C Born**
Portland, OR

3105. **Don Dieckmann**
Alton, IL

3106. **Alan Nishman**
Haydenville, MA

3107. **Christopher Sessa**
Mesa, AZ

3108. **Glen Sandberg**
Gulfport, MS

3109. The plan is almost complete to have a society of non-thinking, non-questioning sheep who will go along with the right-wing plan of a gilded society - having a very rich and a very poor.
—**Janice Barns**
Jacksonville, FL

3110. **Robert Thompson**
Chicago, IL

3111. **Jackson Scholl**
Kalamazoo, MI

3112. **Jackson Scholl**
Kalamazoo, MI

3113. **Richard Smith**
Arkport, NY

3114. **Judith FitzGerald**
Brentwood, TN

3115. **Elke Baitis**
Austin, TX

3116. **Sam Andujar**
New York City, NY

3117. **Ken Thomas**
Visalia, CA

3118. **Drake Meadow**
Ann Arbor, MI

3119. **Mary Grant**
Charlottesville, VA

3120. **Jennifer edelen**
Louisville, KY

3121. Dear West Virginia Board of Education Soon my wife and I hope to explore your beautiful State. In the mean time I hope you will accept the overwhelming science that supports the existence of a profound and dangerous climate change. This change if not checked with a behavioral change by the human race will not only lead to disaster for hundreds of millions but our own grand children and great grand children. Please stand by your recent decision to support high quality, evidence-based science education and adopt standards that include accurate climate science. Sincerely Dennis and Dee Anne Megrditchian
—**Dennis Megrditchian**
Vancouver, WA

3122. **Erin Garcia**
Sherman Oaks, CA

3123. **Susan Castelli-Hill**
Melville, NY

3124. **Judith FitzGerald**
Brentwood, TN

3125. **P Sturm**
Reno, NV

3126. **Scott Zellner**
Virginia Beach, VA

3127. we cannot turn our backs on science! it alone will help our children exist in the future!
—**Bill Chockla**
Estes Park, CO

3128. **AE DeWitt**
Atlanta, GA

3129. JC Horsburgh Newton Center, MA	3146. Geri Collecchia Hollywood, FL	3165. Lauren Porosoff Scarsdale, NY
3130. William Powell Glasgow, KY	3147. Art Smoker Mars Hill, NC	3166. Maureen McCarthy Marblehead, MA
3131. Antonia Wood Rainier, WA	3148. Wendy Burgess Park Ridge, IL	3167. Joy Ingersoll Glenview, IL
3132. Diane Ewing Chaska, MN	3149. John Schreiber Trenton, NJ	3168. Jeanne Brown Redmond, WA
3133. Anyone who goes outside regularly has to acknowledge that climate change is real! — Mary Markus Garden Grove, CA	3150. Annabel Caner Huntington, NY	3169. Jonathan Boyne Honolulu, HI
3134. Kevin Hughes Newtown, CT	3151. Cheryl Crawford Santa Claus, IN	3170. Prisca Gloor Iso angeles, CA
3135. Terry Dycus San Marcos, CA	3152. Annabel Caner Huntington, NY	3171. Peter Ajemian Bridgewater, MA
3136. Wendy Ruggeri Naugatuck, CT	3153. Amy Bursky Wynnewood, PA	3172. William Linden, MI
3137. Dave Smith Navarre, FL	3154. Sarah McKee Amherst, MA	3173. Symone Ma Cedar Falls, IA
3138. Patricia Ward Lupton, MI	3155. Judy Voss Indianapolis, IN	3174. Michelle Fournier Ann Arbor, MI
3139. Mary-Alice Strom Marysville, WA	3156. Suzanne Watson Killbuck, OH	3175. Edgar Stuhr Marlborough, MA
3140. Sandra Klick Lititz, PA	3157. Judi Naue San Rafael, CA	3176. This is the right thing to do! Our future depends on your willingness to make a wise choice here. It is not about us - it is about the quality of life and education our great grandchildren and beyond will have or not have. Thank you! — Katy Christensen Sparks, NV
3141. Terry Andrews Rhome, TX	3158. Megan Petkewec Iowa City, IA	3177. Jerry Orr Reading, PA
3142. Fatima Al-Hayani Toledo, OH	3159. Tim G Oak Harbor, WA	3178. Richard Mindar Honolulu, HI
3143. Elizabeth Conlan	3160. Stephen Buckley Branford, CT	3179. Eileen Hufana Portland, OR
3144. Chris Mendel Columbus, OH	3161. Susan Blain Gardner, MA	
3145. David York Stevenson, CT	3162. Ainsley Dewitte syracuse, NY	
	3163. Mandy Devine Alexandria, VA	
	3164. David Garrett Savannah, GA	

3180. **Randy Rannow**
Reno, NV

3181. **Sue Stodola**
Frankfort, KY

3182. **Janeene Porcher**
Golden, CO

3183. **Lorraine brabham**
Hoboken, NJ

3184. **Ingrid Rochester**
Elbert, CO

3185. **Brian Yanke**
Madison, WI

3186. **Geraldine Gregg**
New York, NY

3187. **Joe Wiederhold**
Bellingham, WA

3188. **Peggy Arevalos**
San Diego, CA

3189. **Cheryl Delvecchio**
Loomis, CA

3190. **Leslie O'Shaughnessy**
Alexandria, VA

3191. **Darla Faler**
Berryton, KS

3192. **Paula Cooke**
New Port Richey, FL

3193. **Jodie Hamilton**
Knoxville, TN

3194. **Anne Pinkerton**
Phoenixville, PA

3195. It's vitally important that WV students not be left out of the information that children in other states have access to.
—**Helene Willson**
Stewart, OH

3196. **Miki Lang**
Dunedin, FL

3197. **Susan Hanlon**
Manchester, NJ

3198. **Amy Burgess**
Chelsea, MI

3199. **Abigail Rome**
Silver Spring, MD

3200. **Rebecca Brown**
Streetsboro, OH

3201. **Barbara Stevko**
Topeka, KS

3202. **Kathy Bigler**
Salina, KS

3203. **Fiona Priskich**
Beverly Hills, CA

3204. **lawrence Jasud**
Memphis, TN

3205. **Brittany Galisdorfer**
Detroit, MI

3206. **Michael Roberts**
Reno, NV

3207. School is to teach facts and science. Keep science standards in place.
—**Melodie Metje**
West Chester, OH

3208. **Michelle iturrate**
Boulder, CO

3209. **Steve Downing**
Santa Barbara, CA

3210. **Lee Wisdom**
Downingtown, PA

3211. **Helen Stuehler**
Reno, NV

3212. **Benjamin Krohling**
Minneapolis, MN

3213. **Blair Sandler**
San Francisco, CA

3214. **M K Smith MD**
Mankato, MN

3215. **Shannon Neckes**
Miami, FL

3216. For those who oppose an authentic Science curriculum and Climate Science, let them teach their children at home and / or at Church.
—**Ellen Henegar**
Columbus, OH

3217. **EM Ryan**
Rockville, MD

3218. **Nicole McAtee**
Toledo, OH

3219. **Douglas Metcalfe**
Birdsboro, PA

3220. **Bill Deutschlander**
new providence, PA

3221. **Bruce Newton**
Meredith, NH

3222. **Anne Webber**
West Des Moines, IA

3223. **MJ Baumann**

3224. **Patricia McDonough**
Las Vegas, NV

3225. **James Handy**
Takoma Park, MD

3226. **Russell Willis**
Pelham, NY

3227. **Lorraine Martinez**
Indian Mound, TN

3228. **Marcus Sellers**
Spruce Creek, PA

3229. **Brenda Psaras**
East Moriches, NY

3230. Marylee kishel Janesville, WI	3249. Terrance Chadd Crown Point, IN	3265. Fran Holme Seattle, WA
3231. Gayle Westbrook Miami, FL	3250. Christine Muller Kingston, RI	3266. Javier Rivera Brooklyn, NY
3232. Curt Dodson Ypsilanti, MI	3251. Christine Ward Grandview, TX	3267. Patricia Orlinski Sun City, AZ
3233. K Hurd Winfield, IL	3252. Jane Cassi Nesconset, NY	3268. Peter Rathbun Haiku, HI
3234. Heidi Barishman Plano, TX	3253. Elsa Lichtenberg Kennett Square, PA	3269. Jonathan Nash New York, NY
3235. Stan Berg La Crosse, WI	3254. Ruth Schafer Chico, CA	3270. Linda Finkelstein Narberth, PA
3236. Neal Madnick Flushing, NY	3255. Jen Churchward Carson City, NV	3271. Heather Drees Grand Forks, ND
3237. Stan Berg La Crosse, WI	3256. Alicia Swaringen Arden, NC	3272. Philip Chamberlain Lansing, MI
3238. Stan Berg La Crosse, WI	3257. Robert Lachapelle Hickory Corners, MI	3273. Emily Delatorre Torrance, CA
3239. Loretta Banta Denver, CO	3258. Sheila Tran Hartley, IA	3274. Terry Risner Mt. Carmel, TN
3240. Kristopher Green Pawtucket, RI	3259. William & Laura Glasner Victor, NY	3275. Michelle Bentley Bryson City, NC
3241. Bruce Shilling Seattle, WA	3260. Perhaps you have heard the quote, "Ye shall know the truth and the truth shall make you free." That is scripture. — Mark Friedlander South Euclid, OH	3276. Mark Jordan Dixon, IL
3242. Joshua Gardner Phoenix, AZ	3261. Hank Broege Belmont, MA	3277. Erik Anderson Harrisville, NH
3243. Derek Gendvil Las Vegas, NV	3262. Wretha Palone uniontown, PA	3278. Mark Jordan Dixon, IL
3244. Deb Lincoln Urbandale, IA	3263. Crheston Mitchell Aurora, CO	3279. Pamela Larsen Hood River, OR
3245. Chris watts Anchorage, AK	3264. Steven Flynn Seattle, WA	3280. Jennifer Taylor Stillwater, OK
3246. Autumn hickman Salt Lake City, UT		3281. Please, people....there is little point in playing politics with our children's future. The point of Education is to educate....not suppress. Do the right thing. Thank you.
3247. B Rodriguez Hercules, CA		
3248. Kathleen Doyle Golden, CO		

—**George Jacobs**
Portland, OR

3282. **Justin Tobias**

3283. **Dale Ryder**
San Marcos, TX

3284. **Christina Deming**
Ellijay, GA

3285. **philip de Vos**
Monroe, VA

3286. **Barbara Porter**
Dolgeville, NY

3287. **Dana Craig**
Norwood, MA

3288. **Rosamond Brenner**
Wilmette, IL

3289. **Christel Gillespie**
Huntington Beach, CA

3290. **Alicia Evans**
Seattle, WA

3291. **Henry M.**
Trenton, NJ

3292. **Renny Reep**
Seattle, WA

3293. **Carol Bosworth**
Portland, OR

3294. **Roland Gauvin**
Cumberland, RI

3295. **Jena Reid**
Temecula, CA

3296. **K Lucas**
Westminsrtter, CA

3297. **Helgaleena
Healingline**
Monona, WI

3298. **Peter Smith**
Altoona, IA

3299. **Barbara Rabinowitz**
Cary, NC

3300. **Charles Houk**
Louisville, KY

3301. **Helga Spector**
Somerset, NJ

3302. **James Eaton**
Westport, CT

3303. **K Lucas**
Westminster, CA

3304. **Mary Miller**
Woodbridge, VA

3305. **Gloria Foster**
Canandaigua, NY

3306. **Stephen Makovec**
Dayton, OH

3307. **RTerra Williams**
Sebastopol, CA

3308. **Tammy Demanche**
Weare, NH

3309. **Sage Johnson**
San Francisco, CA

3310. **Suzanne Wooldridge**
Gravel Switch, KY

3311. **Ann Wasgatt**
ROSEVILLE, CA

3312. **Albert L**
Northbrook, IL

3313. **Barbara Bonfield**
Tacoma, WA

3314. **Mary Bushur**
Arnold, MO

3315. **Carolyn Warman**
Carrollton, TX

3316. **Cornelia Snyder**
San Diego, CA

3317. What will our children
say about us in the future as
they suffer the
consequences of our

inaction.

—**Janice Clark**
Hillsboro, OR

3318. In your decisions, truth
should be paramount,
especially when it comes to
the truth, as we now know it,
from all the scientific
evidence regarding climate
change. Truth must not be
altered and to the best of our
current knowledge, this is
what must be reflected in our
texts and standards.

—**Mary Germain**
Nazareth, MI

3319. **Claudine Beck**
Siloam, NC

3320. **David Ioy**
Boulder, CO

3321. **Sandra Briggs**
Riverside, CA

3322. **Stephen Nemecek**
Chattanooga, TN

3323. **Stephen Nemecek**
Chattanooga, TN

3324. **Nicole Fountain**
Oakland, CA

3325. **Elizabeth Craig**
Driftwood, TX

3326. **James Rechetnick**
Everett, WA

3327. **Sandra McClennen**
Plymouth, MI

3328. **Charles Wise**
Blue Bell, PA

3329. **Afrodity
voyiatzoglou**
Flushing, NY

3330. **Joan Bykonen**
Lacey, WA

3331. **Edmund Wright**
Bradenton, FL

3332. **Rainbow Koehl**
Bellingham, WA

3333. **Sandra Pucillo**
Mentor, OH

3334. **John Ellis**
Boulder, CO

3335. **Katherine Nolan**
Cupertino, CA

3336. **Jean Jenkins**
Chesterfield, MO

3337. **Jan Hall**
Columbus, OH

3338. **Kathleen Ferguson**
Stone Harbor, NJ

3339. **Alexandr Yantselovskiy**

3340. **Christina Fong**
Grand Rapids, MI

3341. **Laura Miller**
Waldport, OR

3342. **Nick Taylor**
Olympia, WA

3343. **Sandra Mann**
Portage, MI

3344. **Bonnie Avery**
Louisville, KY

3345. **Mike Dotson**
Carterville, IL

3346. **Jennifer Zeller**
Pacific Palisades, CA

3347. **Leslie Bird**
Partlow, VA

3348. **Anne Gibson**
Arlington, TX

3349. **M S**
Denver, CO

3350. Education is not indoctrination but making available to students the true, scientific information that they will need to be successful Americans. For the lives of the children of West Virginia, adopt the West Virginia Next Generation Content Standards and Objectives for Science. These include the original climate science standards.
—**Janet Dietrich**
West Chester, OH

3351. **John and Marlene Payne**
Berea, KY

3352. **John and Marlene Payne**
Berea, KY

3353. **Janna Piper**
PORTLAND, OR

3354. **Jason Larke**
Saline, MI

3355. **Linda Francisco**
Oak Park, MI

3356. **gwenn meltzer**
woodlyn, PA

3357. **Linda Gazzola**
Bronx, NY

3358. **Martha Munger**
Mondovi, WI

3359. **Robert Rogers**
Angleton, TX

3360. **Raymond Gibson**
Hollywood, FL

3361. **Elizabeth Olson**
Billerica, MA

3362. **Nancy Nardella**
New York, NY

3363. **Diane Millican**
Kirkland, WA

3364. **Judy Zimmer**
New Lebanon, NY

3365. As long as you quietly suffer climate DENIERS, I will FOR SURE never take a PENNY of my retirement dollars to WV - even the Department of the NAVY knows to prepare there for climate DISRUPTION!!!
—**Maja Ramirez**
Chicago, IL

3366. **Michael Conway**
Chicago, IL

3367. **Gary Frizzle**
Sturgis, MI

3368. **James Tandoo**
Edmonds, WA

3369. **AnaLisa Crandall**
Adkins, TX

3370. **Myra Garland**
New York, NY

3371. **Daniel Lipson**
New Paltz, NY

3372. **Charles Holzwarth**
Powhatan, VA

3373. **Christopher Caldwell**
Bailey Island, ME

3374. **Karl Lohrmann**
Whiting, IN

3375. **Richard Hale**
Northfield, OH

3376. **Howard Seigel**
Portland, OR

3377. **Wanda Ballentine**
St. Paul, MN

3378. **James McGuire**
Kansas City, MO

3379. **Linda Reilly**
Boynton Beach, FL

3380. **CA Matthews**
Fostoria, OH

3381. **Jill Pasquinelli**
San Rafael, CA

3382. **Linda Hutchins-Knowles**
San Jose, CA

3383. **Michelle Oroz**
Morgan Hill, CA

3384. **Edward Jensen**
Denver, CO

3385. **Susan Guido**
Gibsonia, PA

3386. **Chris Sakers**
Owings Mills, MD

3387. **Richard Lee**
Zephyrhills, FL

3388. **Thomas Durst**
Ashland, OR

3389. **Amy Mianowski**
Livonia, MI

3390. **Diana Carroll**
Hatfield, MA

3391. **Sheri Langham**
Arlington, VA

3392. **Elizabeth George**
Springfield, OH

3393. **Betty Van Wicklen**
Watervliet, NY

3394. **Timothy Shivers**
Dallas, TX

3395. Global climate change is here
—**Mark Fan**
Goodyear, AZ

3396. **Sue**
King Ferry, NY

3397. **Margarita Latimer**
Miami, FL

3398. Our first duty to our children is the truth. If we present them falsehoods and demagoguery, they will grow up thinking they live in a world of deceit and falsehood only, where virtue is a sham and honesty best when it's faked. I would not care to live in the world they would inherit. Neither would you.

—**Peter Rogan**
Royal Oak, MI

3399. **Joan Ripple**
Novato, CA

3400. **J. Hays**
Davis, CA

3401. **Peter Martin**
Lucas,, OH

3402. We need students to learn climate science reflecting the scientific consensus: see www.nasa.gov and search on consensus to find 97 percent of climate scientists agree that human made climate disruption is real. We must stop industry lobbyists lying to students.

—**Stephen Dahl**
Kingston, RI

3403. I find it baffling that we're having this discussion. The bag-over-our-eyes approach to climate change does not change the facts. Please give our kids the truth. Teach science-based facts. Thank you!

—**Terri Gillespie**
Martinez, CA

3404. **Kathleen Gamet**
Rapid City, SD

3405. **RICHARD CURRY**
PINEBLUFF, NC

3406. **Doug Howie**
Bethlehem, PA

3407. **Laurence Key**
Stuart, FL

3408. **Dennis Roderigues**
Pinellas Park, FL

3409. **Lynne Gonzalez**
Chicago, IL

3410. **Mary King**
Reno, NV

3411. **Joe C**
Collegeville, PA

3412. **Violet Smith**
Lawrence, KS

3413. **Judy Hill**
Utica, MI

3414. **Alva Pingel**
Rosemount, MN

3415. **Doug Morse**
New York, NY

3416. **Gilly Burlingham**
Portland, OR

3417. **Pat Turney**
Hayward, CA

3418. **Roseanne Sittler**
Salem, NE

3419. **Laurence Yorgason**
Ogden, UT

3420. **Shane Freund**
Seattle, WA

3421. **rhonda Grewe**
Clinton Township, MI

3422. **Michelle Lerner**
Flanders, NJ

3423. **Irwin Hoenig**
Laurel, MD

3424. **Lorie James**
Petaluma, CA

3425. **Janet Kurtz**
Nazareth, MI

3426. **K Cooke**
Silver Spring, MD

3427. **Nathan Materer**
Arlington Heights, IL

3428. **Leonard Levine**
New Orleans, LA

3429. **David Savige**
Portsmouth, VA

3430. **Sierra Fox**
Flint, MI

3431. **Lorne Beatty**
Brighton, MI

3432. **William Toner**
McGraw, NY

3433. **M Port**
Boynton Beach, FL

3434. **Charles Kaseff**
La Jolla, CA

3435. **Kimm Tynan**
Philadelphia, PA

3436. **Dani Duke**
North Liberty, IA

3437. **Lin Zahrt**
Carson City, NV

3438. **Christian Shinaberger**
Santa Monica, CA

3439. **M Kribs**
Corinth, NY

3440. **Stan Berg**
La Crosse, WI

3441. **Stan Berg**
La Crosse, WI

3442. **Suzanne Scollon**
Seattle, WA

3443. **Rita Caruso**
St Paul, MN

3444. **Scott Coahran**

3445. **Peggy Cope**
Round Rock, TX

3446. **Richard Zimdars**
Athens, GA

3447. **Claire Gowan**
Bardstown, KY

3448. **Valerie Clark**
Needham, MA

3449. **Frederick Hamilton**
Rancho Cucamonga, CA

3450. **Bonita Bock**
Denver, CO

3451. **Barbara Mitchell**
Ann Arbor, MI

3452. **Joanne Willis**
Keller, TX

3453. **Brandon Kirk**
Dallas, TX

3454. **Ellen Glatman**
Bowling Green, KY

3455. **Barbara Stone**
Park City, UT

3456. **Andrea**
New York, NY

3457. **Melissa H**
Newport, NC

3458. Ignorance is not bliss but we should not be surprised that science is once again under attack by those who fear something

than can not or do not wish to understand. Allow others to read, try to understand and make up their own minds about climate change. You do not have the right to choose for them.

