

**ALLEGATIONS OF POLITICAL INTERFERENCE WITH
THE WORK OF GOVERNMENT CLIMATE
CHANGE SCIENTISTS**

HEARING

BEFORE THE

**COMMITTEE ON OVERSIGHT
AND GOVERNMENT REFORM**

HOUSE OF REPRESENTATIVES

ONE HUNDRED TENTH CONGRESS

FIRST SESSION

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CONTENTS

| | Page |
|--|------|
| Hearing held on January 30, 2007 | 1 |
| Statement of: | |
| Grifo, Francesca, 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 | 51 |
| Grifo, Francesca | 51 |
| Pielke, Roger, Jr. | 96 |
| Piltz, Rick | 71 |
| Shindell, Drew | 91 |
| Letters, statements, etc., submitted for the record by: | |
| Cannon, Hon. Chris, a Representative in Congress from the State of Utah, prepared statement of | 29 |
| Clay, Hon. Wm. Lacy, a Representative in Congress from the State of Missouri, prepared statement of | 26 |
| Cummings, Hon. Elijah E., a Representative in Congress from the State of Maryland, prepared statement of | 20 |
| Davis, Hon. Danny K., a Representative in Congress from the State of Illinois, prepared statement of | 23 |
| Davis, Hon. Tom, a Representative in Congress from the State of Virginia, prepared statement of | 12 |
| Grifo, Francesca, senior scientist and director of the scientific integrity program, Union of Concerned Scientists, prepared statement of | 54 |
| Pielke, Roger, Jr., professor, environmental studies program, University of Colorado and fellow, Cooperative Institute for Research in the Environmental Sciences, prepared statement of | 99 |
| Piltz, Rick, former senior associate, U.S. Climate Change Science Program, prepared statement of | 73 |
| Sali, Hon. Bill, a Representative in Congress from the State of Idaho, prepared statement of | 37 |
| Shindell, Drew, Goddard Institute for Space Studies, National Aerodynamics and Space Administration, prepared statement of | 93 |
| Waxman, Hon. Henry A., a Representative in Congress from the State of California, prepared statement of | 4 |
| Welch, Hon. Peter, a Representative in Congress from the State of Vermont, letter dated January 30, 2007 | 145 |
| Yarmuth, Hon. John A., a Representative in Congress from the State of Kentucky, prepared statement of | 46 |

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, DC.

The committee met, pursuant to notice, at 10 a.m., in room 2154, Rayburn House Office Building, Hon. Henry A. Waxman (chairman of the committee) presiding.

Present: Representatives Waxman, Kucinich, Cummings, Davis of Illinois, Tierney, Clay, Watson, Lynch, Higgins, Yarmuth, Braley, Norton, McCollum, Cooper, Van Hollen, Hodes, Murphy, Sarbanes, Welch, Davis of Virginia, Shays, Platts, Cannon, Duncan, Turner, Issa, Foxx, and Sali.

Also present: Representative Gilchrest.

Staff present: Phil Schiliro, chief of staff; Phil Barnett, staff director/chief counsel; Kristin Amerling, general counsel; Greg Dotson and Jeff Baran, counsels; Earley Green, chief clerk; Teresa Coufal, deputy clerk; David Marin, minority staff director; Larry Halloran, minority deputy staff director; Jennifer Safavian, minority chief counsel for oversight and investigations; Keith Ausbrook, minority general counsel; Ellen Brown, minority legislative director and senior policy counsel; Mason Alinger, minority deputy legislative director; A. Brooke Bennett, minority counsel; Allyson Blandford, Jay O'Callaghan, and Kristina Husar, minority professional staff members; Larry Brady, minority senior investigator and policy advisor; Patrick Lyden, minority parliamentarian and member services coordinator; Brian McNicoll, minority communications 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 have reviewed, administration officials sought to edit an EPA report: First, to add "balance" by emphasizing the "beneficial effects" of climate change. Second, they tried to delete a discussion of the human health and environmental effects of climate change. Third, 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 state-

ment 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 to have 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 started overruling the views of 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.

[The prepared statement of Hon. Henry A. Waxman follows:]

**Statement of Chairman Henry A. Waxman
Committee on Oversight and Government Reform Hearing
Allegations of Political Interference with the Work of
Government Climate Change Scientists
January 30, 2007**

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 this subject. I have been working on global warming for almost twenty years and introduced Congress' 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's 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 claimed 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.

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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.

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According to the documents we reviewed, Administration officials sought to edit an EPA report (1) to add “balance” by emphasizing the “beneficial effects” of climate change, (2) to delete a discussion of the human health and environmental effects of climate change, (3) to strike any discussion of atmospheric concentrations of carbon because carbon levels are not a “good indicator of climate change,” and (4) 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 of the White House Council on Environmental Quality.

Today, Ranking Member Davis and I are sending a letter to the White House about the documents and to urge the White House to reconsider the confrontational approach it is now taking. This letter describes in more detail what we know about the documents, and I ask that it be made part of the hearing record.

I am looking forward to hearing the testimony of today’s witnesses. We are fortunate to have the Union of Concerned Scientists

here and to have the opportunity to review their new report on political interference into 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.

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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 science possible.

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.]

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 most 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 has swung 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 everywhere 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 levels.

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 re-

gard to other scientific findings or policy considerations such 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.

[The prepared statement of Hon. Tom Davis follows:]

**OPENING STATEMENT OF
RANKING MEMBER TOM DAVIS
COMMITTEE ON OVERSIGHT AND GOVERNMENT REFORM
“Political Interference with Science: Global Warming”
Tuesday, January 30, 2007**

Thank you, Mr. Chairman. My best wishes to you as you bring your first oversight hearing to order.

Someone remarked to me on the way in on the irony of having a global warming hearing on the coldest day of the year. In fact, it's so cold outside, the politicians have their hands in their *own* pockets...

Seriously though, I'm pleased that for 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 issue in a non-partisan way. I am proud that we were able to strip away partisan differences to tackle an issue which most other Committees had steered well clear of.

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Furthermore, like you, I think it’s important to determine whether the Bush Administration or anyone else has attempted to quash scientific findings. That’s 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'm concerned this morning that the pendulum has swung too far in the opposite direction. That is, I'm concerned that we've 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 applies only to those who agree with you.

Let me explain.

First, we're 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've probably gone too far.

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

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

Should it really surprise anyone that leadership at federal agencies manages information in pursuit of their interests or agenda? Is the choice of phraseology – for example, "climate change" versus "global warming" – the province of science alone, or can it also be allowed to reflect political as well as scientific considerations?

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But I’m 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 as 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.

This Committee takes very seriously its responsibility for ensuring individuals remain able to speak freely. Under my Chairmanship, 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 protection. Let’s not pick and choose which targets of suppression to protect.

Thank you again for holding this important hearing, Mr. Chairman.

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 3 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.

Mr. CUMMINGS. I am.

Mr. WAXMAN. OK.

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

[The prepared statement of Hon. Elijah E. Cummings follows:]

U.S. House of Representatives
110th Congress

Opening Statement

Representative Elijah E. Cummings, D-Maryland

Full Committee Hearing:
“Political Interference with Science: Global Warming”
Committee on Oversight and Government Reform

January 30, 2007

Mr. Chairman,

Thank you for holding this vitally important hearing to examine reports that the Bush administration has purposefully misled the public with regards to global warming and its effects.

I am glad that we as a Committee have had the opportunity to address the issue of global warming in a bipartisan way.

It was only four months ago that I sat with Chairman Waxman and my other Democratic colleagues on the opposite side of this hearing room, while Mr. Davis led an investigation into the threat of global warming.

Then, as now, we all agreed on the sound, scientific foundation for the threat posed by global warming.

The reality is clear: Our world is rapidly slipping into a state of environmental catastrophe because of our energy-consuming lifestyles. We need no further evidence than that which has already been presented.

The national academies of sciences of 11 countries, including the United States, the United Kingdom, Russia, China and India, issued a joint statement on the international scientific consensus behind global warming. The National Research Council and the Intergovernmental Panel on Climate Change have issued similar statements.

As we speak, some 500 climate scientists are gathered in Paris to put the final touches on a United Nations report on how global warming, as a result of a growing concentration of heat-trapping gases in the atmosphere, is likely to affect sea levels.

Yet while scientists from around the world and Members of Congress from both parties agree on the urgency with which we must address this threat, the Bush administration still seems unconvinced.

That is simply unfathomable.

To be sure, President Bush has talked a good game. In his State of the Union address last week, the President called for reducing oil consumption through the development of energy efficient technologies.

These technologies are promising, but they represent only one small tool in the arsenal of strategies available to us. Notably missing in the President's agenda is any recognition that carbon dioxide emissions must be reduced.

The national academies of sciences stated in their report that "Action taken now to reduce significantly the build-up of greenhouse gases in the atmosphere will lessen the magnitude and rate of climate change."

And yet, this Administration refuses to place a mandatory cap on carbon dioxide emissions—or even recognize the irreversible damage these emissions are causing—simply because the President is unwilling to impose restrictions on industries friendly to his Administration.

As a candidate in 2000, then-Governor Bush campaigned on the platform of reducing carbon emissions. Once in office, however, President Bush flip flopped on this policy, claiming that carbon dioxide was not a pollutant, and questioning the reality of global warming.

Amid sharp criticism, the Administration announced an unenforceable target of reducing the *intensity* of greenhouse gas emissions. But because reducing the *intensity* of emissions does nothing to lower *overall* emissions, the initiative amounts to little more than creative rhetoric.

If the answer to global warming were more hot air, we would have solved the problem by now.

Today we will hear from two whistleblowers who will tell us firsthand of the practices the Bush administration has pursued in its ongoing struggle with reality.

I want to thank all of our witnesses for being here today, and I want to especially thank the whistleblowers who have shown great courage in standing up and speaking the truth, so that we all might benefit.

I look forward to your testimonies and I yield back the remainder of my time.

##

Mr. WAXMAN. Opening statements may be 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 unsound 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 lung ailments. There are grave consequences from such action.

Again, I want to thank you, Mr. Chairman, and Ranking Member 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.

[The prepared statement of Hon. Danny K. Davis follows:]

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**Statement by Congressman Danny K. Davis
on the Political Interference with Science**

FOR IMMEDIATE RELEASE
January 30, 2007

Contact: Courtni Pugh
Phone: 202-225-5006

(Washington, D.C.) - *Congressman and Member of the Committee on Oversight and Governmental Reform Committee, Danny K. Davis (D-IL 07) issued the following statement today during his committee hearing on global warming and the political interference with science.*

"Global warming is a serious issue and has overarching effects on our nation and our world citizenry for we only have one Mother Earth.

"There is no doubt that we must take measures to look into this. We cannot put politics over science—too much is at stake. Ask those sufferers of environmental catastrophes from an extraordinarily strong hurricane season, most notably Katrina, to families whose victimized children suffer adverse brain development because of industry driven pesticide regulations.

"Numerous well-regarded and credible scientists have issued reports with regards to climate change and it's far reaching consequences. And 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 Environmental Protection Agency that the air was safe 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 lung ailments

"There are grave consequences from such action and I thank the Chairman for holding today's hearing. It is long overdue and I look forward to hearing from today's esteemed panel of experts and considering their recommendations."

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

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.

Thank you, Mr. Chairman.

Mr. WAXMAN. Thank you, Mr. Shays.

Mr. Tierney.

OK.

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 United States. 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 United States are 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.

[The prepared statement of Hon. Wm. Lacy Clay follows:]

**Statement of Wm. Lacy Clay
"Political Interference with Science: Global Warming"
January 30, 2007**

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 scientist would participate in such a dangerous plan.

Emerging threats to health from climate change include malaria, lyme disease and an alarming increase in asthma incidences in the United States. The American Public Health Association found that smog, increased pollen and carbon dioxide are fostering an epidemic of asthma in America's cities. The highest incidence of asthma in the US 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 temperature 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 show 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.

I yield back, and ask that my written statement be included in the record.

Mr. WAXMAN. Thank you, Mr. Clay.

Mr. Cannon.

Mr. CANNON. Thank you, Mr. Chairman.

There is some feedback happening in our mic system, I think. Am I the only one hearing that? It would be really nice to correct that if we have somebody available to do that.

Mr. WAXMAN. We have people working on it. Let me just ask if all Members have their mics off in case any mic is on that might be causing it.

Mr. CANNON. Mr. Chairman, my mic, when it is off, still works, or so the switch is. I am not sure if we have a more fundamental problem here.

Mr. WAXMAN. You ought to be careful what you say when your mic might be on.

Mr. CANNON. It might be me. [Laughter.]

Mr. WAXMAN. Well, we will make the best of it. We have our best people working on trying to correct the problem.

Mr. CANNON. One would hope that those would be at least of the equality of some of the climate change scientists we have in the world today.

I wanted to thank you, Mr. Chairman, for holding this hearing and also associate myself with the remarks of the 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.

[The prepared statement of Hon. Chris Cannon follows:]

Congressman Chris Cannon
Opening Statement
Oversight and Government Reform Committee
“Political Interference with Science: Global
Warming”
January 30, 2007

Thank you Mr. Chairman for holding this hearing today. Global warming is a topic that has drawn much attention for the past few years and even more so recently. Last week, the front page of the Wall Street Journal had an article titled, “In Climate Controversy, Industry Cedes Ground” and just yesterday the Washington Post had an article stating that only 13 percent of Americans are not aware of global warming. You may have seen or heard of the movie “The Day After Tomorrow” a few years ago, the storyline based upon global warming. This is a topic that sells to the public whether it is because it incites inquisitiveness or invokes fear, it sells. And the media has not been shy to expose why Americans should be living in fear of global warming.

Mr. Chairman, what I am concerned about is that the global warming argument is not motivated by true factual science but rather the means that supports scientific research. Unfortunately, research is usually driven by money. Without funding there would be no research, and scare tactics sell. Researchers will not receive grants for research

that concludes there is no problem and therefore no need for additional studies.

Climate change research is a lucrative investment of time. The FY07 budget requested over \$6.5 billion for climate change expenditures (nearly doubling from 1993) and for FY06 nearly \$5.8 billion were appropriated for climate change expenditures.

Although many media outlets proclaim scientific studies show global warming is man-made, there is no scientific consensus that this is true. In addition, as we talk about politicizing climate change, in 2005, research scientist Chris Landsea resigned from the Intergovernmental Panel on Climate Change due to politicizing. In his resignation letter, Landsea stated, "It is beyond me why my colleagues would utilize the media to push an supported agenda that recent hurricane activity had been due to global warming...I personally cannot in good fait contribute to a process that I view as being both motivated by pre-conceived agendas and being scientifically unsound."

Some scientists state we are experiencing catastrophic global warming because ice capes are melting. However, every summer the ice caps experience melting, and in fact research shows the cores are thicker than ever. So yes, the ice caps are melting but does this mean we have a global warming problem? As scientists seek funding for their salaries misrepresenting facts becomes tempting.

Mr. Chairman, thank you again for holding this hearing and I look forward to hearing from our panel of witnesses regarding global warming.

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 emissions 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.

Mr. WAXMAN. Thank you, Ms. Watson.

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.

Mr. WAXMAN. Thank you for your comments.

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.

Mr. WAXMAN. Thank you, Mr. Lynch.

Mr. Issa.

Mr. DAVIS OF VIRGINIA. I think he stepped out.

Mr. WAXMAN. Oh, he stepped out. Then we will go to Ms. Foxx.

Mr. Platts.

Mr. Gilchrest, OK.

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.

Mr. WAXMAN. Thank you, Mr. Gilchrest.

Mr. Higgins.

Mr. HIGGINS. Thank you, Mr. Chairman.

I have no opening statement. I thank you for calling this hearing, and I look forward to the testimony of the expert panel that you have assembled.

Mr. WAXMAN. Thank you.

Mr. Braley.

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 5-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 2 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.

[The prepared statement of Hon. Bill Sali follows:]

Statement of U.S. Rep. Bill Sali (R-ID)

Given at the House Committee on Oversight and Government Reform
Hearing on Supposed Federal Influence on Government Climate Change
Scientists

January 30, 2007

Mr. Chairman and Mr. Davis,

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In addition, in 2003 and 2004 alone, in part due to Administration policies, U.S. greenhouse gas intensity dropped by about 4.5 percent. And in the 2005 Energy Bill, the Administration obtained \$5 billion in tax incentives over a five-year period for what it calls, and I am quoting, "clean energy systems and highly efficient vehicles, mandatory renewable fuel and energy efficiency standards."

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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 have put federal money where their 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 metals industries remain strong and competitive in the global marketplace. To cripple our industrial sector in the name of environmental quality is not good policy or good science. It's 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 and with the general approach we will be taking in the next two years. I believe in oversight, in asking the 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. However, if it is accurate, I hope it is not a foretaste of contentious partisanship cloaked as oversight.

Thank you, Mr. Chairman.

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 6-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.

I yield back the remainder of my time.

Mr. WAXMAN. Thank you, Mr. Braley.

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.

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 administra-

tion 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 and I thank you again for this hearing.

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 6 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. Chairman.

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 2 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, word 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 will testify today. I am sorry I will not be able to be here for your entire testimony, but I look forward to reading it in detail.

I thank the Chair.

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.

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 December 1st was 75 degrees. The high on January 6th 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 representing.

If you look at the EPA's Web site on climate change, you will read "that a causal link between the buildup 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.

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 difficult, 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 decisionmaking 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.

Mr. WAXMAN. Thank you, Mr. Sarbanes.

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 the 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 and provide us with their best scientific evidence.

Thank you, Mr. Chairman. I yield the balance of my time.

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

Mr. Yarmuth.

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.

But I would just like to add that one thing I think we all can agree on is that in the area of global climate change, the Government, the Federal Government, has a critical role to play. Therefore, when it speaks, it has to speak with complete authority and credibility, and that can only be achieved if it is not unduly influenced by personal political agendas or by the agenda of special interests. I think these hearings can contribute to a large extent to creating that degree of credibility when the Government does speak on climate change, and I commend the chairman for organizing these hearings.

