HEARING ON ALLEGATIONS OF POLITICAL
INTERFERENCE WITH THE WORK OF
GOVERNMENT CLIMATE CHANGE SCIENTISTS

Tuesday, January 30, 2007

House of Representatives,

Committee on Oversight and

Government Reform,

Washington, D.C.

"This is a preliminary transcript of a Committee Hearing. It has not yet been subject to a review process to ensure that the statements within are appropriately attributed to the witness or member of Congress who made them, to determine whether there are any inconsistencies between the statements within and what was actually said at the proceeding, or to make any other corrections to ensure the accuracy of the record."

Committee Hearings

of the

U.S. HOUSE OF REPRESENTATIVES



1 | Court Reporting Services, Inc.

- 2 | HGO030000
- 3 | HEARING ON ALLEGATIONS OF POLITICAL
- 4 | INTERFERENCE WITH THE WORK OF
- 5 GOVERNMENT CLIMATE CHANGE SCIENTISTS
- 6 Tuesday, January 30, 2007
- 7 | House of Representatives,
- 8 | Committee on Oversight and
- 9 Government Reform,
- 10 | Washington, D.C.

- The committee met, pursuant to call, at 10:00 a.m., in
 Room 2154, Rayburn House Office Building, the Honorable Henry
 A. Waxman [chairman of the committee] presiding.
- Present: Representatives Waxman, Kucinich, Cummings,
- 15 Davis of Illinois, Tierney, Clay, Watson, Lynch, Higgins,
- 16 Yarmuth, Braley, Norton, McCollum, Cooper, Van Hollen, Hodes,
- 17 Murphy, Sarbanes, Welch, Davis of Virginia, Shays, Platts,
- 18 Cannon, Duncan, Turner, Issa, Foxx, Sali
- 19 Also Present: Representative Gilchrest.
- 20 Staff Present: Phil Schiliro, Chief of Staff; Phil

21	Barnett, Staff Director/Chief Counsel; Kristin Amerling,
22	General Counsel; Greg Dotson, Counsel; Jeff Baran, Counsel;
23	Earley Green, Chief Clerk; Teresa Coufal, Deputy Clerk; David
24	Marin, Minority Staff Director; Larry Halloran, Minority
25	Deputy Staff Director; Jennifer Safavian, Minority Chief
26	Counsel for Oversight and Investigations; Keith Ausbrook,
27	Minority General Counsel; Ellen Brown, Minority Legislative
28	Director and Senior Policy Counsel; Mason Alinger, Minority
29	Deputy Legislative Director; A. Brooke Bennett, Minority
30	Counsel; Allyson Blandford, Minority Professional Staff
31	Member; Jay O'Callaghan, Minority Professional Staff Member;
32	Kristina Husar, Minority Professional Staff Member; Larry
33	Brady, Minority Senior Investigator and Policy Advisor;
34	Patrick Lyden, Minority Parliamentarian and Member Services
35	Coordinator; Brian McNicoll, Minority Communications
36	Director; and Benjamin Chance, Minority Clerk.

Mr. WAXMAN. The meeting of the Committee will come to order.

I want to welcome everyone to today's meeting. It is the first hearing we are having this year, and it focuses on one of the most important issues facing our Nation and the world, global warming.

Most of my colleagues know that I bring some strong views to the subject. I have been working on global warming for almost 20 years and introduced the first comprehensive global warming bill in 1992. I believed then that the science on global warming was compelling enough to warrant action, and in the years since 1992, I believe the science has grown more and more compelling.

But despite my strong views, I would never want scientists to manipulate research so that they can tell me what they think I want to hear. I don't want politically correct science. I want the best science possible, and that is what today's hearing is about.

For several years, there have been allegations that the research of respected climate scientists was being distorted and suppressed by the Bush Administration. Some of these reports claim that Phil Cooney, a former lobbyist for the American Petroleum Industry, was put in charge of the Council on Environmental Quality and imposed his own views on the reports scientists had submitted to the White House.

The last Congress, under the leadership of Tom Davis, this Committee took the appropriate step and began investigating whether the Bush Administration was interfering with the science of global warming for political reasons. I joined with Chairman Davis in requesting routine documents from the White House's Council on Environmental Quality. When the White House resisted, we narrowed our request. When the White House resisted again, we scaled back what had already been a reasonable request, and when the White House resisted a third time, we again tried to accommodate the President.

In addition to repeatedly narrowing our request, we extended the deadlines we had suggested to the White House. But even after all those courtesies, we have received virtually nothing from this Administration.

Last evening, we finally received a total of nine non-public documents. Unfortunately, they add little to our inquiry. In some cases, they do not even appear to be records we were seeking.

It is a privilege to chair this Committee. The

Oversight Committee is charged with an essential
responsibility, bringing accountability to our Government.

We take this very seriously. As Chairman, I intend to be
fair to every witness and to invoke the Committee's broad
powers only when absolutely necessary, but I also intend to

be thorough, to insist on Congress' right to receive relevant information and to do everything possible to meet the important obligations we have to the American people.

In this instance, the Committee isn't trying to obtain state secrets or documents that could affect our immediate national security. We are simply seeking answers to whether the White House's political staff is inappropriately censoring impartial Government scientists.

Last fall, our staffs viewed some of the documents the Committee is seeking in camera. As a result of this review, we know that the White House possesses documents that contain evidence of an attempt by senior Administration officials to mislead the public by injecting doubt into the science of global warming and minimizing the potential dangers. I believe Congress is entitled to this information and to these documents.

According to the documents we reviewed, Administration officials sought to edit an EPA report, one, to add ''balance'' by emphasizing the ''beneficial effects'' of climate change. Secondly, they tried to delete a discussion of the human health and environmental effects of climate change. Thirdly, to strike any discussion of atmospheric concentrations of carbon because carbon levels are not a ''good indicator of climate change,'' and four, to remove the statement that ''changes observed over the last several

decades are likely mostly the result of human activities.''

Some of the most questionable edits were urged by Phillip Cooney, the former oil industry lobbyist who was the Chief of Staff to the White House Council on Environmental Quality.

Today, Ranking Member Davis and I are sending a letter to the White House about these documents to urge the White House to reconsider the confrontational approach it is now taking.

I am looking forward to hearing the testimony of today's witnesses. We are fortunate the Union of Concerned Scientists here and to have the opportunity to review their new report on political interference in the scientific process.

I also want to welcome Dr. Drew Shindell to the Committee. Dr. Shindell is a top climate researcher at NASA's Goddard Center. He will testify about the difficulties he has faced in alerting the public to his important climate research. Dr. Shindell is testifying on his own behalf today, and he has earned our gratitude for having the courage to step forward.

I would also like to note that Rick Piltz is testifying today for the first time. Mr. Piltz is the Government employee who publicly objected when the Council on Environmental Quality starting overruling the views of

138

139

140

141

142

143

144

145

146

137 | climate scientists.

We are pleased that Roger Pielke is able to join us.

All of us have a right to our own views about the seriousness of global warming, but we don't have a right to our own science. This hearing and the Committee's ongoing investigation into political interference is aimed at ensuring the American people receive the best possible science.

That concludes my statement.

[Prepared statement of Mr. Waxman follows:]

147 ******** INSERT *******

HG0030.000

148 Mr. WAXMAN. I want to recognize Mr. Davis.

Mr. DAVIS OF VIRGINIA. Well, thank you, Mr. Chairman, and my best wishes to you as you bring your first oversight hearing to order.

I should note the irony of having a global warming hearing today on the coldest day of the year. In fact, one of my colleagues remarked it is so cold today that Congressmen have their hands in their own pockets just to keep warm.

[Laughter.]

Mr. DAVIS OF VIRGINIA. Seriously, though, I am pleased that in our first hearing, we are continuing the Committee's work on climate change. Last year, we directed the Committee to address this weighty and politically charged issues in a non-partisan way.

I am proud that we are able to strip away partisan differences and tackle an issue which most other committees had steered well clear of. Our approach earned accolades from groups like the Pew Center on Global Climate Change which called our hearings, ''some of the balanced and informative climate change hearings in memory,'' and newspapers like the Washington Post which described our work as ''responsible.''

The Committee's reputation is based on its commitment to fair and responsible oversight, and I look forward to

continuing that tradition with you.

Mr. Chairman, I am no climate change denier. In fact, I believe it is one of the most urgent matters we face. As I have said before, there aren't many people left these days who would argue global warming isn't happening per se. There is widespread agreement that global mean temperatures increased over the past century and that carbon dioxide in the atmosphere has contributed to this warming.

Furthermore, like you, I think it is important to determine whether the Administration or anyone else has attempted to quash scientific findings. That is why together we have requested documents from the Council on Environmental Quality and why together we remain disappointed in the lackluster production of those documents.

But, Mr. Chairman, I am concerned this morning that the pendulum may swing too far in the opposite direction, that is, I am concerned that we have gone from legitimate conversations about politicizing science to a potentially dangerous dynamic that not only condones but heralds the suppression of scientific dissent. For some it seems freedom of speech implies only to those that agree with you. Let me explain.

We are seeing a dangerous trend toward inflammatory and counter-productive hyperbole. When a top climatologist at the Weather Channel calls for stripping meteorologists who

express any skepticism about man's contributions to climate change of their certifications, we have probably gone too far. When so-called eco experts liken skeptics to Holocaust deniers, we have definitely gone too far.

This Committee has earned a reputation as a truth-seeking body. We are gatherers of fact. We let the chips fall where they may. Knowledge, Mr. Chairman, is refined through continuous inquiry and, yes, through skepticism.

Second, one of our witnesses will discuss this morning the issue of politicizing science. But has it itself become politicized? The title of today's hearing is telling. The mere convergence of politics and science does not in itself denote interference. I would caution the Committee and policymakers everyone not to contribute to the naive notion that science and politics can somehow be kept separate.

Should it really surprise anyone that leadership at a Federal agency manages information in pursuit of their interests or their agenda?

Is the choice of phraseology, for example, climate change versus global warming, the province of science alone or can it be allowed to reflect political as well as scientific considerations?

Third, science, as we all know, evolves, living and breathing through the power of evidence. Policy needs to

evolve along with it. Some in this room appear to believe we have reached the end of scientific continuum, but scientific consensus is not science. Sometimes it is nothing more than the best guess of the group that gets the microphone first.

More than once strong scientific consensus of the past now lies in history's mass grave of disproved crackpots. The miasma theory of disease prevailed for a time because cholera outbreaks seemed to be associated with bad-smelling water.

Less fetid water, though it reduced outbreaks, appeared proof of cause and effect until the germ theory identified the real culprit.

The 19th Century rain follows the plow theory attributed increased rain in arid areas to increased agricultural activities by man. Today it is understood that increased vegetation and urbanization have only limited and local effects on overall precipitation's level.

So in the debate about climate change attribution, determining the role of human activity on measurable climate changes, all of us--policymakers, scientists and those fortunate enough to be neither--should take pains to maintain the healthy skepticism that is at the heart of good science and good policy. Without constant constructive doubt, both sides would have us take leaps of faith over the science to politically convenient conclusions.

A wise man once wrote that science is facts. Just as

houses are made of stones, so is science made of facts. But a pile of stones is not a house and a collection of facts is not necessarily science.

Mr. Chairman, I requested the documents from CEQ because I wanted to learn more about the allegations that Administration officials were trying to minimize the significance of climate change. I requested them because I care about climate change and, like you, want to do something about it.

I am no denier, but I am troubled by stories of scientists unable to publish or even complete their research because they are perceived as having the wrong answers or being on the wrong side of the science, or the leveling of accusations that rely on innuendo and inference to prove scientists' intentions is nefarious when in fact often these scientists' only crime is associating with ideas that conflict with those of their accusers, or the notion that X policy action or inaction must follow from Y scientific finding without regard to other scientific findings or policy considerations just as economic inhibitors or geopolitical concerns.

This Committee takes very seriously its responsibility for ensuring individuals remain able to speak freely. Under my chairmanship and with your leadership, Mr. Chairman, we passed hallmark whistleblower legislation which enhanced the

rights of Federal whistleblowers, giving them protection and confidence as they speak up. The monumental challenge of climate change is the latest test of free speech and whistleblower protections.

Again, Mr. Chairman, thank you for holding this important hearing.

[Prepared statement of Mr. Davis of Virginia follows:]

******* INSERT *******

Mr. WAXMAN. Thank you very much, Mr. Davis.

I would like to ask, without objection, that we now call on members in order of seniority in which they appeared at this hearing for an opening statement, should they wish to make one not to exceed three minutes. Without objection, that will be the order.

I would ask unanimous consent that the gentleman from Maryland, Representative Gilchrest, be permitted to participate in this hearing and in accordance with our Committee practices, he will be recognized for the purpose of an opening statement and questioning after members of the Committee have been recognized. Without objection, so ordered.

I want to call on Mr. Cummings. Is he here?

Mr. Cummings?

296 Mr. CUMMINGS. I am.

297 Mr. WAXMAN. Okay.

298 Mr. CUMMINGS. I will submit a statement for the record.

[Prepared statement of Mr. Cummings follows:]

******* INSERT *******

Mr. WAXMAN. Opening statements maybe submitted by any member for the record, and we will keep the record open for that purpose.

Mr. Davis, do you have an opening statement?

Mr. DAVIS OF ILLINOIS. Yes, thank you very much, Mr. Chairman, and I shall be brief.

Global warming is a serious issue and has overarching on our Nation and our world citizenry for we have only one Mother Earth. There is no doubt that we must take measures to look into this. We cannot and must not let politics trump science. Too much is at stake.

Ask those sufferers of environmental catastrophes from an extraordinarily strong hurricane season, most notably Katrina, to families who were victims of sound pesticide regulation, whose children have suffered from the adverse effects on brain development in fetuses and children.

Numerous well regarded and credible scientists have issued reports with regards to climate change and its far reaching consequences. Any effort by the White House Council on Environmental Quality to alter or undermine the integrity of such fact-finding is detrimental. We must take into full account the sound scientific evidence that some of our best minds have to offer and begin to comprehensively treat this problem immediately.

Ask the thousands of rescue workers in the World Trade

Center who were told by the EPA that the air was safe.

Imagine what would happen if political tampering of scientific data is acceptable. This proclamation appears to be premature as our Nation's heroes are now plagued by chronic and crippling long ailments. There are grave consequences from such action.

Again, I want to thank you, Mr. Chairman, and Ranking Member Mr. Tom Davis, for holding this hearing today. It is long overdue, and I look forward to the expert panel of witnesses who have come to share with us.

I yield back any additional time.

[Prepared statement of Mr. Davis of Illinois follows:]

******* INSERT ******

Mr. WAXMAN. Thank you very much, Mr. Davis.

340 Mr. Shays?

Mr. SHAYS. Thank you, Mr. Chairman.

Quickly, I want to say climate change and global warming are one and the same for me. When the President submitted, President Clinton was negotiating the Kyoto agreement, the Senate 100 to 0 said don't exclude China and India. The treaty came back excluding China and India, and there were only about five members of the Senate who supported it. President Clinton never asked for a vote in the Senate.

My big regret is that President Bush, whatever his feelings were about the treaty, should have submitted it to the Senate for its consideration without prejudice because I believe frankly that there would have been less than 20 members of the Senate who would have supported the treaty, but now it is like all of them would have.

I just conclude by saying that anyone who alters scientific research, particularly on issues as important as this, should quit or should be fired.

358 Thank you, Mr. Chairman.

[Prepared statement of Mr. Shays follows:]

360 ******* INSERT *******

Mr. WAXMAN. Thank you, Mr. Shays.

Mr. Tierney?

Thank you, Mr. Chairman.

I will submit my remarks for the record. Thank you.

[Prepared statement of Mr. Tierney follows:]

Mr. WAXMAN. Okay.

Mr. Clay?

Mr. CLAY. Thank you, Chairman Waxman and Ranking Member Davis for holding today's hearing.

I welcome our witnesses and commend Mr. Piltz and Dr. Shindell on their courage in coming before this Committee to testify about their experiences with the Bush Administration's policy of misrepresenting global warming data for political reasons. It is apparent that you are both committed to fully disclosing the facts about global warming.

It is imperative that the integrity of scientific research on global warming is ensured and that we do everything possible to give our children and our grandchildren a healthy environment. Reports that scientists working for Federal agencies have been asked to change data to fit policy initiatives are seriously disturbing and given the enormous health risks posed by global warming, it is unconscionable that any scientists would participate in such a dangerous plan.

Emerging threats to health from climate change include malaria, lime disease and an alarming increase in asthma incidences in the U.S. The American Public Health Association found that smog, increased pollen and carbon dioxide are fostering an epidemic in asthma in America's cities. The highest incidences of asthma in the U.S. is

among African American toddlers and low income toddlers.

Inner city children are most at risk for getting asthma due to poor air quality, increasing temperatures and the high concentration of carbon dioxide.

Political appointees have no business distorting the facts or denying the realities of global warming. Global warming is not a myth or a distant threat. It is a reality that demands immediate action from our Government.

We must implement policies to develop more renewable energy resources to drastically reduce automobile emissions and to end our dependence on oil and other fossil fuels.

Unfortunately, the Bush Administration has shown a blatant disregard for the health of the American people. They have shown they would rather safeguard the interests of big oil than preserve the future of planet Earth. This Administration has not only failed to address the assault on climate change, they have contributed to this crisis.

Global warming poses an overwhelming challenge to our responsibility to protect the earth for future generations. I look forward to today's testimony and working with my colleagues to meet this challenge and to put an end to this Administration's efforts to deny or undermine scientific knowledge about the global warming crisis.

Mr. Chairman, I yield back the balance of my time and submit my statement for the record.

21

419 Mr. WAXMAN. Thank you, Mr. Clay.

- 420 Mr. Cannon?
- 421 Mr. CANNON. Thank you, Mr. Chairman.
- There is some feedback happening in our mic system, I
- 423 think. Am I the only one hearing that? It would be really
- 424 | nice to correct that if we have somebody available to do
- 425 that.
- 426 Mr. WAXMAN. We have people working on it. Let me just
- 427 ask if all members have their mics off in case any mic is on
- 428 that might be causing it.
- 429 Mr. CANNON. Mr. Chairman, my mic, when it is off, still
- 430 works, or so the switch is. I am not sure if we have a more
- 431 fundamental problem here.
- Mr. WAXMAN. You ought to be careful what you say when
- 433 your mic might be on.
- 434 Mr. CANNON. It might be me.
- 435 [Laughter.]
- Mr. WAXMAN. Well, we will make the best of it. We have
- 437 our best people working on trying to correct the problem.
- 438 Mr. CANNON. One would hope that those would be at least
- 439 of the equality of some of the climate change scientists we
- 440 | have in the world today.
- 441 I wanted to thank you, Mr. Chairman, for holding this
- 442 | hearing and also associate myself with the remarks of the
- 443 Ranking Member and Mr. Shays, in that the fact is I believe

there is global warming and therefore it is a global problem, not just an American problem. On the other hand, I think there are some serious questions as to whether or not global warming is actually caused by man or how much of global warming is caused by man.

What a relief. We can now think. This is all a plot to distort the thinking of our panel members, I am sure.

I would like to submit a statement for the record, Mr. Chairman, and not belabor this but point out that science is by nature, especially when science needs to be funded, it is political. Suppression happens all over the place, and unfortunately suppression is complicated by bad science done by not very smart scientists who have an agenda that is more a matter of belief of emotion than it is clarity of thinking. In this whole process, I hope we come to be able to distinguish between what is an agenda and what is science and what is the data and how do we draw conclusions from that data.

With that, Mr. Chairman, I yield back.

[Prepared statement of Mr. Cannon follows:]

******* INSERT ******

Mr. WAXMAN. Thank you very much, Mr. Cannon.

Now we go to Ms. Watson.

Ms. WATSON. I want to thank you, Mr. Chairman, for convening today's hearing and your timeliness on this issue.

The United States has only 2 percent of the world's oil reserves but accounts for 25 percent of the world's energy demand. Of the global supply, we consume 43 percent of motor gasoline, 25 percent of crude petroleum, 25 percent of natural gas and 25 percent of electricity. Currently, American demand for all these commodities is rising dramatically.

The Administration announced in 2002 that reducing greenhouse emissions and increasing spending on climate research to reduce emission 18 percent by 2012 was a top priority, but their actions have not matched this pledge. Funds have been redirected for these purposes to spend on nuclear power and other non-renewable programs that do not reduce emissions.

In addition, the allegation of political interference with the work of Government scientists is an additional example of how this Administration is not taking the threat of global warming seriously. Global warming is occurring at a rapid pace today, and the consensus of the worldwide scientific community is that it will accelerate during the 21st Century.

Global warming and our related energy policies also raise National security concerns. One such concern is the prospect of international destabilization caused by the consequences of global warming such as the loss of land area or the loss of water resources.

Mr. Chairman, as I have stated in previous hearings on this issue, we have a chance to start again to create adequate climate change research and development that we can help our world in the future. Political interference on this critical issue is unacceptable. We all live under the same skies. We are here today to investigate and resolve these allegations, and politics has no place in science.