—**Angela Taylor**
Hot Springs Village, AR

3459. **Victoria Jensen**
Santa Monica, CA

3460. **Kelly Caffrey**
Parlin, NJ

3461. **Mary Sharpee**
Puxico, MO

3462. **Christine Cerone**
Wyckoff, NJ

3463. **Dorothy Valley**
Cottage Grove, OR

3464. **Thomas Artle**
Incline Village, NV

3465. **Peter Sigmann**
STURGEON BAY, WI

3466. **Richard Gardner**
Chicago, IL

3467. **Michael Butkiewicz**
Sterling Heights, MI

3468. **Bob M**
hobbs, NM

3469. **Kathleen Malley**
Tacoma, WA

3470. **Herb Evert**
Cottage Grove, WI

3471. **William Rovnak**
Cheswick, PA

3472. **Paul Fung**
New York, NY

3473. **Amy Christenson**
Seaside, CA

3474. Nancy Kneip Hampshire, IL	3493. Dennis Glotzhober Bloomfield Hills, MI	3511. Jenn R Newport News, VA
3475. John Helmon Kirkland, WA	3494. Cynthia Hull Gallup, NM	3512. Michael Toobert GRASS VALLEY, CA
3476. Patrick Vogelsong Carlisle, PA	3495. Nicole Dobronski Shawnee, KS	3513. Jennifer Calvert Spokane, WA
3477. Martha Spencer Seattle, WA	3496. Bryan Lilienkamp Indianapolis, IN	3514. Frederic Webster Seattle, WA
3478. Aurea Walker Los Angeles, CA	3497. Pamela Utterback Phoenixville, PA	3515. paul Joslin Anchorage, AK
3479. Matt Rosencrans Pittston, PA	3498. Jason Reinhardt Houston, TX	3516. Tommy Zamplus Boynton Beach, FL
3480. Suan Schreurs Rochester, MN	3499. LuAnn Wherry San Diego, CA	3517. Marsha Tokareff Ashland, OR
3481. Malaika Boyd Austin, TX	3500. Richard Conklin Corvallis, OR	3518. James Davis Troy, MI
3482. Mary Cray Riverside, IL	3501. Diana Corwin Tucson, AZ	3519. Lisa Witham Mentor on the Lake, OH
3483. Joe Cook Norfolk, VA	3502. Henry Bright Lakeside, MT	3520. Kristine Moore Houston, TX
3484. Ted Whitney Portland, OR	3503. Richard Schwager Santa Barbara, CA	3521. WV BOE, Oh for pete's sake. Stop behaving like the stupid people you obviously want the children in your state to be. How on earth do you think they can compete in the world if you make up the information they are learning. They are doomed!!! — Karen Peterson Chicago, IL
3485. Jan Bird Joseph, OR	3504. Tony Buch Seattle, WA	3522. Victoria crampton Patagonia, AZ
3486. Arnold Advocate Camp Meeker, CA	3505. Monique Musialowski Clinton Township, MI	3523. Ellen Fox New York, NY
3487. Christopher Lee Chicago, IL	3506. Peter Grimm Pasadena, CA	3524. Summer Stevens Moscow, ID
3488. Carla Culp Anniston, AL	3507. Victor Torres Hollywood, FL	3525. Brian Klubek Murphysboro, IL
3489. David Wilson Lancaster, KY	3508. Tonya Adrian-Hill Petoskey, MI	
3490. Kari Wood Orem, UT	3509. Serena Buschi Dobbs Ferry, NY	
3491. Adam Hankins Lexington, KY	3510. D Klump Oxford, WI	
3492. Karen Wells Havana, FL		

3526. **Larry Battle**
Windsor Mill, MD

3527. **Brandon Schooley**
Cheswick, PA

3528. Please try and rise above politicizing climate science. Our nation's children deserve better...
—**Mark Quigley**
Vacaville, CA

3529. **Shirley Coffey**
Gig Harbor, WA

3530. **Bethany Witthuhn**
Cleveland, OH

3531. **John and Martha Stoltenberg**
Elkhart Lake, WI

3532. **Anpeo Carpenter**
Newport News, VA

3533. **Carolyn Riddle**
Austin, TX

3534. **Laura Kennell**
Saint Louis, MO

3535. **Alejandro Treszezamsky**
San Antonio, TX

3536. **John and Martha Stoltenberg**
Elkhart Lake, WI

3537. **Russell Symonds**
Costa Mesa, CA

3538. **Logan Paul**
Port Orange, FL

3539. **Tanya Renelt**

3540. **Marj Woodruff**
Chicago, IL

3541. **Hedy Taylor**
Seattle, WA

3542. **Joyce Weir**
Newport, WA

3543. **Sarah Guyer**
Chambersburg, PA

3544. **mae kang**
Owego, NY

3545. **Beth Zelanko**
Saint Johns, FL

3546. **Mary Will**
Upland, CA

3547. **Sherry Dunn**
Penn Valley, CA

3548. **Malcolm MacLaren**
Sarasota, FL

3549. **Elisabeth Price**
Albuquerque, NM

3550. **Robin Drawhorn**
Scotts Mills, OR

3551. **John AND Jean Fleming**
Lonsdale, MN

3552. **Luke gram**
Portland, OR

3553. **Pat tran**
Annandale, VA

3554. **April Delaney**
Mount Airy, MD

3555. **Pat and Gary Duncan**
Los Lunas, NM

3556. **Shawn Firth**
Falls Church, VA

3557. **Sam Yates**
Rockingham, NC

3558. **Emily Lewis**
Easthampton, MA

3559. **Alaina McCleery**
Columbus, OH

3560. Climate change is real and is backed by science. Education is about teaching scientific facts and should not be impacted by politics. Do the right thing.
—**Mary K**
Minneapolis, MN

3561. **Andy Mutchler**
Columbus, WI

3562. **David Runge**
Louisville, KY

3563. Climate change education is very important. I hope this continues to be taught.
—**Jennifer Langer**
Chehalis, WA

3564. **Ramon Trumbull**
Grand Rapids, MI

3565. **Ann Hennelly**
Los Angeles, CA

3566. **Marjorie Frazier**
Waterford, MI

3567. **Meghan Wilson**
Cheshire, CT

3568. **Michael Ranger**

3569. **Thaddeus Sonnenfeld**
Socorro, NM

3570. **Nancy Rosa**
Scotts Valley, CA

3571. **Sheilla Johnson**
Houston, TX

3572. **Linda Sullivan**
Huntington Beach, CA

3573. **John Limbach**
Madison, WI

3574. **Nathan Hofstad**
Mound, MN

3575. **Joshua Jones**
Gainesville, GA

3576. **Lorraine Lorraine G**
South Salem, NY

3577. **O Mdina**
Bradenton, FL

3578. **Richard Lozier**
San Francisco, CA

3579. **Art Hanson**
Lansing, MI

3580. **Margaret Mass**
Chicago, IL

3581. **John Humphries**
Louisville, KY

3582. **Alexandra Winder**
Bremerton, WA

3583. **Vivian D'Angio**
Boynton Beach, FL

3584. **Jill Skinner**
Cobden, IL

3585. **Julie Krasin**
Edgewater, NJ

3586. **Gail Nelson**
Tiffin, IA

3587. Thank you for doing
the right thing.
—**Carole Moore**
Zephyrhills, FL

3588. **Bob Justis**
Telluride, CO

3589. **Gary Webber**
Alberton, MT

3590. **Maria Cazares**
Conroe, TX

3591. **Keelin Magnus**
Saint Paul, MN

3592. **Stuart Mork**
Seattle, WA

3593. **Amy L**
Austin, TX

3594. **Christopher
Seymour**
Newark, MD

3595. **Andy Sayles**
Kalamazoo, MI

3596. **Andy Sayles**
Kalamazoo, MI

3597. **Linda Myers**
Petersburg, PA

3598. **Liz Galst**
Manhattan, NY

3599. **Keith Williams**
Hampton, GA

3600. Please do the right
thing and move forward with
the adoption of accurate
science standards. You owe
it to today's kids who will be
dealing with the evermore
adverse affects of climate
change in the future. They
will need the facts and
science to deal with and try
to solve the climate problems
that we are creating today.

—**Gayle Janzen**
Seattle, WA

3601. **Joey Leftow**
New York, NY

3602. **Deirdre Cole**
Mount Kisco, NY

3603. **Agnes Chao**
Yorktown Heights, NY

3604. **Betsy Malcolm**
New York, NY

3605. **Joyce Frohn**
Oshkosh, WI

3606. **Adrienne Perovich**
Brooklyn, NY

3607. **Pancho Savery**
Portland, OR

3608. **Deby Brown**
Littleton, CO

3609. **M Peluso**
Brewster, NY

3610. **Deborah Baker**
Fletcher, NC

3611. **Judy Watrous**
Louisville, KY

3612. **Lorraine Kirk**
Nederland, CO

3613. **Fred Mallery**
Eugene, OR

3614. **Margery Coffey**
Rosalie, NE

3615. **Ashley Barnes**
Lafayette, CO

3616. **Tim Boester**
Dayton, OH

3617. **Delbert Mueller**
Manhattan, KS

3618. **Timothy Shivers**
Dallas, TX

3619. **Hamel Family**
Oceano, CA

3620. **Kimberly Kashner**
Milton, DE

3621. **Marita Mayer**
San Anselmo, CA

3622. **Roy Pearson**
Estancia, NM

3623. **Dolores Reynolds**
Grand Junction, MI

3624. **Hannah Blakeman**
Myrtle Beach, SC

3625. **Douglas Anderson**
Ankeny, IA

3626. Karen Hughes Columbus, OH	3645. Marianne Flanagan Des Plaines, IL	3657. Paul Mueller Luck, WI
3627. Miss Crystal J Boles Phoenix, AZ	3646. Douglas Collura New York, NY	3658. Patrick Stroud Norwalk, IA
3628. Jane Church Chapel Hill, NC	3647. I know/knew(some now dead) people who think that the moon landing was staged,that we never landed on the moon.The sun does not revolve around the earth. The earth is not flat.Climate change is and has happened many times over the earths live, although there are those who believe that the earth is only some 6,500 to 7,000 years but that is according to their interpretation of the Christian Bible,and how much humans are contributing to it is open to debate. Bob Rayburn U.S. Veteran 1963-1967 — bob 1963-1967 Chicago, IL	3659. Javier Mendez Honolulu, HI
3629. Molly Hauck Kensington, MD		3660. Kathie Snavely Wrightsville, PA
3630. Guy Amsler Little Rock, AR		3661. Walter Christensen Eugene, OR
3631. Charles Sheehan Cotuit, MA		3662. Don Thompson Cambridge, MA
3632. Terri Spurr Tucson, AZ		3663. Diana Kardos Massillon, OH
3633. Adam Koranyi Tenafly, NJ		3664. Jonathan Maschke Port Hope, MI
3634. Colleen Rodger San Francisco, CA		3665. Walter Christensen Eugene, OR
3635. Nancy Munro Oak Ridge, TN		3666. Diana Dee North Hollywood, CA
3636. Nancy Ross-Stallings Perryville, KY	3648. David Wilson Myrtle Point, OR	3667. Shehrever Masters Toledo, OH
3637. April Barcenas Sacramento, CA	3649. Vera Cousins Grinnell, IA	3668. John Will Chula Vista, CA
3638. Keith Wiljanen Ypsilanti, MI	3650. Dylan Jones Traverse City, MI	3669. Trevor Masters Toledo, OH
3639. Daniel Coe Louisville, KY	3651. Timothy Parker Chatsworth, CA	3670. Karen Duncanwood Paradise, CA
3640. Vinod Dumblekar	3652. Timothy Parker Chatsworth, CA	3671. Annette Kane Fairfax, VA
3641. Kiley Brown Louisville, KY	3653. Deniz A-McCoy Stillwater, MN	3672. Stacy Grossman Bexley, OH
3642. Bea Baxter Campton, NH	3654. George Sargent Gresham, OR	3673. Karina Salazar Athens, TX
3643. Ingeborg Glier North Las Vegas, NV	3655. Dan Fullerton Ossining, NY	3674. Grant Lauer Signal Hill, CA
3644. Maria Dickmann Davenport, IA	3656. Amber Thompson Groveton, NH	3675. Rhonda Holt Dayton, OH

3676. **Joanie Zosike**
New York, NY

3677. **Thomas Nieland**
Alamo, TX

3678. **K Karkanen**
Walnut Creek, CA

3679. Thank you for coming to your senses. This is something that will give your children a better world.
—**Harold Denenberg**
Langhorne, PA

3680. **Ric Bernat**
Portland, OR

3681. **Frank Miele**
Washington, DC

3682. **Robert Gore**
Maryland Heights, MO

3683. **Carolyn Davis**
Livonia, MI

3684. **Stuart Greenburg**
Stevenson Ranch, CA

3685. **Kathy Doyle**
Westerville, OH

3686. **Dominica Lo Bianco**
Aston, PA

3687. **Scheree Davis**
Tulsa, OK

3688. **Betsy Rose**
Berkeley, CA

3689. **Rick Luttmann**
Rohnert Park, CA

3690. **Margaret Cleveland**
Nashville, IN

3691. **Pernell Banks**
Grosse Pointe, MI

3692. **Greg Spahn**
Wheaton, IL

3693. **Terrell DeVilbiss**
Sonoma, CA

3694. **Donovan Bosold**
Fairfield, IA

3695. **Leslie Young**
Bloomington, CA

3696. **Mike Stanley**
Ithaca, NY

3697. **Patti Del Tufo**
Sarasota, FL

3698. **Mike Stanley**
Ithaca, NY

3699. Anyone who believes that NOT giving American children the best scientific knowledge available is neither an educator nor a patriot. All American children deserve the best education possible, especially in Science and Math, which is increasingly important in our technological world. Climate change is all but certain to be profoundly consequential during their lives, and all children have a right to understand the facts, even if their parents don't.

—**Edward Lasker**
Franklin, MI

3700. **Catlin Spargo**
Lakewood, OH

3701. **Mondee Door**
Crownsville, MD

3702. **Barb DeLeone**
Tallmadge, OH

3703. **Phillip Jr. & A.**
Birmingham, MI

3704. **Amanda Evens**
Madison, WI

3705. **Stacey Meinzen**
Cotati, CA

3706. **Helen Woerner**
Lyndon, KS

3707. **Steven Van Grouw**
Holland, MI

3708. **Georganne D'Angelo**
Trenton, NJ

3709. **Laura Rice**
Lawrenceburg, KY

3710. **Anuj Mankad**
Woodbridge, NJ

3711. **Nicole Taylor**
Las Vegas, NV

3712. **Jason Bowman**
Antelope, CA

3713. **John Haskin**
Traverse City, MI

3714. **Elizabeth Leon**
Buena Vista, CO

3715. Teach our children well for the future of the Public Good.

—**Marie**
Albuquerque, NM

3716. **Stephanie Stout**
Houston, TX

3717. **Mercedes Lackey**
Claremore, OK

3718. **Sue Roark-Calnek**
Corpus Christi, TX

3719. **John Bremer**
Bellingham, WA

3720. **Stephen McClasky**
Fort Lauderdale, FL

3721. **Samantha Baldwin**
Nahant, MA

3722. **Annie Fernald**
Pound Ridge, NY

3723. **Marta Guttenberg**
Philadelphia, PA

3724. **Julie Shear**
Zeeland, MI

3725. **Abraham
Oboruemuh**
Riverside, CA

3726. **Deo Schlupp**
Arvada, CO

3727. **Marina True**
Silver Spring, MD

3728. **Don Margeson**
St. Petersburg, FL

3729. **Nancy Sims-West**
Paola, KS

3730. **Paul Licano**
Miami, AZ

3731. **Rita Mullis**
Mint Hill, NC

3732. **Gina Bates**
Apple Creek, OH

3733. **Robert Clifton**
Luck, WI

3734. **Billie Ambrose**
GRESHAM, OR

3735. **Deborah Herdan**
Brooklyn, NY

3736. **M Struble**
Philadelphia, PA

3737. **Jerry Parks**
Burlington, IA

3738. **Brooks Obr**
Coralville, IA

3739. **Patricia Copenhaver**
Vallejo, CA

3740. Science proceeds on
cold, hard facts.....not a
bunch of loonies deciding by

popular vote what reality is....
—**Loran Davidson**
Davidsonville, MD

3741. **Emily Van Alyne**
West Richland, WA

3742. **Anthony Draper**
Bloomfield, IA

3743. **Allan Price**
Arlington Heights, IL

3744. **Jonathan Bennett**
Forest, VA

3745. **George Stadnik**
Astoria, NY

3746. **Jan Wilson**
Shoreline, WA

3747. **Corrine Egan**
Erie, PA

3748. **Kimberly Cornilsen**
Drain, OR

3749. **William Richardson**
Highland, CA

3750. The idea that
educational institutions
would suppress the best
information that science can
offer on climate change is
truly horrifying. Is it profound
ignorance or just blind
allegiance to a
science-denying ideology
that makes people take such
indefensible actions?
Ninety-seven percent of the
world's climate scientists
agree that climate change is
real and caused by human
activity. To deny that is
insane.
—**Richard Frichette**
Sequim, WA

3751. **Barbara Fankell**
Sherwood, OR

3752. **Sharon Barnes**
Encino, CA

3753. **Meg Kettell**
Brooklyn, NY

3754. **Patricia Thomas**
Yacolt, WA

3755. **Bernadine Turner**
Newberry, FL

3756. **Ann Noling**
Brooklyn, NY

3757. **Nelia Swayze**
Port Townsend, WA

3758. **Melvin Cheitlin**
San Francisco, CA

3759. **Ryan Keane**
Marlborough, MA

3760. **Susan Ingerham**
Cissna Park, IL

3761. **Pat Salomon**
Monterey, MA

3762. **Mariano Urbani**
Villa Park, CA

3763. **Georgena Askew**
El Paso, TX

3764. **Tina Carantza**
Lansing, MI

3765. **Tiffany Keefer**
Essex, MD

3766. **DK Bolen**
Saint Petersburg, FL

3767. **Nancy Hauer**
Saint Paul, MN

3768. **Rev Kaplan**
Cleveland, OH

3769. **Denise Junice**
Philadelphia, PA

3770. **Michael Leicht**
Brooklyn, MD

3771. **Martha W D Bushnell**
Boulder, CO

3772. **Carole Plesser**
Prairie Village, KS

3773. **Satya Vayu**
Portland, OR

3774. **Ray Andreasen**
Massapequa, NY

3775. **Daniel Demetzky**
North Ridgeville, OH

3776. **Ken Hughes**
Panorama City, CA

3777. **Mark Alexander**
Fayetteville, AR

3778. **Aida Sheets**
St. Petersburg, FL

3779. **Brenda Lahm**
Ceresco, NE

3780. **Tom Gwin**
Mobile, AL

3781. **Peter Hoyt**
Medford, OR

3782. **Guanghui Li**
Redmond, WA

3783. It is unfair for these students to enter a competitive world with a common knowledge which they lack . Enforcing mythology harms your future leaders. Teach ideas, theories, and science not opinions lacking a basis of knowledge and support.
—**MD James KOSS**
ALAMEDA, CA

3784. **Susan Hubbard-Reeves**
Pensacola, FL

3785. **Carina Ramirez**
EL Paso, TX

3786. **Lenore Reeves**
Mokena, IL

3787. **Camille Doucet**
Ithaca, NY

3788. **Tom Hildebrandt**
Farmington, MI

3789. **Alexine Pope**
Crestview, FL

3790. **Brian Waak**
Aurora, IL

3791. **Richard Larimore**
Urbana, IL

3792. **Nicholas Conte**
Matawan, NJ

3793. **Claude Jones**
Detroit, MI

3794. **Mike Lyxwiler**
Saint Louis, MO

3795. **Thomas Gillespie**
La Mirada, CA

3796. **W Starn**
Alexandria, LA

3797. **Eldon Wedlock**
Indianapolis, IN

3798. **Stephen C. Durand**
Signal Mountain, TN

3799. **Truman Mooney**
Portland, OR

3800. **Dana Linder**
Fresh Meadows, NY

3801. **Steve Ditore**
Seattle, WA

3802. **James Kilgore**
Jamaica Plain, MA

3803. **Charles Macquarie**
Carson City, NV

3804. **Olivia Lim**
Davis, CA

3805. **Brian Scott**
Cleveland, OH

3806. **Peter Pitsker**
Gardnerville, NV

3807. **Greg Kimber**
Temple, ME

3808. **Marilyn Noll**
Cincinnati, OH

3809. **Kris Head**
Garden Grove, CA

3810. **Kim Robbins**
Milwaukee, WI

3811. **Vanessa Carbia**
Gainesville, FL

3812. You may not falsify the science of the Eath's atmosphere and the human effect upon it. Scientific facts do not var with the identity of the school board, nor its members personal beliefs or political affiliations. Lying to our children about those scientific facts is a cardinal and unforgivable sin.
—**Jim Steitz**
Gatlinburg, TN

3813. **Stephen Holler**
Houston, TX

3814. **Natalia Arcila**
Saint Petersburg, FL

3815. **Lisa Jenkins**
Petaluma, CA

3816. **Carolyn Shafer**
Toms River, NJ

3817. **Tom Robin**
Las Vegas, NV

3818. **Melissa Locher**
Erie, CO

3819. **Vera Loewer**
Pacifica, CA

3820. **Les Waters**
Louisville, KY

3821. **Linda Mueller**
Covington, KY

3822. **Candy LeBlanc**
Placerville, CA

3823. **Han Rasmussen**
New Orleans, LA

3824. My father, a devout Christian, was also a scientist. His thinking was that honest science is essential, and that God gave us brains with the expectation that we would be good stewards of those brains and USE THEM. His frequent comments about people who put religion in the way of science was, "God gave us brains, He expects us to use those brains. To not use the brains God gave us is to insult God.". Why would any school board choose to insult God and not encourage students to actually use their brains? Adopting standards that include accurate climate science is simply providing good quality education and an opportunity for students to use the brains with which they have been so blessed.
—**Priscilla Williams**
Topeka, KS

3825. **Lauren**
Chicago, IL

3826. **D Wolf**
Bisbee, AZ

3827. **Frank Wissler**
Spring Branch, TX

3828. **Steven Kranowski**
Blacksburg, VA

3829. **Daniel Ferrier**
Detroit, MI

3830. **Mark Willis**
Kensington, MD

3831. **Elizabeth Watts**
Lynbrook, NY

3832. **Marilyn Taylor**
Mount Shasta, CA

3833. **Elizabeth Grindle**
Fairview, TN

3834. **Ronald Ratner**
Sioux Falls, SD

3835. **Jamie Gwynn**
Pflugerville, TX

3836. **Frank Belcastro**
dubuque, IA

3837. **Michael Hayes**
Pueblo, CO

3838. **Amy Irish**
Littleton, CO

3839. **Mike Williams**
Mill Valley, CA

3840. **June Davenport**
Princeton, MA

3841. **Susan Meehling**
Broad Run, VA

3842. **Ellen Matis**
West Palm Beach, FL

3843. Out changing climate is something our kids are going to have to live with, and thus need to know about!
—**Stephen Couche**
Portland, OR

3844. **Mark Coates**
White River Junction, VT

3845. **Norma Erickson**
Greeley, CO

3846. **Norma Erickson**
Greeley, CO

3847. **Nancy Goldberg**
Los Angeles, CA

3848. **Stacey Mangni**
San Francisco, CA

3849. **Richard Pulling**
Denver, CO

3850. **Doug Frugé**
Arvada, CO

3851. Please allow the scientific consensus to prevail. Future generations will thank you for it!
—**Julia Glover**
Clinton, WA

3852. **Harvey Havar**
Minneapolis, MN

3853. **Anne Sen**
Washington, DC

3854. It is time to adopt standards that include accurate climate science.
—**Karen B**
Chapel Hill, NC

3855. **Dale Middleton**
Seattle, WA

3856. **Carol Pond**
Albuquerque, NM

3857. **Gary Cook**
Austin, TX

3858. **Joene Bryant**
Westfield, IN

3859. **Olga Clarke-Jackso**
Providence, RI

3860. **Jenny Cottle**

3861. **Sheryl Schmatjen**
Denver, CO

3862. It's particularly important to have scientifically accurate climate information. What we do to our climate today will affect how it will treat us in the future.