I yield back.

[The prepared statement of Hon. John A. Yarmuth follows:]

Statement of Congressman John Yarmuth
Committee on Oversight and Government Reform
Full Committee Hearing on Political Interference with Science: Global Warming
January 30, 2007

Thank you, Mr. Chairman. The value of your leadership, in bringing global warming to the forefront of our agenda cannot be overstated. I also want to thank our distinguished witnesses for taking the time to testify at this important and long overdue hearing.

Mr. Chairman, the time to question the grave threat that global warming poses to the environment has long since passed. Already, change in the Earth's climate is straining the daily lives of people around the world. Extreme heat and drought drastically impede food production in some regions, while natural disasters cause devastation in others. But we have only just scratched the surface of the impact of this phenomenon, and we are finding that each passing day of inaction, is striding not only toward environmental calamity, but economic devastation as well.

The price of dealing with the obstacles that now confront us, pale in comparison to the long term cost of repairing the damage once it is done. We are currently in a situation that parallels the one that confronted New Orleans only a few years ago: Do we reinforce the levies that we know are faulty, or procrastinate and deny until catastrophe strikes, then scramble to pick up the pieces when it is already too late.

The cost of the latter, of refusal to act, will cost up to 20% of the world's gross domestic product in the immediate future, as the world's climate begins to rise exponentially. Or we can take control of our destinies for the comparatively low cost of 1% of the GDP.

Here's the good news: We, the United States of America are by far the most egregious and irresponsible polluters in the world, and therefore the most significant cause of this impending disaster.

Which means we have the largest capacity to improve the situation. The nations of Europe and Asia, which signed the Kyoto treaty and are dutifully working to halt the cycle before it spins out of control, cannot do it alone. Only we, America can take control of the immediate threat to our way of life and give hope to a bleak future. Because the stakes are so high, and the circumstances have made evident that the time to act is now, it has become clear that this is America's next call to greatness.

That is why we gather here today. The impact of global warming can no longer be doubted, nor can the value of taking action immediately, be questioned. But, it is not only important that we act, but that we act responsibly. It is our duty and it is in our best interest that as the world changes; we change with it, and indeed, mold that change to benefit humankind. To do that our leaders and are scientists must engage in an open, honest dialogue with each other and with our fellow citizens.

I look forward to this hearing illuminating the need for— and the ways in which— America can once again lead the way.

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, which they drink. 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.

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

Unfortunately, one of the glitches of this hearing today is that the 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 2 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 U.S. 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.

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 5 minutes duration. Unfortunately, that light may not tell you when the 5-minutes is up, but I will let you know when the 5-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 5 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 Fed-

eral 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 5 years ago and 10 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.

[The prepared statement of Ms. Grifo follows:]

**Written Testimony of Francesca T. Grifo, Ph.D.
Senior Scientist with the Union of Concerned Scientists
Scientific Integrity Program**

**Before the Committee on Oversight and Government Reform
U.S. House of Representatives**

**Hearing on “Allegations of Political Interference with the Work of Government
Climate Change Scientists”
January 30, 2007**

This testimony is presented by Dr. Francesca Grifo, Senior Scientist with the Union of Concerned Scientists (UCS), a leading science-based nonprofit working for a healthy environment and a better world. The full testimony is submitted for the record and Dr. Grifo will summarize her statement for the Committee on the problem of political interference in the work of federal government scientists.

This written testimony contains an overview of the issue of scientific integrity, a summary of the report Atmosphere of Pressure released today and recommended government reforms needed to restore scientific integrity to the policy making process. Also included are a timeline of abuses of science compiled by UCS, selected essay responses from UCS's survey of federal climate scientists, the text of the statement signed by 11,000 scientists, and summaries of UCS's surveys of scientists working at the Food and Drug Administration, the Fish & Wildlife Service, the NOAA Fisheries Service, and climate scientists working at seven federal agencies.

In a nutshell, here is the problem we face – political interference is harming federal science and threatening the health and safety of Americans. UCS has surveyed more than 1,800 federal scientists and found the following:

- 145 FDA scientists reported being asked, for non-scientific reasons, to inappropriately exclude or alter technical information or change their conclusions in an FDA scientific document.
- Nearly half (44 percent) of all FWS scientists whose work is to evaluate endangered species reported that they have been directed, for non-scientific reasons, to refrain from making findings that would protect a species.
- And, 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 such incidents.

Our government runs on vast amounts of information. If the government does not have access to accurate and complete information about a topic, the inevitable result is bad policy and bad decisions. The thousands of scientists in the employ of the federal government represent a tremendous resource and their knowledge and advice should be heeded, rather than manipulated or ignored. The message of these statistics is clear: without strong action to restore integrity to federal science our nation will be ill-prepared to deal with the challenges we face.

Scientific Integrity

Successful application of science has played a large part in the policies that have made the United States of America the world's most powerful nation and its citizens increasingly prosperous and healthy.

Although scientific input to the government is rarely the only factor in public policy decisions, scientific input should always be weighted from an objective and impartial perspective. Presidents and administrations of both parties have long adhered to this principle in forming and implementing policies. Recent actions, however, threaten to undermine this legacy by preventing the best available science from informing policy decisions—with serious consequences for our health, safety, and environment.

Misrepresenting and suppressing scientific knowledge for political purposes can have serious consequences. For example, if the Nixon administration suppressed air quality studies and vetoed the Clean Air Act of 1970, Americans would have suffered more than 200,000 premature deaths and millions of cases of respiratory and cardiovascular disease over the next 20 years.¹

This misuse of science has led Russell Train, the EPA administrator under Presidents Nixon and Ford, to observe: “How radically we have moved away from regulation based on independent findings and professional analysis by the White House and driven primarily by political considerations.”

On February 18, 2004, 62 preeminent scientists articulated these concerns in a statement titled “Restoring Scientific Integrity in Policy Making.” In this statement, the scientists charged the Bush administration with widespread and unprecedented “manipulation in the process through which science enters into its decisions.” In conjunction with the statement, the Union of Concerned Scientists (UCS) released detailed documentation backing up the scientists’ charges in its February 2004 report, *Scientific Integrity in Policy Making*.

In the months since the original UCS report, more than 11,000 scientists have signed onto the scientists’ statement. Signers include 52 **Nobel laureates**, 63 National Medal of Science recipients, and 194 members of the National Academy of Sciences. A number of these scientist have served in multiple administrations, both Democratic and Republican, underscoring the unprecedented nature of the current practices and that the issues of scientific integrity transcend partisan politics. The names of all the signers are listed on the banners displayed here today.

Scientific Community Response

The scientific community has responded strongly to this growing problem. The more than 11,000 individual scientists who have called for a restoration of scientific integrity in federal policy making have been joined by several major scientific associations, including

¹ See www.epa.gov/oar/sect812. See also data from the American Meteorological Society, online at ametsoc.org/sloan/cleanair/index.html

the American Association for the Advancement of Science, the American Public Health Association, the American Geophysical Union, and the Ecological Society of America, which have addressed the problem at society wide meetings and have begun to investigate how to defend science.

In addition, a National Academy of Sciences panel, chaired by former Congressman John Porter (R-IL), released a report in November 2004 that strongly rejected political litmus test for federal science and technology appointments. The report stated: “It is no more appropriate to ask experts to provide non-relevant information—such as voting record, political party affiliation, or position on particular policies—than to ask them other personal immaterial information, such as hair color or height.”

In May 2006, the National Science Board of the Nation Science Foundation (NSB), responding to a request by Senator John McCain (R-AZ), released a report concluding that “there exists no consistent Federal policy regarding the dissemination of research results by Federal employees” and recommending that the development of an “overarching set of principles for the communication of scientific information” by the Administration. The NSB found that “[d]elay in taking these actions may contribute to a potential loss of confidence by the American public and broader research community regarding the quality and credibility of Government sponsored scientific research results.”

Congressional Response

House and Senate bills titled the “Restore Scientific Integrity to Federal Research and Policymaking Act” were introduced in the 109th Congress to address this problem and restore America’s status a world leader in science. The House bill, led by Representatives Henry Waxman (D-CA) and Bart Gordon (D-TN), had 80 cosponsors, while the Senate bill, led by Senator Richard Durbin (D-IL), had 15 cosponsors. Similar legislation is expected to be introduced in the 110th Congress.

In December 2005, an amendment to the FY ‘06 Labor, Health, Human Services and Education Appropriations bill banned the use of political questions for scientific advisory committee nominees and the deliberate dissemination of false scientific information for those agencies.

In June 2006, two separate congressional letters to the Administration were sent in response to concerns about suppression of climate science. House Science Committee Chairman Sherwood Boehlert (R-NY) and Representative Vernon Ehlers (R-MI) sent a letter to the Director of the National Oceanic and Atmosphere Administration Conrad C. Lautenbacher, Jr. asking him to look into concerns that scientists at the agency have been prevented from discussing climate science, Senator Joe Lieberman (D-CT), also sent a letter to the Office of Science and Technology Policy Director John Marburger asking him to investigate why “the suppression of scientists’ climate-change findings appears to be occurring simultaneously across more than one government agency.”

Misuse of Science

Specific examples of the misuse of science have occurred across a broad range of issues such as childhood lead poisoning, toxic mercury emissions, climate change, reproductive health, and nuclear weapons. Experts at the FDA charged with ensuring the safety of our food and drug supply, report being pressured to alter their scientific conclusions. Political appointees in the Department of the Interior have been exposed for overruling the scientific consensus and refusing to protect endangered species. Scientists nominated to serve on scientific advisory boards report being asked about their political leanings. And scientists studying what may very well be the most profound global change of this century – global warming – are effectively barred from communicating their findings to the news media and the public. UCS has continued to compile additional examples in its July 2004 update of the original report, and its 2006 *A-to-Z Guide to Political Interference in Science*.

The specific actions by political appointees and others include:

1. Censorship and suppression of federal science by suppressing or delaying scientific reports, limiting media access to government scientists, and placing restrictions on the flow of information.
2. Disseminating inaccurate science-based information by forcing scientists to change their data, editing scientific documents to alter their conclusions, distributing inaccurate science based information, and distributing curricula with incorrect information.
3. Manipulating scientific advice by subjecting scientific advisory panel nominees to political litmus tests; nominating underqualified individuals or individuals with conflicts of interest; and ignoring or disbanding science advisory committees altogether.

Scientist Surveys

To move beyond anecdotes and to gather information about the extent and nature of the interference, UCS has conducted a series of surveys of federal scientists. Previous surveys have given voice to scientists at the Food and Drug Administration, the Fish and Wildlife Service and the NOAA Fisheries Program. More information about the series of surveys can be found at <http://www.ucsusa.org/surveys/>.

Today, UCS and the Government Accountability Project (GAP) are releasing a joint report, entitled *Atmosphere of Pressure*, addressing political interference in the work of federal climate scientists. As a part of this report, UCS sent surveys to over 1,600 climate scientists at seven federal agencies and departments.

Atmosphere of Pressure

Out of concern that inappropriate political interference and media favoritism are compromising federal climate science, the Union of Concerned Scientists (UCS) and the Government Accountability Project (GAP) undertook independent investigations of federal climate science. UCS mailed a questionnaire to more than 1,600 climate scientists at seven federal agencies to gauge the extent to which politics was playing a role in scientists' research. Surveys were also sent to scientists at the independent (non-federal) National Center for Atmospheric Research (NCAR) to serve as a comparison with the

experience of federal scientists. About 19 percent of all scientists responded (279 from federal agencies and 29 from NCAR). At the same time, GAP conducted 40 in-depth interviews with federal climate scientists and other officials and analyzed thousands of pages of government documents, obtained through the Freedom of Information Act (FOIA) and inside sources, regarding agency media policies and congressional communications.

These two complementary investigations arrived at similar conclusions regarding the state of federal climate research and the need for strong policies to protect the integrity of science and the free flow of scientific information.

Political Interference with Climate Science

The federal government needs accurate scientific information to craft effective policies. Political interference with the work of federal scientists threatens the quality and integrity of these policies. As such, no scientist should ever encounter any of the various types of political interference described in our survey questions. Yet unacceptably large numbers of federal climate scientists personally experienced instances of interference over the past five years:

- Nearly half of all respondents (46 percent of all respondents to the question) perceived or personally experienced pressure to eliminate the words “climate change,” “global warming,” or other similar terms from a variety of communications.
- Two in five (43 percent) perceived or personally experienced changes or edits during review that changed the meaning of scientific findings.
- More than one-third (37 percent) perceived or personally experienced statements by officials at their agencies that misrepresented scientists’ findings.
- Nearly two in five (38 percent) perceived or personally experienced the disappearance or unusual delay of websites, reports, or other science-based materials relating to climate.
- Nearly half (46 percent) perceived or personally experienced new or unusual administrative requirements that impair climate-related work.
- One-quarter (25 percent) perceived or personally experienced situations in which scientists have actively objected to, resigned from, or removed themselves from a project because of pressure to change scientific findings.
- Asked to quantify the number of incidents of interference of all types, 150 scientists (58 percent) said they had *personally experienced* one or more such incidents within the past five years, for a total of *at least* 435 incidents of political interference.

The more frequently a climate scientist’s work touches on sensitive or controversial issues, the more interference he or she reported. More than three-quarters (78 percent) of those survey respondents who self-reported that their research “always” or “frequently” touches on issues that could be considered sensitive or controversial also reported they had personally experienced at least one incident of inappropriate interference. More than

one-quarter (27 percent) of this same group had experienced six or more such incidents in the past five years.

In contrast to this evidence of widespread interference in climate science at federal agencies, scientists at the independent National Center for Atmospheric Research (NCAR), who are not federal employees, reported far fewer instances of interference. Only 22 percent of all NCAR respondents had personally experienced such incidents over the past five years.

Barriers to Communication

Federal scientists have a constitutional right to speak about their scientific research, and the American public has a right to be informed of the findings of taxpayer-supported research. Restrictions on scientists who report findings contrary to an administration's preferred policies undermine these basic rights. These practices also contribute to a general misunderstanding of the findings of climate science and degrade our government's ability to make effective policies on topics ranging from public health to agriculture to disaster preparation.

The investigation uncovered numerous examples of public affairs officers at federal agencies taking a highly active role in regulating communications between agency scientists and the media—in effect serving as gatekeepers for scientific information.

Among the examples taken from interviews and FOIA documents:

- One agency scientist, whose research illustrates a possible connection between hurricanes and global warming, was repeatedly barred from speaking to the media. Press inquiries on the subject were routed to another scientist whose views more closely matched official administration policy.
- Government scientists routinely encounter difficulty in obtaining approval for official press releases that highlight research into the causes and consequences of global warming.
- Scientists report that public affairs officers are sometimes present at or listen in on interviews between certain scientists and the media.
- Both scientists and journalists report that restrictive media policies and practices have had the effect of slowing down the process by which interview requests are approved. As a result, the number of contacts between government scientists and the news media has been greatly reduced.

Highly publicized incidents of interference have led at least one agency to implement reforms; in February 2006, NASA adopted a scientific openness policy that affirms the right of open scientific communication. Perhaps as a result, 61 percent of NASA survey respondents said recent policies affirming scientific openness at their agency have improved the environment for climate research. While imperfect, the new NASA media policy stands as a model for the type of action other federal agencies should take in reforming their media policies.

The investigation also highlighted problems with the process by which scientific findings are communicated to policy makers in Congress. One example, taken from internal documents provided to GAP by agency staff, shows edits to official questions for the record by political appointees, which change the meaning of the scientific findings being presented.

Inadequate Funding

When adjusted for inflation, funding for federal climate science research has declined since the mid-1990s. A majority of survey respondents disagreed that the government has done a good job funding climate science, and a large number of scientists warned that inadequate levels of funding are harming the capacity of researchers to make progress in understanding the causes and effects of climate change. Budget cuts that have forced the cancellation of crucial Earth observation satellite programs were of particular concern to respondents.

Poor Morale

Morale among federal climate scientists is generally poor. The UCS survey results suggest a correlation between the deterioration in morale and the politicized environment surrounding federal climate science in the present administration. One primary danger of low morale and decreased funding is that federal agencies may have more difficulty attracting and keeping the best scientists.

A large number of respondents reported decreasing job satisfaction and a worsening environment for climate science in federal agencies:

- Two-thirds of respondents said that today's environment for federal government climate research is worse compared with 5 years ago (67 percent) and 10 years ago (64 percent). Among scientists at NASA, these numbers were higher (79 percent and 77 percent, respectively).
- 45 percent said that their personal job satisfaction has decreased over the past few years. At NASA, three in five (61 percent) reported decreased job satisfaction.
- 36 percent of respondents from NASA, and 22 percent of all respondents, reported that morale in their office was "poor" or "extremely poor." Among NCAR respondents, only seven percent reported such low levels of morale.

Recommendations

This report has brought to light numerous ways in which U.S. federal climate science has been filtered, suppressed, and manipulated in the last five years. Until this political interference ends, the United States will not be able to fully protect Americans and the world from the dangers of a warming planet. Creating systems to ensure long-term independent and accessible science will require the energies of the entire federal government. UCS and GAP recommend the following reforms and actions:

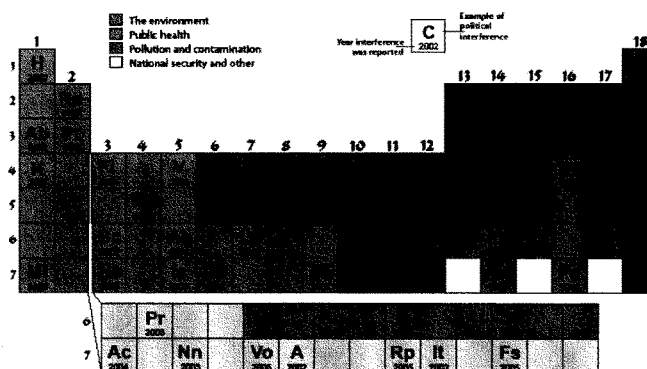
- Congress must act to specifically protect the rights of federal scientists to conduct their work and communicate their findings without interference and protect scientists who speak out when they see interference or suppression of science.