Thank you so much, Mr. Chairman, and I yield back the rest of my time.

[Prepared statement of Ms. Watson follows:]

505 ******** INSERT *******

Mr. WAXMAN. Thank you, Ms. Watson.

507 Mr. Duncan?

Mr. DUNCAN. Thank you, Mr. Chairman.

Richard Lindzen, who is a professor of atmospheric science at MIT, a few months ago wrote in the Wall Street Journal about what he called the alarmism and feeding frenzy surrounding the climate change/global warming debate, and he said this. He said, 'But there is a more sinister side to this feeding frenzy. Scientists who dissent from the alarmism have seen their grant funds disappear, their work derided and themselves libeled as industry stooges, scientific hacks or worse. Consequently, lies about climate change gain credence even when they fly in the face of the science that supposedly is their basis.''

Professor David Deming, a geophysicist said, 'The media hysteria on global warming has been generated by journalists who don't understand the provisional and uncertain nature of scientific knowledge. Science changes.''

Robert Bradley, President of the Institute for Energy
Research, wrote this in the Washington Times. He said 'The
emotional, politicized debate over global warming has
produced a fire, ready, aim mentality despite great and still
growing scientific uncertainty about the problem.''

He went on to say, he said, 'Still, climate alarmists demand a multitude of do-somethings to address the problem

they are sure exist and is solvable. They pronounce the debate over in their favor and call their critics names such as deniers, as in Holocaust deniers. This has created a bad climate for scientific research and for policymaking. In fact, the debate is more than unsettled.''

I appreciate your calling this hearing. This issue has become very politicized and emotional. It appears that most of those who support and say most of the alarmists about global warming are people who are funded directly or indirectly by the Federal Government. So we need to look into these things and see what the real truth is in this situation.

Thank you, Mr. Chairman.

[Prepared statement of Mr. Duncan follows:]

545 ******** INSERT *******

Mr. WAXMAN. Thank you for your comments.

547 Mr. Lynch?

Mr. LYNCH. Thank you, Mr. Chairman. Thank you to the Ranking Member for holding this hearing.

I am going to submit my official remarks in the interest of time to the record, but I do want to say thank you to the panelists for coming before this Committee and helping us with our work.

With all due respect to my colleague who spoke previously, this is not a hearing on alarmism or the quality and integrity of the information that has been delivered to the Congress and to the White House by the scientific community. This is a hearing that will investigate allegations that attorneys, not scientists, attorneys formerly employed by the American Petroleum Institute, edited scientific documents that were meant to alert the public and alert the Congress to the effects of global warming. This is a hearing that will look into whether or not that data, that information, that scientific information that we would rely upon was distorted by this White House. That is what we are investigating here.

We appreciate the courage of the panelists that have stepped forward to help Congress in making that decision.

This is very troubling, not only in the sense that scientific data had been distorted and there had been an attempt to

misinform the American people but also the concerted pattern and practice of this White House to censor these scientists has a chilling effect not only on these individuals but on a wider scientific community.

We are here to exercise the right of the American people to get the truth. That is what we are here for today. It is not to debate the degree to which the atmosphere is warming or the extent to which global warming will impact us over the coming years and decades. This is really a question about governmental integrity and whether we are partners with our scientific community to protect the interests not only of the American people but our partners around the world.

I appreciate that this Chairman has had the courage to put this issue right out in front. It is the first hearing of this Committee, and I think it sends a great message to the American people and to the scientific community that the work that they do is greatly appreciated and welcomed by this Congress.

With that, Mr. Chairman, I will yield back the balance of my time.

[Prepared statement of Mr. Lynch follows:]

******* INSERT *******

593 Mr. WAXMAN. Thank you, Mr. Lynch.

- 594 Mr. Issa? Mr. Issa?
- 595 Mr. DAVIS OF VIRGINIA. I think he stepped out.
- Mr. WAXMAN. Oh, he stepped out. Then we will go to Ms.
- 597 Foxx.

606

607

608

609

610

611

612

613

614

615

616

617

- 598 Mr. Platts?
- 599 Mr. Gilchrest, okay.
- Mr. GILCHREST. Thank you, Mr. Chairman, just a very
 brief comment that is a little off topic but it sort of is
 relevant to this issue of whether or not there is enough
 scientific evidence to display for the Administration or
 anybody else that there is human activity causing the climate
 to change.

I would urge my colleagues to contact National Geographic. They have a genographic program where they have converged anthropologists and geneticists to see where your ancestors came from, and I participated in that, gave my DNA and the markers in my DNA went from here to Ireland to Spain all the way to Ethiopia about 50,000 years ago. The way they were able to do that, and by the way they spent about 5,000 years in Iran about 35,000 years ago before they migrated further west.

The point is that there are DNA markers in human DNA that can actually be traced over millenniums back thousands and tens of thousands of years if we converge those two

scientists, anthropologists and geneticists.

If we do the same thing with the atmosphere, we converge meteorologists, atmospheric scientists with chemists and a variety of other people, you can trace the markers in CO2 or methane or any one of the other atmospheric gases back not thousands of years but millions of years. When you look at those markers, those radioactive isotopes, 800,000 years ago to just today, you can tell where the CO2 comes from.

Does it come from a volcano? Does it come from soybeans? Does it come from burning forests? They all produce CO2. The markers, the distinctive markers, burning gasoline produces a marker in the CO2 that is different from the marker in CO2 coming out of volcanos.

The point is there is an extraordinary amount of science that an individual, a member of Congress, for example, pursuing an objective analysis can make a fairly quick determination by talking to a variety of interests in the scientific community to, yes, determine that the natural range of fluctuation has been interrupted, disrupted in the last hundred years to produce a huge increase in CO2 from burning fossil fuel, and the markers are present there.

Is science 100 percent? There is a principle of uncertainty that has been in the scientific community for quite some time, and the principle of uncertainty is that science is always working in the edge of the unknown. So a

sense of tolerance to that result by us, I think, is pretty vital.

I really appreciate the fact that the Chairman and the Ranking Member are holding this hearing today.

Thank you.

[Prepared statement of Mr. Gilchrest follows:]

650	Mr. WAXMAN. Thank you, Mr. Gilchrest.
651	Mr. Higgins?
652	Mr. HIGGINS. Thank you, Mr. Chairman.
653	I have no opening statement. I thank you for calling
654	this hearing, and I look forward to the testimony of the
655	expert panel that you have assembled.
656	[Prepared statement of Mr. Higgins follows:]
657	****** COMMITTEE INSERT ******

658 Mr. WAXMAN. Thank you.

659 Mr. Braley?

- 660 Mr. SALI. Mr. Chairman?
- Mr. WAXMAN. Yes.
- Mr. SALI. May I be recognized for an opening statement?
- Mr. WAXMAN. The gentleman is recognized.

Mr. SALI. Mr. Chairman and Mr. Davis, it is a pleasure for me to join this distinguished Committee. I look forward to serving with you as we do what we have been charged with, to examine fairly and honestly Government programs, contracts and expenditures.

Today we begin these activities in the new Congress by reviewing the Administration's actions with respect to the study of global climate change, but as all of us know, the issue before us is not really climate change itself. It is whether the Bush Administration has manipulated facts, prevented scientific investigation or otherwise obstructed honest study of this critical issue.

Mr. Chairman, I must say that the idea the

Administration has stifled inquiry and action is a bit hard

for me to swallow. From 2001 through 2006, this

Administration devoted more than \$25 billion to programs

related to climate change, \$25 billion, and where I am from

in Idaho, that is a pretty good chunk of change. In

addition, in 2003 and 2004 alone, in part due to the

Administration policies, U.S. greenhouse gas intensity dropped by about 4.5 percent. In the 2005 Energy Bill, the Administration obtained \$5 billion in tax incentives over a five year period for what it calls, ''go clean energy systems and highly efficient vehicles, mandatory renewable fuel and energy efficiency standards.''

The Bush Administration's Advanced Energy Initiative is increasing by 22 percent Department of Energy research funding to help refine clean energy technologies to the point that they can be used effectively and at a modest price by ordinary Americans.

Mr. Chairman, these actions are not the hallmarks of an administration that is seeking to curtail research or force certain results. President Bush and his team are committed to serious, effective and practical research and action.

They put a lot of Federal money where the public commitments have been made, a lot of money. This Administration has been working to safeguard our resources, reduce greenhouse gas emissions and at the same time help American manufacturing and mining and metal industries remain strong and competitive in the global marketplace.

To cripple our industrial sector in the name of environmental quality is not good public policy or good science. It is mere ideology, zealotry in the name of environmental extremism. The Bush Administration has taken a

much more balanced course, and I applaud it.

Mr. Chairman, I am concerned with the tenor of this hearing, with the general approach we will be taking in the next two years. I believe in oversight, in asking hard questions and in demanding appropriate accountability, but today's hearing seems less about finding answers than making an argument. I hope that perception is incorrect or if it is accurate, I hope it is not a foretaste of a partisan contention that will be cloaked as oversight.

Thank you, Mr. Chairman.

[Prepared statement of Mr. Sali follows:]

719 ******** INSERT *******

Mr. WAXMAN. Thank you.

Mr. Braley?

Mr. BRALEY. Thank you, Mr. Chairman, and thank you, Ranking Member Davis, for giving us the opportunity to discuss these important issues today.

With all respect to my distinguished colleague from Idaho, I think that one of the biggest problems that we have right now with the Bush Administration is captured in this Congress Daily A.M. headline, Panel Steamed Over Withheld Documents, which focuses on respect for the rule of law, respect for the jurisdiction of this Committee and the deliberate withholding of information requested over a six month period in a bipartisan spirit, not just by this Committee Chair but by the former Chair and the Ranking Member, and that sets a tone that I think should cause us all concern about the impact that the Administration is having on the conduct of oversight in this Congress.

I have a portrait in my office of one of my heroes, Clarence Darrow, someone who stood up for the integrity of the scientific inquiry and academic freedom and stood up for accountability and the rule of fact over fiction. I had the great privilege of graduating from the Iowa State University of Science and Technology where the first digital computing system was invented, and one of the things I know is that people who work in an academic environment need to have

assurances that their inquiries will be free from political influence. That is what distinguishes us from other countries around the world and gives us the opportunity to make great advances as we have seen over the entire history of this Country.

One of the things I also know is that the Federal court system has set up a gatekeeping system to make sure that testimony presented in a court of law has the credibility of scientific inquiry behind it. Things like making sure that those scientific theories have been tested through peer review journals is an indication of what stands for academic freedom, stands for preservation of the integrity of the scientific process and the free marketplace of ideas. We need to get back to that system. We need to diminish the role of politics so that our scientists have the ability to give us the great discoveries we have come to depend upon them in making this Country the place that it is.

I look forward to working with the Committee, and I also want to comment on how much appreciation I have for our witnesses today. I know what it is like to represent clients who have sat in your shoes. It doesn't take a lot of courage to sit back here and make comments and ask questions. It takes a tremendous amount of courage to sit where you are, and we appreciate your willingness to come and share your thoughts with us.

Mr. WAXMAN. Thank you, Mr. Braley.

774 Mr. Issa?

Mr. ISSA. Thank you, Mr. Chairman.

I too want to echo earlier remarks that this has been a Committee that on a bipartisan basis has been frustrated by an inability, not just in this area but in a number of areas, to get the kind of candid response and respect for the oversight responsibility of the Congress. I certainly hope today that this hearing will deal with the facts as to whether or not oversight is going to be properly done and respected in the future, and I say so for a couple of reasons.

First of all, I think that the people out in the hinterland watching this, even the people in the gallery here today, understand that global warming is not a secret hidden from the American people by the Government. Certainly, Mr. Sali said it very well. There have been huge amounts of money, huge amounts of awareness as to global warming. There is a debate going on as to what part the human being plays in it and how much of it is simply us coming out of a mini ice age, and I believe good science should be used, employed, paid for and deliver us answers so that we can make intelligent decisions.

Additionally, this Committee in the last Congress spent a lot of time through our oversight hearings, realizing that

CO2 was only going to be beat by non-CO2 products which includes nuclear, a subject that often is by the same people who insist on ending global warming is also rejected. I am hoping we can do that and more.

I do recognize that this is a highly charged political subject, but it is my sincere hope that this Committee will continue working on a bipartisan basis to recognize that as Presidents come and go, as Congresses change from one side to the other side having the Chairman's gavel, that this Committee has an ongoing responsibility, we take it seriously and we expect to get answers to our questions from whomever occupies the Oval Office or more specifically by the bureaucrats who stay there throughout one administration after another and tend to resist. That is what we are here, I hope, today to do is to recognize that it is time for us to assert our oversight role and insist on it.

With that, I yield back and thank the Chairman.

[Prepared statement of Mr. Issa follows:]

816 ******* INSERT *******

Mr. WAXMAN. Thank you, Mr. Issa.

Ms. Norton?

Ms. NORTON. Mr. Chairman, I thank you for this hearing, but I am sure that millions of Americans thank you for this hearing. I appreciate that you have made this your first hearing. So far as I know, it is the first hearing on global warming to be held in the House this session, and I know you have not simply gone down a list and picked this one out.

This issue, the fate of the planet itself, simply has no rival in importance. Because the issue has somehow in our Country become controversial—I am not sure that is true in most advanced countries—such a hearing might be perceived as blame—laying, but the reason for this hearing for Congress is surely to make sure that actions are taken and that information is not ever again suppressed. We need to be full speed ahead on this one. The elements that comprise global warming have a huge head start on this hearing.

Mr. Chairman, the independence of church and state is gospel in our Country. Well, the independence of science from politics ought to be the same in Government. We have the best science in the world. Its word has always been its bond. When we consider the dangers to public health and to the planet itself, the politicization of science is itself a catastrophe that simply must be avoided.

Apparently, there had been one peer study, over against

the hundreds, that said there wasn't global warming, but this Administration chose to side with those who said no. There were no nuances apparent in its view.

At the moment, the Administration is defending in the Supreme Court of the United States, the position that CO2 is not covered by the Clean Air Act. Without getting into the technicalities, that takes a huge stretch if you know anything about the Act. Now the courts have to decide the issue, and if I know the courts, they will try to find some procedural way to avoid a scientific issue that shouldn't be there and shouldn't be in politics at all.

We do not have the luxury, Mr. Chairman, of making up for lost time on this one. We have done that historically: disregard the losses; there will be more where that came from. Already, my great fear is that it is too late when you see glaciers melting. I know of no science that is likely to refreeze the glaciers or to reproduce their majesty.

Mr. Chairman, I live and hope and only hope it is not already too late as I thank you again for this hearing.

[Prepared statement of Ms. Norton follows:]

******* INSERT *******

Mr. WAXMAN. Thank you very much, Ms. Norton.

Ms. McCollum?

Ms. MCCOLLUM. Thank you, Mr. Chairman, for your leadership on this important issue.

I would also like to express my appreciation to the witnesses with us here today for their efforts in calling attention to the disturbing pattern of interference and abuse of science surrounding global climate change. I applaud each of you for having the courage to have your voice heard.

In my home State of Minnesota, we are uniquely affected by changing climate patterns because of our geography. We are at the intersection of three major ecosystems. Minnesota and Minnesotans are experiencing the effects of climate change, and my constituents are demanding action. Global climate change is one of the greatest challenges facing this Nation. We know that meaningful solutions will demand unprecedented cooperation, innovation, commitment and urgency.

Over the past six years, enormous scientific consensus supporting the reality of global climate change did not fit the Administration's agenda. As we have seen in other situations when reality doesn't fit the script, the White House rewrites reality to fit the script. Tragically, the Bush Administration has led an effort to suppress and distort the science of global warming while providing protection and

ensuring massive profits for the petroleum industry.

Is this why the Bush Administration feels so threatened by the issue of climate change that it engages in a calculated campaign to manipulate scientific documents and intimidate science? What justification does the Administration give us for these actions?

Congress has the responsibility and the duty to find the answers as to why the Administration officials acted as they did, but the impacts of the Administration's interference with the science of global climate change are already known. It is undermined the integrity of numerous Federal agencies. It has recklessly harmed the careers of many respected professionals. It has delayed popular consensus on the need to take action against global warming. I fear America will look back on the bush Administration as the lost years: lost talent, lost time, lost solutions.

While there is a need for science in the realm of political debate, we must fiercely guard against the intrusion of politics into scientific research and discovery, and that is why today's hearing is an essential first step. Through transparency, we will find accountability. Through accountability, we will create a new and higher standard, one in which science is required and the science that is given to the American people is correct and accurate.

Thank you, Mr. Chair.

Mr. WAXMAN. Thank you very much, Ms. McCollum.

Mr. Cooper?

Mr. COOPER. Thank you, Mr. Chairman.

First, for the record, I would like to take note of a recent book called The Republican War on Science by Chris Mooney. It is excellent reading. I can't help but note it has a blurb on the back from our distinguished Chairman recommending that people read it.

Second, let me mention a dinner party I attended about two months ago here in Washington. The honoree was John Negroponte who was then the Director of National Intelligence. He was there to receive an environmental award. It was very interesting because in anticipation of his remarks, words slipped through the crowd that he was not allowed to utter the words, global warming, at least not in the same sentence. Apparently, he was allowed to say the word, global, in a separate sentence and warming in a separate sentence, but not together. It sort of became a little parlor game during his remarks to see how closely he would fit the words, global and warming and not incur the wrath of the White House.

I thought this was a sad statement of the current condition of our scientific community when a top and very eminent statesman like John Negroponte would be so hamstrung by the Administration that he would not be allowed to utter

the two words in conjunction. I thought that was an indignity to Mr. Negroponte and a sad comment on the level of the Bush Administration to so hamstring its talented and capable appointees. Sadly, this is an effort on the part of the Administration that has been going on for a long time.

Another must read book is by Christine Todd Whitman, the former EPA Administrator, entitled It's My Party Too. In this book, she chronicles how President Bush promised in the campaign to do something about carbon emissions, then reversed his promise at the urging of four Republican Senators who were named in the book: Chuck Hagel, Jesse Helms, Larry Craig and Pat Roberts. This reversal took place while Christine Todd Whitman was negotiating on behalf of the United States in Trieste in Europe. So before she flew back, her legs were completely cut out from underneath her, embarrassing America and undercutting science in our community.

This is not a Democratic diatribe. This is a Bush cabinet official's memoirs. What a sad condition our Country has fallen into.

I commend the scientists who have testified today. I am sorry I was not able to be here for your entire testimony, but I look forward to reading it in detail.

I thank the Chair.

[Prepared statement of Mr. Cooper follows:]

49

965 ********* INSERT *******

Mr. WAXMAN. Thank you, Mr. Cooper.

Mr. Hodes?

Mr. HODES. Thank you, Mr. Chairman, for calling this hearing.

In New Hampshire, we talk a lot about the weather, and folks where I come from notice that the weather is changing. We don't have a lot of snow this year. But we are not here to talk about the weather, and we are not here to talk about money spent or unspent. We are here to investigate rank political abuse.

We live in an information age. When we as a Nation and as global citizens face rapidly changing climatic conditions, the integrity of scientific research is critical to wise policymaking.

Before coming to Congress, I read numerous articles documenting concerns about the interference by the Bush Administration with the conclusions of Government scientists. Allowing politics to trump science is dangerous business. Disinformation was once thought of as a fictional Orwellian construct. If it has happened here, we need to bring it out in the open and help restore good scientific practices without fear of retaliation, reprisal and control by political officials.

The American people need good data and good science, not disinformation. If we are to effectively address global

warming and make the right policy decisions, we need science unimpeded by political concerns.

I thank the panelists for appearing. It takes courage to come and tell the truth, but the American people want it, they need it and, as members of Congress, we expect it. So, thank you very much.

I yield back. Thank you, Mr. Chairman.

[Prepared statement of Mr. Hodes follows:]

999 ******* INSERT *******

991

992

993

994

995

996

997

Mr. WAXMAN. Thank you for your statement.

Mr. Murphy?

Mr. MURPHY. Thank you, Mr. Chairman.

Mr. Chairman, on my walk to the Capitol this morning, I passed a line of cherry trees that up until a few weeks ago had been blooming. Frankly, the sight of a cherry tree in the middle of winter, blooming, concerns me and a lot of us very deeply. I know why the tree was blooming. The high temperature on the first of December was 75 degrees. The high on the sixth of January was 70 degrees and 67 on the 15th. Whether this is an anomaly of the season or a sign of a trend, I don't know, but today it feels like winter and I am pretty relieved.

There is unequivocal scientific evidence that the earth is warming due to human activities, specifically to the release of carbon dioxide emissions in the air. One would think that given these facts, the President would appoint someone amongst the talented pool of scientists in this Country to look into the question. But proving once again that this President never misses an opportunity to miss an opportunity.

Who does he appoint? A lawyer with no scientific training, a former oil industry lobbyist whose primary responsibility on certain days seemed to be disproving the link between greenhouse gases and the companies he was

1025 representing.

If you look at the EPA's web site on climate change, you will read 'that a causal link between the build-up of greenhouse gases in the atmosphere and the observed climate change during the 20th Century cannot be unequivocally established.'' Given the data that this Committee, Mr. Chairman, has uncovered into the Bush Administration's political interference in the scientific community, we should not be surprised.