—**Elaine Ricci**
Houston, TX

3863. **Paul & Kathleen Lancot**
Scotts Valley, CA

3864. **Bob Eugene**
Newport, WA

3865. **David McNiff**
Burke, VA

3866. **Christopher Lodge**
Tampa, FL

3867. **John Linder**
Portland, OR

3868. **Max Magbee**
Baton Rouge, LA

3869. **Jan Kulp**
Blue Bell, PA

3870. **Gail Stamps**
Evansville, IN

3871. **Richard Snook**
Vancouver, WA

3872. **Catherine Boulanger**
Highland, IL

3873. **John Avery**
Arlington, VA

3874. **Andra Addis**
Chicago, IL

3875. **Linda Jones**
Ontario, CA

3876. Make believe seems to be the new normal for so many GOP supporters. Refusing to believe the facts will not make the

"unpleasantness" go away!! Our younger generations need to be taught facts and the TRUTH, and they might be the ones to solve this most serious issue of our time - our very survival depends on this (if humans as a species deserve to survive).

—**Sheryl Schmatjen**
Denver, CO

3877. **Keith Rosen**
Houston, TX

3878. **David Laguna**
Bastrop, TX

3879. **Mary Switlik**
Wichita, KS

3880. **Barbara Davidson**
Peoria, IL

3881. **Anja Kollbach**
Menlo Park, CA

3882. **Alan Green**
Nashville, TN

3883. **Renee Brinker**
O'Fallon, MO

3884. **Carol Dobson**
New York, NY

3885. **Jeffrey payne**
Lake Orion, MI

3886. **Renee Jacobs**
Dewey, AZ

3887. **George Stewart**
Hoyt, KS

3888. **Peter von Christierson**
Port Townsend, WA

3889. **Jenelle Joseph**
Brooklyn, NY

3890. **Elaine Alfaro**
Felton, CA

3891. **Theodore Voth**
Madison, WI

3892. **Jo and Joe Reasons**
Port Orchard, WA

3893. **Erik Fredrickson**
Albuquerque, NM

3894. **Naomi Gilmore**
Sacramento, CA

3895. **Lisa Dangelo**
Sacramento, CA

3896. **June Balish**
Brooklyn, NY

3897. **Ron Goldman**
LOS ALTOS, CA

3898. **Orne Montgomery**
Las Vegas, NV

3899. **ElaineKurpiel Kurpiel**
Coatesville, PA

3900. **Flame Schon**
Santa Fe, NM

3901. **Tena Frank**
Citrus Heights, CA

3902. **John Forbes**
Edinburgh

3903. **Lynette Lowe**
Cincinnati, OH

3904. **Mark Brooker**
CHICAGO, IL

3905. **Gladys Tiffany**
Fayetteville, AR

3906. **Charles Riddle**
Mercer Island, WA

3907. **Allison Matthews**
Alpharetta, GA

3908. **Stephen Bellomo**
Rochester, NY

3909. **C P.**
Trenton, NJ

3910. Anna Kolovou Woodside, NY	who are afraid to face reality. Trust the science and teach the truth!	3944. Robert Brown Fircrest, WA
3911. Ann K Woodside, NY	— Colene Turner San Francisco, CA	3945. Brian Underhill Boulder, CO
3912. Anna K West Hollywood, CA	3928. David Mayer Olympia, WA	3946. N Burrows Anchorage, AK
3913. Jim Moseman San Diego, CA	3929. Kent Radek Kenmore, WA	3947. john ÁMK Los Angeles, CA
3914. Thomas Douglas Grayson, KY	3930. M Rangne New York, NY	3948. Katherine Noble Hailey, ID
3915. Eric Meyer Fairfield,Iowa, IA	3931. Matt Geer Willow Springs, IL	3949. James McIntosh Ann Arbor, MI
3916. Kimberly Picazo Las Vegas, NV	3932. Adriana P Fort Collins, CO	3950. Elizabeth O'Connor Honolulu, HI
3917. Carl Stilwell Pasadena, CA	3933. Carol Voeller Salem, OR	3951. Daniel Fewster Baltimore, MD
3918. Zach Bowser Reisterstown, MD	3934. Michael Gnat Brooklyn, NY	3952. Mark Beckwith USA, CA
3919. Ricki Newman Newburgh, IN	3935. Eric Fisher Boise, ID	3953. Ariana Decker Vancouver, WA
3920. Linda Murdock Seattle, WA	3936. Michael von Sacher-Masoch Everett, WA	3954. Christine Carstensen Loveland, CO
3921. Billy Giblin Park City, UT	3937. Nick Page Ferndale, WA	3955. Francine Afromsky Calabasas, CA
3922. Edeltraut Renk	3938. Megan Bratkovich Palatine, IL	3956. Everyone needs to have correct and honest information about everything. How else do you determine what would affect you, your families and the future of our planet? Do not cause harm by falsifying the facts and consider harming your own loved ones and their heirs. — Marguerite Polidori Franklin, MI
3923. Kevin Chiu Kirkland, WA	3939. Cathy Curtis Buffalo, MN	3957. Margery Oberheide Northbrook, IL
3924. Twyla Meyer Pomona, CA	3940. Cosme somogyi Brooklyn, NY	3958. Kathryn Richardson Eagar, AZ
3925. David Podsakoff Long Beach, CA	3941. Jackie Critser	
3926. James Santoro West Linn, OR	3942. S Jaffe Los Angeles, CA	
3927. The science is utterly clear on global climate change, and our children need to know the facts, not the deluded wishes of people	3943. Doris Eckel Hemet, CA	

3959. Aditya Chalakode	Staten Island, NY	3993. Candy Bowman Sacramento, CA
3960. Judith Langhans Olympia, WA	3974. Ciara Preston Redwood City, CA	3994. Nicole Green Seattle, WA
3961. Lon Pilot Baltimore, MD	3975. L R West Hollywood, CA	3995. Mike Frailey Longmont, CO
3962. Nancy Whiting Cave Creek, AZ	3976. Aixa Fielder Los Angeles, CA	3996. Michelle Seymoure Whittier, CA
3963. Mike Weltman Beaverton, OR	3977. Elizabeth Cotton Encinitas, CA	3997. Ra Na Ballwin, MO
3964. Eric Hurt Sterling Heights, MI	3978. Jason Bowman Placerville, CA	3998. Karen Freed Colorado Springs, CO
3965. John Elliott San Francisco, CA	3979. Richard Tuma Prague	3999. V HOEKSEMA TAMPA, FL
3966. Julie McCarthy Westminster, CO	3980. RedLion York Fort Collins, CO	4000. Edith Borie New Paltz, NY
3967. Marie Weis Fox Island, WA	3981. Jennifer Lowans Fayetteville, PA	4001. Jennifer Kundrot Belmont, MA
3968. Kathleen Kilcommons Trumbull, CT	3982. Wendy Emlinger El Paso, TX	4002. David and Susanne Arbiter 3098 Koeniz, TX
3969. Colleen Lobel San Diego, CA	3983. Candace Volz Austin, TX	4003. Donte Morgan Orlando, FL
3970. Stand with students and educators and say "NO!" to Big Coal and its political allies! — Joshua Steele Studio City, CA	3984. Kevin Kraft Menlo Park, CA	4004. Steve smith Washington, DC
3971. Sylvia Niedner Columbus, OH	3985. Mary McGaughey Gresham, OR	4005. Eileen Simons Trenton, MI
3972. Daniel Vandolah Santa Fe, NM	3986. Cathleen Cooks	4006. Michele Shipp Gaithersburg, MD
3973. If we do not enable our young to gain as part of their basic education an understanding of basics of science, scientific method, scientific principles, what is the plan for their intelligent and effective living? — Barbara Walker	3987. Cathleen Cooks	4007. Pat Magrath Pomona, CA
	3988. Myrna Uditsky Mesa, AZ	4008. Ginger Hill Lyman, SC
	3989. Colonel Meyer North Port, FL	4009. Nati camus Hollis, NY
	3990. Silvestre silvestre	4010. Sakura Vesely Martinez, CA
	3991. Charles Fry Sunnyvale, CA	
	3992. Kerry Moore Toledo, WA	

4011. **Florante Pascual**
American Canyon, CA

4012. **Benjamin Oppenheim**
Miami, FL

4013. **John and Christine NICOUD**
North Las Vegas, NV

4014. **Galina Maksimova**

4015. **Carol Lapetino**
Downers Grove, IL

4016. **Adrienne Kirshbaum**
Highland Park, IL

4017. **Gary Bence**
Burton, MI

4018. **Jason Fish**
Lincoln, CA

4019. **Ethan Wearn**
Canterbury, NH

4020. **Ethan Wearn**
Canterbury, NH

4021. This is not a "leap of faith" to "believe" that human burning of fossil fuels contributes to global warming and climate change. It's just adding up the collected data we have. The results are unfortunately bad news for those who make money selling fossil fuels.

—**David Kowalski**
Glen Ellyn, IL

4022. **Nicolas Herrera**
Woodridge, IL

4023. **Michael Espinoza**
Trenton, MI

4024. **Cathi Brooks**
East Burke, VT

4025. **Robert McAllister**
Denver, CO

4026. **Carolyn Mone**
Woodside, CA

4027. **Alex Shatsky**
Las Vegas, NV

4028. **David Adams**
Penn Valley, CA

4029. **William Hewes**
Simi Valley, CA

4030. **Mark Lopez**
Battle Ground, WA

4031. **Rodney Hemmila**
Saint Paul, MN

4032. **Ronald Snow**
Columbia Station, OH

4033. **David Kaczorowski**
Burton, MI

4034. **Joy Ruth**
Austin, TX

4035. **Robert Vendl**
Malabar, FL

4036. **Terri MacDonald**
Monona, WI

4037. **Bob Ostrander**
West Palm Beach, FL

4038. **Jake Turner**
Walsenburg, CO

4039. **Alan Benson**
Manistee, MI

4040. **Chanda Farley**
Canton, NC

4041. **Linda Hartman**
Grand Island, NY

4042. **Dave Boothe**
Richmond, VA

4043. **Dan Boland**
Charlotte, NC

4044. **Robert Weingart**
Powell, OH

4045. **Mary Davies**
West Bend, WI

4046. **Valarie Young**
Southfield, MI

4047. **George Schaefer**
Silver Spring, MD

4048. **Benjamin Allen**
Crofton, MD

4049. **Burton Dickerson**
Tulsa, OK

4050. **Eusebio vestias**
Borba, OK

4051. **Laurel Erickson**
Lincoln, NE

4052. **Jessica Stiles**
Berkeley, CA

4053. **Alexandra Sipiiora**
Chicago, IL

4054. **Jorge Gomez**
San Antonio, TX

4055. **Janet Nestor**
Annapolis, MD

4056. **Susang-Talamo Family**
Export, PA

4057. **CHRISTINE VANHOEK**
Jackson Heights, NY

4058. **Kyle Petlock**
Los Angeles, CA

4059. **Kenneth Nash**
NewBaltimore, MI

4060. **Kristen Stout**
Oakton, VA

4061. **Kenneth Schilling**
Grand Rapids, MI

4062. **Douglas Halfen**
Baltimore, MD

4063. **Marcia**
Franklin, IN

4064. **Jeffrey Routh**
Fort Myers, FL

4065. **John van Kleef**
Chicago, IL

4066. **Bruce Olson**
Overland Park, KS

4067. **John Geiser**
Grand Rapids, MI

4068. **Maria Peteinaraki**

4069. **Rita Rafferty**
Ridgefield Park, NJ

4070. **Gary Silverstein**
Summerfield, NC

4071. **Ellen Jahos**
Alstead, NH

4072. **Eileen Conner**
Coopersburg, PA

4073. **David Hewitt**
Topeka, KS

4074. **John Brown**
Camp Hill, PA

4075. **Kevin Takeguchi**
Arlington, VA

4076. **Ann Diamond**
New Haven, CT

4077. **Steven Esposito**
Port Jefferson Station, NY

4078. **Steven Esposito**
Port Jefferson Station, NY

4079. **Paula Hutts**
Howell, MI

4080. **Denise Potash**
Jim Thorpe, PA

4081. **Kathy Spera**
Tyler, TX

4082. **Cathleen Gilliland**
South Point, OH

4083. **Cathleen Gilliland**
South Point, OH

4084. **Clinton Sennett**
Lewistown, MT

4085. **Edward Owen**
Flemingsburg, KY

4086. **Rob Myers**
Anaheim, CA

4087. **Perry Phillips**
Kent, OH

4088. **Brian Earley**
Lancaster, PA

4089. **Karen McHugh**
Melbourne, FL

4090. **Susann Pelletier**
Lewiston, ME

4091. **Cheri Stephenson**
Tulsa, OK

4092. **Benjamin Rice**
Brookhaven, NY

4093. **Lisa Whalen**
Dayton, OH

4094. **Luci Klinkhamer**
Northville, MI

4095. **Katen roberts**
Rome, NY

4096. **Barrym Greenhill**
Reston, VA

4097. **Ralph Morehouse**
O Fallon, MO

4098. **Amanda White**
Tomball, TX

4099. **Howard Lee**
Berkeley Heights, NJ

4100. **Roel Cantú**
Mission, TX

4101. **Michael Fergot**
New York, NY

4102. **Charles Tazzia**
Grosse Pointe, MI

4103. **David James**
Wilmington, NC

4104. **Mark Hare**
Amesville, OH

4105. **Stephen Girard**
st louis park, MN

4106. **Lori Caudill**
Los Osos, CA

4107. It is dishonest and dishonorable to teach false "facts" in any circumstances. I am glad the board removed such material and trust it will formally adopt the peer-reviewed standards. The future well-being of those you teach depends on facing reality and dealing with it.

—**Katharine Rylaarsdam**
Baltimore, MD

4108. **Ashlee Johnson**
Simi Valley, CA

4109. **Anna Harvey-Myers**
Martinsburg, PA

4110. **Margaret Wood**
Naperville, IL

4111. **lynn manzione**
Athens, GA

4112. **Barbara Collins**
Lawrenceville, NJ

4113. **Joey Stevenson**
Leitchfield, KY

4114. **Diana**
Nashville, TN

4115. **Lynn Fisher**
Bellaire, MI

4116. **Susan Cote-DeMilia**
Southbury, CT

4117. **Pete Wallace**
Oviedo, FL

4118. **Holly Costar**
Bangor, ME

4119. **Julia Hudgens**
Sterling Heights, MI

4120. **Neville Austin**

4121. **keren Kumar**
Westborough, MA

4122. **Jason Harpster**
Pinehurst, NC

4123. **Ivan LaHaie**
Grass Lake, MI

4124. **Barbara Neri**
Pinckney, MI

4125. **Robert Cook**
Lapeer, MI

4126. **RN Cynthia Elia**
Minneola, FL

4127. **Donald Miller**
Cerrillos, NM

4128. **Kathleen Swartz**
Appomattox, VA

4129. **Sharon Tyson**
Monroe, NC

4130. **Eva Landeo**
New York, NY

4131. **Debbie Balasko**
Sparta, MI

4132. **Amanda Barry**
Spencer, NY

4133. **Thomas Lux**
State Road, NC

4134. **les roberts**
fresno, CA

4135. **Clayton Conway**
Seattle, WA

4136. **Mary Button**
Groton, NY

4137. **Cheryl Williams**
Oswego, IL

4138. **Wendy Walsh**
Absecon, NJ

4139. **Nathaniel Hammerli**
Vail, CO

4140. Do you want your students to be educated in the 21st century? Or the nineteenth? Science has come a long way since the church persecuted Galileo.
—**Shinann Earnshaw**
Bend, OR

4141. **John Steponaitis**
San Francisco, CA

4142. **Kelley Anderson**
Sarasota, FL

4143. **Mary Haley**
Elk Grove, CA

4144. **Chris Byknish**
Masury, OH

4145. **Betty Stewart**
Newport News, VA

4146. **Linda Manasco**
MOBILE, AL

4147. **E C**
Wayne, NJ

4148. **Julie Viergutz**
Parma, OH

4149. **Darlene Pavlik**
Chicago, IL

4150. I am a professor who reads and understands climate science. Students in West Virginia and around the world need to understand climate science as presented by scientists in the peer-reviewed literature.
—**William DeMott**
Athens, OH

4151. **John Bills**
Ashland, KY

4152. **Judith Babcock**
Louisville, KY

4153. **Honour Horne-Jaruk**
Dayton, OH

4154. **Barry Plaxen**
Bloomingburg, NY

4155. **Glenn Krakower**
Greenfield, WI

4156. **Patricia Petit**
Cleveland, GA

4157. **Jeffrey Bradian**
Youngstown, OH

4158. **Laura Dame**
Saranac Lake, NY

4159. **Melinda Nelson**
Westland, MI

4160. **Barbara MacKe**
st ann, MO

4161. **MK Ranii**
Pittsburgh, PA

4162. **Mary Terlau**
Louisville, KY

4163. **Terry Murcko**
Youngstown, OH

4164. **Gardner Jay**
Los Angeles, CA

4165. **Robert Graver**
Vincentown, NJ

4166. As a person of faith and a grandparent, I want my grandchildren and all children to learn the most up-to-date, well-researched science available, especially about topics as important as our climate.

—**Jan Wright**
Ypsilanti, MI

4167. Intellectual honesty is the future of the world. Adopting Standards by including accurate climate science must start at School because our children need to have something to build on their future.