- The federal government must respect the constitutional right of scientists to speak about any subject, including policy-related matters and those outside their area of expertise, so long as the scientists make it clear that they do so in their private capacity, and such communications do not unreasonably take from agency time and resources. Scientists should also be made aware of these rights and ensure they are exercised at their agencies.
- Ultimate decisions about the communication of federal scientific information should lie with scientists themselves. While non-scientists may be helpful with various aspects of writing and communication, scientists must have a “right of last review” on agency communications related to their scientific research to ensure scientific accuracy has been maintained.
- Pre-approval and monitoring of media interviews with federal scientists by public affairs officials should be eliminated. 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. We provide a Model Media Policy that can be used as an example for federal agencies who wish to reform their policies and practices regarding scientific freedom and openness.
- Federal agencies should clearly support the free exchange of scientific information in all venues. They should investigate and correct inappropriate policies, practices, and incidents that threaten scientific integrity, determine how and why problems have occurred, and make the necessary reforms to prevent further incidents.
- Congress should immediately exert pressure on the Executive branch to comply with its statutory duty under federal law and undertake periodic scientific assessments of climate change that address the consequences for the United States. (The last national assessment was conducted in 2000.)
- Funding decisions regarding climate change programs should be guided by scientific criteria, and must take into account the importance of long-term, continual climate observation programs and models.
- All branches of the government must have independent scientific advice.

The reality of global warming, including the role of heat-trapping gases from human activities in driving climate change, has been repeatedly affirmed by scientific experts. Every day that the government chooses to ignore climate science is a day it fails to protect future generations from the consequences of global warming. Our government must commit to ensuring basic scientific freedoms and support scientists in their endeavors to bring scientific results to the policy arena, scientific fora, and a wide array of other audiences. Addressing climate change is a matter of national preparedness.

The A to Z Guide to Political Interference in Science

In recent years, scientists who work for and advise the federal government have seen their work manipulated, suppressed, distorted, while agencies have systematically limited public and policy maker access to critical scientific information. To document this abuse, the Union of Concerned Scientists has created the *A to Z Guide to Political Interference in Science*. To read the full *A to Z Guide* visit http://www.ucsusa.org/scientific_integrity/interference/a-to-z-guide-to-political.html.



From air pollution to Ground Zero, the *A to Z Guide* showcases dozens of examples of the misuse of science on issues like childhood lead poisoning, toxic mercury contamination, global warming, and endangered species. These examples originate in 18 federal agencies and departments.

Timeline of abuses of science

| | |
|---------------|--|
| October 2006 | Endangered Species Act Scientific Documents Altered |
| August 2006 | EPA closes its scientific libraries EPA ignores scientific studies on pesticides |
| July 2006 | Education Department suppresses study on school vouchers |
| May 2006 | STD Panel at CDC conference manipulated, Science disregarded for prescription drug Ketek |
| April 2006 | National Ambient Air Quality Standards |
| February 2006 | Navy downplays sonar impact on marine life Science suppressed on hurricane/global warming connection Bureau of Land Management suspends forest study funding EPA distorts evidence for tightening particulate matter standard |
| January 2006 | NASA censors climate scientist James Hansen |
| November 2005 | Economic analysis distorted for endangered red frog habitat |
| October 2005 | EPA limits information about their release of toxic chemicals |
| August 2005 | Department of Justice suppresses racial profiling study |

| | |
|----------------|---|
| July 2005 | EPA report on fuel efficiency withheld Top FDA official overrules staff to approve nerve stimulator |
| June 2005 | Bureau of Land Management altered a cattle grazing impact study |
| May 2005 | Genetics eliminated from Endangered Species Act decisions |
| April 2005 | World Health Organization approval of abortion pill block attempt |
| March 2005 | New selenium pollution control standards misrepresent science |
| February 2005 | First UCS surveys of federal agencies scientists released |
| December 2004 | Endangered Species Act scientific documents altered for greater sage grouse Federally funded abstinence-only curriculum contains false science |
| November 2004 | FDA ignores scientists' warnings on arthritis drug Vioxx |
| October 2004 | BLM promotes flawed study on hydraulic fracturing, an oil drilling technique |
| September 2004 | Endangered Species Act science ignored for the marbled murrelet |
| August 2004 | Science obscured on health impacts of weedkiller Atrazine Forest Service exaggerates wildfire threat to spotted owl to promote logging |
| June 2004 | Health Organization panel experts are vetted by Health and Human Services |
| May 2004 | EPA uses bad science to create plywood plant pollution rule FDA appointees distort science to deny access to emergency contraception Research at the U.S. Fish and Wildlife Service is distorted |
| April 2004 | EPA distorts guidelines for monitoring air pollution over national parks CDC researchers kept from international AIDS conference Fish and Wildlife Service distorted economic analysis of bull trout habitat |
| March 2004 | NIH advisory board rejects scientists subjected to political litmus tests Science-based recommendations removed from an official report on salmon Scientists dismissed from President's Council on Bioethics |
| February 2004 | Arms Control Advisory Panel dismissed and never reappointed. |
| January 2004 | Multiple agencies disregard science on mountaintop removal mining |
| December 2003 | Office of Management and Budget adopts flawed peer review rule Administration officials manipulate Endangered Species Act science |
| August 2003 | White House orders misleading of public on Manhattan air quality after 9/11 |
| July 2003 | National Nuclear Security Administration Panel dismissed EPA withheld an analysis of alternatives to President Bush's Clear Skies Act |
| June 2003 | Administration officials undermined science behind climate change |
| March 2003 | Forest Service overruled science-based old-growth forest management plan |
| February 2003 | White House suppressed information about the impact of mercury on public health |
| December 2002 | Administration obscured scientific evaluation of abstinence-only education programs CDC ordered to change website to raise doubt about the effectiveness of condoms NIH Drug Abuse Advisory Panel members subject to political litmus tests Abortion and breast cancer erroneously linked on National Cancer Institute website Microbiologist prohibited from publishing research on airborne bacteria from farms |
| November 2002 | Workplace Safety Panel scientists rejected because of their political beliefs |
| October 2002 | Childhood lead poisoning panelists replaced by scientists with industry funding Underqualified nominee suggested as chair of an FDA reproductive health committee |
| September 2002 | Administration disregarded scientific analysis of aluminum tubes in Iraq Engineer rejected from Army Science Board because of political contributions |
| August 2001 | Fish and Wildlife Service misrepresented information on rare trumpeter swans |

Selected Excerpts from UCS Climate Survey Essay Responses

The 40-question survey mailed by UCS to over 1,600 federal climate scientists featured one essay question that allowed scientists to provide a written narrative, and extra space for scientists to leave additional comments. The following are excerpts from the essays provided, divided into five topic areas: political interference in climate science, scientific findings misrepresented, barriers to communication, funding, and climate scientist are disheartened.

“The integrity of the U.S. federal government climate science could best be improved by...”

I. Political Interference with Climate Science

Large numbers of federal climate scientists reported various types of interference, both subtle and explicit:

National Aeronautics and Space Administration (NASA)

“Remembering that the civil service scientists and engineers can and should be an unbiased reservoir of insights into different questions with impacts across international economic and cultural dividing lines. Politicizing and degrading the integrity for which we are internationally known and respected is a disservice to our country and a danger to the world. If we can’t be trusted, to give insights on global change and funded to do so, who in the world will do it?”

“Keep politics out of science.”

“Administration needs to act on the best information, not try to force the information to fit their desired action.”

National Oceanic and Atmospheric Administration (NOAA)

“Removing the current atmosphere where scientists who report findings truthfully may face consequences if they contradict administration policies.”

“I have never seen or expected this degree of political interference in scientific research. It’s appalling and unbelievable that it happens in the US.”

“Eliminating political pressure from influencing science findings.”

“De-politicizing the science, especially at the highest administrative levels of agencies. Protect the integrity of scientists by letting them speak, and by respecting that.”

“Remove political pressures that try to make agencies support the administration’s agenda. Allow scientific agencies to remain nonpolitical. Allow scientific results to be used as scientific facts instead of political or policy statements.”

“Policy of zero interference in the scientific process.”

Environmental Protection Agency (EPA)

“The perception that . . . we (climate scientists) might find and write [something that] might

be considered controversial is a strong one that comes down from management. It's not clear that there's a real reason for it or what the consequences would be. This perception should be actively discouraged from the highest levels!"

"Keeping politics out of the scientific process. I believe the line has been crossed between science informing public policy and policy manipulating the science (and trying to influence its outcome). I have personally experienced this manipulation in the area of communicating the science many times."

Department of Energy

"Allowing scientists to work completely independently of current administrative views on the subject."

"No oversight of scientific quality by politicians. It should be left to peer review and presentations of results in scientific meetings."

U.S. Geological Survey (USGS)

"A scientific report will now undergo three 'policy' reviews and two 'peer' reviews prior to further peer-review journal reviews. This will not only slow the reporting of results, but the chances are that significant watering-down of results will occur during the three 'policy' reviews by non-specialists."

National Center for Atmospheric Research (NCAR)

"Keeping political employee appointments completely independent of the scientific research, scientific publication, and scientific communications processes."

II. Scientific Findings Misrepresented

Federal climate scientists reported that their research findings have been changed by non-scientists in ways that compromise accuracy:

National Oceanic and Atmospheric Administration (NOAA)

"Not censoring scientific results."

"US Federal government climate science does not lack integrity. Science assessments, summaries, policy papers sometimes do lack integrity. The best way to improve them would be to ensure they are written by qualified scientists, not by political hacks."

Department of Agriculture (USDA)

"It's not the climate science per se, but how it is spun and censored by officials."

"Hands off by policy/communications and non-scientific staff on scientific reports. These reports should be subject to scientific and independent peer review."

Department of Energy

"Not having political appointees who have no formal training in climate science looking over our shoulders. There should be some minimum bar before they are appointed. Policy should be based

on sound science; results of science should not be diluted or suited/adjusted to justify policy. This particular Administration has gone beyond reasonable boundaries, on this issue.”

National Center for Atmospheric Research

“The unedited presentation of findings to government panels and to the public. It appears that funding organizations are shifting priorities away from climate studies to other programs deemed more important by the current administration.”

III. Barriers to Communication

Agency scientists are not free to communicate their research findings to the media or the public:

National Aeronautics and Space Administration (NASA)

“As of March 2006, there was a marked change in NASA, and I have spoken out freely on climate change, including a NASA-approved press release. I believe scientists at other agencies (e.g. NOAA) still have restrictions.”

“Allow direct and open communication between scientists and the public without prior permission, clearance, chaperones, handlers, etc.”

“Recently a Bush appointee to the position of Public Information Officer attempted to muzzle Jim Hansen, Director of GISS . . . the NASA Administrator made it clear that such political meddling would not be tolerated. This was excellent leadership at the top and set the tone for any lower echelons that may not otherwise have been this strong. Michael Griffin is a great improvement over his recent precedents.”

“Reduced public affairs interference, review, delay, oversight.”

“Not having White House liaisons in science related PR offices.”

National Oceanic and Atmospheric Administration (NOAA)

“Scientists should be free to communicate with the media, rather than having media contacts filtered by “Public Affairs” officers. This should be official policy, not a “wink and nod” policy.”

“Removing all apparatchiks monitoring the controlling how scientists communicate to the public.”

“Allowing us to interact openly with the public.”

“Less restrictions on publications and data output, more universal support, less restrictive travel/visitor policies (our honored guests are treated like criminals to even get in the building).”

Department of Energy

“Not having political appointees tinker with science that is best left to the experts. Particularly at NOAA where the Administration has gagged free exchange of results.”

“More open discussion of issues, honest assessment of data and results. The public does not know who to believe. Separate the “grey” results/literature from solid peer reviewed results and provide “what is known and not known”, not opinions.”

Environmental Protection Agency (EPA)

“Allowing scientists to communicate directly to the public and other scientists about critical significance of climate change. In fact, informing the public regarding the truth of this issue must be encouraged and rewarded.”

National Center for Atmospheric Research

“From what I’ve heard, NCAR is rare among research institutes in that we are free to communicate our findings. This policy needs to apply to all research institutes and all scientists should be encouraged to communicate their results to the public.”

“At one point, I specifically asked my division director if there were any censorship policies at NCAR. He emphatically stated that there were none and that if we were ever pressured that we should contact him immediately and he would raise hell to eliminate the pressure.”

IV. Inadequate Funding

Scientists reported that inadequate funding affects their ability to do the research that is necessary and pertinent.

National Aeronautics and Space Administration (NASA)

“I believe that climate research at NASA is being undermined by the current administration. This is accomplished not through direct threats of intimidation, but through lack of funding. Several years ago the funding focus [at NASA] was switched from Earth Science to solar system exploration (Moon and Mars). I believe this was done not for solar system exploration, but rather to curtail climate research. The emphasis needs to be switched back to Earth Science.”

“Problems with climate research in the federal government mainly have to do with funding. Future funding at my agency is uncertain. Future climate observational programs (crucial ones) are threatened because of lack of funds. New accounting rules at my agency require climate scientists to spend unreasonable amounts of time writing proposals, which has reduced productivity.”

“Funding for climate research is a factor of 5-10 below critical mass to develop a designed climate observing system.”

National Oceanic and Atmospheric Administration (NOAA)

“Include a dedicated long-term observing program with stable funding support for about 30 more years. The current satellite program does not meet climate research needs.”

Environmental Protection Agency (EPA)

“I have not worked directly on climate change since funding was eliminated in my area. Other areas of much less importance have been emphasized as a result. Which is a tragedy.”

Department of Agriculture (USDA)

“The US Climate Change Science Program has not received sufficient funding for needed observations, monitoring, research, [and] data systems.”

U.S. Geological Survey (USGS)

“US satellite programs are in severe jeopardy. The loss of continuity in observational satellite data will impair progress in climate science.”

V. Climate Scientists are Disheartened

While a large majority of respondents (88 percent) agreed with the statement, “U.S. federal government climate research is of generally excellent quality,” respondents reported decreasing job satisfaction and a worsening environment for climate science in federal agencies:

National Oceanic and Atmospheric Administration (NOAA)

“The intrusion of politics into the field is making some (me and others) consider change of field or career.”

Environmental Protection Agency (EPA)

“I am [close to] retirement and feel that I will no longer be able to use my abilities to produce scientific information of relevance to the American public. The last years of my career are being squandered for political reasons. I do not think I will be able to do any more new climate science before I retire. My goal is to get out the results from past research.”

Department of Energy

To watch this from another agency is so demoralizing. They have virtually derailed the mission of providing environmental services to the public and burnt billions.... Shocking tracking record!”

“I know people in federal agencies who have been pushed into very difficult decisions on whether to leave or stay and do bad/insignificant work. Many cases they left.”

U.S. Geological Survey (USGS)

“Incredible bureaucratization of USGS during Bush era seems intent on crippling our scientific productivity by wasting more of our time and energy on ridiculous and counter-productive ‘accountability’ procedures, damag[ing] to morale.”

Scientists' Statement: Restoring Scientific Integrity in Policy Making

Science, like any field of endeavor, relies on freedom of inquiry; and one of the hallmarks of that freedom is objectivity. Now, more than ever, on issues ranging from climate change to AIDS research to genetic engineering to food additives, government relies on the impartial perspective of science for guidance.

President George H.W. Bush, April 23, 1990

Successful application of science has played a large part in the policies that have made the United States of America the world's most powerful nation and its citizens increasingly prosperous and healthy. Although scientific input to the government is rarely the only factor in public policy decisions, this input should always be weighed from an objective and impartial perspective to avoid perilous consequences. Indeed, this principle has long been adhered to by presidents and administrations of both parties in forming and implementing policies. The administration of George W. Bush has, however, disregarded this principle.

When scientific knowledge has been found to be in conflict with its political goals, the administration has often manipulated the process through which science enters into its decisions. This has been done by placing people who are professionally unqualified or who have clear conflicts of interest in official posts and on scientific advisory committees; by disbanding existing advisory committees; by censoring and suppressing reports by the government's own scientists; and by simply not seeking independent scientific advice. Other administrations have, on occasion, engaged in such practices, but not so systematically nor on so wide a front. Furthermore, in advocating policies that are not scientifically sound, the administration has sometimes misrepresented scientific knowledge and misled the public about the implications of its policies.

For example, in support of the president's decision to avoid regulating emissions that cause climate change, the administration has consistently misrepresented the findings of the National Academy of Sciences, government scientists, and the expert community at large. Thus in June 2003, the White House demanded extensive changes in the treatment of climate change in a major report by the Environmental Protection Agency (EPA). To avoid issuing a scientifically indefensible report, EPA officials eviscerated the discussion of climate change and its consequences.

The administration also suppressed a study by the EPA that found that a bipartisan Senate clean air proposal would yield greater health benefits than the administration's proposed Clear Skies Act, which the administration is portraying as an improvement of the existing Clean Air Act. "Clear Skies" would, however, be less effective in cleaning up the nation's air and reducing mercury contamination of fish than proper enforcement of the existing Clean Air Act.

Misrepresenting and suppressing scientific knowledge for political purposes can have serious consequences. Had Richard Nixon also based his decisions on such calculations he would not have supported the Clean Air Act of 1970, which in the following 20 years prevented more than 200,000 premature deaths and millions of cases of respiratory and cardiovascular disease. Similarly, George H.W. Bush would not have supported the Clean Air Act Amendments of 1990 and additional benefits of comparable proportions would have been lost.