I thank the panel for having the courage to be here with us today. I look forward to your testimony, and I yield back the balance of my time.

[Prepared statement of Mr. Murphy follows:]

1038 ******** INSERT *******

Mr. WAXMAN. Thank you very much.

Mr. Sarbanes?

Mr. SARBANES. Thank you, Mr. Chairman. I want to thank you for holding this hearing today on the science of global climate change. This is the first substantive hearing I have had the opportunity to participate in as a newly elected member of this body, and I believe the subject matter could not be more appropriate.

In my own State of Maryland and especially within the Third Congressional District, we have a strong tradition of environmental advocacy rooted in a passion for the Chesapeake Bay, but the Chesapeake Bay, which is our Nation's largest estuary, does not escape the consequences of global warming. In fact, as a result of global warming, sea levels in the Chesapeake Bay area have risen at alarming levels over the last 100 years. If continued unchecked, this phenomenon will cause entire bay islands to be submerged and destroy diverse plant and wildlife habitat across the bay watershed. Such a calamity would have a profound environmental and ecological impact but would also devastate Maryland's tourism and seafood industries.

The scope of the challenge of global warming is international, but its impact on people in communities can be seen in how it has affected areas like the Chesapeake Bay region. Likewise, change must begin by examining our own

personal behaviors and our own National energy policy which overwhelmingly depends on fossil fuels. Promoting change will be difficulty, however, if the Administration continues its systematic effort to understate the threat of global warming.

Mr. Chairman, effective and responsive governance at all levels depends on receiving accurate and timely information. All too often, this Administration has disregarded or in some cases suppressed information that does not support its particular ideological or political agenda. We have seen this pattern in the run-up to the Iraq War, in the crafting of the Medicare prescription drug legislation and, as is being demonstrated today, in the approach to global climate change.

Today's hearing marks the beginning of a march back to fact-based decision-making at the highest levels of our Government.

Mr. Chairman, thank you for your efforts to illuminate the true science of global climate change. I look forward to working with my colleagues to address this problem in a meaningful way. Today's hearing is not just about preserving our natural climate. It is about preserving the climate for open and honest scientific research and discussion.

Thank you, Mr. Chairman.

[Prepared statement of Mr. Sarbanes follows:]

1089

******* INSERT *******

Mr. WAXMAN. Thank you, Mr. Sarbanes.

1091 Mr. Welch?

Mr. WELCH. Thank you, Mr. Chairman.

For decades, the issues of climate change has focused on debate about science, and today the overwhelming scientific research shows that global warming is real, it is urgent and it requires immediate action. That consensus has not always been present with only a shrinking minority remaining as skeptics, but more often than not that skepticism has been driven by politics or economic motivations, not the facts. We have learned that outspoken scientists dedicated to following the facts where they lead have had their sound conclusions altered by those motivated by politics, not the truth, and scientists at eh seven agencies that study climate change have reported such widespread abuses.

Politically-motivated suppression of science is not only irresponsible but highlights a careless and reckless disregard for the public that all of us are here to serve. We have an opportunity to investigate that because it is critically important to our future. The true test of leadership for scientists, for people in politics is an ability to face directly the realities that are often times difficult. To help us do that, we need honest scientific conclusions.

I applaud the gentlemen who are here today to testify

1120 Mr. WAXMAN. Thank you very much, Mr. Welch.

- 1121 Mr. Yarmuth?
- 1122 Mr. YARMUTH. Thank you, Mr. Chairman.

I am anxious to hear the witnesses, so I would like to submit my prepared remarks for the record.

1125 But I would just like to add that one thing I think we 1126 all can agree on is that in the area of global climate 1127 change, the Government, the Federal Government, has a 1128 critical role to play. Therefore, when it speaks, it has to 1129 speak with complete authority and credibility, and that can 1130 only be achieved if it is unduly influenced by personal 1131 political agendas or by the agenda of special interests. 1132 think these hearings can contribute to a large extent to 1133 creating that degree of credibility when the Government does 1134 speak on climate change, and I commend the Chairman for

1136 I yield back.

1135

[Prepared statement of Mr. Yarmuth follows:]

1138 ******** INSERT *******

organizing these hearings.

Mr. WAXMAN. Thank you, Mr. Yarmuth.

Mr. Kucinich?

Mr. KUCINICH. I thank the Chair for holding this hearing. One has to ask: do you have to be a scientist to know that there is something quite unusual going on with our global climate? Do you have to be a member of Congress to understand it?

All over the world, people have seen the effects of global climate change: the intensity of storms, the frequency of droughts, the destruction of crops, rising sea levels, changes in migration patterns. I don't need a scientist to tell me this is happening because I see it myself.

The problem comes when you get scientists who tell you something that is different from what you are seeing with your own eyes. Why do we even get trapped into that type of thinking?

Remember the long parade of witnesses who used to come in front of Congressional committees, generations ago and put TV commercials on the air that would tell people smoking was good for them. It was glamorous, sexy. That was backed by science.

Today we have a planet that is smoking, and we are told that, don't worry, be happy. Yet we have seen scientific evidence presented and then subverted by this Administration. We paid for the scientific studies, and then when the studies

come forward, they are dismissed. We are not even getting what we are paying for.

We are all citizens of the same planet, at least we would hope we are. We have a common destiny. We should share common concerns about the stability of the global climate and act to protect our planet. We need to challenge the type of thinking which separates us from our natural environment.

Almost 30 years ago, a philosopher by the name of Morris Berman wrote a book called The Reenchantment of the World, who talked about the fundamental problem which comes from when human beings separate themselves from the very environment in which they breath in, in which they drink in. That type of thinking, that us versus them type of thinking, that dichotomist type thinking not only separates us from each other, but it is a precursor of war itself.

This hearing becomes important when we understand our common aspirations to aspire to a stable global climate, about our common concerns which should be expressed, about great fluctuations in temperatures and the regular weather patterns. These changes in weather patterns, the more intense storms including hurricanes, Hurricane Katrina, ought to cause us to seek out scientists who are free to give us their best advice.

There is substantial scientific certainty about climate

change. Scientists are confident that global warming is happening. The vast majority of experts on the issue agree that human activities are to blame. I mean this is a call for leadership which unites the American people in taking a new direction for not just energy conservation but the development of alternative energies, green energies. But what happens is because scientific information is brought forward which disputes global climate change, the kind of massive unity that we need to take a new direction is slowed.

I thank the Chair for holding this hearing and for his consistent leadership over the years to reclaim human dignity. Thank you.

[Prepared statement of Mr. Kucinich follows:]

1202 ******** INSERT *******

Mr. WAXMAN. Thank you very much for your testimony.

Unfortunately, one of the glitches of this hearing today is that that green light seems to be on forever even if the time is expired. We will try to work that out, but at least we stopped the static for everyone.

Mr. KUCINICH. Thank you, Mr. Chairman. Everywhere I go in life, there is a green light. I appreciate that.

[Laughter.]

Mr. WAXMAN. To close out the opening statements, I want to call on the gentleman from Maryland, Mr. Van Hollen.

Mr. VAN HOLLEN. Thank you, Mr. Chairman, and thank you for your leadership in this very important issue.

I think we can all agree that everybody is entitled to their own opinions, but not everybody is entitled to their own facts. We as a Nation invest billions of dollars every year in scientific research, whether it is at NIH, whether it is at EPA, whether it is at NOAA, and that is an investment made by the taxpayers and that investment is only as good as the reliability of the science that comes from that investment.

That is why it is essential that the science that we do as a Federal Government is done free from political interference because if facts become twisted by the politics, then that is money wasted, taxpayer money wasted. I am afraid that over the past many years we have seen that kind

of political interference. We all know of political science as one realm of inquiry. Under this Administration, unfortunately, much more of science has become political science, and it is not just in the area of global climate change although that has been exhibit A.

Here on Capitol Hill, the tone with respect to that debate was set by people like one of our colleagues on the Senate side who used to chair the Senate Environment and Public Works Committee, Senator Inhofe, who said, ''Global warming is the greatest hoax ever perpetuated on the American people.''

This Congress in the past and the Administration helped set the tone at the top that was placed over our scientists, our public servants who do this work day by day, trying to get at the right answers. The result has been a twisting of the science, not just in the area of global climate change.

The Government Reform Committee looked at this question when it came to mercury control and regulations. In fact, the Inspector General, the independent Inspector General at the EPA found just more than a year ago that there had been interference through the political process on the science of mercury poisoning, the development of regulations in that area. This has been a problem endemic from the top in this Administration.

I represent a lot of Federal employees. I happen to

represent a district that includes NIH, that includes NOAA, that includes the Nuclear Regulatory Commission, many others. Those are good people who are just trying to do their work and get at the facts and get the science for the benefit of the American people. I can tell you when I am able to talk to them one on one, when the political minders are not around, they tell me about the chilling effect from the top on the work that is done and on the influence that is brought to bear from the top on their work. I think it is high time that we had a thaw in that chilling influence, and I think this hearing and this new day on Capitol Hill is part of setting that new tone.

Science should be fact-driven. We should not be driven by the political vagaries of any Administration, whether it be Republican or Democrat. I think that is the message that we want to send to the good people in our Government who are working every day on behalf of the American people to get the answers.

Mr. Chairman, let me just close on this. Yesterday evening, we had a hearing in Montgomery County, a bipartisan hearing, on legislation that has been proposed in the Congress on mental health and insurance coverage for mental health. Congressman Patrick Kennedy and Congressman Jim Ramstad, Democrat and Republican, had been going around the Country on these issues.

We invited a member, a representative from the National Institutes of Mental Health to testify, and that individual wanted to testify and two weeks ago was preparing testimony. We asked them only for their testimony on the science, mental health issues, the science of the brain. We weren't asking them to take a position on the legislation. We wanted to hear about the science. They were prepared to come.

Yesterday just before we had the hearing, they were notified by their political minders at NIH that they could not come to a hearing attended by members of Congress, Republicans and Democrats alike.

It seems to me if the people in this Country are making the kind of investment they are at NIH, that we should be able to have the benefit of their testimony, whether that hearing is held here in the United States Congress by members of the Committee or in our districts, especially when the representative from NIH is an expert in the field and leader in the field and was eager to testify. It is just another example, it seems to me, of the politics getting in the way of allowing our public servants to inform the public about the best results from their scientific inquiry.

Thank you, Mr. Chairman, for holding this hearing. I thank the witnesses for being here.

[Prepared statement of Mr. Van Hollen follows:]

1302 ********* INSERT *******

(6)

Mr. WAXMAN. Thank you, Mr. Van Hollen.

I thank all the members for their opening statements.

We are now going to hear from the witnesses who have been described as courageous, but I also want to describe them as patient. Let me introduce the witnesses.

We have Dr. Francesca Grifo, Senior Scientist and
Director of the Union of Concerned Scientists, Scientific
Integrity Program. She has over 20 years of experience
directing science-based projects and programs. She holds a
Ph.D. in botany from Cornell University.

Rick Piltz is the Director of Climate Science Watch, a program that aims to hold public officials accountable for using climate research with integrity and effectiveness in addressing the challenge of global climate change. From April, 1995 until March, 2005, Mr. Piltz worked at the U.S. Climate Change Science Program where he coordinated scientific research on climate change.

Dr. Drew Shindell is an atmospheric physicist who studies climate change in atmospheric physics. He has worked at NASA's Goddard Institute for Space Studies for the last 12 years. In 2004, Scientific American Magazine named Dr. Shindell one of the top 50 scientists in the Country.

Dr. Roger Pielke is a political scientist who has been on the faculty of the University of Colorado since 2001. He is a professor in the Environmental Studies Program and a

fellow of the Cooperative Institute for Research in the Environmental Sciences.

It is our practice in this Committee to swear in, so if you would please rise, I would like to administer the oath.

[Witnesses sworn.]

Mr. WAXMAN. The record will note that each witness answered in the affirmative.

I would like to ask each of the witnesses to give a brief summary of their testimony, to keep this summary under five minutes duration. Unfortunately, that light may not tell you when the five minutes is up, but I will let you know when the five minutes is up and then we would appreciate a concluding statement. Your written testimony that has been submitted in advance will be made part of the record in full.

We thank you for being here.

Dr. Grifo, why don't we start with you.

STATEMENTS OF FRANCESCA GRIFO, SENIOR SCIENTIST AND DIRECTOR OF THE SCIENTIFIC INTEGRITY PROGRAM, UNION OF CONCERNED SCIENTISTS; RICK PILTZ, FORMER SENIOR ASSOCIATE, U.S. CLIMATE CHANGE SCIENCE PROGRAM; DREW SHINDELL, GODDARD INSTITUTE FOR SPACE STUDIES, NATIONAL AERODYNAMICS AND SPACE ADMINISTRATION; ROGER PIELKE, JR., PROFESSOR, ENVIRONMENTAL STUDIES PROGRAM, UNIVERSITY OF COLORADO AND FELLOW, COOPERATIVE INSTITUTE FOR RESEARCH IN THE ENVIRONMENTAL SCIENCES

STATEMENT OF FRANCESCA GRIFO

Ms. GRIFO. Good morning, and thank you, Mr. Chairman and members of the Committee for the opportunity to be here and address you. I come representing the Union of Concerned Scientists and scientists across the Country.

Political interference is harming Federal science and threatening the health and safety of Americans. Over 1,800 Federal scientists from multiple agencies have reported concerns. Six hundred and ninety-nine scientists, that is 39 percent of our respondents across nine agencies have reported that they fear retaliation for openly expressing their concerns about mission-driven work of their agencies.

Four hundred and thirty-two scientists from five agencies reported that they were not able to publish work in peer review journals if it did not adhere to agency policies. That was 25 percent of our respondents.

From the report we are releasing today, 150 Federal climate scientists report personally experiencing at least one incident of political interference in the past five years for a total of at least 435 incidents.

All branches of Government must have access to independent scientific advice. The thousands of scientists in the employ of the Federal Government represent a tremendous resource. We need strong action to restore integrity to Federal science in order to be prepared to face the complex challenges ahead of us.

The Union of Concerned Scientists has documented scores of examples of such abuses in our online A to Z Guide to Political Interference in Science. This interference can take many forms from censorship and suppression of Federal science to dissemination of inaccurate scientific results and science-based information to the manipulation of scientific advice. Over 11,000 scientists including 52 Nobel laureates and numerous other luminaries and science advisors to both Republican and Democratic presidents dating back to the Eisenhower Administration have signed our statement calling for a restoration of scientific integrity.

Our investigations demonstrate that the problem goes deeper than just the high profile incidents and includes new examples from NOAA and NASA as well as the voices of hundreds of climate scientists from seven Federal agencies. Our investigations found high quality science struggling to get out. Nearly half of all respondents perceived or personally experienced pressure to eliminate the words, climate change, global warming or other similar terms from a variety of communications. Forty-three percent personally experienced or perceived changes or edits during the review of documents that changed the meaning of scientific findings.

Barriers to communication hinder our National ability to prepare and respond to protect future generations from the consequences of global warming. Our investigation uncovered numerous examples of public affairs officers at Federal agencies taking an active role in regulating communications between agency scientists and the media, in effect, serving as gatekeepers for scientific information. We found agency climate scientists who had their press inquiries routed to other scientists whose views more closely matched Administration policy and who routinely encountered difficulty in obtaining approval for official press releases. Two-thirds of respondents said that today's environment for Federal Government climate research is worse compared with five years ago and ten years ago. Both scientists and

journalists report that restrictive media policies and practices have hampered the communication between Government scientists and the news media. This limits the extent to which new scientific findings can enter the public and policy debate.

The report includes a model media policy which encompasses the following: whistleblower protections, Congress must act to protect scientists who speak out when they see interference or suppression of science and all agency policies must affirmatively educate their employees of their rights under these statutes.

Scientific freedoms, Federal scientists have a constitutional right to speak about any subject, so long as the scientists make clear that they do so in their private capacity. Scientists must also have a right of last review on agency communications related to their research.

Scientific openness, scientists should not be subject to restrictions on media contacts beyond a policy of informing public affairs officials in advance of an interview and summarizing the interaction for them afterwards. Federal agencies should support the free exchange of scientific information in all venues.

I just want to close with a quote from a NASA scientist from our survey. ''Civil survey scientists and engineers can and should be an unbiased reservoir of insights into

different questions. If we can't be trusted to give insights on global change and funded to do so, who in the world will do it?''

Thank you.

[Prepared statement of Ms. Grifo follows:]

1446 Mr. WAXMAN. Thank you very much for your testimony. 1447 Before calling on Mr. Piltz, I understand that in order 1448 to get the timer to register on the front table, there needs to be an adjustment and we are going to have one of our 1449 1450 people make that adjustment. I understand there may be a 1451 loud pop, so please don't get excited. Mr. ISSA. Mr. Chairman, it took us most of those 12 1452 1453 years to get that working right, so good luck. 1454 Mr. WAXMAN. Well, we are going to do it in one minute, 1455 we hope. 1456 [Laughter.] 1457 Mr. WAXMAN. If not, we expect to have 12 years to work 1458 on it, at least. 1459 Mr. Piltz, we will now hear from you. We welcome you 1460 here. 1461 Let me, just for housekeeping purposes, ask unanimous 1462 consent that all of the statements submitted by our witnesses 1463 will be made part of the record. Without objection, that

1464

1465

will be the order.

Mr. Piltz?

STATEMENT OF RICK PILTZ

Mr. PILTZ. Mr. Chairman, Ranking Member Davis, members of the Committee, I greatly appreciate the opportunity to present testimony at this hearing, and there is considerable more detail in my written testimony.

I endorse all of the conclusions and recommendations in the Joint Union of Concerns Scientists Government

Accountability Project Report and to complement that, my testimony will focus on the Administration's treatment of the National Assessment of Climate Change Impacts and the problem of the White House Council on Environmental Quality.

From April, 1995 until March, 2005, I worked in the Coordination Office of what is now called the U.S. Climate Change Science Program, the Federal multi-agency Federal program that supports the scientific research on climate and associated global environmental change. I had various responsibilities and worked on many projects during those 10 years. I worked directly with the agency leadership and with the senior professional staff in the Coordination Office.

One key ongoing project for which I was responsible involved coordinating the development of and editing nine editions of the annual report to Congress, Our Changing Planet, which represents the government-wide research

program. In doing that, I would compile and edit into accessible language the contributions of about 90 scientists and science program managers in the Federal agencies and labs. Those reports were carefully reviewed and vetted and signed off on by the Agency experts, and then they would go to the Executive Office of the President for final editing and the review and clearance before publication.

During the 2001-2005 timeframe, I came increasingly to the conclusion that the Administration was acting to impede forthright communication of the state of climate science and its implications for society and that the politicization of climate science communication by the current Administration was undermining the credibility and integrity of the Climate Change Science Program in its relationship to the research community, to the program managers, to policymakers and to the public. So in March 2005, I left the program office, resigning my position in protest.

I saw that the problem was manifested especially at the points at which scientifically-based information regarding climate change was communicated to a wider audience, to Congress, to the public. It wasn't so much a matter of interfering with what scientists were publishing in geophysical research letters or other technical journals. It was when the science would come forward into to be communicated to a wider audience, that the political

gatekeepers would step in.

Now, I am not a climate scientist by academic training, and I don't debate technical issues. I will leave that for Dr. Shindell and other eminent climate scientists, but I can tell you what happens when the climate science comes forward into this arena of wider communication and the collision between science and politics.

Really among the issues that I regard as politically significant, particularly significant in this politicization, was the Administration's treatment of the National Assessment of Climate Change Impacts which was carried in the 1997-2000 timeframe pursuant to the Global Change Research Act of 1990. This was a report that was developed by a panel of climate and ecosystem scientists and other experts that is to this day the most systematic and comprehensive effort to assess the potential implications of global warming and climate change for the United States. The report identified a range of likely adverse societal and environmental impacts.

This report has essentially been made to vanish by the Bush Administration, all reference to it by Federal agencies has been prohibited. All use of it in reports to Congress and other climate change communications has been suppressed. The scientist stakeholder networks that developed this report have been abandoned and no follow-on work of a comparable sort has been undertaken.

I discuss this in considerably greater detail in my written testimony, but starting in 2002, the White House Council on Environmental Quality placed Phillip Cooney as Chief of Staff at the table as part of the governance of the U.S. Climate Change Science Program. Now CEQ is a policy shop, not a science office. It is my understanding that Mr. Cooney was the proximate agent of the White House's directive to the Federal agencies to suppress the National Climate Assessment. Of course, he was not acting independently. He was an operative in a chain of command leading up to CEQ Chairman on to the President, but there are many aspects of the way CEQ intervened to manipulate communication on climate change and this was one example.

In conclusion, in addition to the UCS GAP recommendations, I would recommend it is very important to revitalize this national assessment process. Every member, I think, has a vital interest in this regional level, sectoral level analysis of putting the top experts together with direct communication with policymakers and other stakeholders to diagnose the problems and develop solutions. What you need, I think, is this direct unimpeded communication between the experts and policymakers and get the gatekeepers out of the way.