—**Marietta Mautner**
Hicksville, NY

4168. **Bob Eldridge**
Westwood, NJ

4169. **Tina Gardner**
New Port Richey, FL

4170. **William Mitchell**
Oakland, CA

4171. **Beth Mays**
Hebron, KY

4172. **Cass Landrum**
Albuquerque, NM

4173. **Cindy Aber**
Decatur, GA

4174. **Erica Lohan**
Free Union, VA

4175. **John Morse**
Pendleton, SC

4176. **Alex Mooney**
Seattle, WA

4177. **Karen Bearden**
Raleigh, NC

4178. **Bruce Calvert**
Milford, MI

4179. **Jay Kenney**
East Peoria, IL

4180. **Dean Sigler**
Beaverton, OR

4181. **Josh Berger**
Harvard, IL

4182. **Mary Gondeck**
Nazareth, MI

4183. **Ellen Goodman**
Riverside, RI

4184. **Adel Kessler**
Cedar Falls, IA

4185. **Rahul Gupta**
West Palm Beach, FL

4186. **Helen Veit**
East Lansing, MI

4187. **Larry Haggart**
Grosse Pointe, MI

4188. **Mike M**
Watertown, WI

4189. **Helen Chirigotis**
New Bedford, MA

4190. **Gary Dalecky**
Cedar Rapids, IA

4191. Our kids will be better served when they have a wide range of information to consider. We need strong thinkers and effective communicators, not people who are limited in what they've been told. Thanks for standing up and doing the right thing - that's what true leaders do.

—**Amanda Senechal**
Woodbury, MN

4192. **Jerry Duncanson**
Menomonie, WI

4193. **Sonette Tippens**
Lake Geneva, WI

4194. **Victor McGill**
Greenville, NH

4195. **Toni Menninger**
Philadelphia, PA

4196. **George McDill**
San Antonio, TX

4197. **Barbara Sorrell**
Milford, OH

4198. **Christine Parus**
Hyattsville, MD

4199. **Nancy Slocum**
Independence, IA

4200. **Kevin Smith**
Grand Blanc, MI

4201. **Judy Dufficy**
Skokie, IL

4202. **Gordon Kramer**
Amherst, MA

4203. **Amanda Woods**
San Diego, CA

4204. **Magali Lachot**
Peoria, AZ

4205. **James Lynch**
Chestertown, NY

4206. **Bill Marvin**
Dayton, OH

4207. **Marlene Callahan-Smith**
Richmond, VA

4208. **Marion Kaselle**
North Branch, NY

4209. **Ryusuke Hasegawa**
Morristown, NJ

4210. **John Cawley**

4211. **Vaiva Griskaite**
Sacramento, CA

4212. **Fran Sears**
Manchester, MI

4213. Robert Ellis St Petersburg, FL	4228. Mary Zimmerer Dexter, KY	4243. Marty Burns Marathon, IA
4214. Cynthia Thomas Pinellas Park, FL	4229. Teresa Mayorga Kingsville, TX	4244. virginia Le Blanc Liberty, MO
4215. Roger Givens Morgantown, KY	4230. Melba Arrington New Rochelle, NY	4245. Philip Burton Galesburg, MI
4216. Virginia Raab Madison, WI	4231. Claude Beavers Lansing, MI	4246. Steven Killermann michigan city, IN
4217. Nelda Farrow Shawnee, OK	4232. Ryan Houlette Cambridge, MA	4247. Dave Gladstone Montague, MA
4218. Christina Mecca Bridgewater, NJ	4233. Gary Vencill Stockton Springs, ME	4248. Ethan Eisenberg Broomfield, CO
4219. Kathleen Martin Orlando, FL	4234. Sarah Edmunds Escalante, UT	4249. Ethan Eisenberg Broomfield, CO
4220. Ralph Milliken Hobe Sound, FL	4235. Christian Rouleau Holland, MI	4250. Catherine Paplin South Amboy, NJ
4221. Barry Anderson Kill Devil Hills, NC	4236. Ruth Lanton Plainview, NY	4251. Howard Jackson Stevensville, MI
4222. I am a science teacher who can not imagine teaching falsehoods simply to support ignorant ideologies. Please reject the unethical tampering of peer reviewed textbooks. Respect reliable science that is based on evidence. — Diane McLaughlin Culver City, CA	4237. Michael Van Clef Great Meadows, NJ	4252. Cynthia Loewy 47-21 41st Street, NY
4223. Sue Nearing Vassar, MI	4238. Dorothy Dobbyn Millsboro, DE	4253. Mark Hodgen Centerville, UT
4224. Denis Wood Raleigh, NC	4239. Keya Chatterjee Washington, DC	4254. Don Bolanos Friday Harbor, WA
4225. Laura Muñoz Floral Park, NY	4240. Rene Maurice San Francisco, CA	4255. Chris Yeyna Myerstown, PA
4226. Carlos Leo Hollywood, FL	4241. I am a retired Public School Teacher. Young people should be taught to seek the truth in facts - which means they need the facts in order to know the truth. Then they can decide what actions - if any - they should take. It's their earth. — Cathy Shanley Chicago, IL	4256. Howard Rubenstein Livonia, MI
4227. Lee Hegstrand Grand Rapids, MI	4242. Rene Maurice San Francisco, CA	4257. Victor Sytzko Fair Lawn, NJ
		4258. Harry Heatherby Norristown, PA
		4259. Claire Russell Oconomowoc, WI
		4260. Karen Goshaney Sparks, MD
		4261. Corey Kaup New York, NY

4262. **Michael Williams**
Washington, DC

4263. **DB Pope**
Varnville, SC

4264. **Victoria Collins**
Valparaiso, IN

4265. **Bobby Keeland**
Arnaudville, LA

4266. **Dorothea Vecchiotti**
Dublin, NH

4267. **Linda Peterson**
Boulder, CO

4268. **Catherine Snyder**
Indianapolis, IN

4269. **Timothy Lippert**
Athens, GA

4270. **Sue Nearing**
Vassar, MI

4271. **Edward Hughes**
East Setauket, NY

4272. **Gerald Meike**
Grand Rapids, MI

4273. **Christopher Knight**
Salem, MA

4274. **Mary Smith**
Rochester, NY

4275. **Barry Oaks**
Eugene, OR

4276. **Amy Horst**
Minneapolis, MN

4277. **Harvey Reed**
Detroit, MI

4278. **Cenie Cafarelli**
Pittsford, NY

4279. **John McPeek**
Fairfax, VA

4280. **Sarah Sercombe**
Royal Oak, MI

4281. **Bartley Lawson**
Hamilton, OH

4282. **Terry Vollmer**
Saint Louis, MO

4283. **Susan Schutt**
Ridgewood, NJ

4284. **Richard Spadola**
Cape Coral, FL

4285. **Tim Ros.**
Lighthouse point, FL

4286. This is a no brainier.
—**Eugene Mosca**
Kutztown, PA

4287. **Elmo Dunn**
Longwood, FL

4288. **Jim Sandoe**
Ephrata, PA

4289. **Katherine Wojciechowski**
Oneida, NY

4290. ignoring truth does
not make truth go away , but
it does make your populatoin
more stupid so the wolves
can control the sheep better .
Is this your not so
clandestine goal?
—**Gary Verst**
Bowling Green, KY

4291. **Pat Long**
Sacramento, CA

4292. **Leslie Elston**
Wheatland, IA

4293. **Mary Furlong**

4294. **D McInnes**
columbia, SC

4295. **Shehrever Masters**
Toledo, OH

4296. **Kim Androlia**
Darlington, PA

4297. **Layne Ricketts**
Washington, DC

4298. **John Teall**
Sparks, NV

4299. **Christine McDonald**
Townsend, DE

4300. **Don Leisen**
Osseo, MN

4301. **Bianca Benincasa**
Bethesda, MD

4302. **Jeffrey Rattner**
Lake Hopatcong, NJ

4303. **Sylvia Rodriguez**
New York, NY

4304. **Helen Goldstein**
Iowa City, IA

4305. **Donnal Walter**
Roland, AR

4306. **Nancy Bella**
Glenside, PA

4307. **Anne and John Hedberg**
Golden, CO

4308. **Jim Brownlow**
Western Springs, IL

4309. **Rochelle Rubin**
Huntington Station, NY

4310. **Cheri Stephenson**
Tulsa, OK

4311. **John Coleman**
Waukegan, IL

4312. **Adam Barnes**
Blacksburg, VA

4313. **Mark Nobriga**
San Francisco, CA

4314. **Plj joseph**
westport, CT

4315. Roger Lema Hayward, CA	4333. cynthia Philip Rhinecliff, NY	— Gregory Snider Bel Air, MD
4316. Teresa Baker Creedmoor, NC	4334. cynthia Philip Rhinecliff, NY	4344. Richard Nadeau Myrtle Beach, SC
4317. John Schumacher Ann Arbor, MI	4335. Yvonne Baab Montpelier, VT	4345. J Preston and Family MORTON, WA
4318. Elliot Clymer Denver, CO	4336. Daniel Pickering Amityville, NY	4346. Rachel Devlin Brooklyn, NY
4319. Michael Lawrence Harrison City, PA	4337. Debbie Fox Newark, DE	4347. Donald Ament Leola, PA
4320. Alex Mooney Seattle, WA	4338. Patricia Supplee Carrollton, KY	4348. Jerry Curow Searchlight, NV
4321. Patricia Hilleary Spokane, WA	4339. Patricia Supplee Carrollton, KY	4349. Emily Bovee Rochester, MI
4322. Sara Syswerda Middleville, MI	4340. Fiorella Russo-Jang Richland, WA	4350. Patricia McGuire Denver, CO
4323. Michelle Jaggi Providence, UT	4341. Matt Conley New Bloomington, OH	4351. Blake T Cherry Log, GA
4324. Adam DSousa Sandy, UT	4342. Hi Folks- I am Lucille M. (Lou) Martin, a 91 year old SAGE - and SAGE come with AGE- that has lived through a great climate era and am now suffering in a POLLUTED PLANET that is withering away from lack of MAINTENANCE. We have been POOR STEWARDS of the BEAUTIFUL BLUE PLANET that we were left in charge of and it is in THE HANDBASKET- TEETERING AT THE EDGE OF THE SLIPPERY SLOPE TO OBLIVIAN and folks - IF WE LOSE OUR PLANET EVERYTHING ELSE IS MOOT. — Lucille Martin Houston, TX	4352. We have separation of church and state and we also pride ourselves on our scientific research. Let's live up to our well-deserved reputation. — Wendy McKee Corvallis, OR
4325. Donna Frye Haddam, KS		4353. John Tweten San Jose, CA
4326. Klaus Skreiner Champaign, IL		4354. E Robbins Wayne, PA
4327. Donna Frye Haddam, KS		4355. Lynn Cole-Walker Brooklyn, NY
4328. Jay Frye haddam, KS		4356. T Garmon Dawsonville, GA
4329. Anthony Magana Boise, ID		4357. Tim Block Princeton, NJ
4330. Religion is NOT science. — Harry Swensen Pensacola, FL	4343. Please allow science to be just science...without political and religious beliefs obscuring the facts!	4358. Karen Peterson Northbrook, IL
4331. Becky Klein Valparaiso, IN		
4332. Sandra Silva chicago, IL		

4359. Linda Pence Franklin, MI	4376. Lila Rhodes Lynnwood, WA	4394. James Clark Colorado Springs, CO
4360. Jenelle Melina Saint Paul, MN	4377. George Phillips Carrboro, NC	4395. Carole Osborn Winsted, CT
4361. Linda mccloud Alamogordo, NM	4378. Marlena East Louisville, KY	4396. David Broadwater Atascadero, CA
4362. Tamsen Binggeli Garden City, ID	4379. Nicole Uhing Des Moines, IA	4397. Robert March Warren, OH
4363. Christine Staight Cottage Grove, OR	4380. Phil Berry Alpharetta, GA	4398. Robert March Warren, OH
4364. Raul Arribas Bridgeport, NJ	4381. Cathy Carleton hadley, NY	4399. Franklin Hamilton Winter Park, FL
4365. Bonnie German Rochester, MI	4382. Rob Fursich Hartsdale, NY	4400. T Edick Dimondale, MI
4366. Randall Foreman Metairie, LA	4383. Patricia Richard-Amato Duluth, MN	4401. Justine Barbuto brockport, NY
4367. Christopher Lish Olema, CA	4384. Earth Thunder Boise, ID	4402. james keats springfield, MA
4368. Andrew Dunbar Peterborough, NH	4385. Phil Berry Alpharetta, GA	4403. Chris Valiante Driggs, ID
4369. Robert Pierson Channelview, TX	4386. Leanna Hollon lexington, KY	4404. Carole Osborn Winsted, CT
4370. William Bagley Fort Lauderdale, FL	4387. Lynne Schrupp Troy, MI	4405. Alvy King Austin, TX
4371. Kade Ariani Alexandria, VA	4388. Kathryn Maysen Grosse Pointe, MI	4406. Susan Hirsch Somers, NY
4372. Tamsen Binggeli Garden City, ID	4389. christina rhode Corpus Christi, TX	4407. Beth Redwine Covington, KY
4373. Daniel Olson Astoria, NY	4390. Christina Tirado North Windham, CT	4408. Mark Resnick Seattle, WA
4374. David White Bar Harbor, ME	4391. Rosemary Clifford New Rochelle, NY	4409. Pat Howell Silver Spring, MD
4375. The W V board of Ed needs to go back to school in order to be taught critical thinking skills!!! — Al Frisby Shawnee, KS	4392. Natalie Audage Davis, CA	4410. Jean Hackney Philadelphia, PA
	4393. Peter Corkey San Francisco, CA	4411. Karen Naifeh San Mateo, CA
		4412. Dennis Miller Falkville, AL

4413. **Barbara Schlachter**
Iowa City, IA

4414. **Bradley Houseworth**
Stevensville, MI

4415. **Jan Roberts**
Salt Lake City, UT

4416. **Richard Engel**
Beachwood, OH

4417. **Hunter Sellari**
Brownsville, TN

4418. **Malika Karunaratne**
Johnstown, PA

4419. **Alan Chapple**
Midland, MI

4420. **Clarence Breece**
North Brunswick, NJ

4421. **Kara Stewart**
Fennimore, WI

4422. **Barry Chalofsky**
Lawrence Township, NJ

4423. **Samantha Miller**
Cincinnati, OH

4424. **Karen Meyer**
Ford, WA

4425. **Marc Brenowitz**
Roswell, GA

4426. **James Bachman**
St. Charles, IL

4427. **Peggy Jones**
Grand Junction, MI

4428. **Hunter Sellari**
Brownsville, TN

4429. **Enio Toro**

4430. **Margaret Reiter**
Saylorsburg, PA

4431. **Kellie Smith**
Deering, NH

4432. **Marcy Gustafson**
Chicago, IL

4433. **Jennie Hoenie**
Maryville, TN

4434. **Richard Berggren**
Maplewood, NJ

4435. **Naomi Olsen**
Hightstown, NJ

4436. **Nancy Stamm**
Fort Pierce, FL

4437. **Linda Bruner**
Beloit, WI

4438. **Francine Ungaro**
Southington, CT

4439. **Lacey Wozny**
Kansas City, MO

4440. **Elizabeth Cronin**
Brooklyn, NY

4441. **Clayton Denman**
West Jefferson, NC

4442. **Carole Buchmiller**
Iowa City, IA

4443. **Carmen Ramirez**
Tallahassee, FL

4444. **L Larkins**
Ruckersville, VA

4445. **Louis Baccarini**
Elmhurst, IL

4446. **Joan Shanahan**
Louisville, KY

4447. **Dawn Jones**
Wellman, IA

4448. **Annie Tucker**
Iowa City, IA

4449. **Ronice Branding**
Florissant, MO

4450. **Jennifer Morski**
Oak Forest, IL

4451. **Pat Bowen**
Iowa City, IA

4452. **Kaaren Klingel**
Pinckney, MI

4453. **Lindsey Walker**
Petoskey, MI

4454. **Frank Costanza**
Hillside, IL

4455. Schools in West Virginia, Texas, and every other state in our nation should be teaching our children science, not ideology. A well-educated student population is our only hope for a decent future and we are already falling behind other nations in teaching our children. Any Board of Education should adopt the highest standards that reflect the best available current science.

—**Elizabeth Bartlett**
Jarrell, TX

4456. **Doug Landau**
St. Petersburg, FL

4457. **Lois White**
Shrub Oak, NY

4458. **John Miller**
Maysville, KY

4459. **Cheri O'Hara**
Ankeny, IA

4460. As a life long educator, I urge you to adopt these standards.

—**Susan Doughty**
Brentwood, TN

4461. **Mark**
Oklahoma City, OK

4462. **Robert Walker**
New York, NY

4463. Jessica May Santa Rosa, CA	4482. Leah Hokanson Pleasant Grove, UT	4500. Jan Stephan Iowa City, IA
4464. Ann Christenson Iowa City, IA	4483. Mish norman Portage, MI	4501. Lisa Jack Novato, CA
4465. Sonia Sniderman tulsa, OK	4484. Michael Monroe Brookline, MA	4502. Sabine Buergermeister
4466. Leslie Winston Columbia, MD	4485. Joan Berger Riverview, MI	4503. Martha Schut Iowa City, IA
4467. Natalie Hanson Lansing, MI	4486. Marta Martinez Not provided, NJ	4504. Annie Murphy Van Buren, MO
4468. Scott Schlachter San Jose, CA	4487. devin nordson boulder, CO	4505. Karen Stankye White Lake, MI
4469. Sam Charette Driggs, ID	4488. George Oliver Port Huron, MI	4506. Missy Howse-Kurtz Kalamazoo, MI
4470. John Juerling Indianapolis, IN	4489. Marcos Arguello Las Vegas, NV	4507. Thomas Sundberg East Northport, NY
4471. Joan Russell Chanhassen, Minnesota, MN	4490. Bob Hammond Sisters, OR	4508. Bryan Johnsrud Springfield, IL
4472. Edward Becker Flushing, NY	4491. R Lenderking Belfast, ME	4509. Lynn Gallagher Solon, IA
4473. Meredith Bailey Bothell, WA	4492. Bud and Shirley Coffey Gig Harbor, WA	4510. Andreas Lange Hallowell, ME
4474. Joan Russell Chanhassen, Minnesota, MN	4493. Jeevan Ramakrishnan Raleigh, NC	4511. Stop living in the stone age. This being a form letter does not negate the fact that it represents my views. — David Edwards Eugene, OR
4475. Bettemae Johnson Albuquerque, NM	4494. Jordana	4512. Sharon Lieberman Annapolis, CA
4476. Susan Shouse Edmonds, WA	4495. Nancy Eichler Berkeley, CA	4513. Doug Jablin Las Vegas, NV
4477. Dale Hillard Salinas, CA	4496. Michele Glaze Garland, TX	4514. Melanie Lewis Waccabuc, NY
4478. Pennelloppe Allee Beaverton, OR	4497. James Seamans Cortland, NY	4515. Elliot Safdie San Francisco, CA
4479. Helen Hansen San Diego, CA	4498. Thomas Bousman Kansas City, MO	4516. Al Steiner Cornwallville, NY
4480. Gb y Louisville, KY	4499. Ted Silen Gresham, OR	
4481. Brian Pomerantz Los Angeles, CA		

4517. **Luisa Patroni**
Miami Beach, FL

4518. **Thomas ratcliffe**
Spanish Springs, NV

4519. **Neal Steiner**
Los Angeles, CA

4520. **Gary Frieden**
Downs, IL

4521. **Jamie Heath**
Greenville, NC

4522. **Shirlene Harris**
San Antonio, TX

4523. **Carletta Downs**
New York, NY

4524. **Jason Bullett**
Mechanicville, NY

4525. **Bryan Monesson-Olson**
Belchertown, MA

4526. **Rosemary French**
Reno, NV

4527. **Linda Hebert**
Thibodaux, LA

4528. **Pat Hanbury**
Reno, NV

4529. **Desiree Crisp**
Las Vegas, NV

4530. **Nancy DeMuth**
Marblehead, MA

4531. **Madhu M.**
North Brunswick, NJ

4532. **Arthur Gies**
Reno, NV

4533. **Brynne Sheriff**
Portland, OR

4534. **Cindy Thompson**
Salina, KS

4535. **Lori Visioli**
Tewksbury, MA

4536. **Pamela Wigdahl**
Castle Rock, CO

4537. **Lisa Perrotta**
Walpole, MA

4538. **Kori McCarthy**
Rochester, NY

4539. **Helen Anderson**
Portland, ME

4540. **Peggy Jones**
Grand Junction, MI

4541. **Karen Kitterman**
Holland, MI

4542. **Andrew Marshello**
Avenel, NJ

4543. **Miriam Green**
Chicago, IL

4544. **Russell Green**
Grand Junction, MI

4545. **Bryan Johnsrud**
Springfield, IL

4546. **Donald Taylor**
Fair Oaks, CA

4547. **Elena Martinez**
Vancouver, WA

4548. **Shylla Noon**
Ada, OK

4549. **Darrell Swofford**
Kansas City, MO

4550. **Mark Mars**
Laconia, NH

4551. **Eunice Kim**
Torrance, CA

4552. **Mark Heald**
Pleasant Hill, TN

4553. **Daniel Brant**
Port Townsend, WA

4554. **Becky Hall**
Iowa City, IA

4555. **Suzanne Barns**
Batesburg, SC

4556. **Ken Rose**
Fallbrook, CA

4557. **M Arveson**
Sumner, WA

4558. **Gerald Antich**
Bolingbrook, IL

4559. **Charles Swet**
Sandy Spring, MD

4560. **Karen Klotzkin**
Rockville, MD

4561. **Emma Wright**
San Diego, CA

4562. **Donald Runstrom**
Clarkston, MI

4563. **John Richkus**
Jersey City, NJ

4564. Climate change deniers are ignorant. do not be influenced by them.
—**Walter Birdwell**
Port Isabel, TX

4565. **Richard & Elizabeth Blakney**
Seattle, WA

4566. **Stewart Smythe**
Moab, UT

4567. **Georgiane Perret**
Iowa City, IA

4568. **David Robison**
Seattle, WA

4569. Do the right thing!
Children need to learn the reality of the environmental issues facing them in their future. Don't bury your head in the sand, EDUCATE

ACCURATELY!!!!