The behavior of the White House on these issues is part of a pattern that has led Russell Train, the EPA administrator under Presidents Nixon and Ford, to observe, "How radically we have moved away from regulation based on independent findings and professional analysis of scientific, health and economic data by the responsible agency to regulation controlled by the White House and driven primarily by political considerations."

Across a broad range of policy areas, the administration has undermined the quality and independence of the scientific advisory system and the morale of the government's outstanding scientific personnel:

- Highly qualified scientists have been dropped from advisory committees dealing with childhood lead poisoning, environmental and reproductive health, and drug abuse, while individuals associated with or working for industries subject to regulation have been appointed to these bodies.
- Censorship and political oversight of government scientists is not restricted to the EPA, but has also occurred at the Departments of Health and Human Services, Agriculture, and Interior, when scientific findings are in conflict with the administration's policies or with the views of its political supporters.
- The administration is supporting revisions to the Endangered Species Act that would greatly constrain scientific input into the process of identifying endangered species and critical habitats for their protection.
- Existing scientific advisory committees to the Department of Energy on nuclear weapons, and to the State Department on arms control, have been disbanded.
- In making the invalid claim that Iraq had sought to acquire aluminum tubes for uranium enrichment centrifuges, the administration disregarded the contrary assessment by experts at Livermore, Los Alamos and Oak Ridge National Laboratories.

The distortion of scientific knowledge for partisan political ends must cease if the public is to be properly informed about issues central to its well being, and the nation is to benefit fully from its heavy investment in scientific research and education. To elevate the ethic that governs the relationship between science and government, Congress and the Executive should establish legislation and regulations that would:

- Forbid censorship of scientific studies unless there is a reasonable national security concern;
- Require all scientists on scientific advisory panels to meet high professional standards; and
- Ensure public access to government studies and the findings of scientific advisory panels.

To maintain public trust in the credibility of the scientific, engineering and medical professions, and to restore scientific integrity in the formation and implementation of public policy, we call on our colleagues to:

- Bring the current situation to public attention;
- Request that the government return to the ethic and code of conduct which once fostered independent and objective scientific input into policy formation; and
- Advocate legislative, regulatory and administrative reforms that would ensure the acquisition and dissemination of independent and objective scientific analysis and advice.

*For a list of all 11,000 signers of this statement visit
http://www.ucusa.org/scientific_integrity/interference/scientists-signon-statement.html*

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

Before calling on Mr. Piltz, I understand that in order 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 people make that adjustment. I understand there may be a loud pop, so please don't get excited.

Mr. ISSA. Mr. Chairman, it took us most of those 12 years to get that working right, so good luck.

Mr. WAXMAN. Well, we are going to do it in 1 minute, we hope. [Laughter.]

If not, we expect to have 12 years to work on it, at least.

Mr. Piltz, we will now hear from you. We welcome you here.

Let me, just for housekeeping purposes, ask unanimous consent that all of the statements submitted by our witnesses will be made part of the record. Without objection, that 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 governmentwide 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 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.

[The prepared statement of Mr. Piltz follows:]

**TESTIMONY OF RICK PILTZ
DIRECTOR, CLIMATE SCIENCE WATCH
GOVERNMENT ACCOUNTABILITY PROJECT
WASHINGTON, D.C.**

**BEFORE THE
COMMITTEE ON OVERSIGHT AND GOVERNMENT REFORM
U.S. HOUSE OF REPRESENTATIVES**

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

JANUARY 30, 2007

Mr. Chairman, Mr. Ranking Member, and Members of the Committee — I greatly appreciate the opportunity to present testimony at this hearing, which addresses a subject of crucial importance for good policymaking and an informed society. I am currently the Director of Climate Science Watch, a program of the Government Accountability Project in Washington, D.C. The Government Accountability Project, a 29-year-old nonprofit public interest group, is the Nation's leading whistleblower protection organization. Climate Science Watch engages in investigation, communication, and reform advocacy aimed at holding public officials accountable for using climate research with integrity and effectiveness in addressing the challenge of global climate change.

Introduction

From April 1995 until March 2005 I worked in the program coordination office of the multiagency U.S. Government program that supports scientific research on climate and associated global environmental change. The program was originally established as the U.S. Global Change Research Program (USGCRP) under the Global Change Research Act of 1990. In 2002, the Bush Administration established the U.S. Climate Change Science Program (CCSP), incorporating the USGCRP and the President's Climate Change Research Initiative.

The Climate Change Science Program Office, where I worked, supports this research effort by performing interagency coordination, strategic planning, communications, and reporting functions, and serving as the program secretariat. At the time of my resignation from the program office my position was Senior Associate. During the time I worked in the program office I was employed by the University Corporation for Atmospheric Research (UCAR), based in Boulder, Colorado. UCAR is a nonprofit consortium of North American member universities that grant doctoral degrees in the atmospheric and related sciences. I was assigned to work in the program office under a grant from the National Science Foundation to the UCAR Joint Office of Science Support.

I had various responsibilities and worked on many projects during the 10 years I served in the program office. One key ongoing project for which I was responsible involved coordinating the development of and editing the program's annual report to Congress, starting with the Fiscal Year 1997 edition, continuing thereafter, and ending with the completion of a review draft of the Fiscal Year 2006 edition shortly before I resigned from the program. This annual report, titled *Our Changing Planet*, is distributed to all Members of Congress and all Congressional committees and subcommittees with oversight or budget jurisdiction over climate and global change research at the program's participating departments and agencies. The report is also distributed more widely, in print and electronic form, and is one of the principal means by which the program as a government-wide entity is communicated to a broad range of audiences.

I worked directly with the program leadership and with the senior professional staff in the program office. In developing program publications and on other matters, I worked with a large network of career science program managers in the participating agencies. I provided senior advisory and editorial support on a number of aspects of the development of the *Strategic Plan for the U.S. Climate Change Science Program*, issued in July 2003. I also coordinated a review by U.S.-based scientists of the Draft Scientific Report of the international *Arctic Climate Impact Assessment*.

During the 2001-2005 time frame, I came to the conclusion that 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 program managers, to policymakers, and to the public interest. In March 2005 I left the program office, resigning my position in protest. I drafted a 9,000-word memorandum to the program leadership, entitled "On Issues of Concern About the Governance and Direction of the Climate Change Science Program," in which I explained my concerns.

In the memorandum I discussed a set of interrelated problems with the policies and direction of the program, stemming from what I saw as an overarching problem: that the Administration was acting to impede forthright communication of the state of climate science and its implications for society. I stated my observation that this problem was manifested especially at the points at which scientifically based information relating to climate change was communicated to Congress and to wider audiences and touched on the arenas of societal decisionmaking. Among the key issues that I viewed as particularly significant in the politicization of the program, foremost was the treatment by the current Administration of the National Assessment of the Potential Consequences of Climate Variability and Change ("National Assessment").

The National Assessment

The National Assessment was initiated, carried out, and published between 1997 and 2000, during the time I worked in the program office. The Global Change Research Act of 1990 (Section 106) mandates the USGCRP to produce and submit to the President and the Congress "no less frequently than every 4 years" scientific assessment reports of global change that include the impacts of such change on the environment and on various socioeconomic sectors. To be responsive to this statutory mandate, the program sponsored the National Assessment, which analyzed the potential consequences of climate variability and change for the Nation, in

the context of other societal and environmental stresses. The National Assessment process involved communication between scientists and a variety of "stakeholders," from the public and private sectors and academia. It was intended to initiate a process of interaction and reporting that would be ongoing and developed and improved over time.

A National Assessment Synthesis Team made up of leading scientists and other experts, established as an advisory committee under the Federal Advisory Committee Act, produced a National Assessment report that integrated key findings from regional and sectoral analyses and addressed questions about the implications of climate variability and change for the United States. The report was forwarded to the President and Congress in November 2000. A copy of the published National Assessment Overview document was mailed to every Member of Congress in late November or early December 2000; a copy of the 600-page, in-depth, referenced Foundation document was mailed to every Member in April 2001.

In addition, numerous regional workshop and assessment reports, most of which were developed by university-based teams, focused on significant issues at the regional level across the United States. Five sectoral reports focused on issues that were national in scope and related to the goods and services on which society and the economy depend, including reports on agriculture, water, human health, forests, and coastal areas and marine resources. The regional and sectoral reports were produced and issued by various independent author teams in 1999 and after.

The National Assessment was designed to be of use to Congress and the federal agencies, state and local officials, regional and sectoral planners and resource managers, educators, and the general public. The process of dialogue between experts and stakeholders that was initiated and that helped to identify priority issues reflected this intention that the overall Assessment process should have value for a broad range of information users, as did the wide public distribution of the report in both published form and in electronic form on the Internet. However, planned focused outreach and public education activities following the publication of the Assessment were curtailed by the political opposition of the Bush Administration, which chose to initially ignore and later suppress the Assessment rather than use it to communicate with and educate the public about the issues addressed in the Assessment.

In my judgment, the National Assessment exemplified a vision of a democratic process for societally relevant environmental assessment, based on dialogue between interdisciplinary teams of scientific experts and a wide range of stakeholders and the general public. Through this process, the agenda for ongoing research and assessment would be informed by a better understanding of the concerns of policymakers and the public, and policymakers and the public would learn about issues of climate change and its potential consequences so as to better equip them for making decisions.

In carrying out the National Assessment, the National Assessment Synthesis Team and hundreds of other scientists and other experts produced a set of reports that to this day remains the most comprehensive, scientifically based assessment of the potential consequences of climate change for the United States. No national climate change assessment process or reporting of comparable subject matter and regionally-based, nationwide scope has subsequently been undertaken with

the support of the federal government. The National Assessment was a pioneering experiment in societal relevance for climate change research.

In June 2001, the Committee on the Science of Climate Change of the National Research Council (NRC) issued a report titled *Climate Change Science: An Analysis of Some Key Questions*. The study originated from a White House request in May 2001 to help inform the Administration's review of U.S. climate change policy. The Committee was made up of 11 eminent climate scientists. It was chaired by Ralph J. Cicerone of the University of California, who is today the President of the National Academy of Sciences. The section of the NRC report on "Consequences of Increased Climate Change of Various Magnitudes" began as follows: "The U.S. National Assessment of Climate Change Impacts, augmented by a recent NRC report on climate and health, provides a basis for summarizing the potential consequences of climate change." The remainder of that section of the report is based almost entirely on the findings of the National Assessment. The NRC Committee did not in any way call into question the scientific legitimacy or significance of the National Assessment, but rather drew on it as a core text in this advisory report to the White House.

The Administration's treatment of the National Assessment

Despite the utility of the National Assessment, beginning in 2001, and more aggressively from the second half of 2002 onward, the Administration acted to essentially bury the National Assessment, i.e., by suppressing discussion of it by participating agencies for purposes of research planning by the Climate Change Science Program; suppressing references to it in published program documents including annual program reports to Congress; withdrawing support from the coordinated process of scientist-stakeholder interaction and assessment that had been initiated by the first National Assessment; and making clear that no second National Assessment would be undertaken. The Administration failed to consider and utilize the National Assessment in the *Strategic Plan for the U.S. Climate Change Science Program* issued in July 2003. From my experience, observation, analysis of documentation, and personal communications with others in the program, I believe it is clear that the reasons for this were essentially political, and not based on scientific considerations. I believe this is generally understood within the program.

My first experience of efforts by Administration officials to bury the National Assessment was in July 2001. At that time I was editing and coordinating the review process for the Fiscal Year 2002 edition of the *Our Changing Planet* annual program report. This was the program's first annual report to Congress since the publication of the National Assessment. A draft of the report had been reviewed by all participating agencies in the program and approved for publication by the principal representatives of all of the USGCRP participating agencies. The draft report included a 560-word section titled "National Assessment of the Potential Consequences of Climate Variability and Change," describing the National Assessment and noting its publication and availability.

This draft, dated May 31, 2001, was transmitted to the Executive Office of the President for final review and clearance. Seven weeks later, on July 20, 2001, I was directed by the White House Office of Science and Technology Policy to delete the section of the draft report on the National

Assessment. No documented explanation was provided to the program leadership and the program office as to why this alteration was necessary and appropriate. However, I was given to understand that the directive from OSTP was related to the Administration's intention to settle a lawsuit that had been brought by Competitive Enterprise Institute et al. v. George W. Bush et al., seeking to suppress the distribution of the National Assessment. Specifically, that CEI et al. would withdraw the lawsuit in return for an assurance by Administration officials that the Administration would, in effect, disown the National Assessment. (CEI is an industry-funded policy organization that has aggressively promoted the position of denying that global warming is a significant problem calling for a significant policy response strategy.) I communicated my concerns about this procedure and about what implications this might have for the future status of the National Assessment component of the program to the Chair of the interagency principals committee and the director of the program office. However, to my knowledge, no one raised this issue with OSTP, and the section describing the National Assessment was deleted.

The matter of the deletion of discussion of the National Assessment from program reports was never discussed by the principals committee, but in my judgment and from subsequent experience, a White House political signal was being sent to agency principal representatives to the program and to career science program managers in the agencies, to the effect that the National Assessment was a politically sensitive issue, apart from any question of its scientific merits. This continued even after the Competitive Enterprise Institute lawsuit was dismissed in the fall of 2001.

In late May 2002 the Administration issued the report *U.S. Climate Action Report – 2002: Third National Communication of the United States of America Under the United Nations Framework Convention on Climate Change*. This third Climate Action Report was one of a series of reports required periodically pursuant to U.S. responsibilities under the Framework Convention on Climate Change, the foundational climate treaty. Chapter 6 of the Climate Action Report, "Impacts and Adaptation," drew substantially on the findings of the National Assessment for its discussion of the potential consequences of climate change for the United States. This was appropriate, considering that the National Assessment had recently been published and represented the most systematic, in-depth study of this subject that had been done to that point (and remains so at the present time).

The "Impacts and Adaptation" chapter prompted press coverage, including a prominent story in the *New York Times*, on how the chapter suggested a new acknowledgement by the Administration of the science pointing to the reality of human-induced climate change and a range of likely adverse societal and environmental consequences. This appeared to cause a public relations problem for the Administration. Asked about the report and the press coverage of it, the President replied in a way that distanced himself from it by referring to it as "a report put out by the bureaucracy."

My understanding at that point, which I believe was coming to be more widely shared, both inside and outside the program, was that the Administration was uncomfortable with the mainstream scientifically based communications suggesting the reality of human-induced climate change and the likelihood of adverse consequences. The Administration had adopted a policy on climate change that rejected regulatory limits on emissions of greenhouse gases, and

cited scientific uncertainty about climate change as one of its justifications for the policy. Straightforward acknowledgement of the growing body of climate research and assessment suggesting likely adverse consequences could potentially lead to stronger public support for controls on emissions and could be used to criticize the Administration for not embracing a stronger climate change response strategy. Administration political officials appeared increasingly to take an interest in managing the flow of communications pertaining to climate change in such a way as to minimize the perception that scientifically-based communications might be seen as conflicting with the Administration's political message on climate change policy. It was the concern about this linkage that seemed to underlie much of what I perceived to be the Administration's intervention in managing communications by the Climate Change Science Program.

In this context, for the Administration to have released a U.S. Climate Action Report with a chapter on climate change impacts that identified a range of likely adverse consequences, based on scientific reports including the National Assessment, could rightly be seen as an anomaly and appeared to be seen as a significant political error by Administration allies dedicated to denying the reality of human-induced global warming as a significant problem. On June 3, 2002, Myron Ebell of the Competitive Enterprise Institute sent an e-mail message addressed to Philip Cooney, Chief of Staff at the White House Council on Environmental Quality (CEQ), offering to help manage this "crisis" and help "cool things down." (This document was obtained by a nongovernmental organization via a Freedom of Information Act request). In the e-mail to Cooney, Ebell said: "If it were only this one little disaster we could all lock arms and weather the assault, but this Administration has managed, whether through incompetence or intention, to create one disaster after another and then to expect its allies to clean up the mess." He told Cooney the Administration needed to get back on track with disavowals of the Climate Action Report and the National Assessment.

Immediately prior to taking the position of CEQ Chief of Staff, Cooney had been employed as a lawyer-lobbyist at the American Petroleum Institute (API), the primary trade association for corporations associated with the petroleum industry. He was the climate team leader at API, leading the oil industry's fight against limits on greenhouse gas emissions. CEI also had a close relationship with the oil industry, having reportedly received \$2 million in funding between 1998 and 2005 from ExxonMobil.

William O'Keefe, President of the George C. Marshall Institute, faxed to Phil Cooney at CEQ a copy of a letter dated June 12, 2002, that O'Keefe had written to White House Chief of Staff Andrew Card. (This document was obtained by a nongovernmental organization via a Freedom of Information Act request). O'Keefe's letter to Card begins: "I am writing about the recently released national assessment, which seems completely inconsistent with the President's policy and expressed views on the subject." The letter concludes by suggesting that the Administration needed to have a senior person on the White house staff coordinating communications on climate change and making sure everyone was "on the same page, with the same message."

The letter to Card did not indicate that anyone but Card was receiving a copy, so O'Keefe's fax to Cooney was basically a "blind copy." O'Keefe is a former Chief Executive Officer at the American Petroleum Institute, where Cooney was also formerly employed. O'Keefe also was

reportedly a registered lobbyist for ExxonMobil on climate change issues from 2001-2005. The Marshall Institute has been one of the most prominent policy organizations engaged in attempting to debunk global warming. It has reportedly received at least \$630,000 in funding from ExxonMobil since 1998.

Shortly thereafter, Cooney began to play a more visible role in Climate Change Science Program governance as the CEQ liaison to the interagency principals committee. He served as a representative of the interest taken by the White House policy apparatus in the science program, and in particular as the agent of CEQ Chairman James Connaughton. Program publications required his editorial review and approval prior to publication and distribution. His edits of program reports, which had been drafted and approved by career science program managers, had the cumulative effect of adding an enhanced sense of scientific uncertainty about global warming and minimizing its likely consequences, and deleted even minor references to the National Assessment. (I discuss Cooney's role further below.)