[Prepared statement of Mr. Piltz follows:]

1563 ********** INSERT ********

Mr. WAXMAN. Thank you very much, Mr. Piltz.

1565 Dr. Shindell?

1566 STATEMENT OF DREW SHINDELL

Mr. SHINDELL. Good morning, and I thank the Committee.

Mr. WAXMAN. There is a button at the base of the mic. Is that on?

Mr. SHINDELL. Thank you. Good morning. I would like to thank the Committee for the opportunity to testify this morning about climate change science and my personal experiences with communication of climate science.

As Mr. Chairman noted, I have been a researcher at NASA's Goddard Institute for Space Studies for some time, and I am a lecturer at Columbia University as well, but today I am speaking here as an individual.

Scientists provide information to policymakers and the public on issues affecting society. Climate change is clearly such an issue and one for which it is especially critical that decisions be made using the best available scientific information because the potential costs to society of action or of inaction are large.

The earth as a whole is unquestionably warming, and virtually all climate scientists believe that the evidence regarding a human role in this warming is clear and compelling. Multiple lines of evidence based on

measurements, theory and modeling support these conclusions. The scientific evidence indicates that the earth si now warmer than at any time during the last thousand years. While continued warming is inevitable, the seriousness of the consequences of climate change will depend upon societal action to limit the emissions of greenhouse gases and pollutants that are the dominant cause of global warming. These consequences include droughts and flood, increased severity of summer heat waves and rises in sea level that could devastate low-lying coastal areas.

Although the scientific basis for the conclusion that human activities are altering Earth's climate is extremely strong, there are questions that are still raised over whether current scientific understanding justifies societal action. One of these arguments has concerned Antarctic temperature trends. While most of the planet has warmed rapidly during the past several decades, much of the Antarctic Continent has, by contrast, cooled. Lack of an adequate explanation for this has been cited as evidence that scientific understanding of climate change is simply too incomplete to warrant taking action to mitigate global warming.

In the fall of 2004, a team I led at NASA published a paper providing an explanation of how ozone depletion over Antarctica and increasing greenhouse gases could together

account for this observed cooling of Antarctica. The study was the first to look at how these two factors work together to influence Antarctic temperatures. It not only helped to explain the observed cooling but also predicted a warmer future for Antarctica based on projections of continued increases in greenhouse gases. This has clear implications, both for the debate on global warming and for potential sea level rise as Antarctica contains an enormous reservoir of water in its ice sheets.

The NASA press corps and I wrote a press release on these findings to convey them to the broader public. While previous to this time, press releases had been issued rapidly and with revisions from headquarters that basically were made to improve clarity and style, this release was repeatedly delayed, altered and eventually watered down. When we at GISS inquired of those higher up the NASA chain what was going on, we were told in the fall of 2004 by the press corps that releases were being delayed because two political appointees and the White House were now reviewing all climate-related press releases.

Scientists do not simply explore what we are most curious about. We know that our research is funded by the public, and we go to great lengths to provide policy-relevant information to support decision-making. While it was frustrating for me to see my work suppressed, even more

importantly, it is a disservice to the public to distort or suppress information needed.

But that experience is only one example of a series of actions that attempted to suppress communication of climate science to the public. Also during the fall of 2004, NASA headquarters insisted that a NASA press officer be present to monitor all interviews, either in person or in the phone, a measure most of us felt was unbefitting of a Democratic society. As with the interference with press releases, the restrictions were not imposed on other parts of NASA such as space science or even other areas of earth science outside of climate research.

NASA's new written policy of openness regarding press conferences and releases has been a welcome first step. This clearly defined policy is rather unique among Federal scientific agencies and should be emulated at others. As this policy seems to have come about in large part in response to scrutiny of political interference in communication, I hope that the interest evidenced by this morning's hearing will lead to continued improvements in policies to protect the integrity of Government science and its communication to the public.

Even with the best possible information, policymakers must make subjective decisions in the face of uncertainty, but these types of decisions go on around us all the time,

for example, when a doctor decides on treatment based on the best medical evidence, despite the fact that medical science doesn't know everything there is to know about human physiology. The public must trust the evaluation of the evidence by policymakers in the same way that patients must trust their doctors.

Suppression of scientific evidence has undermined the trust between the public and policymakers and between scientists and policymakers. Cases where scientific uncertainties were exaggerated by political appointees have been equally troubling. Restoring the necessary trust will require the highest standards of scientific integrity and transparency in policies regarding scientists' interaction with the public and in decision-making on the urgent issue of climate change.

I thank the Committee for holding this hearing.

[Prepared statement of Mr. Shindell follows:]

1680 | ******* INSERT *******

Mr. WAXMAN. Thank you very much, Dr. Shindell.

1682 Mr. Pielke?

1683 STATEMENT OF ROGER PIELKE, JR.

Mr. PIELKE. I thank the Chairman, the Ranking Member and the Committee for the opportunity to offer testimony this morning.

My main point today is that politics and science cannot, in practice, be separated. Consequently, policies for the production, promotion and use of information in decision-making should be based on the realities of science and politics, not on the mistaken impression that they somehow can be kept separate. Efforts to separate them will in most cases only contribute to the pathological politicization of science.

Now imagine the following situation: the President has in his Administration a range of scientific experts on the most important policy issue of the day. However, the President is denied access to that advice by the manipulative actions of one of his primary advisors who we will call the Admiral. It turns out that the Admiral has the President's ear on matters of science, but he himself in fact has no formal scientific training. He justifies his actions on the belief that the United States is engaged in a fundamental religious, political and economic conflict between good and

1705 | evil.

When two leading Government scientists seek to provide advice to the President that differs from that being offered by the Admiral, the Admiral asks the FBI to open investigations of these scientists. One of the scientists subsequently faces hearing to consider his lack of loyalty to the United States, and he never again works as a Government scientist.

The other scientist warns that this case indicates to scientists that ''Scientific integrity and frankness in advising Government on policy matters of a technical nature can lead to later reprisals against those whose earlier opinions have become unpopular.''

One of the Nation's leading scientists writes that the relationship between Government and scientists has been gravely damaged because the Government has given the impression that it would 'exclude anyone who does not conform to the judgment of those who in one way or another have acquired authority.''

The year, 1954; the President, Dwight Eisenhower; the Admiral, Lewis Strauss; the scientists, Robert Oppenheimer, Hans Bethe and Vannevar Bush.

This vignette drawn from Benjamin Green's excellent new book on Eisenhower's science policy along with the other examples recounted in my written testimony that discuss

issues of science and politics from Richard Nixon through
Bill Clinton show that science and politics have always been
of concern for policymakers, and the subject of today's
hearing indicates that today is no different.

There are, however, reasons why today's conflicts are receiving more attention from scholars, political advocates and politicians. I will just quickly go through these.

There are an increasing number of important issues that are related to science and technology. Policymakers and advocacy groups alike increasingly rely on experts to justify their favorite course of action. Congress, at least for the past six years and perhaps longer, has been derelict in its oversight duties, particularly related to issues related to science and technology.

Many scientists are increasingly engaging in political advocacy. Some issues of science have become increasingly partisan as some politicians sense that there is political gain to be found on issues like stem cells, teaching of evolution and climate change. Lastly, the Bush Administration has indeed engaged in hyper-controlling strategies for the management of information.

Now, I will just give a few very short vignettes to illustrate how fundamentally science and politics are inter-related. The language of science in public discussion lends itself to politicization. The New York Times reported

Laboratory had complained because they had been instructed to use the phrase, climate change, rather than the phrase, global warming. A Republican strategy memo did indeed recommend the use of the phrase, climate change, over global warming, and environmental groups have long had the opposite preference. Another Federal scientist in NOAA described how he was instructed by superiors not to use the words Kyoto or climate change.

To cite another example, several years ago, the Union of Concerned Scientists, as part of its advocacy campaign on reducing greenhouse gas emissions, recommended use of the word, harbinger, to describe current climate events that may become more frequent with future global warming.

Subsequently, scientists at NOAA, the National Center for Atmospheric Research, and the Fish and Wildlife Services Polar Bear Project began to use the phrase in public communication in concert with advocacy groups like Greenpeace. The term has also appeared in official Government press releases.

Policymakers and their staff are, of course, intimately familiar with these dynamics. We have just recently seen them in practice as Republicans and Democrats have battled over framing President Bush's proposed troop increases as a surge or an escalation.

An example of how easy it is to misrepresent science in a political setting, consider the memorandum prepared last week by the majority staff of this Committee to provide background information on this hearing. The memorandum states quite correctly that a consensus has emerged on the basic science of global warming. It then goes on to assert that 'Recently published studies have suggested that the impacts of global warming include increases in the intensity of hurricanes and tropical storms.''

It supports this claim by citing three papers, but what the memorandum does not relate is that the authors of each of the three cited papers recently participated with about 120 experts from around the world to prepare a consensus statement under the auspices of the World Meteorological Organization which concluded, ''No consensus has been reached on this issue.'' The WMO statement was subsequently endorsed by the Executive Council of the American Meteorological Society.

Thus, the science cited in the Committee memo is incomplete and misleading. Such cherrypicking and misrepresentations of science are endemic in political discussions involving science. What has occurred in the preparation of this memorandum is in microcosm the exact sort of thing we have seen with heavy-handed Bush Administration information management strategies which include editing

Government reports and overbearing management of press releases and media contacts with scientists. Inevitably, such ham-handed information management will backfire because people will notice and demand accountability. This oversight hearing today is good evidence for that.

My written testimony goes into far more detail on issues of press releases, agency media policies, empanelment of Federal advisory committees and other subjects which I would be happy to discuss with your further.

Thank you.

[Prepared statement of Mr. Pielke follows:]

1816 ******** INSERT *******

Mr. WAXMAN. Thank you for your testimony.

This Committee has been trying to get documents from the Administration since last July, and we have made requests on a bipartisan basis when Mr. Davis was Chairman and I was the Ranking Member. Now that I am chairman and he is the Ranking Member, we are still making those requests.

We have sent today a letter to Mr. James L. Connaughton, Chairman of the Council on Environmental Quality, asking again for the information we requested. Without objection from any member of the Committee, I would like to put the letter by Congressman Davis and myself in the record.

Furthermore, the staffs of our Committee, Democratic and Republican, were allowed to view these documents that we have requested in camera. They weren't allowed to take them out. I have a memorandum which provides additional information about the documents from the White House Council on Environmental Quality being sought by this Committee, and I seek to make this memorandum part of the record as well. Without objection, that will be the order.

The Chair recognizes himself to start off the questions.

I thank all of your for your testimony.

Many experts are telling us that global warming is one of the most severe environmental threats facing this Nation and the world. The challenges confronting us are enormous potentially. Therefore, I think policymakers have an

obligation to understand the science, and we need to get that scientific information without any manipulation of the science, without any suppressing of the reports or misleading the public about the issues which seems to be would be a breach of the public trust. So we have been asking for this information.

Dr. Shindell, you are one of the Nation's leading climate change scientists, and I want to discuss some of the documents that the Committee staff reviewed and ask whether you are concerned about the issues in these documents.

First of all, let me begin by asking you about some of the edits urged by the White House Office of Management and Budget. OMB asked that an EPA report be rewritten to remove the statement that global warming may 'alter regional patterns of climate' and 'potentially affect the balance of radiation.' Dr. Shindell, do you think this was an appropriate change in the document?

The statement in the EPA draft was that climate change can alter regional climates and affect the balance of radiation. Is there any scientific justification for removing these assertions?

Mr. SHINDELL. No. That is a very well supported statement. For the change in the energy balance of the planet, we have satellite data that have measured that balance directly for decades now, and we can see it changing,

and it is extremely well documented and uncontroversial.

As far as regional patterns, I mentioned before,
Antarctica has gone the other way from the rest of the globe.
Different areas have warmed more, others less. It is quite clear that this is happening.

Mr. WAXMAN. Another edit deleted the phrase, ''changes observed the last several decades are likely mostly the result of human activities,'' and that phrase was replaced with a phrase that said, ''a causal link between the build-up of greenhouse gases in the atmosphere and the observed climate changes during the 20th Century cannot be unequivocally established.'' Is this an appropriate change? Does the rephrasing accurately represent the science or does it mislead the public?

Mr. SHINDELL. I would say that that is also a misleading statement. While technically true, the first statement that human activities play the dominant role is a much, much more accurate picture of the science.

Mr. WAXMAN. Some of the edits we reviewed were made by CEQ Chief of Staff Phillip Cooney. Now Mr. Cooney is not a scientist by training. Instead, he is a lawyer who was working as a lobbyist for the American Petroleum Institute before he was appointed to his position at the Council on Environmental Quality. I would like to ask you some questions about his edits.

In one document, Mr. Cooney deleted a reference to the National Research Council's finding that human activities are causing temperatures to rise. Obviously, the National Research Council is this Country's premier scientific body. Can you tell us if there is a scientific basis for deleting a reference to this finding?

Mr. SHINDELL. No. That is again a well supported statement.

Mr. WAXMAN. In the same document, Mr. Cooney deleted the phrase 'climate change has global consequences for human health and the environment.' Is there anything scientifically questionable about this phrase?

Mr. SHINDELL. Again, no.

Mr. WAXMAN. Yet another edit, Mr. Cooney wrote that satellite data disputes global warming. Is this scientifically valid?

Mr. SHINDELL. No. There was for many years a controversy where satellite data showed warming but to a different degree than was seen at the surface or that was predicted by models higher up in the atmosphere. It never disputed global warming, and that controversy has since been resolved.

Mr. WAXMAN. If climate changes offer us an incredibly serious problem, then we need to get the facts and rely on Federal scientists and agencies to give Congress and the

public the true facts about this global threat. Yet the preliminary evidence we are seeing from the White House suggests that the Administration may have taken a very different approach. If the documents we have seen so far are representative, it appears that the White House installed a former oil industry lobbyist as the Chief of Staff for the Council on Environmental Quality and then systematically sought to prevent the Environmental Protection Agency from reporting on dangers to health, the environment and the economy. In effect, it appears that there may have been an orchestrated effort to mislead the public about the threat of global climate change.

These are serious allegations, and they are ones that we will be exploring in detail in this hearing and in our ongoing investigation.

I thank the witnesses very much for answering my questions. I do have further questions, and we will have a second round for members who wish to pursue a second round.

Mr. Davis, I yield to you.

Mr. DAVIS OF VIRGINIA. Thank you.

Dr. Shindell, let me just say I am not asking and you can't produce it today, but I would be very interested in looking at the initial drafts that you had on the press releases and then at the end result. It would give us, I think, a clue in terms of what the Administration did. I

1942 don't have copies of that, but if you could produce that, 1943 that would be helpful.

Mr. SHINDELL. Sorry, I didn't follow.

Mr. DAVIS OF VIRGINIA. The initial drafts of press releases that came out that you said were manipulated and changed over time, I would be interested in seeing the draft that came from the scientist and the end result that came out. I think that would give the Committee a good clue in terms of what transpired in between.

Mr. SHINDELL. Yes, and there is more detail about that in my submitted written testimony.

Mr. DAVIS OF VIRGINIA. I understand that, but if you could produce the document, that would be helpful to us as we work forward.

Mr. SHINDELL. Okay.

Mr. DAVIS OF VIRGINIA. Thank you.

Dr. Pielke, let me just ask you. In your testimony, you talk about scientists or advocacy groups or even politicians cherrypicking the best facts and using them in a way that is most advantageous to their argument. This is also been called fact-slinging. Why is this approach wrong and harmful to the process?

Mr. PIELKE. Well, I think it is inevitable.

Mr. DAVIS OF VIRGINIA. Push your button there.

1966 Mr. PIELKE. I think it is inevitable. I think whenever

people make an argument for a particular course of action, they are going to frame their perspective in the best light possible. When you go out on that limb and you present information selectively or, worse, you misrepresent it, you will get called on it. It will damage your own credibility. So I think advocates of all stripes, it is unavoidable to be selective in presentation of information.

Mr. DAVIS OF VIRGINIA. I guess we would like to navigate away from that environment and the reason I have joined Mr. Waxman in a request for documents from the Administration, we need to get everything laid out in fact. I think there is some cherry picking going on back and forth. It doesn't help when we can't get them all, but it is important to get everything out there so we can get a complete picture and then make an appropriate analysis of what has and hasn't happened.

I wonder if you could discuss the policy reasons for executive agencies vetting the work of their employees before public comment is made on behalf of the agency.

Mr. PIELKE. Well, there is a long--

Mr. DAVIS OF VIRGINIA. Is this a new process?

Mr. PIELKE. It is not. For example, the Office of Management and Budget has, at least since the 1920s, gone over witness testimony from Government employees. The reason

Mr. DAVIS OF VIRGINIA. Of both parties, right?

Mr. PIELKE. Of both parties, and the reason for this is that the governance of the United States would be impossible if every Government employee were able to go out and interpret the laws, policies in the way that they saw them. Imagine if officials at the State Department below the top, every single one of them were going out and voicing their views on Iran or the Israeli-Palestine conflict. It would be, it would be chaos, complete chaos. So at some level from the standpoint of policy, Government has to coordinate its actions.

This becomes difficult when science is involved because the view is that we can somehow separate science and politics. Let scientists only talk about science. Let the policy, political appointees only talk about the politics. But the reality is science and politics are intermixed. A phrase like dangerous climate change relates to the framework convention on climate change. So if scientists in their official remarks say that phrase, they are engaging in a political discussion.

I should point out NOAA and NASA have- FE

Mr. DAVIS OF VIRGINIA. They may or may not be right, but
that is their opinion and not the opinion the elected
leaders.

Mr. PIELKE. I want to point out NOAA and NASA have two

different approaches to how scientists communicate with the public. NASA has said that its scientists can take off their agency hat and speak as individuals. NOAA has said in its media policy that they always speak for the agency. This is a perfect topic for Congressional oversight. What makes the most sense? Does it makes sense to have scientists take off their hat or not?

I don't have an answer for that, but we do have inconsistencies across the different agencies.

Mr. DAVIS OF VIRGINIA. We don't either, and our goal here, I think, is to just get the facts and lay them out and then the public can judge appropriately where truth lies.

This age-old process may qualify as politicization, but it also can reflect a rational policy by a presidential administration in both parties as well to carry out what they perceive as their mandate.

Mr. PIELKE. Yes. Now let me say politics is how we get done the business of society, and in popular parlance with the public, politics has kind of a pejorative, negative notion. But I think the Government funds about \$140 billion worth of scientific research, so it will be relevant to politics.

Mr. DAVIS OF VIRGINIA. In one of your writings, you stated that well-regarded scientists who are known believers of global warming is happening also believe the debate will

not be settled for more than a decade. If that is the case, then why is it the only scholars we hear from are the ones that believe it is so glaringly obvious that only a fool or an idiot could question it?

Mr. PIELKE. The statement you refer to is with respect to the debate over tropical cyclones and climate change, and indeed I think the general consensus that it is going to take some more research on that topic.

On the issue of global warming generally and particularly global average temperatures, I point you to the Intergovernmental Panel on Climate Change, IPCC, and Dr. Shindell can probably represent that better than I.

Mr. DAVIS OF VIRGINIA. Well, Mr. Connaughton was up here before us, and he admitted that there was climate change or warming going on, that in fact it was manmade. I think we need to get to once we establish those parameters, then we can make intelligent policies in terms of how we deal and what are the ramifications with it. But there was no denial in the Administration when they were up here last year as well. I hope we will get them back once they produce the documents, and they can more fully talk about what their edits are and the like, and we can have a better opportunity to address that.

It looks like my time is up.

Mr. WAXMAN. Thank you, Mr. Davis.

2067 Mr. Davis on our side.

Mr. DAVIS OF ILLINOIS. Thank you very much, Mr. Chairman, and I want to thank all of the witnesses for appearing.

Mr. Piltz, let me ask you. You worked as a senior associate in the Federal Climate Change Science Program.

This is the office that coordinates Government climate research. You resigned in March of 2005 after 10 years in the office. Can you basically tell us why you resigned?

Mr. PILTZ. YES. I had increasingly come to see that the Administration was politicizing the communication of the climate research. It is a \$2 billion a year research program involving 12 agencies, and from time to time this research gets put together and assessments reports to Congress and so forth, communicating to a wider audience. That is the point at which Administration political gatekeepers would step in to either ignore the report if they couldn't stop it from being published and misrepresent the intelligence in it if they needed to or just flat out directly edit it if they could.

I was particularly concerned with this communication function. That was what I was doing, and it became increasingly impossible to work in that environment and to see this going on.

Mr. DAVIS OF ILLINOIS. Now let me ask you. You were

there for 10 years.

Mr. PILTZ. Yes.

Mr. DAVIS OF ILLINOIS. Which means that you were there prior to the current Bush Administration.

Mr. PILTZ. That is right, five years under the previous administration and five years under the Bush Administration.

Mr. DAVIS OF ILLINOIS. So how does this action or activity compare with that of the previous administration?

Mr. PILTZ. It is a good question, and let me say first of all that no administration is above criticism, but I do think that there was a significant difference under the previous administration. The key liaison to the Climate Change Research Program was the white House Science Office. Those were scientists, and they, their way of thinking and talking and writing about climate change was well within the mainstream of the climate science community which I think they were trying to feed into the policy process.