—**Jesse Huff-Larson**
Osseo, MN

4570. **Hollie Galloway**
West Greenwich, RI

4571. **Timothy Walker**
Boaz, AL

4572. **Jefree Anderson**
San Francisco, CA

4573. **John Morrow**
Newport, KY

4574. **Nina Ortiz**
Bronx, NY

4575. **Barbara Schuler**
Gretna, LA

4576. **James Elsesser**
Springport, MI

4577. **Janet Johnson**
Sioux City, IA

4578. **Susan Pynchon**
Kent, WA

4579. **Haley Swanson**
San Mateo, CA

4580. Education is the
primary purpose of schools.
—**Janet Johnson**
Sioux City, IA

4581. **Greg Barnett**
Cedar Rapids, IA

4582. **Christine
Carollo-Zeuner**
Oregon, WI

4583. **Malaika Thompson**
Steamboat Springs, CO

4584. **Anne Gallagher**
Clifton, NJ

4585. **Patrick Maloney**
Chicago, IL

4586. **Alan Scott**
Seattle, WA

4587. **John Doyle**
Crow Agency, MT

4588. **Joe Cooper**
Austin, TX

4589. **Bob Watkins**
Niles, IL

4590. **Jenni**
Bethesda, MD

4591. **Joan Agro**
Orangeburg, NY

4592. **Caroline Ko**
Livermore, CA

4593. **Mary Mutch**
La Crosse, WI

4594. **Nicole Lawless**
Eugene, OR

4595. **Joe Edwards**
Shipman, VA

4596. **Christian Cano**
Charlotte, NC

4597. **Greg Tichenor**
Louisville, KY

4598. **Carl Tyndall**
Bronx, NY

4599. **Caroline Wallace**
Charleston, SC

4600. **Pat Tolton**
Bellingham, WA

4601. **Edmund Swiger**
Gibsonia, PA

4602. **Bryan Daly**
Dayton, OH

4603. **Lorraine Hiatt**
Reno, NV

4604. **Shannon Milhaupt**
Denver, CO

4605. **Julie Maisel**
Atlanta, GA

4606. **Sandi Redman**
Skokie, IL

4607. **Stephen Tews**
Bloomfield, IA

4608. **Benjamin Joannou**
Pinecrest, FL

4609. **Laura Park**
Lawrenceville, GA

4610. **Donald Moeser**
Portsmouth, OH

4611. **Wally Knight**
Nacogdoches, TX

4612. **Patrick Sennello**
Zephyr Cove, NV

4613. **Amanda C**
Washington, PA

4614. **Matthew Getz**
Newburyport, MA

4615. **Cherie Warner**
Pullman, WA

4616. **Cherie Warner**
Pullman, WA

4617. **Kay brained**
Belleville, MI

4618. **Elisabeth Robbins**
Woodland, CA

4619. **Fernando Escobar**

4620. **James Hubbard**
Los Angeles, CA

4621. **Ellen Eisenberger**
Baltimore, MD

4622. **Brenda Cameron**
Cincinnati, OH

4623. **Brice Beckham**
West Hollywood, CA

4624. **Wf Noble**
Boston, MA

4625. **Mary Puckett**
Sparks, NV

4626. **Linda Houston**
Fulton, MO

4627. **Helen Yu**
Brooklyn, NY

4628. **Charles Bouscaren**
Yermo, CA

4629. **Kevin Schappert**
Twin Lake, MI

4630. **Evalee Mickey**
North Liberty, IA

4631. **Hannah Dodd**
Washington, DC

4632. **Mark Alexander**
Fredericksburg, VA

4633. **Mark Lewellen-Biddle**
Lake Hiawatha, NJ

4634. **BOB HAGELE**
Chicago, IL

4635. **Woody Hastings**
Sebastopol, CA

4636. **Mary DeFino**
Milwaukee, WI

4637. **Jean-Claude Dussart**

4638. **Carl Levan**
Mc Leansville, NC

4639. **Carol gordon**
Los angeles, CA

4640. **Margaret Bollini**
Boone, NC

4641. **Katharine Abel**
Lake Como, PA

4642. **Nancy Barcellona**
Los Angeles, CA

4643. **Raymond Zahra**
Florissant, MO

4644. **Alice Suter**
Portland, OR

4645. **Caroline Hancock**
Princeton, NJ

4646. **jeff Jenkins**
Rochester, NY

4647. **Christopher Darken**
Wesley Chapel, FL

4648. **Dorothea Leicher**
Philadelphia, PA

4649. Ignorance is not bliss. If we want a future for our children then they need to know where we've been, how we got to where we are now and what steps each of us can take to protect the future of Earth.

—**Patricia Wynn**
Miami, FL

4650. **Dorian Canalizo**
New Port Richey, FL

4651. "The coming megadroughts will have profound effects on water resources and agricultural productivity. Water rights in the West were carved up during the 1920s, one of the wettest periods in the past 500 years. "It's kind of bad luck that we based our water accounting on those really wet decades," Cook said. And the West's population explosion between 1980 through 2000 also coincided with wetter than normal decades. Now, with nearly every drop of surface water legally claimed, cities and farmers make up any deficit by tapping nonrenewable underground aquifers, which

are already straining to meet current demands."

<http://www.csmonitor.com/Science/2015/0215/Has>
Children have a right to know and to ask adults to protect them from this.

—**Carol Follett**
Bellingham, WA

4652. **Ph Jack Shapiro**
Sarasota, FL

4653. **Jaleen Reynolds**
Crowley, TX

4654. **Greg Sells**
Austin, TX

4655. **NM Porter**
Ypsilanti, MI

4656. **Keivn Bannon**
Sussex, NJ

4657. **Michael Cozad**
Eugene, OR

4658. **sheila wyse**
Sherman Oaks, CA

4659. **Mary Ann Ford**
Hamtramck, MI

4660. **Gladys Casado**
Bronx, NY

4661. Teaching lies to our children is unspeakably despicable. They are our future. They deserve the best.

—**Gwendolyn Claassen**
North Newton, KS

4662. **Lizzie Saltz**
Athens, GA

4663. **Eric Myra**
Falls Church, VA

4664. **Thelma Follett**
Bellingham, WA

4665. **Sandi Walters**
Holiday Island, AR

4666. Sandi Walters Holiday Island, AR	4685. Paige Pinder Greensboro, NC	4704. James Triplett Pittsburg, KS
4667. Slavica Radakovic Florence, KY	4686. Brian Walker Pompano Beach, FL	4705. Jesse Ritrovato West Chester, PA
4668. Fox Fire Plano, TX	4687. Chuck Gaulke Hartland, WI	4706. Carol Groeschel Huntersville, NC
4669. Carola Spurlock Loveland, OH	4688. Whitney San Francisco, CA	4707. Nato Green San Francisco, CA
4670. Pam Berger Lexington, KY	4689. David Whitney Wyoming, PA	4708. Krista Mahoney Sacramento, CA
4671. Judith Arent Iowa City, IA	4690. Kathy Kaufman Chapel Hill, NC	4709. Lynn Walker Cleveland, OH
4672. Tammra Sanders Sylvania, OH	4691. Alexander Lewin Rockville, MD	4710. Leslie Bebensee Corinth, KY
4673. Reba Bumble Forest Hills, NY	4692. Poncin Jacqueline Princeton, NJ	4711. Brenda mills Los Angeles, CA
4674. Brenda Lee wappingers falls, NY	4693. Oliver Gregurevic Annandale, VA	4712. D Hill Lexington, KY
4675. Julie Harrison New York, NY	4694. Andrew Lindsey Vienna, VA	4713. Marie Ballmann Atchison, KS
4676. Faye Soares Pollock Pines, CA	4695. Linda Lovell Newark, OH	4714. Nathan Bockelman Los Angeles, CA
4677. Stan Berg La Crosse, WI	4696. Brad Parsons Dana Point, CA	4715. Christopher Devine Chicago, IL
4678. Stan Berg La Crosse, WI	4697. Sally Garfield West Des Moines, IA	4716. Esther Klaphaak Louisville, KY
4679. Virginia Melroy Iowa City, IA	4698. Christie Lum Lorton, VA	4717. Michael Watson Hickory, NC
4680. Kevin Rolfes Austin, TX	4699. Presley Garrett Las Vegas, NV	4718. Katherine Riordan Chicago, IL
4681. Lianne Lindeke Seattle, WA	4700. Philip J.Hyun Edison, NJ	4719. jaqueline galvan San Antonio, TX
4682. Kevin Darcy Bellingham, WA	4701. Dan Handel Sun Prairie, WI	4720. Joshua Davis Whitehall, MI
4683. Paul Murray	4702. Dan Meier Cedar Falls, IA	4721. John Hale Paradise, CA
4684. Presley Garrett Las Vegas, NV	4703. Agnes Chao Yorktown Heights, NY	4722. David Dodds west harrison, NY

4723. **Gene Polito**
Sag Harbor, NY

4724. **John Lonneman**
Latonia, KY

4725. **Manmeet Toor**
Los Angeles, CA

4726. **Olga Pader**
Franklin, NC

4727. **Hope O'Dell**
Wichita, KS

4728. **Howard Moore**
San Diego, CA

4729. **Joe Meyer**
Amery, WI

4730. **Mona Davis**
Grand Ledge, MI

4731. **Mary Olson**
Woodinville, WA

4732. **Mike Wilson**
Iowa City, IA

4733. **AmberB**
Bettendorf, IA

4734. **Carolyn Watkinson**
Atwater, CA

4735. **Marisa Mercado**
Marina, CA

4736. **Elizabeth Montgomery**
Norwalk, CT

4737. **Carol Leonis**
Cincinnati, OH

4738. **Betty Trentlyon**
New York, NY

4739. **Elizabeth Bondy**
Tucson, AZ

4740. **M McGillivray**
Eugene, OR

4741. **Kathleen Carr**
Cedaredge, CO

4742. **Zach Bowser**
Reisterstown, MD

4743. **J Forbes**
Chicago, IL

4744. **John McGarrity**
Silver Spring, MD

4745. **Chester Mahan**
Boyne Falls, MI

4746. **Steve Connell**
Charlo, MT

4747. **Mike Strawn**
Warren, MI

4748. **Judith Samkoff**
Harrisburg, PA

4749. **Michael Kondelis**
Houston, TX

4750. **Denise Eager**
Palm Springs, CA

4751. **Brenna Tinsley**
Glasgow, KY

4752. The young people in school today are the ones who will be most affected by climate change. They have a right to know the truth and you have an obligation to see that they hear it.
—**Jane Dinda**
Broadview Heights, OH

4753. **Claudia Fabiano**
Washington, DC

4754. **Virgil Salzman**
Denver, CO

4755. **Alena Wheary**
Portland, OR

4756. **Madeleine S-D**
Narberth, PA

4757. **Christina Pax**
Emmitsburg, MD

4758. **Jesse Yatckoske**
Port Washington, WI

4759. **Janet King**
Wellesley, MA

4760. **Beth Rodio**
Sharon, MA

4761. **Brett Robert**
Pompano Beach, FL

4762. You should work for ISIS. They love to interpret their holy book in the literal sense too.
—**Stephen Leone**
Smithtown, NY

4763. **James Wagner**
Saint Louis, MO

4764. **Ana Esteves**

4765. **Kris Johnson**
Iowa City, IA

4766. **Michael Johnson**
Ruther Glen, VA

4767. **Lynne Brimecombe**
Ann Arbor, MI

4768. **Kate**
Charlottesville, VA

4769. **Marshall Boyler**
Camden Wyoming, DE

4770. **David Smith**
Irvine, CA

4771. **Paula Rusterholz**
Saint Paul, MN

4772. **Leif Dautch**
San Francisco, CA

4773. **Thubten Tsultrim**
Newport, WA

4774. Andrea Baer Wailea, HI	4793. Lisa Scharin Summerville, SC	4807. Lorelei Stierlen Plano, TX
4775. Judith Burt New Smyrna Beach, FL	4794. Darcy Juarez Seattle, WA	4808. Scott Simonson Helena, MT
4776. Kathryn Wood Tacoma, WA	4795. Claudia McDonagh Castro Valley, CA	4809. Linda Prostko Caledonia, MI
4777. Deirdre Aherne New York, NY	4796. Andy Lupenko Lemon Grove, CA	4810. Peggy White Owensboro, KY
4778. Scott Norris Broomfield, CO	4797. Erin Strauss Minneapolis, MN	4811. Hugo and Monica Steensma Santa Fe, NM
4779. Mary Conway Nazareth, MI	4798. Sarah Lyons Phoenix, AZ	4812. Peter Collinge Pittsford, NY
4780. Kirstin Mueller Everett, WA	4799. Elisabeth Brisebois Mc Lean, VA	4813. Heloisa kinge Rockville, MD
4781. David Breed Tucson, AZ	4800. Scott Lowe Cuyahoga Falls, OH	4814. Claudia Hall Beaverton, OR
4782. Carolyn Hudson Wenatchee, WA	4801. Linda Drescher Golden, CO	4815. Dan Anderson Roseville, CA
4783. AnnaLou Ritchie Berea, KY	4802. This issue is a world-wide issue. West Virginia can go on record as leading the world in sensible, science-based education . We need this. Thank you for adopting the original climate science standards for your kids, my kids and grandchildren and for children and grandchildren around the world.. — Christy Tews Carson City, NV	4816. Karen Scotese Evanston, IL
4784. Linda Drescher Golden, CO		4817. Tom Schroeder Port Huron, MI
4785. Linda Simpson Rio Rancho, NM		4818. Dale Warren Nicholasville, KY
4786. Darren Showers Buffalo, NY	4803. Herbert Stein Washingtonville, NY	4819. Edward Hatfield Freedom, NH
4787. Keith Said New York, NY	4804. Brandon Cobb Simi Valley, CA	4820. Michelle Belanger Winston Salem, NC
4788. Shane Conger Princeville, IL	4805. Adam Savett Solon, OH	4821. Helen Davis Rehoboth, MA
4789. Jerry Ballengee White Plains, MD	4806. Terry Talbot Grand Junction, CO	4822. Sarah Drye Gloucester, VA
4790. Marin Quezada chicago, IL		4823. Brad Atkins Higginsville, MO
4791. John Hutchison Salem, OR		4824. Suzy Mound Jerome, AZ
4792. Jesse Kirkham Danville, IN		

4825. It's urgent that our children the truth about how there is climate change is happening. Some may disagree on why it's happening but the important part is that we teach them that it is happening and maybe they could do their part even if it's small like not throwing garbage on the ground. Please help our children to learn what is happening with the enviroment and they will be able to decipher their truths later on.

—**Diane Meyer**
warwick, RI

4826. **Samantha Turetsky**
Ormond Beach, FL

4827. **Stephen Lubin**
Sun Valley, CA

4828. **John Massman**
Antioch, IL

4829. **John Miller**
Newport Beach, CA

4830. **Tom Newman**
Torrance, CA

4831. **Dru Druzianich**
Mountlake Terrace, WA

4832. **Joel Scharf**
Martinsville, NJ

4833. **Haley Green**
Fort Wayne, IN

4834. **Krista**
Lake George, NY

4835. **Julia Cranmer**
Vincentown, NJ

4836. **traci Brown**
West Chicago, IL

4837. **Dana Burns**
Bloomington, IN

4838. **Anitra Potts**
West Lafayette, IN

4839. **Paul Ghenoiu**
Plattsburgh, NY

4840. **Felicia Dale**
Marysville, WA

4841. **Emily Ogle**
Kunkletown, PA

4842. Accurate education is important and the consensus is clear on the truth of climate change.

—**Brian Wilkerson**
Hopkins, MN

4843. **Karen Lull**
Claremont, CA

4844. **Tom Yohe**
Denver, CO

4845. **Pamela McCann**
Chicago, IL

4846. **Eric Hooper**
Fair Oaks, CA

4847. **Susan Swan**
Carlsbad, CA

4848. **John Cibery**
Bethel, CT

4849. This is soooo important !!
—**Robert&mary Swain**
Grand Rapids, MI

4850. **Susan Michetti**
mt horeb, WI

4851. **Susan Michetti**
mt horeb, WI

4852. **Stan Berg**
La Crosse, WI

4853. **Ezequiel hernandez**
Milton, FL

4854. **Lucia Cooper**
Covert, MI

4855. Lying to the kids about drugs didn't help win the drug war. Lying to them about this won't help to change the self-destructive course we are now on in relation to the climate.

—**David Swanson**
Enid, OK

4856. **Renee Leathers**

4857. **Tanya Guchi**
Sherman Oaks, CA

4858. **Jonathan**
San Antonio, TX

4859. **Dale LaCognata**
Indianapolis, IN

4860. **Georgia Yeamans**
Slippery Rock, PA

4861. **Georgia Yeamans**
Slippery Rock, PA

4862. **Mary Ashcliffe**
Henniker, NH

4863. **Jason Hollington**
Gainesville, FL

4864. **Christopher Tuch**
New Braunfels, TX

4865. **Juliana Ley**
Sault Sainte Marie, MI

4866. **Rebecca Ross**
Iowa City, IA

4867. **Jeremy Fischer**
Durham, NC

4868. **Stephen Lubin**
Sun Valley, CA

4869. **Mark Cosgriff**
Lakewood, OH

4870. Michael Evans Los Angeles, CA	4888. T Downs Lewes, DE	4907. Lindsey Heller Lynnwood, WA
4871. Paul Caprioli Hillsboro, OR	4889. Marty Landa Sedona, AZ	4908. Carla Tevelow dayton, MD
4872. Rolyn Baltimore, MD	4890. Mandy Spiczka Sauk Rapids, MN	4909. Martha Perez Portland, OR
4873. Robert Smith York, PA	4891. Vince Mendieta Austin, TX	4910. Stephanie Pierce Gainesville, FL
4874. Arthur & Shirley Wolfe Beulah, MI	4892. Barbara Duncan Whittier, NC	4911. Sharla Keith aloha, OR
4875. Brad LaCroix Rancho Cucamonga, CA	4893. Rebecca Hickey Portland, OR	4912. Bethany Sattur Clark, NJ
4876. Kimberly Picazo Las Vegas, NV	4894. Camilla Spicer Port Charlotte, FL	4913. Joseph Wenzel Saint Paul, MN
4877. Saul Aguirre Chicago, IL	4895. Kathy Jacquez Barrackville, WV	4914. Emil Evenson Eau Claire, WI
4878. Mary White Ann Arbor, MI	4896. Matt Groner Saint Louis, MO	4915. Dylan Nguyen Milpitas, CA
4879. Laura LaVertu Alexandria, VA	4897. Julie Ford Huntington Beach, CA	4916. Karen Larson Chino, CA
4880. Beverly Chemai Germantown, MD	4898. Larry Parsons warner, OK	4917. Romy Basler El Cerrito, CA
4881. Cindy Hatcher Bumpus Mills, TN	4899. Hannah H San Jose, CA	4918. Barret Carpenter Las Vegas, NV
4882. Amber Gilchrist Elbert, CO	4900. Jonathan Weinberg Bradenton, FL	4919. Jonathan Chapin New Haven, VT
4883. Francesca Rago Pleasant Hill, CA	4901. Bo Breda Pahoa, HI	4920. Frederic Levrat New York, NY
4884. Ellen Adler Toledo, OH	4902. Manuel Driggs West Berlin, NJ	4921. Marc Massar Oviedo, FL
4885. Stefanie Sellars Simi Valley, CA	4903. Bronwen Evans vancouver, WA	4922. Anne Dolson Fort Worth, TX
4886. Inga Jaeger Iowa City, IA	4904. Dick Russo Madison, WI	4923. Neil Bleifeld New York, NY
4887. Cox Mary J Utica, MI	4905. Laurel Brewer Moorpark, CA	4924. Heather Beaird Chehalis, WA
	4906. Linda Drescher Golden, CO	4925. Heidi Ellis Newton, IA

4926. **Cheryl Hanks-Hicks**
Springfield, OR

4927. **Carole Shelton**
Auburn, CA

4928. **Ruthann Duval**
Pensacola, FL

4929. **Nona Weiner**
San José, CA

4930. **Freddy Sall**
miami beach, FL

4931. **Elfida Dominguez**
San Benito, TX

4932. **William Cunningham**
Oklahoma City, OK

4933. **Kristin Walden**
Newbury Park, CA

4934. **Mark Miller**
Alpharetta, GA

4935. **Bill McCoy**
Lexington, KY

4936. **Diane Krell-Bates**
San Diego, CA

4937. **Marsha Adams**
Renton, WA

4938. **Shemayim Elohim**
Seattle, WA

4939. **Jean Hagen**
Iowa City, IA

4940. **Paul Macomber**
Herndon, VA

4941. **Rhonda Weber**
Hercules, CA

4942. Deniers aren't too smart
—**Marcia Kaplan**

4943. **Linda Drescher**
Golden, CO

4944. **William Winburn**
Rancho Palos Verdes, CA

4945. **Margaret Fisher**
Overland Park, KS

4946. **Chris Roth**
Dexter, OR

4947. **Charlotte Zampini**
Westborough, MA

4948. **Margaret Bradbury**
Sanbornville, NH

4949. **Spencer Walsh**
Seattle, WA

4950. **Michael Terry**
Santa Monica, CA

4951. **Dan & Judy Dickinson**
Bath, MI

4952. **Erin P**
Camarillo, CA

4953. **Tracy Holthaus**
Kansas City, MO

4954. **David King**
Buffalo, NY

4955. **Henry Day**
Beaverton, OR

4956. **Dolores Wood**
Portland, OR

4957. **Mike Ellison**
Vancouver, WA

4958. **Stephen Lubin**
Sun Valley, CA

4959. **Paola Viteri**
Flushing, NY

4960. **Sandra Walker**
RSM, CA

4961. **Jason Husby**
minneapolis, MN

4962. **Lisa Thomas**
Issaquah, WA

4963. **Timur Slapke**

4964. **Beverly Black**
Milledgeville, GA

4965. **Paloma Alcala**
Alexandria, VA

4966. **Sarah Griffin**
Louisville, KY

4967. **Deb Evans**
Ashland, OR

4968. **William Fink**

4969. **Christina McKye**
Madison, WI

4970. **Emilia Novo**

4971. Climate change is not about some vaguely worrisome, abstract possibility in the distant future. Climate change is happening now. Anyone with eyes can see it. Stand by your decision. Please help the students of West Virginia make sense of their changing world.