The absence of all but the most fleeting and uninformative references to the National Assessment continued through all subsequent CCSP publications, including most significantly the CCSP Strategic Plan and its accompanying "Vision" document, both issued in 2003; the *Our Changing Planet* reports to Congress from the Fiscal Year 2003 edition through the current Fiscal Year 2007 edition; internal documents related to program planning; memoranda documenting meetings of the CCSP principals committee; and documents pertaining to the current and prospective set of CCSP "Synthesis and Assessment Products."

In July 2003 the program issued its *Strategic Plan for the Climate Change Science Program*. The document was submitted to Congress under the signatures of Secretary of Energy Spencer Abraham, Secretary of Commerce Donald L. Evans, and Office of Science and Technology Policy Director John H. Marburger. In the plan, the existence of the National Assessment was mentioned only in a single sentence, which did not even include the title of the report. There was no description of the structure, process, scope, purpose, or contents of the National Assessment. The National Assessment did not appear in the bibliography of the plan. No information was given to suggest how copies might be obtained. In effect, mention of the National Assessment had almost completely vanished from the CCSP Strategic Plan.

The lone, one-sentence mention of the National Assessment appeared in the chapter of the Strategic Plan on "Decision Support Resources Development." It seemed revealing, in a chapter that devoted thousands of words to describing how the program was taking steps to elevate the priority of developing "scientifically based resources to aid decisionmaking" as one of the core approaches of the program's strategic plan for research, that there was no acknowledgement of what has been the program's most substantial process and product in that area. The Strategic Plan contained no discussion of the rationale for this conspicuous omission, no intellectual or scientific justification. It was evident to me from personal communications at the time that the key individuals responsible for producing the Decision Support Resources Development chapter understood that their omission of the National Assessment was not the result of a scientifically based decision, but rather that it was a White House political requirement, enforced by CEQ.

National Research Council's criticism of the CCSP on the National Assessment

The final report of the National Research Council's Committee to Review the U.S. Climate Change Research Program Strategic Plan, issued in February 2004, was critical of the failure of the program to incorporate and build on the National Assessment in its strategic planning for assessment and "decision support" activities. On the subject of the National Assessment's scientific credibility the report said:

It is especially important that CCSP synthesis and assessment products be independently prepared, or evaluated, by the science community. This will provide a level of credibility that reports produced exclusively within the government sometimes fail to achieve. The only previous centralized assessment effort by the CCSP agencies, the U.S. National Assessment on the Potential Consequences of Climate Variability and Change, followed these credibility assurance guidelines. The National Assessment's Overview and Foundation reports are important contributions to understanding the possible consequences of climate variability and change. (National Research Council, Committee to Review the U.S. Climate Change Science Program Strategic Plan, *Implementing Climate and Global Change Research: A Review of the Final U.S. Climate Change Science Program Strategic Plan* (National Academies Press, 2004, p.13).

On the value of the National Assessment's process of engaging scientists and "stakeholders" in dialogue, the NRC review said:

The processes of stakeholder engagement and transparent review of the National Assessment reports were exemplary....The strategic plan...should more effectively build upon a growing capability within the U.S. climate and global change research community to interact with potential users of climate and global change science, as was demonstrated in the U.S. National Assessment of the Potential Consequences of Climate Variability and Change (NAST, 2001). The revised plan generally overlooks the insights and relationships that were developed by the National Assessment. For example, the experience developed in assembling and maintaining networks of university researchers and stakeholders in different regions of the country is extraordinarily valuable, as are the networks themselves. These relationships should be supported if the CCSP is going to maintain strong stakeholder involvement. (pp. 13-14)

On the significance of the regional-scale assessments included as part of the National Assessment, the NRC review said:

The plan also does not include areas of research relevant to regional-scale assessments identified as a result of the National Assessment. The committee reiterates the recommendation from its first report that the CCSP should 'build upon the lessons learned in applied climate studies and stakeholder interaction from prior environmental and climate assessment activities.' This deficiency needs to be remedied quickly so that the program's decision support activities reflect what the scientific community now knows, what it can accomplish, and what users would like to know. (p. 14)

On the Administration's apparent refusal to provide any scientific rationale for the disappearance of any acknowledgement of the National Assessment, the NRC review said:

For the most part the CCSP's revisions to the strategic plan are quite responsive to comments expressed at the workshop, in written input, and by this committee. One notable exception is the fact that the revised plan does not acknowledge the substantive and procedural contributions of the U.S. National Assessment of the Potential Consequences of Climate Variability and Change (NAST, 2001), a major focus of the Global Change Research Program (GCRP) in the late 1990s. Many participants at the [CCSP] December [2002] workshop criticized how the draft strategic plan treated the National Assessment, as did this committee in its first report. The revised plan does not reflect an attempt to address these concerns, and no rationale for this decision has been provided. (pp. 29-30).

Although OSTP Director John Marburger has referred to the National Academy of Sciences as the "gold standard" of scientific advice to the government, and despite the criticism of the plan for failing to provide any rationale for the disappearance of the National Assessment, Dr. Marburger, CCSP Director James R. Mahoney, and other Administration officials and CCSP leaders offered no response to this criticism of how they treated the National Assessment. No changes were made to the Strategic Plan in response to the NRC's criticism. It appeared to me that a conspiracy of silence was being enforced within the federal government, which had nothing to do with the scientific merits of the National Assessment.

The role of the Council on Environmental Quality

The Administration, without ever clarifying the issue forthrightly, has allowed a perception to persist that the suppression of the National Assessment was required by a legal agreement pursuant to a joint stipulation to dismissal of the 2001 lawsuit filed by the Competitive Enterprise Institute et al. seeking to halt the distribution of the National Assessment. From personal communications with program officials I was given to understand that then-CCSP Director James Mahoney, the Assistant Secretary of Commerce for Oceans and Atmosphere, had been told by the White House that references to the National Assessment had to be pulled out of the Strategic Plan because of a legal agreement. Administration officials have never offered an open explanation of why the terms of that legal settlement, as distinct from a strictly political agreement, would require suppression of the assessment even for purposes of using it as a scientific document or referring to it in program planning for research and future assessments.

I have examined the official court records on the dismissal of the 2001 CEI et al. lawsuit and find no basis for such suppression. A subsequent lawsuit filed by CEI in 2003, which would have required removal of all links to National Assessment documents from a federal government Web site, was dismissed with prejudice and likewise provides no legal basis for the suppression of use of the report. Rather, it appears that, although the CEI lawsuits were dismissed, the Administration decided nevertheless to award what I have termed the global warming denial machine a political victory that they could not have won had their lawsuits gone to trial. Myron Ebell of CEI has been quoted as saying of the National Assessment, "To the degree that it has vanished, we have succeeded." (*Greenwire*, October 3, 2006)

It is my understanding that the direction to the CCSP leadership and the federal agencies to suppress the use of and references to the National Assessment came from Philip Cooney at CEQ, and was transmitted to the CCSP agency principal representatives by CCSP Director Mahoney. Cooney was visible and active in the program because of his attendance at meetings in his role as CEQ liaison, and from personal communication with program leaders it was clear to me that Cooney was involved in matters of program governance in ways that were not as visible. In any case, it was my understanding that Cooney acted as a political operative, i.e., not as an independent decisionmaker but rather as an agent of CEQ Chairman James Connaughton and, by extension, the White House policy and political apparatus. In any case, the White House had directed Mahoney to suppress references to the National Assessment.

One of the CCSP agency principals informed me that a directive to the agencies to refrain from referencing the National Assessment had come from Mahoney's office. Mahoney later confirmed to *Environmental Science & Technology*, a journal of the American Chemical Society, that federal researchers were restricted from referring to the National Assessment (*Environmental Science & Technology Online*, October 12, 2005).

My June 1, 2005, memorandum to CCSP agency principals, "On Issues of Concern About the Governance and Direction of the Climate Change Science Program," included the following about the role of CEQ in CCSP governance. To my knowledge these statements have not been challenged for factual accuracy:

The Executive Office of the President, starting in 2002, placed the CEQ Chief of Staff, Phil Cooney – a lawyer and former official with the American Petroleum Institute, the main lobbying arm of the oil industry – at the table at CCSP principals meetings as the CEQ liaison. This individual, and CEQ generally, have been especially notable in the administration's commingling of politics and science....

In a memorandum dated October 28, 2002, he marked-up the first draft of the CCSP Strategic Plan after it was approved by CCSP agency principals and before it was released for NRC review and public comment. Most of his roughly 200 text changes were incorporated in the review draft. A number of these changes in text relating to questions of climate science altered the content of the draft as it had been developed by federal science program professionals. Taken in the aggregate, the changes had a cumulative effect of shifting the tone and content of an already quite cautiously-worded draft to create an enhanced sense of scientific uncertainty about climate change and its implications. The draft Strategic Plan was legitimately criticized by reviewers who charged that the CCSP had adopted a vocabulary with an exaggerated emphasis on scientific uncertainties. To my knowledge this CEQ mark-up was not shared with or vetted by CCSP principals or CCSP agency science program managers. The process was quintessentially non-transparent and, in my view, a policy-driven political interference in a key science program document

It is my understanding that the CEQ Chief of Staff played a lead role as White House agent for enforcing the suppression of the National Assessment and the systematic removal of meaningful references to it from CCSP publications. If this was pushed on the CCSP leadership as ostensibly a legal requirement pursuant to the lawsuit settlement, I am not

aware of any effort by CCSP principals to obtain appropriate clarification and documentation. I believe the CCSP leadership got rolled on this matter by the White House political operation. Further, public disclosure of the CEQ Chief of Staff's communication with the Competitive Enterprise Institute, which filed the lawsuits against the National Assessment, suggests joint political strategizing — an insult to the CCSP leadership and to the climate change research and assessment community, and another indicator of the inappropriateness of CEQ jurisdiction over the science program.

CEQ has also intervened in the final review and clearance of CCSP annual reports. For example, the CEQ Chief of Staff made about 100 revisions to the final draft of the FY 2003 *Our Changing Planet*, some of which substantially changed or deleted text on program activities such as those relating to decision support on mitigation and adaptation options, integration of climate science with comparative analysis of response strategies, ongoing regional assessments of global change consequences, and the relationship between energy-related emissions, climate change, and ecosystem impacts. In general, I believe the Strategic Plan and other CCSP documents have been weakened by a process in which reports are drafted and edited with an anticipatory eye to what will be able to obtain CEQ approval, which appears to be the final step in the White House clearance process.

Unlike the other representatives on the program's principals committee, the great majority of whom were career science program management professionals, CCSP Director Mahoney was a Senate-confirmed Presidential appointee. As Assistant Secretary of Commerce for Oceans and Atmosphere and Deputy Administrator of the National Oceanic and Atmospheric Administration, he held a position different from that of the other principals, as the program's chief executive and a political representative of the Administration. In this role, he would, on some occasions, set policy, or represent policy, regarding program governance on various matters that had been decided by Administration political officials, not by the program principals. The policy of not discussing or citing the National Assessment was one such case. On such a matter, I believe it was well-understood by the agency principals that to challenge the chairman would, in effect, have been to challenge the White House — in particular CEQ.

Looking forward

Building appropriately on the pioneering work of the National Assessment could have had a salutary influence on developing the priorities of the CCSP Strategic Plan and surely would have led the program toward a different overall configuration of follow-up scientific and assessment priorities. It could have led to a different approach to evolving the discourse between scientists and users of information — a freer relationship and one less constrained than is the current process by political gatekeepers concerned with controlling the flow of communications about climate change and its implications for the United States.

Advances in scientific research and assessment in the six years since the first National Assessment report was published, and growing concern about global warming and climate change among policymakers and the public, make a reactivation of the National Assessment process and the production of a second National Assessment report under the Global Change Research Act particularly appropriate, feasible, and necessary at this time.

At the international level, the comprehensive and authoritative Intergovernmental Panel on Climate Change (IPCC) Fourth Assessment Report will be published in 2007. The IPCC Fourth Assessment Report will review and synthesize scientific advances since 2001 in the study of the physical climate system, climate change impacts, and mitigation and adaptation response options. At the national level, since 2001, the U.S. Climate Change Science Program has invested more than \$10 billion in scientific research and observing systems to study climate and associated global change. This investment has made possible substantial progress in advancing scientific understanding.

Reports of a steady stream of scientific findings on global climate change, and reports on observed consequences of global warming, have increased the level of interest and concern among policymakers and the public. Debate on appropriate climate change policy and response strategies at the international, national, and state levels has also increased and become more salient in the U.S. public arena. In this context, activating the National Assessment process and producing a second National Assessment report could make a major contribution to the nation's preparedness for addressing the challenge of global warming and climate change.

Conclusions and Recommendations

1. Revitalize the National Climate Change Assessment process

I see the treatment of the 2000 National Assessment, and the abandonment of high-level support for an ongoing process of scientist-stakeholder interaction, as the central climate science scandal of the Bush Administration – the action that has done, and continues to do, the greatest damage in undermining national preparedness in dealing with the challenge of global climate change. Thus, I believe it would be appropriate for the Committee to investigate the Administration's treatment of the 2000 National Assessment, as part of oversight of the White House's political intervention in the U.S. Climate Change Science Program and in particular its assessment and communication activities.

On December 11, 2006, 24 House Members, including Mr. Waxman and Ms. McCollum from this Committee, sent a letter to Dr. William Brennan, Acting Director of the Climate Change Science Program, which said in part:

The Climate Change Science Program (CCSP) was launched in 2002 to fulfill the duties of the U.S. Global Change Research Program (GCRP) and to coordinate interagency climate change research activities. However, the CCSP has not completely fulfilled the statutory obligations of the GCRP, because it has failed to produce a comprehensive scientific assessment report detailing the effects of climate change on the United States. Climate change has many serious implications for the well being of our country's economy, critical infrastructure, public health, energy security, environmental health and national security. To help Congress shape a well-informed, forward-looking climate change policy, we call on the Bush Administration to comply with the law by producing a policy-relevant climate impacts assessment report at the earliest possible date.

Although it appears that the Administration has no intention of undertaking a new national climate change assessment, I believe the letter points in the right direction for the future.

The essential idea is not to replicate the 2000 National Assessment in its particulars, but rather to move forward with a stronger, coordinated, integrative effort, employing the method of climate scientists and other experts communicating directly with policymakers and other stakeholders, geographical region-by-region, and socioeconomic sector-by-sector, to diagnose vulnerabilities and develop response strategies, without the impediment of political interference with free and open communication. Climate change impacts vary by region and sector, as do response strategy options. Every Member has an interest in the kind of information such an assessment could make available for consideration in developing national policy.

2. Implement the recommendations of the Union of Concerned Scientists – Government Accountability Project report and address additional related issues

I support the recommendations and conclusions of the excellent UCS-GAP report, *Atmosphere of Pressure – Political Interference in Federal Climate Science*. I encouraged and consulted at an early stage on both the UCS survey of federal scientists and the GAP investigative work and believe that the combined efforts of the two organizations have produced significant results. From my experience and understanding of the issues outlined in the report, I believe the report documents a number of the key problems and identifies what needs to be done to address them. I would add the following:

(a) The UCS-GAP report does not substantially address the higher levels in the chain of command that has resulted in political interference with climate science communication, starting with the President. In particular, the report does not focus on the role of the Council on Environmental Quality. CEQ is a White House policy office, not a science office. In my view it was problematic from day one that CEQ officials, whose essential job was to advance the President's policy and political position on global climate change, were at the table participating directly in the governance of the Climate Change Science Program and shaping its communication of climate change research. In my judgment, CEQ should be put back on the policy side of the science-policy fence – as was the case under the previous Administration.

(b) The Government Accountability Project has prepared a critical analysis of the new media policy developed at NASA in 2006 in the wake of publicity surrounding NASA's scandalous attempt to muzzle public communication by Dr. James Hansen, Director of the NASA Goddard Institute of Space Studies. While the NASA media policy appears to be an improvement over the prior situation, GAP's analysis raises concerns and identifies legislative action that the Committee should consider. A statement and memorandum prepared by Tom Devine, Legal Director at GAP, is included with this testimony as an Appendix.

(c) The UCS-GAP report, with its focus on the individual federal agencies, does not substantially address the issue of communication by the Climate Change Science Program as a multiagency entity, nor the communications role of the Climate Change Science Program Office. Congressional oversight should include a focus on CCSP and the CCSP Office as well as the agencies.

In order to ensure the scientific independence and credibility of the program and its products, the CCSP should develop CCSP-wide principles and policies on communications to ensure the scientific independence of climate change science communications.

Currently, there is no procedure under which the CCSP, or the CCSP Office, can communicate on behalf of the federal climate research enterprise as a whole. Media inquiries to the CCSP are channeled to the NOAA Public Affairs Office – an office that, as discussed in the UCS-GAP report, has been politically compromised in its climate science communication by the Department of Commerce and by the Administration political appointees at the head of NOAA. As one key example, in communicating on the scientific question of the relationship between global warming and increased hurricane intensity, NOAA has selectively put forward NOAA meteorologists whose position leads them to either deny or play down the relationship, while steering public attention away from other scientists in the climate research community – at NOAA and other federal laboratories including NASA and DOE, as well as university scientists funded by the National Science Foundation – whose research suggests both an observed and projected linkage between global warming and hurricane intensity. This is not an acceptable state of affairs.