This was a different situation under the current

Administration where you had people who were not scientists,

whose concern was not to make the communication clearer and

more accurate but to spin it politically so that the science

would not be communicated in such ways to threaten the

Administration's political position. The Administration had

made a decision up front it would not support a regulatory

constraint on greenhouse gas emissions, and it seemed to me

that they were uncomfortable with any straight forward
presentation of the growing body of scientific evidence about
global warming.

Mr. DAVIS OF ILLINOIS. Now let me ask you. You also discussed editing in your testimony.

Mr. PILTZ. Yes.

Mr. DAVIS OF ILLINOIS. Mr. Phillip Cooney was the Chief of Staff at the White House Council on Environmental Quality. We have established that he was a lawyer and not a scientist. Until 2001, he worked at the American Petroleum Institute as a lobbyist and as their climate team leader.

You testified that Mr. Cooney made handwritten edits to several science program reports in 2002 and 2003. Is that correct?

Mr. PILTZ. Yes.

Mr. DAVIS OF ILLINOIS. Generally, what type of edits were these?

Mr. PILTZ. It was a very large number of edits. They came at the twelfth hour, the process after all of the career assignments people had signed off and it never went back to them. They had the aggregate effect of creating an enhanced manufactured sense of fundamental scientific uncertainty about global warming, of toning language about observed warming and impacts, of basically discarding any idea that climate models were useful and deleting language about the

2142 observed or projected impacts of climate change.

- 2143 Mr. DAVIS OF ILLINOIS. Let me just ask you.
- 2144 Mr. PILTZ. Sure.
- 2145 Mr. DAVIS OF ILLINOIS. Was it part of your
- 2146 responsibility to help prepare these documents or similar
- 2147 documents, so you are testifying on the basis of firsthand
- 2148 knowledge, not on the basis of something that you heard, read
- 2149 or were told about?
- 2150 Mr. PILTZ. No. I had to deal with the edits directly,
- 2151 yes, sir.
- 2152 Mr. DAVIS OF ILLINOIS. Thank you very much.
- 2153 Mr. Chairman, I suspect that my time is up.
- 2154 Mr. WAXMAN. Yes, thank you very much.
- 2155 Mr. DAVIS OF ILLINOIS. Thank you.
- 2156 Mr. Issa?
- 2157 Mr. ISSA. Thank you, Mr. Chairman.
- 2158 I know it is anecdotal, but how many scientists can
- 2159 raise their hand here on the dais? Just checking. I won't
- 2160 ask how many lawyers up here. That would be telling.
- 2161 Mr. Piltz, I think I will start with you. Your degrees
- 2162 and background are political science?
- 2163 Mr. PILTZ. Yes.
- 2164 Mr. ISSA. So you are not a scientist.
- 2165 Mr. PILTZ. No, I am not a climate scientist.
- 2166 Mr. ISSA. Would it be fair to say you are no more

qualified to evaluate these edits than the petroleum lawyer, 2167 2168 is that right? I mean in the greater world of scientist, 2169 non-scientist. Mr. PILTZ. I think that climate scientists who look at 2170 the edits would regard them as, in the aggregate, pretty 2171 egregious, but I am not arguing particular points. 2172 2173 Mr. ISSA. I appreciate that. I just wanted the simple 2174 answer. We have been trashing a lawyer I have never met, and 2175 I am happy to trash all lawyers, but what it comes down to is he wasn't a scientist, you are not a scientist. 2176 2177 My understanding is Mr. Cooney's edits or proposed edits 2178 were then reviewed by a scientific committee convened by the 2179 National Research Council, and many of his edits were then 2180 disregarded. 2181 Mr. PILTZ. No. 2182 Mr. ISSA. I will be very surprised if my staff is 2183 somehow misunderstanding the fact that his edits were not the 2184 last word. In fact, there was further scientific review that 2185 I am missing in your testimony. 2186 Mr. Chairman, I hope we can get to the bottom of that 2187 because I am not sure that that discrepancy can be easily 2188 worked out by witnesses. 2189 Dr. Grifo, I know you are fairly new to UCS. You have

been there, what, about a year, something like that?

Ms. GRIFO. A little longer.

2190

2191

Mr. ISSA. And you come out of Columbia. 2192 2193 Ms. GRIFO. Yes. 2194 Mr. ISSA. But do you know the history of the 2195 organization? 2196 I am trying to understand a little bit more. My 2197 understanding is UCS was formed at MIT to oppose the Vietnam 2198 War in 1968. Is that roughly correct? 2199 Ms. GRIFO. No, sir, that is an incorrect 2200 characterization. 2201 Mr. ISSA. Was it formed in 1968? 2202 Ms. GRIFO. Yes, sir. 2203 Mr. ISSA. Was it formed at MIT? 2204 Ms. GRIFO. Yes, sir. 2205 Mr. ISSA. Did it oppose the Vietnam War? 2206 Ms. GRIFO. I have no idea, but that was not its purpose 2207 in its forming. 2208 Mr. ISSA. Well, moving down a little bit, you would 2209 characterize your group as a peer watchdog organization? 2210 Ms. GRIFO. No, sir. We are a science-based non-profit. 2211 Mr. ISSA. You do a study that sends out from a list that 2212 you generate. You send out 1,600 questionnaires by email. You get back 19 percent of them. Then you come up with a 2213 2214 whole series of assumptions, and you bring them here and say 2215 this is what the science community says. 2216 I may not be a scientist. Matter of fact, I am

definitely not a scientist or a lawyer, but I will tell you here today because I am very concerned about what is being brought to us as science. If I take all of the subjective answers to emails, press statements, et cetera that come into my office anecdotally from my constituents, I would find 100 percent chance that they want all illegals taken out of the Country and no guest worker program because there is almost 100 to 0 response. Self-selected, those are the people I hear from. The people who think maybe a guest worker program wouldn't be bad, you have to really tear it out of them.

I would only say that in the future if you are going to bring us studies that they live up to, let us say, the standards of John Zogby and not some sort of an email self-serving response. I was very disappointed in seeing that.

Ms. GRIFO. Excuse me. May I respond?

Mr. ISSA. Of course.

Ms. GRIFO. Thank you very much for the opportunity.

Our methodology was in fact quite a bit more complex than the way that you have characterized it. We spent an enormous amount of time and energy looking through the climate documents of the Climate Change Research Group, web sites. The Government does not publish in fact a directly of its Federal climate scientists. So we did in fact have to go through and produce a list. We had very strict criteria for

2242 which scientists we included on this list. We had strict 2243 criteria for their backgrounds and so on.

- Mr. ISSA. Okay, and I appreciate that. Can you make that available to us?
- 2246 Ms. GRIFO. Absolutely.

2244

2245

- Mr. ISSA. Is there peer review scientific oversight of your selection and was there an offset to say that your selection was valid or invalid? In other words, Dr. Pielke, would he in fact have had a chance to say, oh, this is a bad list, you missed 300, 400? Was there any kind of an
- 2252 independent review?
- 2253 Ms. GRIFO. Yes, sir.
- 2254 Mr. ISSA. And by whom?
- Ms. GRIFO. By a number of climate scientists across the community, and in fact Mr. Piltz was one, and there were several others. I can get you that list.
- 2258 Mr. ISSA. Mr. Piltz is a political scientist.
- Ms. GRIFO. But he is aware of who are the Federal climate scientists doing that kind of research, and he was one of many individuals that looked at it.
- 2262 Mr. ISSA. I appreciate it. I am afraid I don't think 2263 that you have made your case.
- 2264 Ms. GRIFO. I am not quite done, sir.
- 2265 Mr. ISSA. Dr. Pielke, you said in your statement, and I 2266 think it is very notable, that there is going to be politics

2267 in all of this.

Mr. Chairman, how is my time?

Mr. WAXMAN. Go ahead and finish your question.

Mr. ISSA. Let me just ask one simple question. During the Eisenhower period you mentioned, isn't true that while President Eisenhower was leading the war against the Soviets, he was in fact downplaying the risk and the threat while funding the very things that allowed us to win the Cold War? Isn't that essentially the story of Eisenhower's managing of things like that threat?

Mr. PIELKE. I think, essentially, in a soundbite fashion, that is accurate, but the story of Eisenhower and particularly the nuclear test ban efforts—this was before my time in academic literature—is that there was tremendous conflict among competing scientists, all very preeminent, about the politics of whether we wanted to engage in a nuclear test in the atmosphere or not illustrate how science came to become very politicized even 50 years ago.

Mr. ISSA. Thank you, Mr. Chairman.

Mr. WAXMAN. Thank you, Mr. Issa.

Ms. Watson?

Ms. WATSON. I want to thank all the witnesses that are here today for being direct and answering the questions directly. There is no attempt to intimidate. We are trying to get information. So my questions go to Dr. Grifo.

Making available the study results lead me to raise 2292 2293 these questions. What percentage of the scientists 2294 personally felt pressured to eliminate the words, climate 2295 change, global warming or similar terms from their scientific 2296 communications? 2297 I have been told as a member of Congress, do not use the 2298 word, global warming. Well, they are telling me? They don't 2299 know who I am. And so, can you answer that, please? 2300 Ms. GRIFO. Yes, thank you very much. Forty-six percent perceived or personally experienced pressure to eliminate 2301 those words, and I would say that is a total of 147 climate 2302 2303 scientists. So that number should be zero. 2304 Ms. WATSON. Those are Government scientists who felt pressured to avoid even using the words, climate change or 2305 2306 global warming? 2307 Ms. GRIFO. Yes. 2308 Ms. WATSON. That is the number? 2309 Ms. GRIFO. Yes. 2310 Ms. WATSON. Because I know what I was told. Okay, thank 2311 you. Did any scientists see their work or the work of others 2312 2313 changed or edited during reviews in ways that changed the 2314 meaning of their scientific findings? You might have referred to that. I happened to be in 2315 2316 the back. I had a conference. And so, could you respond?

2317	Ms. GRIFO. Yes, thank you. Forty-three percent which
2318	was over two in five of our respondents, and I would also say
2319	that is 128 Federal climate scientists who personally
2320	experienced or perceived changes or edits during review that
2321	changed the meaning of their findings.
2322	Ms. WATSON. Were there scientific findings ever
2323	misrepresented by agency officials?
2324	Ms. GRIFO. Yes, in fact, 37 percent of our respondents
2325	which is 110 Federal climate scientists perceived or
2326	personally experienced agency misrepresentation of their
2327	findings.
2328	Ms. WATSON. How many total instances of political
2329	interference did Government climate scientists report?
2330	Ms. GRIFO. That was 400, at least 435. We had a range
2331	in each of the questions that they could answer. So that is
2332	the smallest number. It may indeed be much higher.
2333	Ms. WATSON. How many Government scientists personally
2334	experienced political interference?
2335	Ms. GRIFO. Personally experienced, I will have to get
2336	you that number. I don't have it in front of me, but it is a
2337	large percentage
2338	Ms. WATSON. Now let me ask Mister- FE
2339	Ms. GRIFO. A hundred and fifty, thank you.
2340	Ms. WATSON. One hundred and fifty, okay, thank you.
2341	Mr. Piltz and Dr. Shindell, do these numbers surprise

2342 you? First, Mr. Piltz.

Mr. PILTZ. They surprise me a little bit that it is quite so high. I was aware of particular case studies, but this shows me that this s a much more pervasive pattern throughout the agencies than even I was aware of before.

Ms. WATSON. Dr. Shindell?

Mr. SHINDELL. Yes, I had been aware of this mostly amongst the most prominent, the lab directors at the various research institutes. So this indicates that it is more widespread than I expected as well.

Ms. WATSON. I am wondering, Dr. Grifo, if we could actually get some of the scientific reports that have been changed, the wording has been changed. Can we get those? I think there was a request from the minority Ranking Member, and if we could get that, it would certainly help.

I think this kind of thing must stop. I have witnessed the Administration politicizing factual information and misleading the Americans. I will not be misled, and I would like the facts in front of me. The interpretation of the facts is what we need to hear and see because I think many of us are being misled. We cannot stand for.

I want to thank you very much and thank you, Mr. Chairman.

Mr. WAXMAN. Thank you, Ms. Watson.

2366 Mr. Sali?

Mr. SALI. Thank you, Mr. Chairman.

For Mr. Shindell, Mr. Shindell, every office that is represented by the membership on the dais up here has a vetting process for every statement that goes out of our offices. Of course, everyone would agree that that tends to be political in nature, and we want to make sure that the political discussion ends up with one voice that represents the top of the heap, if you will. I don't suppose that there is anybody on this dais that would think that is problematic. However, when we talk about this issue and the matters that go on in this hearing, we are going to be issuing similar statements.

Do you have any guidance for this Committee about how we might make that transition from science to politics to get the truth out to the people, recognizing that there will be dramatically different statements coming out of the various offices?

Mr. SHINDELL. Well, I think that the scientific community has managed to convey the general viewpoint or the mainstream viewpoint quite well in numerous venues already, and that has taken place when the President called for the National Academy to look at climate change after the last IPCC assessment report and later this week the next IPCC report will be issued. I think these are really authoritative reports.

It is really, in many ways, it is a wonderful thing. If you had a problem and you were able not just to get the advice of one or two people but to get the best experts in that particular area from all over the world to look at the evidence and really present what their best evaluation is, I think you would be very pleased. I think we as the public would be very lucky to have.

Mr. SALI. Would it be correct to say that the opinions coming out of the scientific community are uniform then with regard to climate change or global warming?

Mr. SHINDELL. Pardon?

Mr. SALI. With regard to climate change or global warming or whatever you want to call it, is it your contention then that the opinions within the scientific community are unanimous?

Mr. SHINDELL. Well, that would certainly depend on the particular details of which issue is being discussed, but in general there is never unanimity in science. It is a back and forth of ideas. Scientists, by nature, are skeptical, always doubting what everybody else is saying, and a consensus emerges over time.

Mr. SALI. So then is it your further contention that somehow the minority opinions aren't worthwhile in the discussion, that we ought to just disregard those?

Mr. SHINDELL. I don't think that those, that anybody's

views are disregarded as long as they go through the standard scientific process which is peer review. So papers and documentation must or claims of scientific nature must be validated, and they must be supported, and that support has to be evaluated by scientists.

Claims are submitted every once in a while. There are papers that come into the same journals that mainstream climate scientists publish in, and those are evaluated by scientists. The problem is that these claims don't pass muster. They don't have the scientific evidence to back them up, so they are not making into the debate because they are not judged to be, to have adequate support. So those that do get published are included in reports like the IPCC, the National Assessment, the Academy reports, anything that gets through the process is completely validated.

Mr. SALI. Okay, so I want to make sure I am getting this now. Are you saying that there is no disagreement among the scientific community regarding global warming or climate change, yes or no?

Mr. SHINDELL. There is no restraint?

Mr. SALI. That there is no disagreement.

Mr. SALI. Then are you saying that those in the minority view ought to be disregarded out of hand?

Mr. SHINDELL. I do not think that anybody's viewpoint needs to be disregarded, but I would say that when the vast majority of the community comes down on one side and there are remarkably few voices on the other side that are able to adequately back up the claims that they make, then I think the conclusion is pretty clear of where our best judgment of what is going on lies.

Mr. SALI. Correct me if I am wrong. Then you are saying that the real scientists all agree about global warming and climate change.

Mr. SHINDELL. No. I wouldn't disparage any scientists' claims based on their background or what they believed.

Somebody mentioned Richard Lindzen from MIT earlier. He is an eminent scientist, has done great work in the past. He is free to publish anything he likes as long as it gets through the same process that everybody else uses, and that process is the best way we have had for centuries now to really give science the rigorous evaluation it needs to determine which theories went out and which evidence is strong enough that we believe it is most likely to be true, and that has come down on the side of mainstream scientists.

Mr. WAXMAN. Thank you, Mr. Sali. Your time has expired. I want to call on Mr. Tierney. Thank you, Mr. Chairman.

Mr. TIERNEY. Mr. Shindell, I am impressed that you have taken the time personally to come here today. You are here,

I understand, on your own as a scientist, am I correct? You have no political agenda or do you?

Mr. SHINDELL. That is correct.

Mr. TIERNEY. That you are here as a scientist?

Mr. SHINDELL. Yes. Yes, I am here to testify about climate science and I can relate my personal experiences.

2473 That is all.

Mr. TIERNEY. Thank you.

Mr. Piltz, when Mr. Issa was questioning, there was some inference, I thought, that Mr. Cooney made edits and I think he was implying or at least asking whether or not there was another round of production on that, but we have documents that indicate, one note directly from Mr. Cooney saying that these changes must be made.

Then we have the EPA memorandum itself where the staff gives just three options to the administrator to choose. One is that you accept everything CEQ and OMB submit. The second option was you remove the climate section altogether. The third was that you go back and forth and try to reach some compromise which they decided would antagonize the White House and likely wouldn't be feasible to negotiate an agreeable text. So they opted for just taking the climate change out of the report.

Do you have a different recollection of that? Was there in fact any additional back and forth after Mr. Cooney made

his edits?

Mr. PILTZ. I wasn't involved in that EPA report, but analygously from my own experience with Climate Change Science Program reports, the reports would be drafted and reviewed and vetted and approved by a large number and layers of career science people and Federal science program managers. That is what I worked on. All of my stuff had to be approved before it could go forward. The White House would come in after that process and intervene, and it would never have to go back for clearance with the scientists.

As for the Academy, the Academy of Sciences reviewed the program's strategic plan and in general praised it but criticized it for the vanishing of the National Assessment of Climate Change Impacts, criticized it over and over again as a conspicuous and unwarranted omission. The Administration has stonewalled the Academy of Sciences since the Academy said that and has offered not defense, no response in its own defense.

Mr. TIERNEY. Thank you.

We have obtained, the Committee has obtained some documents, surprisingly enough. We have obtained email correspondence between NOAA and White House employees, and they indicate quite an involvement of the White House with the press contacts of NOAA scientists. I think they show a kind of political interference that we are talking about here

today, and it is not really the results of a couple of low level or over-zealous press officials but direct involvement by the White House. I want to go through just a couple of these emails if I could and then ask some of the panelists about it. All of these emails are from June of 2005.

The first email is from an environmental reporter. The reporter requests an interview with a NOAA scientist about how climate change science has become politicized.

The second email, the scientists responds that the reporter will need to ask the NOAA press corps.

In the third email, the NOAA press officer writes to the White House Council on Environmental Quality and says the press officer expressed concern that the reporter may fish for the answers she is looking for but knows that the NOAA scientist 'knows his boundaries.'' Then the press officer asks for the White House instructions by the end of the day.

The next email from the NOAA press officer states, if we have CEQ approval to go ahead, then that would be good.

In another email, the NOAA press officer reports that CEQ and the White House Office of Science and Technology Policy have given the green light for the interview. The press officer then states, the CEQ officials want me to monitor the call and report back when done.

So my question, Mr. Piltz and Mr. Shindell, are you surprised that the NOAA press officers were reporting back to

the White House about the content of press interviews with Government climate scientists and do you think it is appropriate for the White House to decide whether or not a Government scientist can speak to the press?

Mr. PILTZ. I am not surprised. I do not think it is appropriate. I don't think that when the press makes an inquiry to the Federal Climate Change Science Program, that everything should have to be routed to the NOAA press office which has been politically compromised by the Administration officials who are at the head of NOAA. We need a different, more unimpeded type of communication out of the Climate Change Science Program.

Mr. TIERNEY. Dr. Shindell, your comments?

Mr. SHINDELL. Well, Iam not terribly surprised either because it sounds very similar to what we were told at NASA was happening when we were inquiring as to why we were having so much difficulty communicating, that this was coming from the White House. So it sounds very similar, and I don't think it is appropriate.

Mr. TIERNEY. Dr. Pielke made a comment that the Office of Management and Budget looks at witness testimony for Administration policy consistency and would seem to say that was a reason why all of this was okay. Am I wrong to think that there has got to be some distinction between a policy and somebody's comment on science, their conclusions based on

2567 fact, Dr. Grifo?

2570

2571

2579

2580

2581

2582

2583

2584

2585

2586

2587

2588

2589

2590

2591

Mr. PIELKE. Well, let me correct an impression, if I gave it, that it was okay. It is not okay.

Mr. TIERNEY. Dr. Grifo is a ventriloquist. I am sorry. [Laughter.]

2572 Mr. TIERNEY. Go ahead, you can answer, but I had asked 2573 Dr. Grifo the question. Do you want to answer it? Do you 2574 want to go ahead?

2575 Mr. PIELKE. I am sorry. I thought you were talking to 2576 me.

2577 Mr. TIERNEY. No, but I will give you the chance if you 2578 want to have something to say on that.

Mr. PIELKE. No. Go ahead. My apologies.

Mr. TIERNEY. Okay, thank you. Dr. Grifo?

Ms. GRIFO. Thank you. I think that when you get that Ph.D., when you become a scientist, you do not give up your--I mean I think that. I know that. You don't give up your constitutional rights. You maintain your right as a citizen of free speech, and I think that is incredibly important that we remember that this is discussions about science.