—**Sarah Damassa**
Rockport, MA

4972. **Beth arndtsen**
Medfield, MA

4973. **Jeff Schroeder**
Lincolnshire, IL

4974. **Matthew Coffelt**
Davenport, IA

4975. **Yolanda Mitts**
Scotts, MI

4976. **David Campbell**
Shelby, NC

4977. **Nora Sotomayor**
Dedham, MA

4978. **Jason Collins**
Glen Saint Mary, FL

4979. **Barb Fath**
Pleasant Plain, OH

4980. **Alex Sponza**
Gouldsboro, PA

4981. **Steven Steele**
Maple Grove, MN

4982. **T Borst**

4983. **Ashley Vowles**
Wichita, KS

4984. **John Rusterholz**
Roseville, MN

4985. **Michele Steiner**
Bowling Green, KY

4986. **Susan Horton**
Elgin, IL

4987. **Sholey Argani**
takoma park, MD

4988. **June Cattell**
West Columbia, SC

4989. **Gay Mikelson**
Iowa City, IA

4990. **Carol Preston**
Stillwater, OK

4991. **Kathleen Gregg**
Wilmore, KY

4992. **Gian Colista**
Harper Woods, MI

4993. **Kathleen Morris**
Columbus, OH

4994. **Jeff Chamberlain**
Placerville, CA

4995. **Jonathan Stone**
Chippewa Falls, WI

4996. **Rachel watts**
New Orleans, LA

4997. **Linda Drescher**
Golden, CO

4998. **Penny Zahler**
Riverhead, NY

4999. **Justin Birnholz**
Chicago, IL

5000. **Tamara Button**
BRONX, NY

5001. **Diane Arnal**
Saint George, UT

5002. **Dawn Bueneman**
Palos Hills, IL

5003. **Margaret Wood**
Naperville, IL

5004. **Donna Blue**
Lexington, KY

5005. **Shawna Abbatiello**
Fort Lauderdale, FL

5006. **Kendra brooks**
SeAl beach, CA

5007. **Madonna Wojtaszek-Healy**
Joliet, IL

5008. **Michael Rosenbaum**
Mount Kisco, NY

5009. **Sue Nearing**
Vassar, MI

5010. Some folks claim to be Christians living in a Christian country , but they want to lie about the truth? One of the Ten Commandments says "thou shalt not lie". Did Jesus say that that commandment was nul and void? Tell the truth about climate science!
—**N Oure**
Woodbridge, VA

5011. Please, do not lie to our children. It is there future

that is on the line. Thank you.

—**Elaine Long**
Pisgah Forest, NC

5012. **Anna Broxterman**
Concordia, KS

5013. **Mm**
Orlando, FL

5014. **Cameron O'Reilly**
Columbus, OH

5015. **Stephanie Trujillo**
Des Moines, IA

5016. **Jim Petkiewicz**
San Jose, CA

5017. **Margaret Petkiewicz**
San Jose, CA

5018. **Samantha Siler**
Cincinnati, OH

5019. **Kathy Thede-Reynolds**
Coralville, IA

5020. **Susana Gilboe**
New York, NY

5021. **Marina Garland**
Bar Harbor, ME

5022. **Shane Yellin**
Dover, MA

5023. **Mary stroh**

5024. **Karen May**
Morehead, KY

5025. **Kathleen Bentley**
Baltimore, MD

5026. **John Hunter**
Penn Yan, NY

5027. **Alison McGinty**
Denver, CO

5028. **John Scahill**
Pittsburgh, PA

5029. **Debra Mahony**
Fairfield, CT

5030. **Kimberly Nieman**
plymouth, MN

5031. **Gene Raymond**
Colts Neck, NJ

5032. **Mirian Rivera-Shapiro**
Brooklyn, NY

5033. **Dorothy Wolters**
Atchison, KS

5034. **Eddie Bumgardner**
Cortez, CO

5035. **Melanie Pasinski**
East Aurora, NY

5036. **Jen perlaki**
New York, NY

5037. **Lyn Marshall**
Eagle, ID

5038. **Debra Evon**
Minneapolis, MN

5039. **aron shevis**
brooklyn, NY

5040. **Janet Hanson**
Weaverville, NC

5041. **Gail Gray**
Belchertown, MA

5042. **Edwin Hiley**
Athens, PA

5043. **Querido Galdo**
Oakland, CA

5044. **Gregory Hall**
San Marcos, CA

5045. **Kristen Nolte**
Okeechobee, FL

5046. **Milton Davis**
Springfield, GA

5047. **Evelyn Fraser**
Washington, DC

5048. **Kristeene Knopp**
Irvine, CA

5049. **Lynna Dhanani**
New Haven, CT

5050. **Corey Anderson**
Tacoma, WA

5051. **Stefanie Watkins**
Evergreen, CO

5052. **Brianna Pfeninger**
Tacoma, WA

5053. **Paul Lennon**
Ypsilanti, MI

5054. **Sarah Adrian**
Southfield, MI

5055. If you have not already viewed it, I would recommend you see the movie Interstellar - a dramatization of where we might be if your decision stands and others make the same choice. Think about it.
—**Mary Versgrove**
Iowa City, IA

5056. **sharon Tozzi**
Trenton, NJ

5057. **Annette Raible**
Petaluma, CA

5058. **Maryann Lyon**
Summit, NJ

5059. **s Logan**
Miami, FL

5060. **Sam Sackett**
Canton, OK

5061. **Arlene Zuckerman**
Rego park, NY

5062. **Jennifer DiRenzo**
Elk Creek, MO

5063. My home state of West Virginia owes their children the FINEST education possible. It is wrong to corrupt the information that scientists have been able to gather over time. If the intent is to protect the jobs of coal miners that is very short sighted. The next generation is already looking at and accepting the beautiful wind towers that are being built on the crest of the mountains. Do not cheat your youngest citizens of information, it will reflect on YOU.

—**Candace Barnhouser**
Mount Airy, MD

5064. **Marguerite Larson**
Norman, OK

5065. **P Hudson**
Windsor, VT

5066. **Philip Johnston**
Scotts Valley, CA

5067. **D Suchy**
Lawrence, KS

5068. **Myra Dewhurst**
Miami, FL

5069. **Edward Hills**
Westland, MI

5070. **Purnima Barve**
King of Prussia, PA

5071. **Kathy Schwerin**
Carson City, NV

5072. **Marilyn Bischoff**
Cherokee Village, AR

5073. **Robin Bressler**
Sioux City, IA

5074. **Allen Delzell**
Brevard, NC

5075. **Kenneth and Penny Bruce**
Milwaukee, WI

5076. **Kim Dieter**
Wayne, PA

5077. **Teresa Grimsley**
Alamosa, CO

5078. **Dale Goodin**
Lakewood, CO

5079. **Jesse Fife**
Boulder, CO

5080. **Meghan McAvoy**
Oldsmar, FL

5081. **Gia Cummisk**
Ellensburg, WA

5082. **Maureen Hicks**
Stanton, MI

5083. **Billy Johnson**
Des Moines, IA

5084. **Elizabeth Icks**
Cable, WI

5085. **Sally Hill**
Tulsa, OK

5086. **Maryellen Todd**
Hicksville, NY

5087. **Katherine Slawinski**
New York, NY

5088. **Jonathan Blanton**
Lexington, KY

5089. **Jo-An RN**
San Francisco, CA

5090. Our children need to be informed about science if they are to make informed decisions as adults. Democracy requires that its citizens be educated.
—**Temma Fishman**
Medford Lakes, NJ

5091. **Angie Den**
Eden Prairie, MN

5092. **Henry Jones**
Columbus, OH

5093. **R Elosua**
albq., NM

5094. **Dennis Dehn**
Topeka, KS

5095. **Elisabeth Speece**
Watsonville, CA

5096. **Gretchen Clay**
Bellingham, WA

5097. **Jamie Castaneda**
Sierra Madre, CA

5098. **Kelsey Wotzka**
Duluth, MN

5099. **David Schooley**
Reno, NV

5100. **sasha Delgado**
Rego Park, NY

5101. **Zack Clayton**
Columbus, OH

5102. **Nicole Vela**
Seattle, WA

5103. **Lynne Miceli**
Norfolk, VA

5104. **Carol Genovese**
Brookline, MA

5105. **Chris Witting**
queens, NY

5106. **Christine Schlotfeld**
IOWA CITY, IA

1. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Brianna Godfrey**
Hurricane, WV

2. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Vivian Geroski**
Thomas, WV

3. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Joshua Hardy**
Hillsboro, WV

4. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Mike McFee**
Kenna, WV

5. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Please don't short change our students. Sincerely,
—**Sandra Osbourn**
Shepherdstown, WV

6. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,

—**Sara Wilts**
Bruceeton Mills, WV

7. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Tyler Hannigan**
Left Hand, WV

8. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in

the NGSS. Sincerely,
—**Lee Fuell**
Morgantown, WV

9. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Aaron New**
Mill Creek, WV

10. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based

climate science content in the NGSS. Sincerely,
—**Daniel Chiotos**
Harpers Ferry, WV

11. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Shara Yancey**
Bluefield, WV

12. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which

includes the evidence-based climate science content in the NGSS. Sincerely,
—**Shara Yancey**
Bluefield, WV

13. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Susan Feller**
Augusta, WV

14. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West

Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Connie Bloss**
Charleston, WV

15. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Tara Braithwaite**
Mabie, WV

16. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality

science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Hedda Haning**
Charleston, WV

17. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Ben Badger**
Morgantown, WV

18. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your

commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Herb & Sarah Myers**
Harman, WV

19. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Glenda Spencer**
Harpers Ferry, WV

20. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information.

Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Colleen Murray**
Morgantown, WV

21. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Carole Williams**
Fairmont, WV

22. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and

misleading information. After rejecting inaccurate information, the WV Board of Education should NOT have reopened the discussion. Why must we fight the same battle over and over again? Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Esther Leonard**
Huntington, WV

23. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Carol Sheffield**
Buckhannon, WV

24. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science

educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Edward Savage**
Thomas, WV

25. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Theresa Thornburg**
Elkview, WV

26. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by

scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Stephanie Hyre**
Charleston, WV

27. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Matthew Tate**
Hillsboro, WV

28. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were

written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Vivian Stockman**
Spencer, WV

29. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. We do have the moral responsibility of accurately preparing the new generation of West Virginians by providing them with a sound scientific understanding of problems related to climate change. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Jorge Flores**

Morgantown, WV

30. Dear BOE members: You did the right thing by withdrawing the altered climate standards, given their inaccuracies and a rationale which was predicated solely on placating industry (as explained by Mr. Campbell). Moreover, the altered standards were at odds with literally every credible climate study which has been conducted. For a body which exhorts schools to make decisions that are "research-based" and "data-driven," your decision to align yourselves with climate-change deniers was most disappointing. It is simply unfair to WV's students to have their science education short-circuited by reliance on opinion rather than fact. I appreciate your willingness to reconsider and urge you to retain the standards as originally approved. Your obligation to ensure a thorough and efficient education for our students demands no less. Please, ensure it is evidence-based climate science that's taught in WV's science classrooms. Sincerely,
—**Bobbi Nicholson**
Nitro, WV

31. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the

scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Mark Tauger**
Morgantown, WV

32. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Kathie King**
Ripley, WV, WV

33. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science

educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Kathie King**
Ripley, WV, WV

34. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Christopher Smith**
Saint Albans, WV

35. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by

scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Petra Miller**
Lost Creek, WV

36. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Rebecca Martin**
Hurricane, WV

37. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were

written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Amanda Toothman**
Fairmont, WV

38. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Callie McMunigal**
Union, WV

39. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS

climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Jean Czernek**
weirton, WV

40. Dear Members of the WV Bd of Education: The original climate science standards contained in the Next Generation Science Standards were AWESOME. They don't need any tinkering. I'm so glad you withdrew the altered climate standards, which contained inaccurate and misleading edits. I hope you are as committed to high quality science education for West Virginia students as I am and I hope you do the right thing! Sincerely,
—**Amy Weintraub**
Charleston, WV

41. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board

did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Danita Nrlhaus**
Charleston, WV

42. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Philip Divita**
Charleston, WV

43. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on

climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Margaret Hardesty**
Charleston, WV

44. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Harold Totten**
Charleston, WV

45. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the

scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Susan Malinoski**
Charleston, WV

46. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Henry Glass**
Charleston, WV

47. Dear West Virginia Board of Education: [Please note that I am a retired classroom teacher from the public schools in Marshall County.] Please adopt the original climate science standards contained in the Next Generation Science

Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information.

Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely, Marc Harshman

—**Marc Harshman**
Wheeling, WV

48. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. A science curriculum is not a proper forum for political and ideological stands. More than 97% of climate and geological science professionals agree that the evidence incontrovertibly points to a strong human factor in bringing about the dramatic climate shifts in the past decade. This is considered a scientifically and statistically strong result.

Political views should not hold sway in scientific discussions of fact. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,

—**Richard Swinehart**
Romney, WV

49. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,

—**Charles Williams**
Ashford, WV

50. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by

withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,

—**Ann Willard**
Charleston, WV

51. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Please take this into each academic area and teach the facts. Sincerely,

—**Karin gateless**
Flatwoods, WV

52. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the

scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Please take this into each academic area and teach the facts. Sincerely,
—**Karin gateless**
Flatwoods, WV

53. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**D Conaway**
Morgantown, WV

54. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were

written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Rozanna Bracken**
Charleston, WV

55. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Penney Kolb**
Morgantown, WV

56. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on

climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Daniel Liedl**
West Liberty, WV

57. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Please, don't make WV a national laughingstock by watering down what we teach our future leaders about the most important issue of our time. We need their expertise to help solve this global problem. Sincerely,
—**Carol Nix**
Independence, WV

58. Dear West Virginia Board of Education: Please adopt

the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Dana Kulp**
Glenville, WV

59. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Wendy Bogers**
Wheeling, WV

60. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Jim Plitt**
Wardensville, WV

61. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Eloise Hollen**
Philippi, WV

62. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Ann Cline**
Beckley, WV

63. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Let's not make the country and world think we are ignorant and stupid,

please! Sincerely,
—**Michael Attfield**
Morgantown, WV

64. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Peter Giacobbi**
Morgantown, WV

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climate science content in the NGSS. Sincerely,
—**Alan Ducatman**
Morgantown, WV

66. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Dan Brown**
Bluefield, WV

67. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which

includes the evidence-based climate science content in the NGSS. Sincerely,
—**Hannah Barnes**
Morgantown, WV

68. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Richard Pollack**
Wheeling, WV

69. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West

Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Richard Pollack**
Wheeling, WV

70. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Leslie Devine-Milbourne**
Berkeley Springs, WV

71. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality

science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Billy Peyton**
Charleston, WV

72. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Sandra Frank**
Davis, WV

73. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your

commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Tod Lewark**
Flemington, WV

74. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Rachel Channell**
Elkins, WV

75. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information.

Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Rose Robinson**
Weston, WV

76. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Deirdra Halley**
Charleston, WV

77. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and

misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Stephen Kuehn**
Athens, WV

78. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Kathy Rutledge**
Oak Hill, WV

79. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which

contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Jeffrey Gordon**
Morgantown, WV

80. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Whitney Metz**
Mannington, WV

81. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered

climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Susan Kelley**
Fairmont, WV

82. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely, Scott Barner, Science Teacher, Berkeley County
—**Scott Barner**
Martinsburg, WV

83. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on

climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Therese Vanzo**
Morgantown, WV

84. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**William O'Brien**
Shepherdstown, WV

85. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the

scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Rhonda Marrone**
Charleston, WV

86. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Jackie Burns**
Davis, WV

87. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science

educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. It's a step in the right direction to counter the negative view many from outside the state have. Such as the average citizen being an ignorant hick. All it will take to continue these cliches are to reverse your decision so we can take out place alongside Texas and other backward sliding states. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Charles Delaney**
Saint Albans, WV

88. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,

—**April Keating**
Buckhannon, WV

89. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Mary Weimer**
Huntington, WV

90. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in

the NGSS. Sincerely,
—**Mary Weimer**
Huntington, WV

91. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. Climate science is a hard science; it should not be influenced by political considerations. Certainly in West Virginia there are strong interests pushing for denial of the reality of climate change; but even if all 1.8 million of us fervently and devoutly believe that climate change is a myth, not a single molecule of carbon dioxide will be blocked from rising into the upper atmosphere, where it will cause changes that are predictable in general, even if the details are still hazy. My kids went to Calhoun High School. Despite it being a smallish rural school, they were able to get a sufficiently good education that my daughter got a full scholarship to Amherst, and then a scholarship to law school (she is now a law clerk in Beckley). My son got a collection of scholarships to WVU, where he earned a Masters in mechanical engineering; he is now head engineer at a firm designing cars. CHS had a decent course in sex education, despite the conservative community; my kids got adequate information at home, but I'm sure many of their classmates did not. Likely some teen pregnancies were prevented because the school made sure the kids understood

some of the facts of life, matters that could strongly affect their lives. Climate change will strongly affect their lives, too; pretending it isn't real is hardly useful preparation. Some of the details of which areas will be affected in what ways and when are not clear; the best ways of mitigating the problem are subject to argument, and should be getting that argument in high schools. But the reality of climate change has been settled science for two decades. Please do not bend to political pressures in deciding how science is taught in West Virginia. Sincerely,
—**Mary Wildfire**
Spencer, WV

92. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Diana Greenhalgh**
New Milton, WV

93. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**April Keating**
Buckhannon, WV

94. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Alice Meehan**
Morgantown, WV

95. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Greg Mach**
Elkins, WV

96. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Charlotte Fremaux**
Harpers Ferry, WV

97. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Betsy Reeder**
Jumping Branch, WV

98. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Carrie-Meghan Quick**
Huntington, WV

99. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Ph S. Thomas Bond**
Jane Lew, WV

100. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Kristi godby**
Lewisburg, WV

101. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Chuck Wyrostok**
Spencer, WV

102. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**April Keating**
Buckhannon, WV

103. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Autumn Long**
Wallace, WV

104. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Sara Gorin**
French Creek, WV

105. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Edward Savage**
Thomas, WV

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—**Joan St Clair**
Huntington, WV

107. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Roberta Washington**
mannington, WV

108. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**David Mitchell**
Morgantown, WV

109. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Matthew McCormick**
Romney, WV

110. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Brad Kinder**
Fayetteville, WV

111. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**C hoppe**
Harpers ferry, WV

112. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Gregory Moss**
Shepherdstown, WV

113. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Steve Houchins**
PINEVILLE, WV

114. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Kathryn Chipperfield**
St. Louis, MO

115. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**June Kemp**
Bluefield, WV

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—**Dathna Keller**
Aurora, IL

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—**Jose Ochoa**
Chicago, IL

118. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Benjamin Roberts**
Vienna, WV

119. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Rebecca Harrison**
Milton, WV

120. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Nikki Jones**
Morgantown, WV

121. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Gerard Noel**
Princeton, WV

122. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Scottie Westfall**
Grantsville, WV

123. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Marshall Hickman**
Volga, WV

124. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Rutha Chestnut**
Charleston, WV

125. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Robert Gall**
Wheeling, WV

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—**Anne Pittman**
MORGANTOWN, WV

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—**Tony Christini**
Morgantown, WV

128. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Please do not allow our children to be ignorant of the facts of our

impact on the ability of earth to continue to support life! Sincerely,
—**Deven Matlick**
MOATSVILLE, WV

129. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Chet Dowell**
Mt Zion, WV

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Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Lois Cole**
Lewisburg, WV

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—**Lois Cole**
Lewisburg, WV

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science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Linda Hoffmann**
Ithaca, NY

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—**Destiny Randall**
oak hill, WV

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commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Franklin Bryan**
Amherst,, MA

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—**Annie Brock**
Laramie, WY

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Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Susan Adkins**
Huntington, WV

137. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Robert Jones**
Charleston, WV

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—**Charlie Winfree**
Burlington, WV

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—**Crystal Good**
charleston, WV

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which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Francine Nordling**
Huntington, WV

141. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Debbie Royalty**
Charles Town, WV

142. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the

altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Rebecca Lindsey**
Berkeley Springs, WV

143. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Having lived in West Virginia my entire life, I would like to believe that we can still offer our children a decent education. I would also like to believe that we yet retain some reverence for the truth and for the dissemination of knowledge in the public interest. We cannot allow ourselves to be bullied or deceived by an industry that relies upon the perpetuation of ignorance in order to further its own financial interests. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Robert Paul**

CHARLESTON, WV

144. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Heather Linden**
Gerrardstown, WV

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—**Nancy Pape**
Madbury, NH

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—**Chris Hoke**
Middlebourne, WV

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the NGSS. Sincerely,
—**Jerry Brookover**
ELIZABETH, WV

148. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**David Shaw**
St Albans, WV

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climate science content in the NGSS. Sincerely,
—**Clara Hayes**
SALINAS, CA

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—**Francis Slider**
Middlebourne, WV

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includes the evidence-based climate science content in the NGSS. Sincerely,
—**Justin Porter**
Barboursville, WV

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—**Kimberly Alderman**
Cabin Creek, WV

153. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West

Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Kristina Trevithick**
Morgantown, WV

154. Dear West Virginia Board of Education: As the parent of a West Virginia student, I am very concerned about the misrepresentation of scientific facts to our youth. Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Heather Jones**
Martinsburg, WV

155. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the

altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Ginnie McNeil**
Belington, WV

156. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Robert Jerger**
Martinsburg, WV

157. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the

right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Jason Carroll**
Fairmont, WV

158. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Robin Morse**
Portland, OR

159. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate

change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Kris McW**
Dunbar, WV

160. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Ramona Draeger**
San Francisco, CA

161. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific

consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Freddy Sall**
miami beach, FL

162. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Damon Mills**
huntington, WV

163. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and

represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Stan Corwin-Roach**
martinsburg, WV

164. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Kari Yokochi**
Salem, WV

165. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists

and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**John Wilmer**
Martinsburg, WV

166. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Our children need to know all data so they can take informed action later in life. Sincerely,
—**Amelia Brekeller**
Meadow Bridge, WV

167. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation

Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Betty Shumate**
Ronceverte, WV

168. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Christine Barkey**
Winfield, WV

169. Dear West Virginia Board of Education: Please adopt the original climate science standards contained

in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Michael Ireland**
Parkersburg, WV

170. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**April Keating**
Buckhannon, WV

171. Dear West Virginia Board of Education: Please adopt the original climate

science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Beth Via**
Charles Town, WV

172. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Elaine Hodges**
Durbin, WV

173. Dear West Virginia Board of Education: Please

adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Patti Whipple**
Atlantic Beach, NC

174. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Sheba Kendig**
Burnsville, WV

175. Dear West Virginia Board of Education: Why are you thinking of watering down the Next Generation Science Standards to science in West Virginia? Already students are doing poorly when compared to what others are doing across the nation. Wake up and do what is right. Sincerely,
—**Elizabeth Wasiluk**
Martinsburg, WV

176. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Sarah Skeen**
Huntington, WV

177. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate

change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. I urge you to stand your ground. Students need to be taught facts, not fallacies. Sincerely,
—**Esther Leonard**
Huntington, WV

178. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**jeanne Odom**
davis, WV

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peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Jill Sergent**
Milton, WV

180. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**J Ruano**
Winfield, WV

181. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards

were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**James Ruckle**
Charleston, WV

182. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Erin Hunter**
Hurricane, WV

183. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The

NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Chris Higgins**
Charleston, WV

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—**Amy Humphrey**
Lesage, WV

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Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Angie Abbott**
South Charleston, WV

186. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Daniel Chiotos**
Fayetteville, WV

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in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Hannah Palmer**
Saint Albans, WV

188. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Joey Madia**
Morgantown, WV

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science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Dee Hammonds**
Newton, WV

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—**Marian Buckner**
Shepherdstown, WV

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adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Shane Lorrison**
Madison, WV

192. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. West Virginia student deserve the highest quality science education. Pandering to ignorance hurts everyone. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the

NGSS. Sincerely,
—**Merri Morgan**
Greenville, WV

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—**Hannah Spencer**
Morgantown, WV

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climate science content in the NGSS. Sincerely,
—**Michael McLeod**
White Hall, WV

195. Dear West Virginia Board of Education: Please do not allow climate deniers to make WV looks like a backward-thinking state. Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Donna Long**
Fairmont, WV

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Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Amy Vernon-Jones**
Lewisburg, WV

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—**Suzanne King**
Charleston, WV

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and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Jody Mohr**
Salem, WV

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—**Ed Saugstad**
Sinks Grove, WV

200. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards,

which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Joseph Chasnoff**
Lindside, WV

201. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**bob chamberland**
Greenville, WV

202. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the

altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Charles Walters**
Romney, WV

203. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Kristie Ferriell**
Augusta, WV

204. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the

right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Sara Young**
Craigsville, WV

205. Dear West Virginia Board of Education: The following is obviously a form letter but I agree with it and hope you will be smart enough to reject the tea bagger lies about global warming. Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Julian Martin**
Charleston, WV

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NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Ryan Devine**
Wayne, WV

207. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Madelon Maxson**
Renick, WV

208. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation

Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Jude Binder**
Big Bend, WV

209. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely, Paul Corbit Brown
—**Paul Brown**
Oak Hill, WV

210. Dear West Virginia Board of Education: Thank you for rejecting the

misleading and inaccurate information about climate change. It is imperative that you adopt the climate science standards contained in the Next Generation Science Standard (NGSS). Without adherence to these standards, I am very concerned that our children will be misled and confused, and that pundits will be given more fodder for mocking West Virginia. The NGSS climate standards reflect scientific thinking on climate change. The motives of the very few skeptical "scientists" opposed to these standards are suspect. What are their qualifications? Whose interests do they really represent? The NGSS standards were formulated, written, and peer-reviewed by scientists and science educators. I applaud your recent decision to withdraw the suspect and inaccurate alternate climate standards. Please stand by your decision and maintain your commitment to teaching our children real, not fake, science by adopting the NGSS climate standards. Sincerely,
—**Lynn Yellott**
Shepherdstown, WV

211. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the

right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Judith Deutsch**
Huntington, WV

212. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Tom Firor**
Franklin, WV

213. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate

change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. As a science educator at Fairmont State University, I can state emphatically that our students need to be properly educated in public schools. Sincerely,

—**Karen Yarnell**
Fairmont, WV

214. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,

—**Jennifer Mercer**
Morgantown, WV

215. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation

Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,

—**Kevin Connoley**
Morgantown, WV

216. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,

—**Aaron Lancaster**
Lewisburg, WV

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—**Nancy Price**
Oak Hill, WV

218. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,

—**Brendan Bell**
Charleston, WV

219. Dear West Virginia Board of Education: Please adopt the original climate

science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Mary Borchers**
Romney, WV

220. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Michael Turner**
Fayetteville, WV

221. Dear West Virginia Board of Education: Please

adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Becky Park**
Charleston, WV

222. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Joseph Lambeau**
Huntington, WV

223. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Bill sohonage**
Oak Hill, WV

224. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Bill sohonage**
Oak Hill, WV

225. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Paige Muellerleile**
Huntington, WV

226. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Eve Firor**
Franklin, WV

227. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Julie Darling**
Spencer, WV

228. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Stephanie Hysmith**
Charleston, WV

229. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Alex Estanich**
Bridgeport, WV

230. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Betty Peterson-Wheeler**
Inwood, WV

231. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Patrick Martin**
Bridgeport, WV

232. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Ditty Markham**
Charleston, WV

233. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Don't let business interests and those who refute scientific knowledge insert their opinions in texts. Those comments can be detrimental to learning accurate information. Why teach fallacies that are not based on knowledge?
Sincerely, Patrick Martin
—**Patrick Martin**
Bridgeport, WV

234. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information.

Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Jeff Feldman**
Martinsburg, WV

235. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Patricia Skeen**
Charleston, WV

236. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate

and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Patricia Skeen**
Charleston, WV

237. Dear West Virginia Board of Education: I was so proud of all of you for rejecting the altered climate standards that were recently proposed for WV. I urge you to continue to stand up for our school children by adopting the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. As a parent and an educator, I was grateful to you for that decision. Please continue to stand up for good science and good education. I truly appreciate your commitment to high quality science education for West Virginia students, and encourage you to support the evidence-based climate science content in the NGSS. Sincerely,
—**Kristin Alexander**
Martinsburg, WV

238. Dear West Virginia Board of Education: Please join the rest of the nation in

adopting the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Curt Mason**
charles town, WV

239. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Marianne Turkal**
Weirton, WV

240. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**George Boggs**
Elkview, WV

241. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**David Hott**
Augusta, WV

242. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Carolyn Rodis**
Shepherdstown, WV

243. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Tandi Stephens**
Oak Hill, WV

244. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Evelyn Petry**
Old Fields, WV

245. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Evelyn Petry**
Old Fields, WV

246. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Lynn McGraw**
Winfield, WV

247. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**PJ Hallberg**
Davis, WV

248. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Susan Unger**
Morgantown, WV

249. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Carol Reuther**
Wheeling, WV

250. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**R Rine**
Wheeling, WV

251. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**George Rutherford**
Ranson, WV

252. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Michael Morrison**
Barboursville, WV

253. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Jeannette VanBelleghem**
Harpers Ferry, WV

254. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Marlyn Bissett**
Charleston, WV

255. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Sam Stetson**
Charleston, WV

256. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. The future of West Virginia's economy and the well-being of her children depend upon the state's adoption of a sustainable energy platform. Allowing Big Coal and Gas to dictate the curriculum in our schools for the sake of a handful of jobs and immense profits to them - which they take out of state, mostly untaxed - is an outrage. Sincerely,
—**A Larsen**
Berkeley Springs, WV

257. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the

altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS.
—**Phillip Gooden**
Worthington, WV

258. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Genny Martin**
South Charleston, WV

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right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Gayle Becker**
Falling Waters, WV

260. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Lori Rose**
Dunbar, WV

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change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Susan Kelley**
Fairmont, WV

262. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Russell Smith**
Charles Town, WV

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consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Ann Coulter**
Shepherdstown, WV

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—**Frances Tolley**
Hurricane, WV

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represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**James Dixon**
Terra Alta, WV

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—**L Webb**
oak hill, WV

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and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Paula Clendenin**
Charleston, WV

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—**Richard Clark**
Belington, WV

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peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Matt Sowers**
Hurricane, WV

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—**Lynn Yellott**
Shepherdstown, WV

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were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Dottie Hess**
Charleston, WV

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—**Jonathan O'Dell**
Hurricane, WV

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NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Neil Coffield**
Triadelphia, WV

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—**Marlene Iveans**
Charles Town, WV

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Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Natasha McMann**
Marlinton, WV

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—**Natasha McMann**
Marlinton, WV

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—**Stephen Doll**
Morgantown, WV

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—**Tammy Hackney**
Elkview, WV

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science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Andrea Anderson**
Charleston, WV

280. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Ellen Smith**
Harper's Ferry, WV

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adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**K Moore**
Elkview, WV

282. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Harry Cline**
Baisden, WV

283. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Larissa Spiker**
Shepherdstown, WV

284. Dear West Virginia Board of Education: As a citizen of the Wild and Wonderful State of West Virginia, I am chagrined, appalled, and thoroughly disappointed in the WV Board of Education trying to change the Next Generation Sciences Standards. And that Board of Education members Wade Linger and Tom Campbell WOULD STILL vote to change them is absolutely unacceptable. I have followed this fiasco of poor, uninformed decision making as reported in the Morgantown Dominion Post. My husband, a WVU professor, has been supportive of his colleagues in writing the letter to tell the WVBOE of exactly how wrong-headed this decision was--though they were

certainly more tempered in their response than I am feeling today. As a teacher in one of WV's schools, as someone who has served on a local Board of Education, as a parent of a child educated in the Monongalia County Schools, you have embarrassed us all--both within our state and on a national level. Personally, I think you should all resign. Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
Patricia Schaeffer 9 Red Sky Drive Morgantown, WV 26508
pmschaeffer@gmail.com
—**Patricia Schaeffer**
Morgantown, WV

285. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and

represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Rodney DeMott**
Ravenswood, WV

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—**Rodney DeMott**
Ravenswood, WV

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—**Linda Koval**
Charleston, WV

288. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Darren Page**
Morgantown, WV

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peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Sue Stephens**
Charleston, WV

290. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Joshua Carpenter**
New Haven, WV

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were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Margaret Logan**
Culloden, WV

292. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Frank Shomo**
Scott Depot, WV

293. Dear West Virginia Board of Education: As a previous student of Richwood High school, I was submerged in a learning environment crazy about

coal. I never realized how much coal impacted the environment UNTIL I ATTENDED COLLEGE. I was never told how much damage was done by coal. I am now an Ecology student at West Liberty University, and I am offended by how I was robbed of the knowledge that is incredibly important to know. Keeping students away from the truth is going to get West Virginia nowhere. Students will always be behind in education due to the greediness of corporations driven by coal production. Please do not hide the truth from children in WV. Science is progressing in the world, and hiding the truth from students is only going to hurt them and the state as a whole. It will not EVER stop scientists from persuading the world into better, sustainable resources. This is the 21st century, and it's time to catch up. Do not allow WV students to continue to be unaware of the environments status while the state continues to contribute to destroying it! It will eventually end and due to the lack of knowledge that students have, they will not understand. The science is proven; don't ignore it. Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by

withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—Katie Scott
 Craigs ville, WV

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—Katie Scott
 Craigs ville, WV

295. Dear West Virginia Board of Education: I am a former WV teacher who is deeply concerned that our students learn science-based concepts--not politically popular or industry-sponsored misinformation. Thank you for your recent rejection of inaccurate information about climate change in the new school science standards. Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were

written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Christopher Craig**
Harpers Ferry, WV

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—**Mary Kinsley**
Morgantown, WV

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NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Jeff Kovatch**
Huntington, WV

298. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Peter McCumber**
Westover, WV

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Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Whitney Bailey**
Elkins, WV

300. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Cynthia Wegman**
Charleston, WV

301. Dear West Virginia Board of Education: Please adopt the original climate science standards contained

in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Jack Swiney**
Saint Albans, WV

302. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Christopher Kimes**
Charleston, WV

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science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Leah Craver**
Charleston, WV

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—**Allan Tweddle**
Charleston, WV

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adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Robin Wilson**
Spencer, WV

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—**Gina McCullough**
Fridley, MN

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—**LeJay Graffious**
Bruceton Mills, WV

308. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Amy Carpenter**
Romney, WV

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—**Brian Leonard**
Inwood WV, WV

310. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. While I respect the rights of individuals and groups to offer their opinions, courses in science should not be a platform for political discussions. There are many areas within the sciences that are still open for debate, and that debate should

occur. However, it should occur within the context of describing the scientific method and the strengths and limitations of this method. It should not be an opportunity for every dissenter to have their opinion expressed with equal time to the majority of the scientific community. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Aaron Upton**
Huntington, WV

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—**Heather Rogers**
Capon Bridge, WV

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—**Brianna Godfrey**
Hurricane, WV

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—**Vivian Geroski**
Thomas, WV

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—**Joshua Hardy**
Hillsboro, WV

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—**Mike McFee**
Kenna, WV

5. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Please don't short change our students. Sincerely,
—**Sandra Osbourn**
Shepherdstown, WV

6. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,

—**Sara Wilts**
Bruceeton Mills, WV

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—**Tyler Hannigan**
Left Hand, WV

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—**Lee Fuell**
Morgantown, WV

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—**Aaron New**
Mill Creek, WV

10. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based

climate science content in the NGSS. Sincerely,
—**Daniel Chiotos**
Harpers Ferry, WV

11. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Shara Yancey**
Bluefield, WV

12. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which

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—**Susan Feller**
Augusta, WV

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—**Connie Bloss**
Charleston, WV

15. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Tara Braithwaite**
Mabie, WV

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science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Hedda Haning**
Charleston, WV

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—**Ben Badger**
Morgantown, WV

18. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your

commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Herb & Sarah Myers**
Harman, WV

19. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Glenda Spencer**
Harpers Ferry, WV

20. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information.

Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Colleen Murray**
Morgantown, WV

21. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Carole Williams**
Fairmont, WV

22. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and

misleading information. After rejecting inaccurate information, the WV Board of Education should NOT have reopened the discussion. Why must we fight the same battle over and over again? Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Esther Leonard**
Huntington, WV

23. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Carol Sheffield**
Buckhannon, WV

24. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science

educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Edward Savage**
Thomas, WV

25. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Theresa Thornburg**
Elkview, WV

26. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by

scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Stephanie Hyre**
Charleston, WV

27. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Matthew Tate**
Hillsboro, WV

28. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were

written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Vivian Stockman**
Spencer, WV

29. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. We do have the moral responsibility of accurately preparing the new generation of West Virginians by providing them with a sound scientific understanding of problems related to climate change. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Jorge Flores**

Morgantown, WV

30. Dear BOE members: You did the right thing by withdrawing the altered climate standards, given their inaccuracies and a rationale which was predicated solely on placating industry (as explained by Mr. Campbell). Moreover, the altered standards were at odds with literally every credible climate study which has been conducted. For a body which exhorts schools to make decisions that are "research-based" and "data-driven," your decision to align yourselves with climate-change deniers was most disappointing. It is simply unfair to WV's students to have their science education short-circuited by reliance on opinion rather than fact. I appreciate your willingness to reconsider and urge you to retain the standards as originally approved. Your obligation to ensure a thorough and efficient education for our students demands no less. Please, ensure it is evidence-based climate science that's taught in WV's science classrooms. Sincerely,
—**Bobbi Nicholson**
Nitro, WV

31. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the

scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Mark Tauger**
Morgantown, WV

32. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Kathie King**
Ripley, WV, WV

33. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science

educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Kathie King**
Ripley, WV, WV

34. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Christopher Smith**
Saint Albans, WV

35. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by

scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Petra Miller**
Lost Creek, WV

36. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Rebecca Martin**
Hurricane, WV

37. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were

written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Amanda Toothman**
Fairmont, WV

38. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Callie McMunigal**
Union, WV

39. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS

climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Jean Czernek**
weirton, WV

40. Dear Members of the WV Bd of Education: The original climate science standards contained in the Next Generation Science Standards were AWESOME. They don't need any tinkering. I'm so glad you withdrew the altered climate standards, which contained inaccurate and misleading edits. I hope you are as committed to high quality science education for West Virginia students as I am and I hope you do the right thing! Sincerely,
—**Amy Weintraub**
Charleston, WV

41. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board

did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Danita Nrlhaus**
Charleston, WV

42. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Philip Divita**
Charleston, WV

43. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on

climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Margaret Hardesty**
Charleston, WV

44. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Harold Totten**
Charleston, WV

45. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the

scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Susan Malinoski**
Charleston, WV

46. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Henry Glass**
Charleston, WV

47. Dear West Virginia Board of Education: [Please note that I am a retired classroom teacher from the public schools in Marshall County.] Please adopt the original climate science standards contained in the Next Generation Science

Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information.

Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely, Marc Harshman

—**Marc Harshman**
Wheeling, WV

48. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. A science curriculum is not a proper forum for political and ideological stands. More than 97% of climate and geological science professionals agree that the evidence incontrovertibly points to a strong human factor in bringing about the dramatic climate shifts in the past decade. This is considered a scientifically and statistically strong result.

Political views should not hold sway in scientific discussions of fact. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,

—**Richard Swinehart**
Romney, WV

49. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,

—**Charles Williams**
Ashford, WV

50. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by

withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,

—**Ann Willard**
Charleston, WV

51. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Please take this into each academic area and teach the facts. Sincerely,

—**Karin gateless**
Flatwoods, WV

52. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the

scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Please take this into each academic area and teach the facts. Sincerely,
—**Karin gateless**
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—**D Conaway**
Morgantown, WV

54. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were

written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Rozanna Bracken**
Charleston, WV

55. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Penney Kolb**
Morgantown, WV

56. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on

climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Daniel Liedl**
West Liberty, WV

57. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Please, don't make WV a national laughingstock by watering down what we teach our future leaders about the most important issue of our time. We need their expertise to help solve this global problem. Sincerely,
—**Carol Nix**
Independence, WV

58. Dear West Virginia Board of Education: Please adopt

the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Dana Kulp**
Glenville, WV

59. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Wendy Bogers**
Wheeling, WV

60. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Jim Plitt**
Wardensville, WV

61. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Eloise Hollen**
Philippi, WV

62. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Ann Cline**
Beckley, WV

63. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Let's not make the country and world think we are ignorant and stupid,

please! Sincerely,
—**Michael Attfield**
Morgantown, WV

64. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Peter Giacobbi**
Morgantown, WV

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climate science content in the NGSS. Sincerely,
—**Alan Ducatman**
Morgantown, WV

66. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Dan Brown**
Bluefield, WV

67. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which

includes the evidence-based climate science content in the NGSS. Sincerely,
—**Hannah Barnes**
Morgantown, WV

68. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Richard Pollack**
Wheeling, WV

69. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West

Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Richard Pollack**
Wheeling, WV

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—**Leslie Devine-Milbourne**
Berkeley Springs, WV

71. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality

science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Billy Peyton**
Charleston, WV

72. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Sandra Frank**
Davis, WV

73. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your

commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Tod Lewark**
Flemington, WV

74. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Rachel Channell**
Elkins, WV

75. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information.

Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Rose Robinson**
Weston, WV

76. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Deirdra Halley**
Charleston, WV

77. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and

misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Stephen Kuehn**
Athens, WV

78. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Kathy Rutledge**
Oak Hill, WV

79. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which

contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Jeffrey Gordon**
Morgantown, WV

80. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Whitney Metz**
Mannington, WV

81. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered

climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Susan Kelley**
Fairmont, WV

82. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely, Scott Barner, Science Teacher, Berkeley County
—**Scott Barner**
Martinsburg, WV

83. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on

climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Therese Vanzo**
Morgantown, WV

84. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**William O'Brien**
Shepherdstown, WV

85. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the

scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Rhonda Marrone**
Charleston, WV

86. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Jackie Burns**
Davis, WV

87. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science

educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. It's a step in the right direction to counter the negative view many from outside the state have. Such as the average citizen being an ignorant hick. All it will take to continue these cliches are to reverse your decision so we can take out place alongside Texas and other backward sliding states. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Charles Delaney**
Saint Albans, WV

88. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,

—**April Keating**
Buckhannon, WV

89. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Mary Weimer**
Huntington, WV

90. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in

the NGSS. Sincerely,
—**Mary Weimer**
Huntington, WV

91. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. Climate science is a hard science; it should not be influenced by political considerations. Certainly in West Virginia there are strong interests pushing for denial of the reality of climate change; but even if all 1.8 million of us fervently and devoutly believe that climate change is a myth, not a single molecule of carbon dioxide will be blocked from rising into the upper atmosphere, where it will cause changes that are predictable in general, even if the details are still hazy. My kids went to Calhoun High School. Despite it being a smallish rural school, they were able to get a sufficiently good education that my daughter got a full scholarship to Amherst, and then a scholarship to law school (she is now a law clerk in Beckley). My son got a collection of scholarships to WVU, where he earned a Masters in mechanical engineering; he is now head engineer at a firm designing cars. CHS had a decent course in sex education, despite the conservative community; my kids got adequate information at home, but I'm sure many of their classmates did not. Likely some teen pregnancies were prevented because the school made sure the kids understood

some of the facts of life, matters that could strongly affect their lives. Climate change will strongly affect their lives, too; pretending it isn't real is hardly useful preparation. Some of the details of which areas will be affected in what ways and when are not clear; the best ways of mitigating the problem are subject to argument, and should be getting that argument in high schools. But the reality of climate change has been settled science for two decades. Please do not bend to political pressures in deciding how science is taught in West Virginia. Sincerely,
—**Mary Wildfire**
Spencer, WV

92. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Diana Greenhalgh**
New Milton, WV

93. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**April Keating**
Buckhannon, WV

94. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Alice Meehan**
Morgantown, WV

95. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Greg Mach**
Elkins, WV

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—**Charlotte Fremaux**
Harpers Ferry, WV

97. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Betsy Reeder**
Jumping Branch, WV

98. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Carrie-Meghan Quick**
Huntington, WV

99. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Ph S. Thomas Bond**
Jane Lew, WV

100. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Kristi godby**
Lewisburg, WV

101. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Chuck Wyrstok**
Spencer, WV

102. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**April Keating**
Buckhannon, WV

103. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Autumn Long**
Wallace, WV

104. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Sara Gorin**
French Creek, WV

105. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Edward Savage**
Thomas, WV

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—**Joan St Clair**
Huntington, WV

107. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Roberta Washington**
mannington, WV

108. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**David Mitchell**
Morgantown, WV

109. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Matthew McCormick**
Romney, WV

110. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Brad Kinder**
Fayetteville, WV

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—**C hoppe**
Harpers ferry, WV

112. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Gregory Moss**
Shepherdstown, WV

113. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Steve Houchins**
PINEVILLE, WV

114. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Kathryn Chipperfield**
St. Louis, MO

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—**June Kemp**
Bluefield, WV

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—**Dathna Keller**
Aurora, IL

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—**Jose Ochoa**
Chicago, IL

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—**Benjamin Roberts**
Vienna, WV

119. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Rebecca Harrison**
Milton, WV

120. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Nikki Jones**
Morgantown, WV

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—**Gerard Noel**
Princeton, WV

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—**Scottie Westfall**
Grantsville, WV

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—**Marshall Hickman**
Volga, WV

124. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Rutha Chestnut**
Charleston, WV

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—**Robert Gall**
Wheeling, WV

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—**Anne Pittman**
MORGANTOWN, WV

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—**Tony Christini**
Morgantown, WV

128. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Please do not allow our children to be ignorant of the facts of our

impact on the ability of earth to continue to support life! Sincerely,
—**Deven Matlick**
MOATSVILLE, WV

129. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Chet Dowell**
Mt Zion, WV

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Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Lois Cole**
Lewisburg, WV

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—**Lois Cole**
Lewisburg, WV

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science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Linda Hoffmann**
Ithaca, NY

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—**Destiny Randall**
oak hill, WV

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commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Franklin Bryan**
Amherst,, MA

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—**Annie Brock**
Laramie, WY

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Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Susan Adkins**
Huntington, WV

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—**Robert Jones**
Charleston, WV

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—**Charlie Winfree**
Burlington, WV

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—**Crystal Good**
charleston, WV

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which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Francine Nordling**
Huntington, WV

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—**Debbie Royalty**
Charles Town, WV

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altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Rebecca Lindsey**
Berkeley Springs, WV

143. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Having lived in West Virginia my entire life, I would like to believe that we can still offer our children a decent education. I would also like to believe that we yet retain some reverence for the truth and for the dissemination of knowledge in the public interest. We cannot allow ourselves to be bullied or deceived by an industry that relies upon the perpetuation of ignorance in order to further its own financial interests. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Robert Paul**

CHARLESTON, WV

144. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Heather Linden**
Gerrardstown, WV

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—**Nancy Pape**
Madbury, NH

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—**Chris Hoke**
Middlebourne, WV

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the NGSS. Sincerely,
—**Jerry Brookover**
ELIZABETH, WV

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—**David Shaw**
St Albans, WV

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climate science content in the NGSS. Sincerely,
—**Clara Hayes**
SALINAS, CA

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—**Francis Slider**
Middlebourne, WV

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—**Justin Porter**
Barboursville, WV

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—**Kimberly Alderman**
Cabin Creek, WV

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Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Kristina Trevithick**
Morgantown, WV

154. Dear West Virginia Board of Education: As the parent of a West Virginia student, I am very concerned about the misrepresentation of scientific facts to our youth. Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Heather Jones**
Martinsburg, WV

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altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Ginnie McNeil**
Belington, WV

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—**Robert Jerger**
Martinsburg, WV

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—**Jason Carroll**
Fairmont, WV

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—**Robin Morse**
Portland, OR

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—**Kris McW**
Dunbar, WV

160. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Ramona Draeger**
San Francisco, CA

161. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific

consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Freddy Sall**
miami beach, FL

162. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Damon Mills**
huntington, WV

163. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and

represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Stan Corwin-Roach**
martinsburg, WV

164. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Kari Yokochi**
Salem, WV

165. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists

and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**John Wilmer**
Martinsburg, WV

166. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Our children need to know all data so they can take informed action later in life. Sincerely,
—**Amelia Brekeller**
Meadow Bridge, WV

167. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation

Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Betty Shumate**
Ronceverte, WV

168. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Christine Barkey**
Winfield, WV

169. Dear West Virginia Board of Education: Please adopt the original climate science standards contained

in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Michael Ireland**
Parkersburg, WV

170. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**April Keating**
Buckhannon, WV

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science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Beth Via**
Charles Town, WV

172. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Elaine Hodges**
Durbin, WV

173. Dear West Virginia Board of Education: Please

adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Patti Whipple**
Atlantic Beach, NC

174. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Sheba Kendig**
Burnsville, WV

175. Dear West Virginia Board of Education: Why are you thinking of watering down the Next Generation Science Standards to science in West Virginia? Already students are doing poorly when compared to what others are doing across the nation. Wake up and do what is right. Sincerely,
—**Elizabeth Wasiluk**
Martinsburg, WV

176. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Sarah Skeen**
Huntington, WV

177. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate

change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. I urge you to stand your ground. Students need to be taught facts, not fallacies. Sincerely,
—**Esther Leonard**
Huntington, WV

178. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**jeanne Odom**
davis, WV

179. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and

peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Jill Sergent**
Milton, WV

180. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**J Ruano**
Winfield, WV

181. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards

were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**James Ruckle**
Charleston, WV

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—**Erin Hunter**
Hurricane, WV

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NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Chris Higgins**
Charleston, WV

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—**Amy Humphrey**
Lesage, WV

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Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Angie Abbott**
South Charleston, WV

186. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Daniel Chiotos**
Fayetteville, WV

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in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Hannah Palmer**
Saint Albans, WV

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—**Joey Madia**
Morgantown, WV

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science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Dee Hammonds**
Newton, WV

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—**Marian Buckner**
Shepherdstown, WV

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adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Shane Lorrison**
Madison, WV

192. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. West Virginia student deserve the highest quality science education. Pandering to ignorance hurts everyone. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the

NGSS. Sincerely,
—**Merri Morgan**
Greenville, WV

193. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Hannah Spencer**
Morgantown, WV

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climate science content in the NGSS. Sincerely,
—**Michael McLeod**
White Hall, WV

195. Dear West Virginia Board of Education: Please do not allow climate deniers to make WV looks like a backward-thinking state. Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Donna Long**
Fairmont, WV

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Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Amy Vernon-Jones**
Lewisburg, WV

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—**Suzanne King**
Charleston, WV

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and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Jody Mohr**
Salem, WV

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—**Ed Saugstad**
Sinks Grove, WV

200. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards,

which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Joseph Chasnoff**
Lindside, WV

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—**bob chamberland**
Greenville, WV

202. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the

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—**Charles Walters**
Romney, WV

203. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Kristie Ferriell**
Augusta, WV

204. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the

right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Sara Young**
Craigsville, WV

205. Dear West Virginia Board of Education: The following is obviously a form letter but I agree with it and hope you will be smart enough to reject the tea bagger lies about global warming. Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Julian Martin**
Charleston, WV

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NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Ryan Devine**
Wayne, WV

207. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Madelon Maxson**
Renick, WV

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Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Jude Binder**
Big Bend, WV

209. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely, Paul Corbit Brown
—**Paul Brown**
Oak Hill, WV

210. Dear West Virginia Board of Education: Thank you for rejecting the

misleading and inaccurate information about climate change. It is imperative that you adopt the climate science standards contained in the Next Generation Science Standard (NGSS). Without adherence to these standards, I am very concerned that our children will be misled and confused, and that pundits will be given more fodder for mocking West Virginia. The NGSS climate standards reflect scientific thinking on climate change. The motives of the very few skeptical "scientists" opposed to these standards are suspect. What are their qualifications? Whose interests do they really represent? The NGSS standards were formulated, written, and peer-reviewed by scientists and science educators. I applaud your recent decision to withdraw the suspect and inaccurate alternate climate standards. Please stand by your decision and maintain your commitment to teaching our children real, not fake, science by adopting the NGSS climate standards. Sincerely,
—**Lynn Yellott**
Shepherdstown, WV

211. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the

right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Judith Deutsch**
Huntington, WV

212. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Tom Firor**
Franklin, WV

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change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. As a science educator at Fairmont State University, I can state emphatically that our students need to be properly educated in public schools. Sincerely,

—**Karen Yarnell**
Fairmont, WV

214. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,

—**Jennifer Mercer**
Morgantown, WV

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—**Kevin Connoley**
Morgantown, WV

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—**Aaron Lancaster**
Lewisburg, WV

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—**Nancy Price**
Oak Hill, WV

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—**Brendan Bell**
Charleston, WV

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—**Mary Borchers**
Romney, WV

220. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Michael Turner**
Fayetteville, WV

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—**Becky Park**
Charleston, WV

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—**Joseph Lambeau**
Huntington, WV

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—**Bill sohonage**
Oak Hill, WV

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225. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Paige Muellerleile**
Huntington, WV

226. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Eve Firor**
Franklin, WV

227. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Julie Darling**
Spencer, WV

228. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Stephanie Hysmith**
Charleston, WV

229. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Alex Estanich**
Bridgeport, WV

230. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Betty Peterson-Wheeler**
Inwood, WV

231. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Patrick Martin**
Bridgeport, WV

232. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Ditty Markham**
Charleston, WV

233. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Don't let business interests and those who refute scientific knowledge insert their opinions in texts. Those comments can be detrimental to learning accurate information. Why teach fallacies that are not based on knowledge?
Sincerely, Patrick Martin
—**Patrick Martin**
Bridgeport, WV

234. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information.

Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Jeff Feldman**
Martinsburg, WV

235. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Patricia Skeen**
Charleston, WV

236. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate

and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Patricia Skeen**
Charleston, WV

237. Dear West Virginia Board of Education: I was so proud of all of you for rejecting the altered climate standards that were recently proposed for WV. I urge you to continue to stand up for our school children by adopting the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. As a parent and an educator, I was grateful to you for that decision. Please continue to stand up for good science and good education. I truly appreciate your commitment to high quality science education for West Virginia students, and encourage you to support the evidence-based climate science content in the NGSS. Sincerely,
—**Kristin Alexander**
Martinsburg, WV

238. Dear West Virginia Board of Education: Please join the rest of the nation in

adopting the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Curt Mason**
charles town, WV

239. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Marianne Turkal**
Weirton, WV

240. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**George Boggs**
Elkview, WV

241. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**David Hott**
Augusta, WV

242. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Carolyn Rodis**
Shepherdstown, WV

243. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Tandi Stephens**
Oak Hill, WV

244. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Evelyn Petry**
Old Fields, WV

245. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Evelyn Petry**
Old Fields, WV

246. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Lynn McGraw**
Winfield, WV

247. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**PJ Hallberg**
Davis, WV

248. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Susan Unger**
Morgantown, WV

249. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Carol Reuther**
Wheeling, WV

250. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**R Rine**
Wheeling, WV

251. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**George Rutherford**
Ranson, WV

252. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Michael Morrison**
Barboursville, WV

253. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Jeannette VanBelleghem**
Harpers Ferry, WV

254. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Marlyn Bissett**
Charleston, WV

255. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Sam Stetson**
Charleston, WV

256. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. The future of West Virginia's economy and the well-being of her children depend upon the state's adoption of a sustainable energy platform. Allowing Big Coal and Gas to dictate the curriculum in our schools for the sake of a handful of jobs and immense profits to them - which they take out of state, mostly untaxed - is an outrage. Sincerely,
—**A Larsen**
Berkeley Springs, WV

257. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the

altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS.
—**Phillip Gooden**
Worthington, WV

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—**Genny Martin**
South Charleston, WV

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right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Gayle Becker**
Falling Waters, WV

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—**Lori Rose**
Dunbar, WV

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change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Susan Kelley**
Fairmont, WV

262. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Russell Smith**
Charles Town, WV

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consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Ann Coulter**
Shepherdstown, WV

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—**Frances Tolley**
Hurricane, WV

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represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**James Dixon**
Terra Alta, WV

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—**L Webb**
oak hill, WV

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and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Paula Clendenin**
Charleston, WV

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—**Richard Clark**
Belington, WV

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—**Matt Sowers**
Hurricane, WV

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—**Lynn Yellott**
Shepherdstown, WV

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were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Dottie Hess**
Charleston, WV

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—**Jonathan O'Dell**
Hurricane, WV

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NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Neil Coffield**
Triadelphia, WV

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—**Marlene Iveans**
Charles Town, WV

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Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Natasha McMann**
Marlinton, WV

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—**Natasha McMann**
Marlinton, WV

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—**Stephen Doll**
Morgantown, WV

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—**Tammy Hackney**
Elkview, WV

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—**Andrea Anderson**
Charleston, WV

280. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Ellen Smith**
Harper's Ferry, WV

281. Dear West Virginia Board of Education: Please

adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**K Moore**
Elkview, WV

282. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Harry Cline**
Baisden, WV

283. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Larissa Spiker**
Shepherdstown, WV

284. Dear West Virginia Board of Education: As a citizen of the Wild and Wonderful State of West Virginia, I am chagrined, appalled, and thoroughly disappointed in the WV Board of Education trying to change the Next Generation Sciences Standards. And that Board of Education members Wade Linger and Tom Campbell WOULD STILL vote to change them is absolutely unacceptable. I have followed this fiasco of poor, uninformed decision making as reported in the Morgantown Dominion Post. My husband, a WVU professor, has been supportive of his colleagues in writing the letter to tell the WVBOE of exactly how wrong-headed this decision was--though they were

certainly more tempered in their response than I am feeling today. As a teacher in one of WV's schools, as someone who has served on a local Board of Education, as a parent of a child educated in the Monongalia County Schools, you have embarrassed us all--both within our state and on a national level. Personally, I think you should all resign. Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
Patricia Schaeffer 9 Red Sky Drive Morgantown, WV 26508
pmschaeffer@gmail.com
—**Patricia Schaeffer**
Morgantown, WV

285. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and

represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Rodney DeMott**
Ravenswood, WV

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—**Rodney DeMott**
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—**Linda Koval**
Charleston, WV

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—**Darren Page**
Morgantown, WV

289. Dear West Virginia Board of Education: Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and

peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Sue Stephens**
Charleston, WV

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—**Joshua Carpenter**
New Haven, WV

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—**Margaret Logan**
Culloden, WV

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—**Frank Shomo**
Scott Depot, WV

293. Dear West Virginia Board of Education: As a previous student of Richwood High school, I was submerged in a learning environment crazy about

coal. I never realized how much coal impacted the environment UNTIL I ATTENDED COLLEGE. I was never told how much damage was done by coal. I am now an Ecology student at West Liberty University, and I am offended by how I was robbed of the knowledge that is incredibly important to know. Keeping students away from the truth is going to get West Virginia nowhere. Students will always be behind in education due to the greediness of corporations driven by coal production. Please do not hide the truth from children in WV. Science is progressing in the world, and hiding the truth from students is only going to hurt them and the state as a whole. It will not EVER stop scientists from persuading the world into better, sustainable resources. This is the 21st century, and it's time to catch up. Do not allow WV students to continue to be unaware of the environments status while the state continues to contribute to destroying it! It will eventually end and due to the lack of knowledge that students have, they will not understand. The science is proven; don't ignore it. Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by

withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Katie Scott**
Craigs ville, WV

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—**Katie Scott**
Craigs ville, WV

295. Dear West Virginia Board of Education: I am a former WV teacher who is deeply concerned that our students learn science-based concepts--not politically popular or industry-sponsored misinformation. Thank you for your recent rejection of inaccurate information about climate change in the new school science standards. Please adopt the original climate science standards contained in the Next Generation Science Standards. The NGSS climate standards were

written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Christopher Craig**
Harpers Ferry, WV

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—**Mary Kinsley**
Morgantown, WV

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—**Jeff Kovatch**
Huntington, WV

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—**Peter McCumber**
Westover, WV

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—**Whitney Bailey**
Elkins, WV

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—**Cynthia Wegman**
Charleston, WV

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—**Jack Swiney**
Saint Albans, WV

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—**Christopher Kimes**
Charleston, WV

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science standards contained in the Next Generation Science Standards. The NGSS climate standards were written and peer-reviewed by scientists and science educators, and represent the scientific consensus on climate change. The Board did the right thing by withdrawing the altered climate standards, which contained inaccurate and misleading information. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Leah Craver**
Charleston, WV

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—**Allan Tweddle**
Charleston, WV

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—**Robin Wilson**
Spencer, WV

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—**Gina McCullough**
Fridley, MN

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—**LeJay Graffious**
Bruceton Mills, WV

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—**Amy Carpenter**
Romney, WV

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—**Brian Leonard**
Inwood WV, WV

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occur. However, it should occur within the context of describing the scientific method and the strengths and limitations of this method. It should not be an opportunity for every dissenter to have their opinion expressed with equal time to the majority of the scientific community. Thank you for your commitment to high quality science education for West Virginia students, which includes the evidence-based climate science content in the NGSS. Sincerely,
—**Aaron Upton**
Huntington, WV

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—**Heather Rogers**
Capon Bridge, WV