The current procedure needs to be reformulated. Congress, the media, and the public need to be able to receive communications directly from the scientific mainstream of the very large federal investment in scientific research on climate and global environmental change, not filtered through the public and governmental affairs offices of a single agency. One alternative would be to give the Climate Change Science Program Office the resources, staffing with scientific expertise, and freedom from political manipulation, to communicate, and to coordinate communications, on behalf of the full range of research supported by the CCSP participating agencies. The CCSP Office does not currently have the authority, nor the resources, to perform that function. In its review of the CCSP Strategic Plan, the National Research Council said:

Given the expanded attention to decision support, communication with stakeholders, and interagency coordination, the committee sees a much larger role and responsibility being placed on the CCSP Office. However, that office may not have the human resources necessary to meet the strategic plan objectives. As the provision of decision support is a central goal of the overall plan, failure in this area would represent a serious failure of the overall program.

APPENDIX

GOVERNMENT ACCOUNTABILITY PROJECT
STATEMENT ON NASA MEDIA POLICY

January 30, 2007

NASA and other agencies have trumpeted new media policies as proof of their good intentions and new-found respect both for scientific freedom and freedom of speech. Indeed, the policies have appealing rhetoric that can help change bureaucratic attitudes. That matters. Depending on the political cycle, the rhetoric could be sufficient to sustain an open environment within scientific agencies.

Unfortunately, the policies' fine print exposes them as a trap that could be used to fire, or potentially prosecute, almost any scientist if the political environment becomes hostile again. First let's consider what's in them. The Achilles' heel is a loophole that cancels all the new free speech rights if a scientist discloses information in new, pseudo-classified, hybrid secrecy categories. These categories, with new names such as "Sensitive but Unclassified" or "Sensitive Security Information," do not purport to have the national security significance of classified documents. In fact, they are just new names for longstanding categories like "For Official Use Only," that primarily are secrecy shields of convenience for virtually any information the agency wants to keep off the market of public discourse, either to control timing or avoid embarrassment. Although the SBU or SSI brands can be issued arbitrarily, the potential criminal liability can be even more severe than for genuinely classified information.

Even worse, information can be designated as SBU or SSI after-the-fact. For example, one GAP air marshal client has been fired three years after the fact for disclosing Sensitive Security Information, even though it was not marked as restricted at the time. The whistleblower was challenging a security breakdown, and his dissent was vindicated as the agency quickly canceled a reckless decision when it became public. Depending on the next election results or other factors that should be irrelevant, under NASA's fraudulent media policy reform, every NASA scientist communicating with this committee could be fired several years from now for disclosing Sensitive but Unclassified information.

Not only is the policy disingenuous, it is illegal. It violates the Whistleblower Protection Act on its face, because that law only permits blanket restrictions on public speech if information is properly classified.

Let's also consider what the policy doesn't include. The Anti-Gag Statute, an appropriations rider passed unanimously by Congress for the last 18 years, bans any spending to implement or enforce any nondisclosure policy, form or agreement, unless it also has an addendum with specific congressional language that, in the event of a conflict with the policy, the Whistleblower Protection Act and the Lloyd Lafollette Act protecting safe communications with Congress will supersede any contradictory language and prevail. The NASA media policy does not contain this addendum. Any funds spent to implement and enforce it have been and will be illegal expenditures.

There is no possibility that this was a good faith error. GAP's legal director Tom Devine spent over an hour tutoring the NASA Office of General Counsel lawyer who wrote the phony reform, both on the requirements of the Whistleblower Protection Act and the Anti-Gag Statute. The lawyer reassured GAP that he understood what those laws required. But NASA issued a policy that is a custom fit for violating these fundamental merit system and whistleblower rights for scientific freedom. The illegality is deliberate.

Chairman Waxman, your legislation co-sponsored last Congress by Representative Davis and Representative Platts and marked up unanimously last Congress (H.R. 1317 and H.R. 5112) directly addresses this type of back door scientific repression. It codifies and provides a remedy for the Anti-Gag Statute, and establishes checks and balances on the currently-unrestrained use of pseudo-classification gag orders. The media policy's fine print illustrates why your committee should act immediately to pass this badly needed reform. The committee also should have GAO audit how much money has been spent illegally to implement and enforce the NASA media policy. An April 1, 2006, memorandum GAP prepared on the policy is attached.

For further information, contact:
Tom Devine
Legal Director
Government Accountability Project
Washington, DC
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MEMORANDUM

To: Climate Scientists
From: Government Accountability Project
Re: Analysis of NASA's Recently Released Media Policy

The Government Accountability Project (GAP) is issuing advisory comments on NASA's new media policy that it released yesterday, March 30. The new policy came in response to public outcry over NASA's suppression of climate science research inconsistent with the Bush administration's political agenda. NASA is touting the development as a free-speech breakthrough for agency scientists.

GAP identified the areas ***in which the new policy is an improvement:***

- NASA Administrator Michael Griffin's reassuring rhetoric is of symbolic value, demonstrating official respect for scientific freedom.
- The new media policy does not cover scientific reports, web postings, or professional dialogue such as at conferences, allowing scientists to share information with their colleagues without going through public affairs political appointees.
- The policy officially recognizes the free speech right for scientists to express their "personal views" when they make clear that their statements are not being made on behalf of NASA.

However, ***in six critical areas the new policy falls short*** of genuine scientific freedom and accountability, and potentially undermines the positive guarantees:

- While recognizing the existence of a "personal views" exception, the policy doesn't announce the circumstances when that right cancels out conflicting restrictions, which are phrased in absolute terms applying to contexts such as "any activities" with significant media potential. This leaves a cloud of uncertainty that translates into a chilling effect for scientists.
- The policy fails to comply with the legally-mandated requirements of the Anti-Gag Statute to explicitly include notice that the Whistleblower Protection Act and Lloyd Lafollette Act (for congressional communications) limit and supersede its restrictions.
- The policy institutionalizes prior restraint censorship through "review and clearance by appropriate officials" for "all NASA employees" involved in "preparing and issuing" public information. This means that scientists can be censored and will need advance permission from the "appropriate" official before anything can be released.
- The policy defies the WPA by requiring prior approval for all whistleblower disclosures that are "Sensitive But Unclassified" (SBU). The legal definition of SBU is broad and vague, to the point that it can be interpreted to sweep in virtually anything. The WPA

only permits that restriction for classified documents or those whose public release is specifically banned by statute.

- The policy bans employees' free speech and WPA rights to make anonymous disclosures, requiring them to work with NASA public affairs "prior to releasing information" or "engaging in any activities or events... that have the potential to generate significant media or public interest or inquiry."
- The policy gives NASA the power to control the timing of all disclosures, which means scientists can be gagged until the information is dated and the need for the public to know about critical scientific findings has passed.

In December of last year, NASA climatologist Dr. James Hansen was threatened with "dire consequences" by a political appointee for statements he made about the consequences of climate change. According to GAP's legal director, Tom Devine, "Under this so-called reform, Dr. Hansen would still be in danger of 'dire consequences' for sharing his research, although that threat is what sparked the new policy in the first place. The new policy violates the Whistleblower Protection Act, the Anti-Gag Statute, and the law protecting communications with Congress, the Lloyd-Lafollette Act. The loopholes are not innocent mistakes or oversights. GAP extensively briefed the agency lawyer on these requirements, who insisted he understood them fully. NASA is intentionally defying the good government anti-secrecy laws."

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

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 is 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 decisionmaking. 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 unbecoming 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 decisionmaking on the urgent issue of climate change.

I thank the committee for holding this hearing.
[The prepared statement of Mr. Shindell follows:]

Testimony for the hearing on political interference with the work of government climate change scientists, Congressional Oversight and Government Reform Committee, Jan. 30, 2007, U. S. House of Representatives

Dr. Drew T. Shindell

I thank the committee for the opportunity to testify on the present state of climate science and on my experiences with political interference in the communication of climate science by government researchers. I have been a researcher at NASA's Goddard Institute for Space Studies since 1995, and a lecturer at Columbia University since 1997. This is relevant to my expertise, but today I am presenting testimony as an individual. My participation is not connected to my job duties as a NASA scientist.

Scientists provide information to policy makers and the public on issues affecting society. Climate change is such an issue, and one for which it is especially critical that decisions be made using the best available scientific information as 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 computer modeling support these conclusions. Observations of the oceans, glaciers and ice sheets, the atmosphere, and ecosystems all show that the impacts of climate change are already being felt. The scientific evidence indicates that the Earth is now warmer than at any time during the last 1000 years, and probably warmer than at any time during the last 5000 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 shifts in weather patterns and an increased frequency of extreme events leading to more droughts and floods, an increase in the severity of summer heatwaves, and a rise in sea levels that could devastate low-lying coastal areas.

Although the scientific basis for the conclusion that human activities are altering Earth's climate is very strong, arguments are still raised over whether current scientific understanding justifies societal action. One of those arguments concerns Antarctic temperature trends. While most of the planet has warmed rapidly during recent decades, much of Antarctica has cooled. Lack of an adequate explanation for this has been cited as evidence that scientific understanding of climate change is too incomplete to warrant taking action to mitigate global warming.

In the fall of 2004, a team I led published a paper providing an explanation of how ozone depletion over Antarctica and increasing greenhouse gases could together account for the observed cooling over much of Antarctica (and the warming over the Antarctic Peninsula, the one area where observations showed a warming trend). This study, using the NASA Goddard Institute for Space Studies climate model, was the first to look at how these two factors work together to influence Antarctic temperatures. The study not

only helped explain the observed cooling, but also predicted a warmer future for Antarctica based on projections of continued increases in greenhouse gas emissions. This has clear implications 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 the findings to convey them to the public. I have worked on numerous releases during my 12 years at the Goddard Institute. While previous to this time, press releases had been issued rapidly and with revisions from Headquarters that were made primarily to improve clarity and style, this release was repeatedly delayed, altered and watered down. When we at GISS enquired what was going on, we were told in September 2004 by the press corps that releases were being delayed because two political appointees and the White House are now reviewing all climate related press releases. As an example, the title we proposed for the release was "Cool Antarctica may warm rapidly this century, study finds". The reviewers asked that it be 'softened'. The next suggestion from us was "NASA Scientists expect temperature flip-flop at the Antarctic". That apparently still wasn't 'soft' enough, so this time they gave us a title to use themselves: "Scientists predict Antarctic climate changes". I objected, but was anonymously overruled, and the lack of transparency in the process made it very difficult to appeal. That version was the title of the release that went out. Not surprisingly, it generated relatively little media interest and the results have been slow to enter the wider public discussion regarding the level of scientific understanding of global warming.

Scientists do not simply explore what we happen to be most curious about. Knowing that our research is supported by public funding, we go to great lengths to provide policy-relevant information. 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 the information needed for decision-making. 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 monitor all interviews either in person or on the phone, a measure unbecoming a democratic society. Some scientists were told their scientific presentations had to be cleared by NASA in advance. Policies such as these were conveyed orally, with no written documentation even when one was requested. As with the interference with press releases, these restrictions were not imposed on our NASA colleagues in Space Science, or even those in areas of Earth Science other than climate change. Broadly similar experiences of interference in communication with the press and public were related to me by colleagues in NASA and NOAA. Suppression of results demonstrating ever-increasing scientific knowledge of the principles underlying global warming, of the data demonstrating its rapidity and its consequences, and exaggeration of the remaining scientific uncertainties, certainly gave the appearance that scientific evidence that could undermine a rationale for inaction on climate change was being targeted.

NASA's new, written policy of 'openness' regarding press contacts has been a welcome change. This clearly defined policy is rather unique among federal scientific agencies, and it should be emulated at others such as the EPA, NOAA, DOE, etc. As this policy seems to have come about as a response to scrutiny of political interference in communication between NASA scientists and the press and public, I hope that the

interest evidenced by today's hearing will lead to continued improvements in policies to protect the integrity of government science and its communication to the public. While NASA has taken important steps to ensure scientific integrity, even there the process of managing communication between scientists and the public or the press still lacks transparency. Revisions to releases are typically sent anonymously from Headquarters and with minimal explanation. While political appointees will always be at the top of government agencies such as NASA, it is vital to protect the ability of government scientists to communicate to the public without political interference. The taxpayers fund scientific research, so should be able to know and benefit from the outcomes. In a democratic society there is no justification for suppressing scientific information about climate change.

Even with the best possible information, policymakers must make subjective decisions in the face of uncertainty. These types of decisions go on all around us, for example when a doctor decides on treatment based on the best medical evidence despite the fact that medical science does not understand all aspects of the human body. 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' interactions with the public and in decision-making on the urgent issue of climate change.

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

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 decisionmaking 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 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 a 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 6 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. Last, 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 last year that NASA scientists at the Jet Propulsion 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 cherry-picking 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 you further.

Thank you.

[The prepared statement of Mr. Pielke follows:]

**STATEMENT TO THE COMMITTEE ON GOVERNMENT REFORM OF
THE UNITED STATES HOUSE OF REPRESENTATIVES**

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30 January 2007

If Congress uses its oversight powers effectively and judiciously, the nation will be stronger and the Congress will be more successful. And that will be regardless of whether it is Republicans or Democrats in control. After three decades in office, I know that good congressional oversight is not easy. But I also know how essential it is to the health of the nation. Congress cannot continue to allow its oversight agenda to be set by partisan considerations, and we must not repeat the mistakes of the past decade.¹

Representative Henry Waxman (D-CA), 2006

Rather than resolving political debate, science often becomes ammunition in partisan squabbling, mobilized selectively by contending sides to bolster their positions. Because science is highly valued as a source of reliable information, disputants look to science to help legitimate their interests. In such cases, the scientific experts on each side of the controversy effectively cancel each other out, and the more powerful political or economic interests prevail, just as they would have without the science.²

Daniel Sarewitz, 2000

Introduction

I thank the Chairman and the Committee for the opportunity to offer testimony this morning on "Political Interference in Science: Global Warming." I am a Professor of Environmental Studies at the University of Colorado and also director of the university's Center for Science and Technology Policy Research.³ My research focuses on the connections of science and decision making. I also have been studying climate change science and policy for about 15 years. A short biography can be found at the end of my written testimony, including links to my publications. My testimony draws on my

¹ 18 September 2006, <http://oversight.house.gov/Documents/20060918165855-55473.pdf>

² D. Sarewitz, 2000. Science and Environmental Policy: An Excess of Objectivity, Chapter in R. Frodeman (ed.), **Earth Matters: The Earth Sciences, Philosophy, and the Claims of Community**, Upper Saddle River, NJ: Prentice Hall, pp. 79-98. <http://www.cspo.org/products/articles/excess.objectivity.html>

³ At the University of Colorado I am affiliated with CIRES, the Cooperative Institute for Research in Environmental Sciences, a joint institute of the University of Colorado and the National Oceanic and Atmospheric Administration (NOAA). The Center that I direct at CIRES has received research funding from a number of other federal research agencies, including NSF and NASA. The views presented here are my own.

forthcoming book, **The Honest Broker: Making Sense of Science in Policy and Politics** (Cambridge University Press, 2007).

My testimony today makes the case 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 in politics, and not on the mistaken impression that science and politics can somehow be kept separate.

There is no Bright Line that Separates Science from Politics

The title of this hearing indicates that when politics and science interact it somehow represents interference. In recent years policy makers and scientists alike have reinforced this view when they have suggested that we need to identify a demarcation between science and politics in order to keep them separate. Such suggestions have come from both Republicans and Democrats. For example:

“There should be a clear line between the work of scientists, which is to assemble and analyze the best available evidence, and that of policymakers, which is to decide what the nation’s response to the science should be.”⁴

Representative Henry Waxman (D-CA), 2004

“The issue is where does science end and policy begin,”⁵

David Goldston, chief of staff to Representative Sherwood Boehlert (R-NY), chairman of the House Science Committee, 2006

Many decades of study of the role of science in decision making indicates that efforts to keep separate science and politics are not only doomed to fail, but they are likely to create conditions that are likely to enhance the pathological politicization of science.

Both Mr. Waxman’s various reports in recent years on science and politics and those of the Union of Concerned Scientists (UCS) give a strong impression that the politicization of science refers exclusively to their criticisms of the use of science by the present administration. From another perspective, based on the analysis found in a 2004 book published by the conservative-leaning Hoover Institute at Stanford one might be led to think that the politicization of science is really a problem unique to the political left,⁶ This sorry state of affairs indicates that the issue of the “politicization of science” has itself become politicized.

⁴ H Waxman, 2003. Politics and Science in the Bush Administration, UNITED STATES HOUSE OF REPRESENTATIVES COMMITTEE ON GOVERNMENT REFORM — MINORITY STAFF SPECIAL INVESTIGATIONS DIVISION AUGUST 2003, p. 1.

http://oversight.house.gov/features/politics_and_science/pdfs/pdf_politics_and_science_rep.pdf

⁵ A. Revkin, 2006. Call for Openness at NASA Adds to Reports of Pressure, *The New York Times* 16 February <http://www.nytimes.com/2006/02/16/science/16nasa.htm>

⁶ S Gough (Ed.), *Politicizing Science*, Hoover Institute Press. Stanford <http://www.hoover.org/publications/books/3003781.html>

Issues related to the politicization of science are important to the nation as a whole. In the end what is most important is that the government has the capability to well-use expertise in decision making, because such expertise is absolutely critical to developing, understanding, and implementing policy alternatives in the face of the complex challenges of the modern world. In my written testimony that follows I hope to make these thoughts a bit more concrete.