I would like to say that the results that we found, our experience with this issue is really a small part of what Mr. Pielke is talking about. He is talking about a very interesting topic which is the role of science in public

policy, fascinating, but that is not what our program is really focusing on. We are looking at the science that is changed, that is manipulated, that is somehow touched in a way that alters it before it even gets into that public policy arena. What we are calling for is that scientists are allowed to speak about their scientific results and get that information out to the taxpayers that are paying for it, to the community at large, to policymakers, to everyone that needs to really understand this issue.

- Mr. TIERNEY. Is it a fair statement to--
- 2602 Mr. WAXMAN. Mr. Tierney?
- 2603 Mr. TIERNEY. Sorry?

- 2604 Mr. WAXMAN. Your time has expired.
- 2605 Mr. TIERNEY. Okay, thank you, Mr. Chairman.
- 2606 Mr. WAXMAN. Mr. Lynch?
- 2607 Mr. LYNCH. Well, thank you, Mr. Chairman.

Earlier in this hearing, there was the suggestion of bias on the part of the Union of Concerned Scientists because of a position that the organization may or may not have taken in 1968 on the Vietnam War. I hope I am not the only one in this hearing to point out the elephant in the room.

Perhaps it is just me, but we have a situation here where the Bush Administration chose as its Chief of Staff for the White House Council on Environmental Quality, a person who had led the oil industry's fight against limits on

2617 emissions of greenhouse gases. This is someone who worked for the American Petroleum Institute. So I scratch my head 2618 2619 to say why. Why would the Administration put someone who was 2620 so vehemently biased in an important role like this? Mr. Piltz, the analogy of the fox in the hen house is 2621 2622 not appropriate, I believe in this case. Mr. Piltz, in your 2623 responsibility in your official capacity prior to resigning 2624 in protest, you were responsible for editing a document 2625 called Our Changing Planet, is that correct? 2626 Mr. PILTZ. Yes, the annual report to Congress. 2627 Mr. LYNCH. Right, and just to clear something up, your 2628 role there was to take information from 90 scientists, the 2629 reports of those scientists, contributions made by them and 2630 put it in a forum that is usable by Congress. 2631 Mr. PILTZ. That is right and to then fact-check with 2632 them before it went forward. 2633 Mr. LYNCH. So these weren't your own opinions. 2634 Mr. PILTZ. No.

Mr. LYNCH. These were bonafide scientists with obviously scientific research to back up their opinions.

Mr. PILTZ. Yes.

2635

2636

2637

2638

2639

2640

2641

Mr. LYNCH. Now, what I would like to do is get on the record. You have talked generally about what was done by Mr. Cooney. It is my understanding that after he resigned, he went back to work for Exxon Mobile. That is the information

that I have from majority staff.

But I would like to talk about some specific instances of his editing and what that might have reflected. Can you give us a few specific examples of edits by Mr. Cooney to this report to Congress?

Mr. PILTZ. Yes, I can do that and you know. If I may just preface that for a moment by saying that I really have tried to emphasize what seems to me the illegitimacy of the whole process by which this happened rather than arguing particular edits, and in many cases these hundreds of edits would just change a word or two, but you know what happens when you change shall to may.

Mr. LYNCH. Right.

Mr. PILTZ. But there are other places where whole chunks of text are deleted. For example, there is one passage where it came to him saying, warming will also cause reductions in mountain glaciers and advance the timing of the melt of mountain snow packs in polar regions. In turn, runoff rates will change. Flood potential will be altered in ways that are currently well understood. There will be significant shifts in the seasonality of runoff that will have serious impacts on native populations that rely on fishing and hunting for their livelihood. These changes will be further complicated by shifts in precipitation regimes and a possible intensification and increased frequency of extreme

2667 hydrological events. 2668 That was deleted. 2669 Mr. LYNCH. Now did Mr. Cooney ever give a plausible 2670 reason why he would extract a warning of snow melt and 2671 degradation of glaciers which we are seeing now? Did he ever 2672 give a plausible reason why he would remove that warning to 2673 Congress? 2674 Mr. PILTZ. He called it speculative musing. 2675 Mr. LYNCH. Speculative musings. 2676 Mr. PILTZ. Speculative musing. 2677 Mr. LYNCH. Are there other documents or other instances 2678 you can point to that would help us? 2679 Mr. PILTZ. Yes, there was in another passage, the draft said, with continued perturbation of the earth's radiative 2680 2681 balance, climate model projects based on a range of possible 2682 scenarios such as a doubling of atmospheric carbon dioxide 2683 suggest that during the 21st Century, climate changes due to human influences will be substantially larger than what has 2684 2685 been identified up until now. 2686 Mr. LYNCH. Again, if I could just pause there. 2687 Mr. PILTZ. He said delete. He said delete. 2688 Mr. LYNCH. It sounds like you are saying that the amount 2689 of carbon and that measurement is very important. What was

his response to that assumption or that projection?

Mr. PILTZ. The models don't all give the same result, so

2690

2691

2692 it is inappropriate to speak in summary terms about this type 2693 of outcome.

Mr. LYNCH. Mr. Chairman, thank you very much.

Mr. PILTZ. I could go on but that sort of thing.

Mr. WAXMAN. Thank you, Mr. Lynch.

Mr. Higgins?

Mr. HIGGINS. Thank you, Mr. Chairman.

Mr. Piltz, I would like to ask you about the National Assessment on Potential Consequences of Climate Variability and Change. Your office was involve din putting this document together in 2001. You have described it 'as the most comprehensive and authoritative scientifically-based assessment of the potential consequences of climate change in the United States.''

In it, there are projections of potential temperature increases and the consequences those increases would have on our natural environment. This is obviously an important report. Why haven't we heard more about it?

Mr. PILTZ. Well, it was distributed to every member of Congress around the end of 2000, 2001, but very early on in 2001, about the same time that the Administration was pulling back from the Kyoto Protocol talks, we were directed by the White House Science Office to start deleting all references to the National Assessment, in the first instance to the annual report to Congress and then in the later in the

strategic plan for the Climate Change Science Program.

There were lawsuits filed, attempting to suppress the National Assessment and even remove the links to it from a Government web site, although it was a taxpayer-funded study, filed by the Competitive Enterprise Institute which is an Exxon Mobile-funded policy group. The lawsuits were dismissed, in one case with prejudice, but the Administration awarded the political victory to the litigants by back channel without much of a paper trail, instructing the Federal agencies just to stop using this report and going forward with any analogous activities.

I think it is because this process of putting of scientists in direct communication with policymakers and stakeholders, region by region, sector by sector, generated a type of dialogue that probably was going to lead to greater public pressure for taking the global warming problem seriously and doing something about it, and this was a type of discourse that the Administration just did not want to see happening, in my judgment.

Mr. HIGGINS. In this instance and others that you have referenced in your testimony, this is not isolated. This is systemic.

Mr. PILTZ. That is right. But I think that this is, I regard this as the central climate science scandal of the Bush Administration because it so pervasively shut down a

widespread process of intelligence gathering and national preparedness, and we now have six years without high level support for this type of process for linking science to society, and we are losing something because of that.

Mr. HIGGINS. Do you have any evidence that that policy, that attitude has changed?

Mr. PILTZ. No.

Mr. HIGGINS. Thank you.

Mr. WAXMAN. Thank you, Mr. Higgins.

Mr. Shays?

Mr. SHAYS. Thank you.

Mr. Piltz, I want to state from the start I believe there is a global climate change. I believe I would call it global warming. I don't get to exercise which term I use. I think it is manmade, and I think it stared us in the face for years. So I disagree with the position and policy of this Administration, but I find myself being a little defensive about whether we are talking about changes in scientific reports or disagreements over policy. I came here thinking I would be more inclined to say change in scientific reports, and as I listen, I find myself FE-I don't know if I am feeling defensive here for the Administration or just really saying let us be fair.

The bottom line is you are not a scientist, correct?

Mr. PILTZ. That is right. I am not a climate scientist.

2767 Mr. SHAYS. You are not a scientist.

- 2768 Mr. PILTZ. Right.
- 2769 Mr. SHAYS. Climate scientist or anything, you are not a 2770 scientist, correct?
- 2771 Mr. PILTZ. No. I try to communicate with and represent 2772 the scientists.
- 2773 Mr. SHAYS. Why did you even say you are not a climate 2774 scientist? That give the impression that you are a
- 2776 Mr. WAXMAN. He is a political scientist.

scientist. He is a political scientist.

- 2777 Mr. PILTZ. A social scientist by academic training, yes.
- 2778 Mr. SHAYS. I find myself being defensive because I feel 2779 like you are trying to give an impression that is a little
- 2780 false to me.

2775

- There are 90 reports, 80 reports, whatever. You took
 these reports and you synthesize. That is your term. It is
 editing. You take some of what they did and leave something
 out, correct?
- 2785 Mr. PILTZ. Well, yes, to try to clarify the 2786 communication, yes.
- 2787 Mr. SHAYS. You don't even have to clarify it.
- 2788 Mr. PILTZ. Yes.
- 2789 Mr. SHAYS. Because the bottom line is you want to use
 2790 the word, synthesize because that is a more comfortable word
 2791 for you to use than edit. The bottom line is you edit it.

You as a non-scientist took scientific reports and you edited them down to a position that you felt was respectful of what they did.

Mr. PILTZ. Yes.

Mr. SHAYS. And I understand that, but you are not a scientist and you edited it. The bottom line is you have come to the conclusion that when another non-scientist took this, he chose to say well, which report, which scientist you are listening and which aren't. Somebody who also wasn't a scientist said we don't want you to make this comment and this description. I think they were wrong. I think that they made a policy decision that ultimately may even be destructful. So I am not even going to argue about that.

I just don't like the fact that we are basically trying to give the impression that somehow you are a scientist and you came in and you described it all, and then this non-scientist disagreed with you. That is the feeling that I came with before this hearing. I respect you for your convictions. I respect you for even resigning if you think you weren't being treated fairly or positions were being distorted, but I still come down to the points I have just made.

Now what would you like to tell me?

Mr. PILTZ. Well, first of all, I worked with, collaborated with the scientists and had their sign-off.

was not at war with the mainstream science community. That
is one.

I did not write or edit the National Climate Assessment

I did not write or edit the National Climate Assessment.

If you look at the panel of eminent people who wrote it, it is a very impressive group of people. It is not junk science. It is stuff that should not be suppressed.

Mr. SHAYS. I understand that.

Mr. PILTZ. Okay. I don't know. Nobody was telling the scientists what they could publish in the technical journals. This was about communication, but it wasn't just policy. It was spinning the scientific, the state of knowledge, statements about science for political effect.

Mr. SHAYS. Let me ask you. Were there any scientific reports that you chose to not discuss because they were in conflict with a majority of the position? Was there any scientific--

Mr. PILTZ. Normally, I worked- FE

Mr. SHAYS. Let me ask the question and be very clear.

Was there any scientific data that you looked at that you did

not include because it wasn't with the mainstream?

Mr. PILTZ. I don't think so. I worked with what was passed forward to me by the career science people.

Mr. SHAYS. Well, that is important. You are saying that all the scientific data that was provided you, you included and didn't leave any out.

Mr. PILTZ. Generally speaking, there was editing for length, but if you look at the reports that I worked on, it is generally speaking, non-controversial material. It is pretty straight forward, descriptions of research highlights and program plans and so forth.

Mr. SHAYS. My time has come to an end, but I just want to be clear on this thing. Were you selective in the scientific comments that you provided? Did you make any decision to include this scientific data and not this scientific data? That is really what I am asking.

Mr. PILTZ. Yes, I engaged in some editorial selection, as I say, but everything I did was in collaboration with the scientists, was reviewed, revised, edited and approved by the career science people before it could go forward.

Mr. SHAYS. Okay, thank you.

Mr. WAXMAN. Thank you, Mr. Shays.

Ms. McCollum?

Ms. MCCOLLUM. Thank you, Mr. Chair.

I was really surprised just how widespread this problem was. Last week, my office had an opportunity to speak with a climate scientist who is now working in Minnesota, formerly employed by the Federal agency and she saw the suppression of climate change research firsthand. In her words, 'We were told the answers to our analysis before we conducted our research.''

I remember from my science classes, going through scientific discovery, that you set up the hypothesis and then you proved it right or wrong, not the other way.

Mr. Shindell, can I ask you for some help? The Committee staff reviewed some CEQ offices that they looked at some documentation. In one of the documents, CEQ Chief of Staff Phil Cooney informs Kevin O'Donovan who is in the Executive Office of the President that they will start to use a recent paper by Willie Soon and Sally Baliunas to rebut the views of the National Academy of Sciences Intergovernmental Panel on Climate Change. Now, apparently, this Soon-Baliunas paper asserts that the 20th Century is probably not the warmest climate period of the last millennium. Are you familiar with this paper?

I might be saying the one person's name wrong too. You might want to correct that for the record.

Mr. SHINDELL. Yes, I am familiar with that.

Ms. MCCOLLUM. Now I served on the Education Committee, and one of the things that the President and the Administration was very focused on was that teachers would teach to the subject that they were trained in. Can you tell us about this paper?

My understanding is that using this paper to rebut the National Academy and the IPC, maybe these weren't the best scientists to do that.

Mr. SHINDELL. This was an interesting paper, and I think it demonstrates the point that came up in one of the other member's questioning about what is allowed. Really, whatever stands up to scientific scrutiny is allowed, and it is not dependent on the views of the scientist.

So Soon and Baliunas are both astronomers. They are not climate scientists, but that is okay, as long as their work stands up. Basically, what that paper was, there is no original research. It is instead a survey of other climate scientists' work where they basically took all of the uncertainties and caveats, things that were not included in the studies, compiled them and said that then, given that there were so many uncertainties and things that were not fully understood, we could not say much of anything about climate change. However, that is in complete contrast to the views of nearly every expert in climate science.

So I think that that is not at all representative, and I would not say that one alternative paper undermines the thousands of papers that go into a document like the IPCC report.

Ms. MCCOLLUM. They are scientists. They are entitled to their own opinion, but this is not their field of expertise, climate change.

Mr. SHINDELL. That is correct.

Ms. MCCOLLUM. It is my understanding that the paper led

to a lot of controversy. Press reports indicated that the study was funded by the oil industry and that the editor in chief of the journal resigned when the owners of the journal refused to allow him to publish an editorial saying that the paper in fact was flawed. Is that your understanding?

Mr. SHINDELL. Yes, I believe that is correct.

Ms. MCCOLLUM. One of the more troubling aspects of this document seems to be that it reflects on what amount of strategy decision that the White House had in part, in fact, that the White House was going to use this study to rebut the prevailing scientific reviews. Do you find this troubling to you as a scientist to have a person who is a scientist but in a totally different field, not an expert in what you are working on, be given the same weight and credibility in rebutting what you are saying rather than a peer in the same field of science?

Mr. SHINDELL. I do find that quite troubling. I used the analogy in my testimony of a patient having to trust their doctor, and this would be tantamount to you having a heart condition and getting repots from heart experts all over the world, giving you their best opinion of all the medical data, and then somebody coming on and saying, why don't you look at what these skin doctors have to say. They are a couple of people, you know. I think let us throw out this assessment by all the world's experts and let us take

2942 this one instead.

I think it would be very foolish for anybody to do such a thing.

Ms. MCCOLLUM. I thank you for that.

I am very concerned in looking on page 21 of the document, Atmospheric Pressure. To quote here on page 21:
''I have perceived in others or personally experienced changes and edits during the review that changed the meaning--that changed the meaning--of scientific findings.''

Further on the page, it says, ''Statements by officials at my agency that misrepresented FE-misrepresented FE-a scientist's finding.''

I can look at the color of your blue tie, sir, and I can say it is robin's egg blue or I can say it is baby blue. But a scientist could look at that tie and tell me exactly what color it is by science, and that is indisputable. The other two items are my opinion, but the other one is science.

I thank you so much, Mr. Shindell. What would you say about the credibility?

Mr. WAXMAN. The gentlelady's time has expired.

Mr. SHINDELL. I would just say that that is an interesting counterpoint to some of the cases that were raised before where there were synthesis documents. The cases where there was interference at my agency were specific scientific reports. There was no policy involved. They were

simply this is the result of a particular set of observations for a particular modeling study, and those were nevertheless edited when they showed the dangers of climate change.

Ms. MCCOLLUM. Thank you, Mr. Chair.

Mr. WAXMAN. Thank you.

Mr. Sarbanes?

Mr. SARBANES. Thank you, Mr. Chairman.

I have just a couple of questions that are inter-related. The first is, and this may sound a little naive but what I am trying to get to is your understanding. Mr. Piltz, I think you are in the best position to address this, your understanding of what was motivating inside the CEQ, inside the White House.

I guess the range of options could include that you had a small handful of people that had sort of been given license within this office to exercise their own personal ideological political perspective and that is what they were doing and/or they were responding, and this would be sinister, to pressure from external influences and/or that they were carrying out a fairly specific and focused policy agenda coming even from higher levels. Based on your observation of this conduct that was occurring in the CEQ, can you speak to that at all?

Mr. PILTZ. Well, I wasn't in the room with them while that was being worked out, so I have to analyze it from a

step back, but as a political scientist, I would say that

there are elements of all three of those to explain this.

I think the Administration came in with predetermined political agenda on greenhouse gas emissions and the global warming problem that it was not going to support a regulatory policy. The willingness to allow political operatives to engage in misrepresenting the intelligence on the science side, the spinning of the politics back into the science communication is a problem. I think that they were representing particular stakeholder interests, political, particularly in conjunction with political allies. Also, it just seemed to me that they brought with them some kind of animus toward proactive government problem-solving and preparedness to deal with consequences of decisions or not making decisions and have left us in this position.

So somehow this global, the way the global warming issue has been handled is somehow indicative to me of a modus operandi that we have seen across a range of issues, and this is the global warming piece of it.

Mr. SARBANES. Right.

Mr. PILTZ. Did that make any sense.

Mr. SARBANES. It does. I think you are saying it is symptomatic of an attitude that cut across other ways that the Administration has handled things.

Let me ask you this. I am trying understand the purpose of a retrospective like this, I think is to inform what goes

forward. I am struggling to understand for myself the point at which one can say that the scientific inquiry for the moment is concluded. I understand this is ongoing and it changes every day but where you feel comfortable as a scientific community coming forward and saying this is what we know and it has reached the point where the political aspect of it ought to be kept at bay because people will say, well, we are just trying to bring more balance, we are just trying to complete the picture.

So is it at the point where the National Academy of Sciences, for example, says there is a strong, almost unprecedented consensus on this issue, that one can feel comfortable that this represents good science and we ought to accept it as such? Where is that line?

Mr. PILTZ. You can't. You can't try to make the science community say that they are absolutely certain about something. When they say something is very likely, you ought to take it seriously. The science community has a lot of integrity and owning up to their own uncertainties and they are always asking the next question, but you always make your policy decisions in the face of some uncertainty about the implications. What happens is people with political agendas come in, who have a predatory relationship to that uncertainty language and they use it for reason in a way that is different from the way the scientific community uses it.

So you know you will not get them to say we are 100 percent certain.

I always cringe when somebody says the science is in. It is time for action.

I mean we have a National research program that is our basic intelligence capability for understanding what we are doing to Planet Earth. That needs to be supported. It has always had strong bipartisan support regardless of political debates about the policy implications, and that scientific research needs to go on. But while it is addressing whatever questions need to be addressed, policymaking has to proceed in tandem with that, not at the end of some science process. The two have an ongoing interplay.

Mr. SARBANES. That is a powerful phrase, predatory relationship to the uncertainty of the science. I will use that if you give me permission.

Thank you very much.

Mr. WAXMAN. Thank you, Mr. Sarbanes.

Mr. Welch?

Mr. WELCH. Thank you, Mr. Chairman.

Dr. Pielke, I noticed in your written testimony, you made a claim that the memo that was prepared by the Committee staff for this hearing is 'exactly the same sort of thing that we have seen with heavy-handed Bush Administration information strategies,' and I take the charge that you make

very seriously. You are, if I understand it, essentially accusing the Committee of the conduct that it is investigating.

You took specific offense with the memo's discussion of the state of science regarding the connections between global warming and hurricanes, where the memo notes, recently published studies have suggested that the impacts of global warming include increases in the intensity of hurricanes and tropical storms.

So, taking this seriously, we asked the Committee staff to contact these leading researchers to follow up to see if there is anything we should be concerned with in that memo. Dr. Judith Curry, as you know, a leading researcher, told us that all the research scientists working in the area of hurricanes agree that average hurricane intensity will increase with increasing tropical sea surface temperature. Theory, models, observations all support this increase. She tells us that the recent research indicates an impact of global warming is more intense hurricanes. The current debate and lack of consensus is about the magnitude, she says, of the increased intensity, not its existence.

Dr. Michael Mann, also a prominent researcher, tells us that in his view, you have misinterpreted the WMO report in arguing that it somehow contradicts information provided in the scientific background of the hearing memo that you had a

chance to review. He says, the current state of play with the science on this is accurately summarized in the hearing memo.