Politics and Science Have Always Mixed

Here are just a very few examples of political issues that involved science under the past six presidential administrations⁷:

- President Richard Nixon had NASA move the timing of the launch of Apollo 17 in order to better serve his 1972 reelection campaign, against the wishes of NASA scientists and engineers. President Nixon also asked his science advisor to cut all research funding for the Massachusetts Institute of Technology due to a political conflict with its president (his science advisor ignored the request).⁸
- During President Ford's administration the *Los Angeles Times* alleged that the Environmental Protection Agency had falsified data in support of its regulatory position on sulfur oxides. A subsequent investigation by the U.S. Congress found serious issues with EPA's peer review and that some of its epidemiological research provided an unsuitable basis for regulation.⁹
- President Jimmy Carter went against the wishes of his scientific advisors when he committed the United States to drawing 20% of its energy from renewable sources by 2000. President Carter explained that he accepted his advisors technical conclusions that the goal would be impossible, but that he had put forward the proposal for political reasons.¹⁰
- President Ronald Reagan (prior to being elected) questioned the science of evolution, calling it a theory that was being increasingly challenged by scientists. He suggested that if evolution was to be taught in schools, "then I think that also the biblical theory of creation, which is not a theory but the biblical story of creation, should also be taught."¹¹
- The administration of President George H. W. Bush proposed redefining "wetlands" in such a way so as to exclude millions of acres of land from federal

⁷ See also, D. Greenberg, 2001. **Science, Money, and Politics: Political Triumph and Ethical Erosion** (University of Chicago Press).

⁸ http://sciencepolicy.colorado.edu/scienceadvisors/david_transcript.html

⁹ Report on Joint Hearings on the Conduct of the Environmental Protection Agency's "Community Health and Environmental Surveillance System" (CHESS) Studies, Joint Report of the Committee on Science and Technology and the Committee on Interstate and Foreign Commerce, April 9, 1976

¹⁰ F. Press and P. Smith, (in press) Science and Technology in the Carter Presidency, Chapter 6 in R. Pielke, jr. and B. Bklein (eds.) **Presidential Science Advisors: Perspectives and Reflections on Science, Policy, and Politics** (in prep.).

¹¹ Anon. 1980. "Republican Candidate picks Fight with Evolution," *Science* **209**:1214.

protection and open them up for development. The proposal was eventually withdrawn as lacking a scientific basis.¹²

- President Bill Clinton ordered a strike on the Al Shifa pharmaceutical factory in Sudan in 1998 in retaliation for bombings of the U.S. embassies in Kenya and Tanzania. The target of the attack was justified, in part, based on scientific evidence gathered at the factory site. It was later revealed that the scientific evidence had in fact been inconclusive.¹³

If science and politics have always been interrelated, then what, if anything, is different about today?

1. There are an increasing number of important issues which are related to science and technology in some way. Some issues are the result of advances in science and technology (e.g., the ethics of cloning), in others science and technologies are central to their resolution.
2. Policy makers increasingly invoke expertise to justify a course of action that they advocate.
3. Advocacy groups increasingly rely on experts to justify their favored course of action.
4. Congress, at least for the past six years, and perhaps longer has been derelict in its oversight duties, particularly related to issues of science and technology.
5. Many scientists are increasingly engaging in political advocacy.
6. 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, climate change, and so on.
7. The Bush Administration has engaged in hyper-controlling strategies for the management of information.

Science in Policy is Unavoidably Political

The notion that science and politics can be somehow separated in policy making survives in spite of an enormous and sophisticated literature providing evidence to the contrary in the area of Science and Technology Studies. Harvard's Sheila Jasanoff, a leading scholar who has studied the inter-relationship of science and politics, has written:

"Although pleas for maintaining a strict separation between science and politics continue to run like a leitmotif through the policy literature, the artificiality of this position can no longer be doubted. Studies of scientific advising leave in tatters the notion that it is possible, in practice, to restrict the advisory practice to

¹² Pielke, Jr., R. A. (ed.), 2004. Report on the Misuse of Science in the Administrations of George H.W. Bush (1989-1993) and William J. Clinton (1993-2001). By the Students in ENV5 4800, Maymester 2004, University of Colorado, June.

http://sciencepolicy.colorado.edu/admin/publication_files/resource-1935-2004.27.pdf

¹³ Pielke, Jr., R. A. (ed.), 2004. Report on the Misuse of Science in the Administrations of George H.W. Bush (1989-1993) and William J. Clinton (1993-2001). By the Students in ENV5 4800, Maymester 2004, University of Colorado, June.

http://sciencepolicy.colorado.edu/admin/publication_files/resource-1935-2004.27.pdf

technical issues or that the subjective values of scientists are irrelevant to decision making. . . . The notion that scientific advisors can or do limit themselves to addressing purely scientific issues, in particular, seems fundamentally misconceived ... the advisory process seems increasingly important as a locus for negotiating scientific differences that have political weight."¹⁴

The very language of science in public discussions lends itself to politicization. For instance, The New York Times reported in February, 2006 that scientists at NASA's Jet Propulsion Laboratory had complained because they had been instructed to use the phrase "climate change" rather than the phrase "global warming."¹⁵ The reason for this complaint is that the language of climate science has become politicized. A Republican strategy memo recommended use of the phrase "climate change" over "global warming" and environmental groups have long had the opposite preference. Another federal scientist, at NOAA, described how he was instructed by superiors not to use the word "Kyoto" or "climate change."¹⁶

To cite another example, several years ago the Union of Concerned Scientists, as part of its advocacy campaign on reducing greenhouse gas emissions, recommended the use of the word "harbinger" to describe current climate events that may become more frequent with future global warming.¹⁷ Subsequently scientists at NOAA, the National Center for Atmospheric Research, Harvard Medical Center's Center for Health and the Global Environment, Stanford, and the Fish and Wildlife Service's Polar Bear Project began to use the phrase in their public communication in concert with advocacy groups like Greenpeace.¹⁸ The term has also appeared in official government press releases.¹⁹ The use of language to convey political meaning is of course well understood in politics and has gained some greater prominence in recent years through the work of George Lakoff.²⁰ Policy makers 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 in Iraq as a "surge" or as an "escalation."

If the choice of language to use in discussing matters of science is inherently political then so too is selection of topics to issue press releases and statements made in

¹⁴ S. Jasanoff, 1990. **The Fifth Branch: Science advisors as policy makers**, (Harvard University Press) pp. 230-231, 249.

¹⁵ <http://www.nytimes.com/2006/02/16/science/16nasa.html>

¹⁶ http://www.rockymountainnews.com/drmn/local/article/0,1299,DRMN_15_5205550,00.html

¹⁷ http://www.ucsusa.org/global_warming/science/early-warming-signs-of-global-warming.html The word "harbinger" is suggestive of a linkage between today's weather events and projected climate change without definitively requiring a specific attribution.

¹⁸ <http://www.projectthinice.org/warming/science.php>

¹⁹ http://sciencepolicy.colorado.edu/prometheus/archives/climate_change/000354harbingers_and_clima.html

²⁰ <http://www.gsfc.nasa.gov/news-release/releases/2003/h03-340.htm>

²⁰ G. Lakoff. 2004. **Don't Think of an Elephant: Know your values and frame the debate, the essential guide for progressives** (Chelsea Green Publishing). For instance, at p. 3: "... when you are arguing against the other side: Do not use their language. Their language picks out a frame – and it won't be the frame you want." See also S. Hilgartner, 2000. **Science on Stage: Expert advice as public drama** (Stanford University Press).

government reports describing science programs, and in the composition of government advisory committees. Consider each in turn:

Choices When Issuing Press Releases and Reports

Scientists in federal agencies author tens of thousands of research papers every year. For only a very small fraction of these do federal agencies issue press releases or media advisories. So some criteria must be applied to determine what press releases are put out by an agency. Consequently, the decision to issue a press release necessarily involves extra-scientific considerations such as the likelihood of making news, which itself can be a function of political conflict. Often the politics involved are not left-right issues but simply casting the agency in a positive public light as a resource in future political battles over agency budgets.

Agencies all must have some procedure for which subjects and which scientists are promoted to the public. Because of the recent controversies involving press access to scientists, NASA and NOAA have developed very different approaches to their media policies. NOAA's policy on public statements by its employees states that the employee speaks for the agency at all times:

“Whether in person, on camera, or over the phone, when speaking to a reporter you represent and speak for the entire agency.”²¹

NASA, by contrast, distinguishes between speaking for the agency and personal views:

“NASA employees who present personal views outside their official area of expertise or responsibility must make clear that they are presenting their individual views – not the views of the Agency – and ask that they be sourced as such.”²²

Every government agency needs some sort of media policy. I suspect that every congressional office and committee also has guidelines for staff interacting with the media. It seems obvious that democracy would be impossible if every government employee sought to interpret or implement laws and policy according to their own personal preferences. And government employment carries with it professional responsibilities, which are proportionately greater the higher ranking the career official. Because the issue of agency media policies are not obvious or straightforward, they are an ideal subject for Congressional oversight, in order to evaluate and to share best practices.

The preparation of government reports has similar characteristics. Under the Climate Change Science Program more than 20 assessments of the state of various aspects of climate science are in various stages of preparation. The various reports are prepared

²¹ http://www.corporateservices.noaa.gov/%7Eames/NAOs/Chap_219/naos_219_6.html

²² http://www.nasa.gov/pdf/145687main_information_policy.pdf

under an exacting set of procedures for drafting, reviewing, and editing.²³ The Federal government has also sought to create guidelines to provide “guidance to agencies ensuring the quality, objectivity, utility, and integrity of information” under what is called the Data Quality Act.²⁴ Such policies represent experiments in the presentation of scientific information to policy makers, and as such they are worth close Congressional oversight. But for the reasons described above, no information management policy can ever hope to eliminate political considerations in the preparation of government reports with scientific content.

Advisory Committee Empanelment

A November, 2004 report of the nation's leading nongovernmental science advisory body – the National Research Council (NRC) -- recommended that presidential nominees to science and technology advisory panels not be asked about their political and policy perspectives. The NRC describes the political and policy views of prospective panelists as “immaterial information” because such perspectives “do not necessarily predict their position on particular policies.”²⁵ This “don't ask, don't tell” approach has been subsequently passed into law under the so-called Durbin Amendment to the FY 2006 Health and Human Services Appropriations Bill.²⁶ The “don't ask, don't tell” approach to politics in advisory committee empanelment is meaningless in practice.

Considerations of politics are unavoidable in the empanelling process. Consider the irony in the fact that the NRC Committee that recommended that political factors not be considered in advisory panels was itself composed of a perfect partisan balance between those committee members who had served Republican administrations and those who had served Democratic administrations. The real question is whether we want to openly confront the reality that extra-scientific factors of course play a role in committee empanelment or we turn a blind eye and allow committee empanelment decisions to play out in the proverbial backrooms of political decision making.

In nearly every other area of politics, advice is put forward with political and policy perspectives at the fore: the Supreme Court, congressional hearing witness lists, the Sept. 11 commission, to name just a few. In no other area where advice is given to the government is it even plausibly considered that politics can or should be ignored. And while science is the practice of developing systematic knowledge, scientists are both human beings and citizens, with values and views, which they often express in public forums.

²³ <http://www.climate-science.gov/Library/sap/sap-guidelines.htm>

²⁴ http://www.whitehouse.gov/omb/inforeg/agency_info_quality_links.html

²⁵ <http://books.nap.edu/catalog/11152.html>

²⁶ The full text of the Durbin Amendment is:

SEC. 519. (a) None of the funds made available in this Act may be used to request that a candidate for appointment to a Federal scientific advisory committee disclose the political affiliation or voting history of the candidate or the position that the candidate holds with respect to political issues not directly related to and necessary for the work of the committee involved. (b) None of the funds made available in this Act may be used to disseminate scientific information that is deliberately false or misleading. [Available from <http://thomas.loc.gov>]

Sheila Jasanoff has written that when experts make scientific judgments they do so usually

“in full knowledge that different choices may lead to substantially different policy recommendations. Given this state of affairs, it is almost inevitable that a scientist's personal and political values will influence his reading of particular facts.”²⁷

Whether they are asked explicitly or not during the appointment process, many scientists' views on politics and policy are well known. For instance, thanks to a letter of endorsement we know of 48 Nobel Prize winners who in 2004 supported John Kerry for president. It would be easy to convene an advisory panel of very distinguished scientists who happen to have signed this letter without formally asking them about their political views. Moreover, to evaluate whether a policy focused on keeping political considerations out of the scientific advisory process is working, it would be necessary to have information showing that the composition of particular panels is not biased with respect to panelists' political and policy views, which in turn would require knowing what those views are in the first place. It is a Catch-22.

Finally, science advisory panels never deal purely with science. They are convened to provide guidance either on policy or on scientific information that is directly relevant to policy. Arizona State University's Dan Sarewitz has persuasively argued,

“When an issue is both politically and scientifically contentious, then one's point of view can usually be supported with an array of legitimate facts that seem no less compelling than the facts assembled by those with a different perspective.”²⁸

On climate change, even as scientists have come to a robust consensus that human activities have significant effects on the climate, legitimate debate continues on the costs and benefits of proposed alternative policy actions. And evaluation of costs and benefits involves considerations of values and politics. It would be hopelessly naive to think that an advisory committee on climate change could be empanelled without consideration of how the views of its members map onto the existing political debate.

Rather than eliminating considerations of politics in the composition of science advisory panels, a policy of “don't ask, don't tell” just makes it more difficult to see the role played by politics, which will be ever present. More important than the composition of scientific advisory panels is the charge that they are given and the processes they employ to provide useful information to decision makers. The current debate over these panels reinforces the old myth that we can somehow cleanly separate science from politics and then ensure that the science is somehow untainted by the “impurities” of the rest of

²⁷ S. Jasanoff, 1986. *Risk Management and Political Culture: A Comparative Analysis of Science*, (Russell Sage Foundation).

²⁸ D. Sarewitz, 2000. Science and Environmental Policy: An Excess of Objectivity, Chapter in R. Frodeman (ed.), *Earth Matters: The Earth Sciences, Philosophy, and the Claims of Community*, Upper Saddle River, NJ: Prentice Hall, pp. 79-98. <http://www.cspo.org/products/articles/excess.objectivity.html>

society. Yet paradoxically, we also want science to be relevant to policy. A better approach would be to focus our attention on developing transparent, accountable and effective processes to manage politics in science -- not to pretend that it doesn't exist.

Scientific Cherry Picking and Mischaracterizations are a Part of Politics

A memorandum providing background to this hearing prepared 26 January 2007 by the majority staff of the House Committee on Government Reform and Oversight illustrates the cherry picking of science (reproduced in Figure 1). Cherry picking literally mean "take the best, leave the rest." The memorandum states, quite correctly, that "a consensus has emerged on the basic science of global warming." It 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, increases in wildfires, and loss of wildlife, such as polar bears and walrus."

To support its claim of increasing intensities of hurricanes and tropical storms the memorandum cites three papers.²⁹ What the memorandum does not relate is that authors of each of the three cited studies 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:

"The possibility that greenhouse gas induced global warming may have already caused a substantial increase in some tropical cyclone indices has been raised (e.g. Mann and Emanuel, 2006), but no consensus has been reached on this issue."³⁰

With respect to two of the three papers cited in the memorandum, referring to possible trends in tropical cyclone intensities, the WMO statement concluded the subject "is still hotly debated" and "for which we can provide no definitive conclusion."³¹ The WMO Statement was also recently endorsed by the Executive Council of the American Meteorological Society.³² The hearing background memorandum is absolutely correct when it asserts that "recently published studies have suggested that the impacts [of global warming] include increases in the intensity of hurricanes and tropical storms." But this selective reporting does not tell the whole story either. Such cherry picking and misrepresentations of science are endemic in political discussions involving science.

²⁹ The papers that it cites are: K. Emanuel, 2005. Increasing destructiveness of tropical cyclones over the past 30 years, *Nature*, **436**:686-688. P. J. Webster., G.J. Holland, J.A. Curry, and H.R. Chang, 2005. Changes in Tropical Cyclone Number, Duration, and Intensity in a Warming Environment, *Science*, **309**:1844-1846. M. E. Mann and K. A. Emanuel, 2006: Atlantic hurricane trends linked to climate change. *EOS*, **87**:233-244.

³⁰ http://sciencepolicy.colorado.edu/prometheus/archives/IWTC_Statement.pdf

³¹ http://sciencepolicy.colorado.edu/prometheus/archives/IWTC_Statement.pdf

³² http://www.wmo.ch/web/arep/press_releases/2006/iwtc_statement.pdf

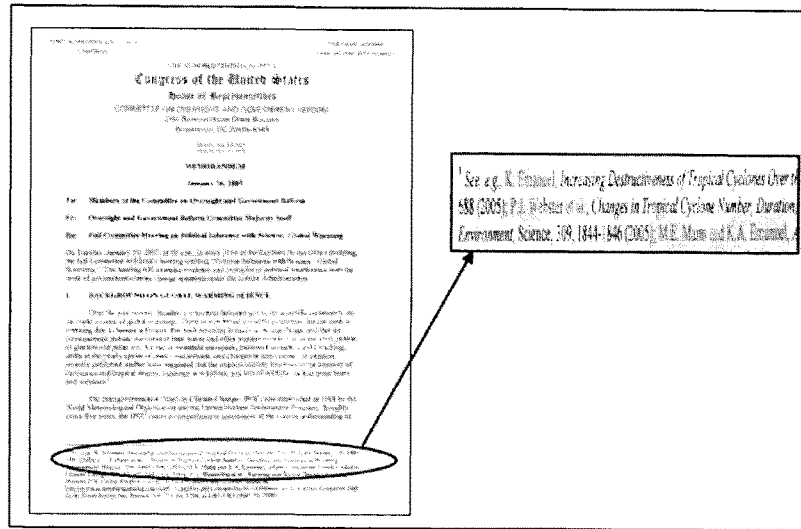


Figure 1. 26 January 2007 Memorandum Re: Full Committee Hearing on Political Interference with Science.

What has occurred in this memorandum is exactly the same sort of thing that we have seen with heavy-handed Bush administration information management strategies which include editing government reports and overbearing management of agency press releases and media contacts with scientists. Inevitably, such ham-handed information management will backfire, because people will notice and demand accountability. This hearing today is good evidence for that.

Scientists Have Contributed to the Politicization of Science

Scientists have not been innocent victims in these political dynamics. Writing in the *National Journal*, Paul Starobin suggests that:

"Inevitably the scientist has been dragged, or has catapulted himself, into the values and political combat that surround science and has emerged, in certain respects, as just another (diminished) partisan."³³

Recent debate over hurricanes and climate change provides a perfect case study of these dynamics and the role that individual scientists play in creating conditions for the pathological politicization of science.