Now, given all the testimony that we have received today, I am wondering whether you stand by your statement which is essentially a challenge to the memo of this Committee. We have heard evidence of hundreds of incidents of political interference. We have heard very direct testimony from some of the people here and others that the White House did edit documents to introduce doubt where essentially no doubt existed. We have heard scientists' contacts with the press were in fact being monitored by the White House.

In light of today's testimony and the information provided to the Committee by Drs. Curry and Mann, is it still your belief that the Committee's hearing memo is, to quote you, 'exactly the same sort of thing' the Bush Administration has done?

Mr. PIELKE. I thank you for the opportunity to clarify, and I did say the word, in microcosm. This is, I think, and I will stand by exactly what I said, and I am happy to talk about the science and impacts of hurricanes as long as you would like because it is an area I have been researching for about 15 years. The memo includes the statement, recently published studies have suggested that the impacts of global

warming include increases, and it cites three papers that look retrospectively back in time. So it is not talking about projections in the future. So the statement by Dr. Judy Curry who is a great scientist, who I have a lot of respect for, isn't on point here.

I want to make a point that I hope everyone recognizes. The same dynamic that we just saw, talking about the Soon-Baliunas paper as the one outlier contradicting the consensus. We see this on the exact other side. Now there was 120 scientists that includes Kerry Emmanuel and Greg Holland who were co-authors of those three papers cited here, came up with a consensus statement on hurricanes and climate change. That is analogous to the IPCC. Subsequently, the American Meteorological Society has endorsed that statement.

Now I am not a climate scientist and just like I accept the consensus of the IPCC, I am compelled to accept the consensus of the hurricane community. Now it is very easy to pick out a Soon and Baliunas paper or selectively email a scientist and say, what is your view?

I respect Dr. Mann and Dr. Curry have their views about what the statement says, but I am absolutely 100 percent certain that the statement that is in your background memo does not faithfully represent the science. It selects among the science perspectives, and that is inevitable, and we have to recognize that, and no one is immune from it. It doesn't

not excuse the Bush Administration from their actions, of course, but let us not pretend that somehow we can separate 3143 3144 out scientific truth from political preferences. The reality 3145 is they are always going to be intermixed. 3146 Mr. WELCH. The memo, the Committee memo, states very 3147 specifically that the evidence suggests that link. Mr. PIELKE. That is true. 3148 3149 Mr. WELCH. The evidence is there. 3150 Mr. PIELKE. Yes, it is there. 3151 Mr. WELCH. You are now taking the leap to suggest that 3152 the Committee memo is similar to the conduct of interfering 3153 with scientific debate that we have heard testimony about 3154 from these scientists. 3155 Mr. PIELKE. In microcosm. In microcosm, it shows how 3156 easy and simple it is to selectively report scientific 3157 information to favor a particular agenda, absolutely. 3158 statement in there is accurate. It is just like what we have 3159 heard about some of the changes. The statement that Mr. 3160 Cooney made, some them were judged to be accurate but 3161 misleading. This is exactly the same sort of thing. 3162 Mr. WELCH. Thank you very much. 3163 I wonder, Dr. Grifo, if you could respond if you have 3164 any different point of view than Dr. Pielke. 3165 Ms. GRIFO. I would just respond by saying that, you

know, peer review is the gold standard and that this is

3166

3167 something that, you know, science will resolve. Ultimately, 3168 you know, as the scientific process continues to study 3169 hurricane intensity and what that means and what it doesn't 3170 mean, you know, we still have all these other lines of 3171 evidence that really point us in the direction that we have 3172 all been talking about here today which is that this is a 3173 huge and serious problem and we need to get on it. 3174 Mr. WAXMAN. Mr. Welch, will you yield to me? 3175 Mr. WELCH. I yield to the Chairman, yes. Thank you. 3176 Mr. WAXMAN. Doctor, you are a doctor, but you are not a 3177 scientist. You are a political scientist. 3178 Mr. PIELKE. I am a political scientist. That is 3179 accurate. 3180 Mr. WAXMAN. And you said you are absolutely certain that 3181 you are right on this issue and that Dr. Curry and Dr. Mann 3182 are wrong in their statement. Isn't that quite a statement 3183 for you to make? No scientist here has been willing to make 3184 any statement that there is absolute certainty because the process of science continues to evaluate things. 3185 3186

Dr. Shindell, you are familiar with Dr. Curry and Dr. Mann, is that correct? Dr. Shindell, are you familiar with those two?

Mr. SHINDELL. Yes.

3187

3188

3189

3190 Mr. WAXMAN. Are they somewhat isolated in the field with 3191 their own theories at odds with the majority of scientists?

3192 Mr. SHINDELL. No. They are quite within the mainstream. 3193 Mr. WAXMAN. In fact, isn't Dr. Mann one of the leading 3194 scientists in global warming issues? 3195 Mr. SHINDELL. Yes. Yes, he is. 3196 Mr. WAXMAN. And Dr. Curry as well? 3197 Mr. SHINDELL. Yes. 3198 Mr. WAXMAN. So I am just wondering whether we should 3199 believe them or the certainty of Dr. Pielke that they are 3200 wrong. 3201 Mr. PIELKE. May I clarify, Mr. Waxman? 3202 Mr. WAXMAN. Yes, please. 3203 Mr. PIELKE. My certainty is as to what the WMO hurricane 3204 consensus says. Let me say I have led two inter-disciplinary 3205 papers including climate scientists, peer-reviewed, reviewing 3206 the science of hurricanes and climate change that were 3207 published in the Bulletin of the American Meteorological 3208 Society in 2005 and 2006, and the summary that is in those 3209 papers has stood up to the WMO and AMS consensus points. 3210 it is fair to say your background means that you can't speak 3211 on this topic and so on, but do recognize that scholars today 3212 work on inter-disciplinary teams and there is literature that 3213 Dr. Shindell would accept as being in the mainstream 3214 peer-reviewed journals. 3215 Mr. WAXMAN. I don't dispute your ability to study the

field and make comments on it except when we say that

3216

evidence suggests something which seems to be backed by Dr.

Mann and Dr. Curry for you to say they are wrong. We didn't
reach the conclusion. We said evidence suggests this.

Mr. PIELKE. Let me clarify again. I did not say that they are wrong. I said that their views are not consistent with the mainstream consensus in the community. I am 100 percent sure of that statement.

Mr. WAXMAN. Do you know whether that is true, Dr. Shindell, on that?

Mr. SHINDELL. I believe that their views are consistent with the mainstream consensus, and I think that we are having a slight semantic argument over what the mainstream consensus is. Is it that hurricanes have increased in severity in the past? Will they increase in the future? I think it is an interesting issue, this one, because unlike some of the other aspects of global warming that are better understood, there is some legitimate controversy, and so it can lead to these kinds of discussions.

But one of the interesting things about uncertainty, there is two points. One is that scientists are very open about the uncertainty and that is what leads to these kinds of statements saying yes, we don't know everything about it.

Another is that while we have been looking at model projections to inform us about the kind of world we are likely to live in, when you look at these studies of

3242 hurricanes, they are suggesting that maybe the models are drastically under-predicting what is likely to happen. 3243 3244 studies that are referred to in your statement from this 3245 Committee are showing much, much stronger increases than 3246 anybody's model guess. 3247 So, yes, there is uncertainty, but that cuts both ways. 3248 It might mean we don't understand everything, and so it could 3249 be better. It might also mean that things might end up far 3250 worse than what we are saying they are likely to be. 3251 Mr. WAXMAN. Thank you. 3252 Mr. Welch, do you want to conclude your questioning? 3253 Mr. WELCH. I will just finish by going back to Dr. 3254 Pielke. 3255 What I understand is you are acknowledging that the 3256 Committee memo does cite mainstream science, correct? 3257 Mr. PIELKE. Absolutely, it does. 3258 Mr. WELCH. What I want to know, after we have been through this, is this, are you standing by your position that 3259 3260 this memo that cites mainstream science is exactly the same 3261 kind of conduct as what we have heard occurred in the Bush 3262 Administration where there was direct interference with 3263 independent conclusions reached by scientists following the 3264 scientific method? 3265 Mr. PIELKE. I will repeat exactly what I said in my written testimony. In microcosm, this shows how in political 3266

settings, which the preparation of Government reports is, how easy, enticing it is to selectively present scientific results to buttress a political perspective.

Mr. WELCH. Would you say there is a difference between citing mainstream science in a public memo as opposed to altering science as presented to a PR person?

Mr. PIELKE. Not much difference, no.

Mr. WAXMAN. The gentleman's time has expired.

Mr. Yarmuth?

Mr. WELCH. Thank you.

Mr. YARMUTH. Thank you, Mr. Chairman.

I would stipulate for the record that I am not a scientist either, but I am journalist by background and an editor, so I would like to pursue a line of questioning that Mr. Shays had with Mr. Piltz.

When I was editing stories, I basically looked for two things. One was whether the message was communicated clearly and secondly whether claims made in the article or the document were backed up by any evidence. If I saw something that I suspected might have been speculative musing or something of that nature, I would have gone to the author and asked the author to show me the documentation or the supporting or the interviews or whatever sources he or she might have had for writing that.

I am taking it from this discussion that Mr. Cooney made

no particular effort to determine whether in fact there was 3292 3293 something substantive behind the portions of those reports 3294 that he excised. 3295 Mr. PILTZ. That is correct. 3296 Mr. YARMUTH. So, essentially, what he did was interpose judgment for the scientists who wrote the report. 3297 3298 Mr. PILTZ. For the career science people, yes. 3299 Mr. YARMUTH. Dr. Grifo, you have a report coming out 3300 today, and it includes some extensive interviews with about 40 Government global warming scientists. I would like to 3301 3302 focus on one. Dr. Pieter Tans, who was the Chief Scientist 3303 for NOAA's Global Monitoring Division, was asked back in 3304 October of 2004 to do a press conference with the BBC or an 3305 interview with the BBC. That was a month before the Presidential election. How long did it take for Dr. Tans to 3306 3307 receive approval to give that interview? 3308 Ms. GRIFO. The interviews were not approved until February of 2005. 3309

Mr. YARMUTH. 2005, so it took four months to approve the interviews.

Ms. GRIFO. Well, that was the approval. They didn't actually take place until even a month after that.

3310

3311

3312

3313

3314

3315

3316

Mr. YARMUTH. Is that a normal cycle for approval of an interview from a media outlet? My experience would say that would be an extraordinarily long period of time.

3317 Ms. GRIFO. That would be consistent with my experience, 3318 yes. 3319 Mr. YARMUTH. Just in terms of other interviews hat scientists might have given, and any of you can answer, would 3320 it take four months for even a Government agency scientist to 3321 3322 agree to do an interview or turn down an interview? 3323 Ms. GRIFO. To me or to them? 3324 Mr. YARMUTH. Whomever. 3325 Mr. SHINDELL. We had cases at NASA where a request would 3326 come in, say from CNN, to talk about the latest global 3327 temperature changes. Our public affairs officer would relay 3328 that to us and by the time we got back, they would say 3329 headquarters has already told them that nobody is available and there will not be such an interview. So those things did 3330 3331 happen. 3332 Mr. YARMUTH. Was there- FE oh, I am sorry. 3333 Ms. GRIFO. I just was letting him go first. Can I just 3334 hop in, back in? 3335 Mr. YARMUTH. Sure. 3336 Ms. GRIFO. I mean our report indicates a large number of 3337 those instances happening. I mean there is a number that are 3338 described, anonymous scientists from NOAA, Christopher Milly, 3339 Dr. Shindell's case, Richard Weatherall. There are many of these that have been documented, so it is not an isolated 3340 incident. 3341

3342 Mr. YARMUTH. Were there conditions placed on the approval of the interview with Dr. Tans? 3343 3344 Ms. GRIFO. Just there was a minder. There was a public 3345 affairs officer, and in fact he flew across the Country and even to Mauna Loa, Hawaii in order to be there for those 3346 3347 interviews. 3348 Mr. YARMUTH. Did he serve any useful purpose as far as 3349 you can tell? Is that standard operating procedure when a scientist is interviewed? 3350 3351 Ms. GRIFO. I think what is important here is that 3352 scientists coordinate with the agency, that they let the 3353 agency know an interview is taking place and that they report 3354 back on this interview after the interview has taken place. 3355 That is what the critical role and the relationship should be 3356 between a scientist and a public affairs officer. 3357 Mr. YARMUTH. Basically, the taxpayers paid to send 3358 someone along over the global to just watch Peter Tans give 3359 an interview. 3360 Ms. GRIFO. Yes, sir, they did. Mr. YARMUTH. That is all I have. I yield back, Mr. 3361 3362 Chairman. 3363 Mr. WAXMAN. Thank you very much, Mr. Yarmuth. 3364 Mr. Issa? 3365 Mr. ISSA. Thank you, Mr. Chairman.

Mr. WAXMAN. You are recognized for second round.

3366

Mr. ISSA. Thank you and thank you so much for calling
this hearing. As I mentioned as a sidebar, this is at least
two great hearings wrapped into one, perhaps three. I will
try to get through just a couple more points.

Mr. Piltz, my understanding is that you were a strong
supporter, remain a strong supporter of the 2000 National

Mr. PILTZ. Yes.

Assessment on Climate Change.

Mr. ISSA. Both you and Dr. Pielke, I am sure are familiar with James Hansen.

Mr. PILTZ. Yes.

Mr. ISSA. Also, well-respected, and my understanding is he vehemently disagreed with the assessments, felt that the models were flawed, leading to overly pessimistic views and said so in a number of writings. Is that roughly correct?

Mr. PILTZ. I am not aware of Dr. Hansen's specific comments on the National Assessment, but I think that every scientist had an individual opinion about how he might have done it better.

Mr. ISSA. Dr. Pielke, are you familiar with that?
Mr. PIELKE. I am not familiar with that.

Mr. ISSA. I will quote him briefly. He said, 'The predicted 1 percent per year or 2 to 3 full 21st Century increases in CO2 assumed in the study may be pessimistic.''

Then he goes on and does a little more than may, but it was

interesting that he used may, something that sometimes people object to. That study turned into a lawsuit and the Government, this Clinton Administration assessment which you support, which James Hansen had doubts about, in fact, turned out by an admission of the Administration to be flawed and is no longer in widespread use.

In a nutshell, you end up with you can have the Government do work. The science can have problems in the model. It can be questioned by a minority of the science community. It can go through, in this case, a lawsuit, and an Administration can recognize that in fact some of the assumptions or models were flawed and therefore overly pessimistic. That is the assessment I find on that, but I want to continue on to Mr. Piltz a little bit because certainly Mr. Cooney deserves -

Mr. PILTZ. If I could respond to that, it would be FE Mr. ISSA. We will.

He deserves to be considered as to whether his edits were proper or not. In your resignation letter from June 1st, 2005, you did a fairly extensive memo, and I appreciate that, but one of the things you said on page 11, speaking of Mr. Cooney's edits, most of the more problematic CEQ comments were not adopted. Some were and the damage to the document was significantly limited.

Now earlier I asked you about whether or not there was

further review. If I read this correctly and your own statements, what we really have is we have an editor editing your edit and then his edits being further edited, and each of you, I am sure, like the pride of an author, would say I didn't like his edits.

I will mention for the record that I once had dinner with Francis Ford Coppola, and it took the entire dinner for him to tell me how rotten a job they did screwing up his great work on the Godfather series and each of them would have been better if they had just left it alone. You don't even want to get into his idea of colorization of old films.

I think the point is we are having an argument over edit, edit, edit when in fact science is, by definition, not perfect or infallible, and certainly the 2000 National Assessment proves that you can have bad assumptions even in a Government document.

Back to Dr. Grifo--thank you--your study, this 19
percent response rate, doesn't it fly in the face of OMB's
own requirement for an 80 percent response in fact to have a
study be considered to be reasonable survey results? I will
just note that a study done at the request of the Urban
Institute and the United Way in June of 2003 for non-profits
found in fact that low rate of return raises concerns about
potentially serious, non-responsive bias. Claims from a
survey project with low return rates are frequently viewed

with skepticism and even rejected by the scholarly community.

Isn't it fair to say that your organization, notwithstanding the question of the Vietnam War, if you will, that is a little old history, but your organization which released a major study just today, that had been embargoed, that reaches a strong position on global warming is in fact an advocacy group, and moreover the Pew Charitable Trust, which I respect a great deal, gave you \$1 million to promote getting the Nation's commitment to energy efficiency and renewable energy as a corner store policy?

Isn't fair to say that your organization is in fact an advocacy group and that when we are sitting here today, what we are seeing is several advocates of positions against a question of whether the Administration has a right to balance that advocacy?

Mr. WAXMAN. The gentleman's time has expired. I want to give Dr. Grifo a chance to respond and Mr. Piltz a chance to respond as well.

Ms. GRIFO. Thank you very much. Yes, sir, we are advocates for good science. That is what we are advocates for, for getting that information out into the public realm. Furthermore, I would say that all those other surveys that you have mentioned did not have the primary consideration that we did which was protecting the anonymity of the scientists that we surveyed. That was paramount to us. That

was absolutely incredibly important because of the chilling effect that we are all here to discuss. /Mr. Piltz, you seem to want to respond to Mr. Issa's question.

Mr. PILTZ. Well, first of all, on the National Assessment briefly, it was not a Clinton report. It was prepared by an independent panel of eminent scientists and handed to the Government without any Government vetting.

The Bush Administration has never said anything about to criticize the National Assessment, never given any intellectual or scientific rationale for what, if anything, is wrong with the. They just deep-sixed it.

The National Academy of Sciences has praised it as a seminal, important, credible, exemplary study. That is the bottom line on that.

As for Mr. Cooney's edits, in one report in the final technical review draft of the Climate Change Program's Strategic Plan, at the twelfth hour, he came in and proposed more than 400 text edits in the document that in the aggregate would have pervasively changed the tone of the document to manufacture an enhanced sense of uncertainty. It caused so much consternation on the inside that there was a pushback from the director of the Climate Change Science Program, and a solution was negotiated at the political level that a lot of these edits would not be taken. However, the banishing of the National Assessment remained.

3492 Mr. WAXMAN. Thank you. 3493 Mr. ISSA. Mr. Chairman, I would ask unanimous consent to submit for the record the proof that the Clinton 3494 3495 Administration did in fact settle and that the 2000 3496 assessment has been disregarded as the result of flaws. 3497 Mr. PILTZ. The Bush Administration settled. 3498 Mr. WAXMAN. You want to submit? 3499 I will submit it for the record. Mr. ISSA. 3500 Mr. WAXMAN. You will submit some documents for the 3501 record? Mr. ISSA. I will submit the documentation. I do believe 3502 it is the Clinton Administration. I will submit it for the 3503 3504 record. 3505 Mr. WAXMAN. We will be pleased to receive whatever 3506 documents you wish to submit for the record. 3507 Mr. ISSA. Thank you. 3508 Mr. WAXMAN. Then we will make our own judgment whether 3509 it proves something or not. Thank you. 3510 Mr. Lynch? 3511 Mr. LYNCH. Thank you, Mr. Chairman. 3512 Dr. Shindell, I just wanted to go over another specific example of political interference. Now you have been at 3513 NASA's Goddard Institute for Space Studies for 12 years, is 3514 3515 that correct? 3516 Mr. SHINDELL. Yes.

3517 Mr. LYNCH. You were there in the later nineties. 3518 Mr. SHINDELL. That is correct. 3519 Mr. LYNCH. When you completed important studies in the late nineties, did you submit press releases for 3520 3521 distribution? 3522 Mr. SHINDELL. Yes, I did many times. Mr. LYNCH. Did you have any problems such as has been 3523 described here earlier in the hearing, any problems in terms 3524 3525 of editing of those press releases? 3526 Mr. SHINDELL. On the contrary, I found the comments from 3527 headquarters and the press corps to be helpful in clarifying 3528 the results. 3529 Mr. LYNCH. In September of 2004, you submitted a press 3530 release to announce the findings of your new study on 3531 Antarctica. You suggested a title for the press release, and 3532 I will quote it here: ''Cool Antarctica May Warm Rapidly This 3533 Century, Study Finds.'' 3534 First of all, can I ask you, was this a significant 3535 study? 3536 Mr. SHINDELL. Well, as I mentioned in my oral testimony, I thought it was significant, both because this was an 3537 unexplained feature of the world's temperature trends, why 3538 Antarctica was going the other way from the rest of the 3539 3540 planet, and it is an area we worry about quite a lot for 3541 possibility of contributing to sea level rise as the ice

sheets melt. So in that yes, it was.

Mr. LYNCH. Now, can I ask you, was your press release accepted?

Mr. SHINDELL. No. It was delayed several times and then came back altered, and the title that we had, as you mentioned that we had suggested was especially objected to. So we worked for some time on that and came up with another title which we thought might be more palatable which was NASA Scientists Expect Temperature Flip-Flop in the Antarctic. That, too, was rejected.

After more complaints and questions as to who was editing these things without ever getting a direct response, word came back from above that the title should be Scientists Study Antarctic Climate Change, with no possibility of revision. So, as you might imagine, that doesn't really attract the attention of most people. The public, you as members of Congress are not out there reading geophysical research letters. If a study says we look at climate change in Antarctica, it drew very little media interest. It didn't get out into the public debate, and I think that is harmful to informing the public debate about global warming.

Mr. LYNCH. Right, I just want to go back again. The phrase, rapid warming, was deleted.

Mr. SHINDELL. Yes.

Mr. LYNCH. Instead, it just indicates Scientists Predict

Antarctic Climate Changes, a rather neutral, rather vague title. Were you uncomfortable with that title?

Mr. SHINDELL. I was not comfortable with that. I thought it was so watered down that it would be of little interest to anybody after all the time and effort we went to, to make this release and communicate the results that that would do a very poor job of doing so. But when I objected, there was no response, and I was told that it had to be that title. Indeed, there was little media reporting.

Mr. LYNCH. Let me ask you quickly. Press interviews, what was the procedure under the Clinton Administration in the late nineties for press interviews?

Mr. SHINDELL. The public affairs office worked to facilitate our contacts with the media, and when inquiries came into public affairs, they would simply relay them to us and say, do you have a chance to talk to this person? Go ahead. Contact them.

Mr. LYNCH. What was the most recent process under the Bush Administration?

Mr. SHINDELL. In the fall of 2004, that was when there was imposed this rule that press officers or minders, if you will, had to be present supposedly for our benefit to protect us from being misquoted, although there was no feeling within the agency that this was actually a problem.

Mr. LYNCH. Okay, I will yield back.

Mr. SHINDELL. Instead, it had a chilling effect.

Mr. LYNCH. Thank you.

3594 Mr. WAXMAN. The gentleman's time has expired.

Mr. Murphy?

Mr. MURPHY. Thank you, Mr. Chairman.

I just had a few questions for Dr. Grifo.

We have been talking today obviously about the very unique question of global warming and the impact of political decisions made in Washington upon scientific opinion, but I think we might be remiss in leaving this hearing if we didn't admit that there is a creep of political influence into other areas of this Administration as well.

We certainly understand the long term ramifications of global warming on the health of our Nation, but there are more potentially immediate consequences of the political decisions made within this Administration when it comes to the Food and Drug Administration. I understand that the Union of Concerned Scientists have done some work into surveying the opinions of those working in and around the Food and Drug Administration, and I might just ask you a few questions about some of your work there to maybe educate our panel and Congress on some of the ancillary implications beyond the subject of global warming.

When you did this survey of FDA scientists, it would be interesting to know if you heard from any of those scientists

whether they were asked for non-scientific reasons to inappropriately exclude or alter any technical information or conclusions in any of the documents that the FDA was providing to Congress or to other agencies. Did you get a sense from FDA scientists whether they were asked, in essence, to censure the information they provided for those documents?

Ms. GRIFO. Yes, sir, and in answer to the actual survey instrument that was mailed to them anonymously again with an anonymous return, and I would also say that the FDA scientists came back to us with 69 pages of essays, 69 pages of their own words, irrespective of the questions we asked. Their hearts have really been poured out into that document, and that is on our web site, and we can make that available.

But I would say that, you know, 145 FDA scientists had been asked to alter info or conclusions for non-scientific reasons, and I think even more frightening is that 461 of them knew of cases where commercial interests had inappropriately intruded into that process. These are the decisions that profoundly and very directly affect our health and the health of our children.

I would just add that I had a personal experience with Ketek, a drug that really never should have come onto the market and because of the manipulation of the science, did. In fact, this was a drug that caused profound liver failure

and was prescribed to my son for an infected hangnail. I mean this is the risk that we encounter with this kind of interference.

Mr. MURPHY. You gave sort of the gross numbers of those that responded. What percentages of the respondents are you talking about that either believed that they were forced into making decisions for commercial rather than scientific reasons or even felt pressure?

I mean to the extent that people actually changed their input or changed the recommendations they were making, but then there is also simply the issue of those in the agency that felt that they were pressured to make those different decisions. Do you have a sense of what percentage of scientists answered in the affirmative to those types of questions?

Ms. GRIFO. Yes, and again we went to great lengths to determine who were the scientists and made sure that they were the respondents. We had a high level of Ph.D.s, a high level of high GS scientists responding and a very high level of 10 and 15 years at the agency. So these were the cream of the crop, if you will. Sixty percent knew of cases where commercial interests inappropriately induced or attempted to induce changes to FDA decisions or actions, and again 61 percent of all respondents knew of cases of inappropriate political interference.

Mr. MURPHY. In your experience of surveying different agencies and departments of the Administration, how does the concern of those scientists and the pressure put upon the FDA officials and scientists, how does that compare with some of the other issues that we have been talking about today or other experiences that you have hard from other departments and agencies within the Administration?

Ms. GRIFO. I think one of the most frightening ones has to do with fear of retaliation, that we had 396 scientists at the Food and Drug Administration who could not publicly express concerns about public health without fear of retaliation and that 357 of them, that would be 36 percent of our respondents, could not even express those concerns within the agency.

As I started off in my testimony, the total number from across the Federal Government and the number was, when we look at retaliation, 699 scientists. That is 39 percent across 9 agencies have reported that they fear retaliation for openly expressing their concerns about the mission-driven work of their agencies.

Mr. WAXMAN. Thank you, Mr. Murphy. Your time has expired.

Mr. MURPHY. Thank you very much.

Mr. WAXMAN. Mr. Braley?

Mr. BRALEY. Thank you, Mr. Chairman.

I am very concerned that even if the White House and Administration political appointees can't edit every scientific report and press release, they are sending a strong signal to Government scientists that the threat of global warming should be played down and science should get as little attention as possible. Because of that, good scientists who do important research may worry about voicing their concerns or publicizing their findings.

Mr. Piltz, I am going to start with you. Are you personally worried about the chilling effect or self-censorship that this environment breeds and if so, can you share with us how that manifests itself in the way you and your colleagues do your work?

Mr. PILTZ. That is an excellent question, and I think it is a key point really and one I haven't had a chance to emphasize. I know I cited the marked-up documents that came fairly early on as graphic illustrations of a pervasive pattern, but you know once this heavy-handed censorship signal is sent, the career people in the Federal agencies, they defer to the White House. They have their antenna out.

What could be career limiting? Don't rock the boat. They are great public servants, but what sets in if you know that what you are writing has to go through a White House clearance before it can be published, people start writing for the clearance, toning down, steering away from and kind

of anticipatory self-censorship sets in among the career Federal program managers.

Maybe not on--the FDA scientists and some of the other agencies, their scientific conclusions feed directly into regulatory decision-making. So the pressure is right on their scientific conclusions. Since we don't really have a regulatory regime on climate change, the interference tends to be more with the communication that might influence the way people think about the issue, but it is the same. It is an analogous dynamic. People censor themselves, and there is a chilling effect, certainly.

Mr. BRALEY. Thank you.

Dr. Shindell, what about you? Have you seen or heard about any of your colleagues responding to expected political pressure by censoring themselves or just giving up on a press release or a press contact?

Mr. SHINDELL. Yes, both of these things, I think that people are aware that releases would be delayed so long if they tried to talk about global warming and climate change that it was left out. I have seen people talk much more favorably about the environment at universities now where they encourage outreach as opposed to what is going on in the Federal Government.

Mr. BRALEY. Thank you.

Dr. Grifo, the Union of Concerned Scientists and the

Government Accountability Project interviewed 40 Government climate scientists. Were any of these scientists worried about the Administration learning of their conversations with you?

Ms. GRIFO. Yes, and in fact the number that the study began with was much higher. It was more than 150, almost 200 scientists, and out of that large group that were contacted for the study, we really only ended up with 5 or 6 that were willing to go on the record, a significant drop, obviously because of their fear of retaliation or other problems.

Mr. BRALEY. I am going to offer this question to the entire panel. As someone who started out in a very challenging engineering curriculum and later switched to a political science degree, one of the things I know is that the heavy emphasis on math and science often times makes it impractical to educate scientists on some of the constitutional protections they have in terms of freedom of speech, freedom from interference with voicing their opinions in a setting similar to what we are talking about.

Dr. Grifo, one of the things you had talked about was an increased need for whistleblower protections and also insuring that scientists have a constitutionally protected right of free speech. What, if anything, do we need to be doing to educate scientists to make sure that they understand the constitutional basis for their free speech protections

and arm them with the knowledge so they can be more forceful advocates to speak out and have the courage to do what is necessary to make sure that we become aware of these concerns?

Ms. GRIFO. I think one of the key things that we need to do is to affirmatively educate. We cannot assume that in fact these scientists know what these things mean. In our experiences, our conversations with scientists, anecdotally as well as in the essays and the other ways that we receive communications have told us over and over that the line is gray to them, and so because of that grayness, they are taking giant steps backward from what they are actually able to do.

What we are asking for very simply is that these things come out, that we have clear policies. We have a model media policy that is appendixed to the report which clearly lays out yes, there are roles for public affairs officers.

Coordination is important. We are not saying that you don't have to play by some rules. But what we are saying very loudly, very clearly I hope, is that you don't give up your constitutional rights when you become a Federal scientist, that in fact there are protections and statutes that need to be communicated and enforced, and the scientists need to know where that line is so that they can be at that line and not self-censoring themselves away from it.

Mr. PILTZ. If I could add just one other quick point, the last four pages of my written testimony has memoranda prepared by the legal director at the Government Accountability Project on how even the NASA media policy, which is an upgrade, falls short in terms of the Whistleblower Protection Act protections, the Anti-Gag Statute and things that make it clear that scientists don't give up their freedom of speech when they become Federal employees. There are some specific issues and legislative points raised in that, that I think I would commend to the Committee's attention.

Mr. WAXMAN. Thank you very much, Mr. Braley.

Mr. SHINDELL. I would say that I agree with the statement of the other witnesses, and I would also like to mention that there is a second issue here. With NASA, for example, we do have this new openness policy which is a great first step, but what we are seeing in the future is we may be able to communicate information but we may not have any information because all of the budget for earth observations is being gradually shifted within NASA whose budget is staying high, but it is being shifted to other areas. It is being out of science and especially out of earth science. So we are likely five years to ten years from now to have far less ability to even observe our own planet than we do now.

Mr. WAXMAN. Thank you.

3817 Mr. Welch? 3818 Mr. WELCH. Thank you, Mr. Chairman. 3819 In February of 2006, the New York Times reported that political appointees in the NASA press office were in fact 3820 3821 exerting strong pressure during the 2004 Presidential 3822 campaign to cut the flow of news releases on climate change 3823 in the article entitled Call for Openness at NASA Adds to 3824 Reports of Pressure. I would like to ask that that be made 3825 part of the record by Mr. Chairman. 3826 Mr. WAXMAN. Without objection, so ordered. 3827 [The referenced information follows:] 3828 ******* INSERT *******

Mr. WELCH. Thank you.

Dr. Shindell, listening to your testimony, I can't help but wonder if your personal experience is related to that broader story. What can you tell us about your experiences with NASA in the run-up to the 2004 election and does the Times article appear consistent with your own experience?

Mr. SHINDELL. Well, obviously, it is difficult to know what intentions were behind policies that you didn't see formulated, but I would certainly agree that it is consistent. All of these new restrictions that I was talking about on press releases and the imposition of minders to be present at interviews, all of that took place in the fall of 2004 just before the election.

Mr. WELCH. Dr. Grifo, do you have anything to add on this point?

Ms. GRIFO. Not to comment on the timing, but just simply to say that there are six categories of things that we saw and that we documented in the GAP portion of the report, press release delays, the presence of minders, preapproval for interviews and rerouting of interviews, overall decreased media contact, altering of documents.

Perhaps also intimidating really had to do with the requirement that scientists prepare Q and As. They had to anticipate what questions were going to come up in these interviews and in fact you might think so what is so bad

about that. Well, in fact, what was happening was that the information in those Q and As was used to actually determine whether or not the interviews were granted or to feed into that process of decision-making.

Mr. WELCH. Were there any resources that reported what you just described?

Ms. GRIFO. All of these, yes. I mean, they are. I can give you, you know, pages of documentation that we have. I mean we have the interviews. But I think also very interestingly a lot of this work was based on documents obtained through the Freedom of Information Act, and I think really interestingly is that in response to very broad queries about climate and climate change and very, very broad questions, we received 2,000 pages of documents. The Government Accountability Project, I should say, received 2,000 pages of documents from NOAA, 9 pages from NASA and no pages from the EPA.

Mr. WELCH. One other question, later this week, the Intergovernmental Panel on Climate Change or the IPCC is going to release its latest scientific assessment about our understanding of climate change science. The IPCC, as you know, it includes hundreds of the world's finest scientists.

In light of that, I notice that the IPCC is mentioned in the CEQ documents reviewed by the Committee staff. In one document, the CEQ Chief of Staff, Mr. Cooney, informs another

White House staffer that they will use a controversial paper to rebut the IPCC, and in the EPA memo, an EPA staffer notices this might be a problem and saying that the EPA will take responsibility and severe criticism from the science and environmental community for poorly representing the science.

I want to ask the panelists, is the credibility of the IPCC in doubt? Does it make any sense for our Government to seek to actively undercut this body of scientists?

Dr. Grifo, perhaps you could start.

Ms. GRIFO. Yes, I think what I would like to say about the IPCC is that, you know, it is one of the most extensive transparent, you know, examples of iterate peer review. I mean I think it is a document that has reviewers and review editors and many processes of meetings and conversations in order to have this process move forward. I think that what is really extraordinary about it is that all of the authors of each chapter must agree that all sides of the science have been fairly represented, and I think that really gets to the heart of the openness of the scientific exchange that it represents.

But I think furthermore 2,500 scientific expert reviewers, 800 contributing authors, 450 lead authors from 130 countries, 6 years of work. I think it is an amazing piece of work and will be received in that way.

Just if I might add one other note. I want to say that

there is more information. I mean there, we are continuing and the Government Accountability Project is continuing to work on this and on the documentation, and there is to be another report in about a month's time.

Mr. WELCH. Thank you.

Briefly, yes.

Mr. PILTZ. Yes, I would say that when the science community comes together and produces these comprehensive assessments and they do have synthesis and policymaker summaries that are readily understandable, that this is what those of us who are not technical experts should use, basically. This is the well vetted assessment. Even after we have lifted the heavy hand of censorship, there is still the matter of taking these findings, learning them, adopting them, using them, embracing them and translating them into the appropriate policy responses.

Mr. WELCH. Thank you.

Mr. WAXMAN. Thank you, Mr. Welch.

Dr. Shindell, did you want to add anything to the question on the IPCC?

Mr. SHINDELL. I would agree that this is the most authoritative document we have, and I would say that it does not exclude anybody that wants to participate. The paper that you referred to that supposedly would undermine it, those authors are free to join in the process as well to

offer their comments and criticism, and their documents were taken into account with everybody else. All of the available research is evaluated, and so this is really a wonderful thing for policymakers to have everybody sit together and look and get the best evidence.

The only drawback that I can see with this process is that it takes so long that by the time it comes out, some things can be out of date. What we have seen, for example, is that the melting agreement has been accelerating so incredibly rapidly, that the IPCC report that will come out next week will already be out of date in predicting likely sea level rise which will probably be much worse than is projected in the IPCC report.

Mr. WAXMAN. Thank you, Mr. Welch.

Mr. Yarmuth, do you wish a second round?

Mr. YARMUTH. Thank you, Mr. Chairman.

We have heard some very disturbing testimony today about political interference in the area of climate science, but the politicization of science isn't limited under the Bush Administration to climate change. We have heard all sorts of evidence regarding endangered species and food and drug safety as well.

Dr. Grifo, the Union of Concerned Scientists has surveyed other scientists in the past. You have a February, 2005 survey of fish and wildlife scientists that included

hundreds of biologists, ecologists and botanists. When you asked those scientists, was there evidence that they felt that had been directed for non-scientific reasons to refrain from making scientific findings that would protect endangered species?

Ms. GRIFO. Yes, sir, and I would say in that survey, actually the return rate was almost 30 percent, so it was a higher rate if that matters, but 44 percent of the endangered species scientists reported being directed for non-scientific reasons to refrain from findings protective of species.

Mr. YARMUTH. Were scientific conclusions reversed or withdrawn because of the business interests in any instances?

Ms. GRIFO. Well, what we saw was that 70 percent of the scientists reported or knew of cases where political appointees had injected themselves into those ecological services determinations.

Mr. YARMUTH. Based on your survey, it is clear that there was political interference and that it was widespread when it comes to science surrounding endangered species. How did this affect the outcome of policymakers and decision-makers? Was there any evidence based on your survey that decision-makers made decisions differently based on this suppressed science, if you will?

Ms. GRIFO. I think there are a couple of aspects to that question. I mean one is that self-censorship that we keep

returning to. I mean I think when I go to scientific meetings such as my discipline, and fish and wildlife scientists come up to me, then express very clearly their experiences and their hesitation to bring forward this kind of information.

I think in addition to that, I mean obviously there are things in the survey, but overall I mean what we have seen is a very large drop in the number of species that end up being listed. Whether or not you agree or disagree with that, the fact is that the science is not coming out. Again, there are problems with being able to publish results in peer review literature. There are problems with these basic scientific freedoms amongst the scientists in fish and wildlife. Again, these species are important for various reasons, and they have consequences for the American people.

Mr. YARMUTH. Mr. Chairman, this hearing is appropriately focused on how the Bush Administration officials have repeatedly tried to muzzle Government climate scientists and distort their findings. We need to remember that this is part of a larger pattern of politics trumping science throughout the Bush Administration. I commend you once again for holding these hearings.

Mr. WAXMAN. Thank you very much, Mr. Yarmuth.

I want to thank each of the witnesses for your presentation today. You are very distinguished scientists

with a great deal of integrity.

Policymakers must have good science, unfiltered, unaltered scientific information especially when taxpayers' dollars are being used to pursue that information. Even, of course, if it is coming from the private sector, if information is being sent to us, it ought to be the information that the scientists have agreed upon.

I think this hearing today will further our ability to deal with the issue of climate change, and of course the big issue before us is to get the Administration to move from a confrontation to cooperation. We have been trying on a bipartisan basis for six months to get the information from the Council on Environmental Quality. I expect to get that information and any other information that is pertinent to the representatives of the American people.

That concludes our hearing, and we stand adjourned.

[Whereupon, at 1:47 p.m., the committee was adjourned.]

PAGE

88

********************	****			
STATEMENTS OF FRANCESCA GRIFO, SENIOR SCIENTIST AND DIR	ECTOR			
OF THE SCIENTIFIC INTEGRITY PROGRAM, UNION OF CONCERNED				
SCIENTISTS; RICK PILTZ, FORMER SENIOR ASSOCIATE, U.S. C	LIMATE			
CHANGE SCIENCE PROGRAM; DREW SHINDELL, GODDARD INSTITUT	E FOR			
SPACE STUDIES, NATIONAL AERODYNAMICS AND SPACE				
ADMINISTRATION; ROGER PIELKE, JR., PROFESSOR, ENVIRONMENTAL				
STUDIES PROGRAM, UNIVERSITY OF COLORADO AND FELLOW,				
COOPERATIVE INSTITUTE FOR RESEARCH IN THE ENVIRONMENTAL				
SCIENCES				
PAGE	70			
STATEMENT OF FRANCESCA GRIFO				
PAGE	70			
STATEMENT OF RICK PILTZ				
PAGE	76			
STATEMENT OF DREW SHINDELL				
PAGE	82			
STATEMENT OF ROGER PIELKE, JR.				

PAGE

29

INDEX OF INSERTS		
**************	******	*****
****** INSERT ******		
	PAGE	7
******* INSERT ******		
	PAGE	13
******* INSERT *******	D. 65	
****** INSERT ******	PAGE	14
	PAGE	16
******* INSERT ******		ŕ
	PAGE	17
******* INSERT ******		
	PAGE	18
******* INSERT *******		
******* INSERT ******	PAGE	21
	PAGE	23
****** INSERT ******		20
	PAGE	25
******* INSERT ******		
	PAGE	27
****** INSERT ******		

*******	INSERT *******		
		PAGE	32
******	COMMITTEE INSERT ********	PAGE	33
******	INSERT *******	PAGE	33
		PAGE	36
******	INSERT *******	PAGE	39
******	INSERT *******	FAGE	39
		PAGE	41
******	INSERT ********	PAGE	43
******	INSERT *******	TAGE	43
	•	PAGE	46
******	INSERT *******	PAGE	49
******	INSERT *******	11101	13
		PAGE	51
*****	INSERT *******	PAGE	53
******	INSERT *******		33
		PAGE	56
******	INSERT *******	PAGE	58
******	INSERT *******		50
		PAGE	59

******	INSERT	*****				
			P.	AGE	62	
******	INSERT	******				
			P.	AGE	67	
******	INSERT	*****		Party trace		
			P.	AGE	74	
*****	INSERT	******				
			P.	AGE	80	
******	INSERT	*****			****	
			P	AGE	86	
*****	INSERT	*****	IT.		ran e	
			PA	AGE	93	
******	INSERT	*****				
			P	AGE 1	74	