³³ P. Starobin, 2006. Who turned out the enlightenment, *National Journal*, 20-26 July.

In the spring of 2006, a group of scientists were collectively promoted in a press release by a group called TCS - Tech Central Station - which values "the power of free markets, open societies and individual human ingenuity to raise living standards and improve lives." Each of the scientists cited in the TCS press release believes that global warming plays little discernible role in hurricane activity.³⁴ Clearly the scientists were selected by, or joined with, TCS because their scientific perspectives happened to be politically convenient. Late in the summer of 2006, another group of scientists collaborated with an environmental group to promote research suggesting that sea surface temperatures had increased due to global warming.³⁵ Each of these scientists believes that global warming is the primary reason behind increased hurricane activity. These scientists were similarly collected and presented as a group because their scientific perspectives also happened to be politically convenient.

Interest groups have a great deal of power in such situations of scientific diversity, because they can selectively assemble experts on any given topic to basically support any ideological position. That interest groups will cherry-pick among experts comes as no surprise, but what, if any, responsibility do scientists have in such advocacy and what are the implications for the scientific enterprise?

From the perspective of the individual scientist choosing to align with an interest group, it should be recognized that such a decision is political. There is of course nothing wrong with politics. It is how we get the business of society done, and organized interest groups are fundamental to modern democracy. Nonetheless, an observer of this dynamic might be forgiven for thinking that different perspectives on scientific issues are simply a function of political ideologies. We often see how contentious political debates involving science can become, when filtering science through interest groups is the dominant mechanism for connecting science to policy.

Scientists have other options beyond aligning with advocacy groups. Advice can also be provided through government science advisory panels, National Academy committees, and professional societies. When scientists with differing views organize themselves to jointly describe the policy significance of their work (and where they may differ), it can serve to militate against the pathological politicization of science. Unfortunately, many such institutions eschew discussion of the significance of scientific work,³⁶ or emulate the behavior of advocacy groups by selectively presenting a subset of the relevant science or endorsing particular policy alternatives.

One notable effort to place scientific debate into a policy context was led by MIT's Kerry Emanuel, a hurricane-climate expert embroiled in the current debate over hurricanes and global warming. He organized nine of his colleagues from both sides of the debate to

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http://sciencepolicy.colorado.edu/prometheus/archives/science_policy_general/000747politicization_101.html

³⁵ http://www.net.org/warming/hurricane_briefing.vtml

³⁶ For instance, the Intergovernmental Panel on Climate Change (IPCC) formally states that it does not discuss policy options.

prepare a statement about their debate and its significance for decision making. The statement by the scientists said:

As the Atlantic hurricane season gets underway, the possible influence of climate change on hurricane activity is receiving renewed attention. While the debate on this issue is of considerable scientific and societal interest and concern, it should in no event detract from the main hurricane problem facing the United States: the ever-growing concentration of population and wealth in vulnerable coastal regions.³⁷

With the exception of The New York Times, the statement was been almost completely ignored by the major media and advocacy groups. This is not surprising, as many would rather use scientists for their own narrow purposes, which often depend on the presence of political conflict rather than consensus. Nonetheless, the effort by the hurricane scientists represents responsible leadership seeking to move beyond the exploitation of scientists for political ends.

³⁷ http://wind.mit.edu/~emanuel/Hurricane_threat.htm The WMO consensus statement referenced above also represents such a community effort.

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 you 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 potentially enormous. 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 me 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 buildup 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 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 change presents 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 don't have copies of that, but if you could produce that, 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. OK.

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.

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 cherrypicking 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 1920's, 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——

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 make 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 that 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 is 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 and 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 ramifica-

tions 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.

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 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, 5 years under the previous administration and 5 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 straightforward 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 12th 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 observed or projected impacts of climate change.

Mr. DAVIS OF ILLINOIS. Let me just ask you.

Mr. PILTZ. Sure.

Mr. DAVIS OF ILLINOIS. Was it part of your responsibility to help prepare these documents or similar documents, so you are testifying on the basis of firsthand knowledge, not on the basis of something that you heard, read or were told about?

Mr. PILTZ. No. I had to deal with the edits directly, yes, sir.

Mr. DAVIS OF ILLINOIS. Thank you very much.

Mr. Chairman, I suspect that my time is up.

Mr. WAXMAN. Yes, thank you very much.

Mr. DAVIS OF ILLINOIS. Thank you.

Mr. Issa.

Mr. ISSA. Thank you, Mr. Chairman.

I know it is anecdotal, but how many scientists can raise their hand here on the dais? Just checking. I won't ask how many lawyers up here. That would be telling.

Mr. Piltz, I think I will start with you. Your degrees and background are political science?

Mr. PILTZ. Yes.

Mr. ISSA. So you are not a scientist.

Mr. PILTZ. No, I am not a climate scientist.

Mr. ISSA. Would it be fair to say you are no more qualified to evaluate these edits than the petroleum lawyer, is that right? I mean in the greater world of scientist, non-scientist.

Mr. PILTZ. I think that climate scientists who look at the edits would regard them as, in the aggregate, pretty egregious, but I am not arguing particular points.

Mr. ISSA. I appreciate that. I just wanted the simple answer. We have been trashing a lawyer I have never met, and I am happy to trash all lawyers, but what it comes down to is he wasn't a scientist, you are not a scientist.

My understanding is Mr. Cooney's edits or proposed edits were then reviewed by a scientific committee convened by the National Research Council, and many of his edits were then disregarded.

Mr. PILTZ. No.

Mr. ISSA. I will be very surprised if my staff is somehow misunderstanding the fact that his edits were not the last word. In fact, there was further scientific review that I am missing in your testimony.

Mr. Chairman, I hope we can get to the bottom of that because I am not sure that discrepancy can be easily worked out by witnesses.

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.

Mr. ISSA. And you come out of Columbia.

Ms. GRIFO. Yes.

Mr. ISSA. But do you know the history of the organization?

I am trying to understand a little bit more. My understanding is UCS was formed at MIT to oppose the Vietnam War in 1968. Is that roughly correct?

Ms. GRIFO. No, sir, that is an incorrect characterization.

Mr. ISSA. Was it formed in 1968?

Ms. GRIFO. Yes, sir.

Mr. ISSA. Was it formed at MIT?

Ms. GRIFO. Yes, sir.

Mr. ISSA. Did it oppose the Vietnam War?

Ms. GRIFO. I have no idea, but that was not its purpose in its forming.

Mr. ISSA. Well, moving down a little bit, you would characterize your group as a peer watchdog organization?

Ms. GRIFO. No, sir. We are a science-based non-profit.

Mr. ISSA. You do a study that sends out from a list that you generate. You send out 1,600 questionnaires by email. You get back 19 percent of them. Then you come up with a whole series of assumptions, and you bring them here and say this is what the science community says.

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, etc. 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 directory of its Federal climate scientists. So we did in fact have to go through and produce a list. We had very strict criteria for which scientists we included on this list. We had strict criteria for their backgrounds and so on.

Mr. ISSA. OK, and I appreciate that. Can you make that available to us?

Ms. GRIFO. Absolutely.

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 independent review?

Ms. GRIFO. Yes, sir.

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.

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.

Mr. ISSA. I appreciate it. I am afraid I don't think that you have made your case.

Ms. GRIFO. I am not quite done, sir.

Mr. ISSA. Dr. Pielke, you said in your statement, and I think it is very notable, that there is going to be politics 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 these questions. What percentage of the scientists personally felt pressured to eliminate the words, climate change, global warming or similar terms from their scientific communications?

I have been told as a Member of Congress, do not use the word, global warming. Well, they are telling me. They don't know who I am. And so, can you answer that, please?

Ms. GRIFO. Yes, thank you very much. Forty-six percent perceived or personally experienced pressure to eliminate those words, and I would say that is a total of 147 climate scientists. So that number should be zero.

Ms. WATSON. Those are Government scientists who felt pressured to avoid even using the words, climate change or global warming?

Ms. GRIFO. Yes.

Ms. WATSON. That is the number?

Ms. GRIFO. Yes.

Ms. WATSON. Because I know what I was told. OK, thank you.

Did any scientists see their work or the work of others changed or edited during reviews in ways that changed the meaning of their scientific findings?

You might have referred to that. I happened to be in the back. I had a conference. And so, could you respond?

Ms. GRIFO. Yes, thank you. Forty-three percent which was over two in five of our respondents, and I would also say that is 128 Federal climate scientists who personally experienced or perceived changes or edits during review that changed the meaning of their findings.

Ms. WATSON. Were their scientific findings ever misrepresented by agency officials?

Ms. GRIFO. Yes, in fact, 37 percent of our respondents which is 110 Federal climate scientists perceived or personally experienced agency misrepresentation of their findings.

Ms. WATSON. How many total instances of political interference did Government climate scientists report?

Ms. GRIFO. That was 400, at least 435. We had a range in each of the questions that they could answer. So that is the smallest number. It may indeed be much higher.

Ms. WATSON. How many Government scientists personally experienced political interference?

Ms. GRIFO. Personally experienced? I will have to get you that number. I don't have it in front of me, but it is a large percentage—

Ms. WATSON. Now let me ask Mister—

Ms. GRIFO. 150, thank you.

Ms. WATSON. 150, OK, thank you.

Mr. Piltz and Dr. Shindell, do these numbers surprise 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 is 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 that.

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

Mr. WAXMAN. Thank you, Ms. Watson.

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 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 it.

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 it 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. OK, 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. SHINDELL. No, I am not saying that there is no disagreement. I am saying that what—

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.

Mr. TIERNEY. Thank you, Mr. Chairman. 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. 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 analogously 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 no 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 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, I am 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 OK. Am I wrong to think that there has to be some distinction between a policy and somebody’s comment on science, their conclusions based on fact, Dr. Grifo?

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

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

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

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

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

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

Mr. TIERNEY. OK, 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 pro-

gram 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—

Mr. WAXMAN. Mr. Tierney.

Mr. TIERNEY. Sorry?

Mr. WAXMAN. Your time has expired.

Mr. TIERNEY. OK, thank you, Mr. Chairman.

Mr. WAXMAN. Mr. Lynch.

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 emissions of greenhouse gases. This is someone who worked for the American Petroleum Institute. So I scratch my head to say why. Why would the administration put someone who was so vehemently biased in an important role like this?

Mr. Piltz, the analogy of the fox in the hen house is not appropriate, I believe in this case. Mr. Piltz, in your responsibility in your official capacity prior to resigning in protest, you were responsible for editing a document called *Our Changing Planet*, is that correct?

Mr. PILTZ. Yes, the annual report to Congress.

Mr. LYNCH. Right, and just to clear something up, your role there was to take information from 90 scientists, the reports of those scientists, contributions made by them and put it in a forum that is usable by Congress.

Mr. PILTZ. That is right and to then fact-check with them before it went forward.

Mr. LYNCH. So these weren't your own opinions.

Mr. PILTZ. No.

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

Mr. PILTZ. Yes.

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 hydrological events.”

That was deleted.

Mr. LYNCH. Now did Mr. Cooney ever give a plausible reason why he would extract a warning of snow melt and degradation of glaciers which we are seeing now? Did he ever give a plausible reason why he would remove that warning to Congress?

Mr. PILTZ. He called it speculative musing.

Mr. LYNCH. Speculative musings.

Mr. PILTZ. Speculative musing.

Mr. LYNCH. Are there other documents or other instances you can point to that would help us?

Mr. PILTZ. Yes, there was in another passage, the draft said, “with continued perturbation of the Earth’s radiative balance, climate model projects based on a range of possible scenarios such as a doubling of atmospheric carbon dioxide suggest that during the 21st century, climate changes due to human influences will be substantially larger than what has been identified up until now.”

Mr. LYNCH. Again, if I could just pause there.

Mr. PILTZ. He said delete. He said delete.

Mr. LYNCH. It sounds like you are saying that the amount 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 it is inappropriate to speak in summary terms about this type 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 involved in 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 dialog 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 6 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 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 too exercised over 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—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.

Mr. SHAYS. You are not a scientist.

Mr. PILTZ. Right.

Mr. SHAYS. Climate scientist or anything, you are not a scientist, correct?

Mr. PILTZ. No. I try to communicate with and represent the scientists.

Mr. SHAYS. Why did you even say you are not a climate scientist? That gives the impression that you are a scientist. He is a political scientist.

Mr. WAXMAN. He is a political scientist.

Mr. PILTZ. A social scientist by academic training, yes.

Mr. SHAYS. I find myself being defensive because I feel like you are trying to give an impression that is a little false to me.

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?

Mr. PILTZ. Well, yes, to try to clarify the communication, yes.

Mr. SHAYS. You don't even have to clarify it.

Mr. PILTZ. Yes.

Mr. SHAYS. Because the bottom line is you want to use the word, synthesize because that is a more comfortable word 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 to and which you 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. I was not at war with the mainstream science community. That is one.

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. OK. 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—

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 straightforward, 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. OK, thank you.

Mr. WAXMAN. Thank you, Mr. Shays.

Ms. McCollum.

Ms. MCCOLLUM. Thank you, Mr. Chairman.

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 a 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 went to some CEQ offices and 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 IPCC, 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 OK, 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 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 reports 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 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, Atmospher of Pressure, "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”—misrepresented—“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 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 interrelated. 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 to 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, policy-making 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 followup 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, “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 excuse the Bush administration from their actions, of course, but let us not pretend that somehow we can separate out scientific truth from political preferences. The reality is they are always going to be intermixed.

Mr. WELCH. The memo, the committee memo, states very specifically that the evidence suggests that link.

Mr. PIELKE. That is true.

Mr. WELCH. The evidence is there.

Mr. PIELKE. Yes, it is there.

Mr. WELCH. You are now taking the leap to suggest that the committee memo is similar to the conduct of interfering with scientific debate that we have heard testimony about from these scientists.

Mr. PIELKE. In microcosm. In microcosm, it shows how easy and simple it is to selectively report scientific information to favor a particular agenda, absolutely. The statement in there is accurate. It is just like what we have heard about some of the changes. The statement that Mr. Cooney made, some them were judged to be accurate but misleading. This is exactly the same sort of thing.

Mr. WELCH. Thank you very much.

I wonder, Dr. Grifo, if you could respond if you have any different point of view than Dr. Pielke.

Ms. GRIFO. I would just respond by saying that, you know, peer review is the gold standard and that this is something that, you know, science will resolve. Ultimately, you know, as the scientific process continues to study hurricane intensity and what that means and what it doesn't mean, you know, we still have all these other lines of evidence that really point us in the direction that we have all been talking about here today which is that this is a huge and serious problem and we need to get on it.

Mr. WAXMAN. Mr. Welch, will you yield to me?

Mr. WELCH. I yield to the chairman, yes. Thank you.

Mr. WAXMAN. Doctor, you are a doctor, but you are not a scientist. You are a political scientist.

Mr. PIELKE. I am a political scientist. That is accurate.

Mr. WAXMAN. And you said you are absolutely certain that you are right on this issue and that Dr. Curry and Dr. Mann are wrong in their statement. Isn't that quite a statement for you to make? No scientist here has been willing to make any statement that

there is absolute certainty because the process of science continues to evaluate things.

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.

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

Mr. SHINDELL. No. They are quite within the mainstream.

Mr. WAXMAN. In fact, isn't Dr. Mann one of the leading scientists in global warming issues?

Mr. SHINDELL. Yes. Yes, he is.

Mr. WAXMAN. And Dr. Curry as well?

Mr. SHINDELL. Yes.

Mr. WAXMAN. So I am just wondering whether we should believe them or the certainty of Dr. Pielke that they are wrong.

Mr. PIELKE. May I clarify, Mr. Waxman?

Mr. WAXMAN. Yes, please.

Mr. PIELKE. My certainty is as to what the WMO hurricane consensus says. Let me say I have led two inter-disciplinary papers including climate scientists, peer-reviewed, reviewing the science of hurricanes and climate change that were published in the Bulletin of the American Meteorological Society in 2005 and 2006, and the summary that is in those papers has stood up to the WMO and AMS consensus points. So it is fair to say your background means that you can't speak on this topic and so on, but do recognize that scholars today work on inter-disciplinary teams and there is literature that Dr. Shindell would accept as being in the mainstream peer-reviewed journals.

Mr. WAXMAN. I don't dispute your ability to study the field and make comments on it except when we say that 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?

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 are 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 hurricanes, they are suggesting that maybe the models are drastically under-predicting what is likely to

happen. These studies that are referred to in your statement from this committee are showing much, much stronger increases than anybody's model guess.

So, yes, there is uncertainty, but that cuts both ways. It might mean we don't understand everything, and so it could be better. It might also mean that things might end up far worse than what we are saying they are likely to be.

Mr. WAXMAN. Thank you.

Mr. Welch, do you want to conclude your questioning?

Mr. WELCH. I will just finish by going back to Dr. Pielke.

What I understand is you are acknowledging that the committee memo does cite mainstream science, correct?

Mr. PIELKE. Absolutely, it does.

Mr. WELCH. What I want to know, after we have been through this, is this, are you standing by your position that this memo that cites mainstream science is exactly the same kind of conduct as what we have heard occurred in the Bush administration where there was direct interference with independent conclusions reached by scientists following the scientific method?

Mr. PIELKE. I will repeat exactly what I said in my written testimony. In microcosm, this shows how in political 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 second 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 something substantive behind the portions of those reports that he excised.

Mr. PILTZ. That is correct.

Mr. YARMUTH. So, essentially, what he did was interpose judgment for the scientists who wrote the report.

Mr. PILTZ. For the career science people, yes.

Mr. YARMUTH. Dr. Grifo, you have a report coming out today, and it includes some extensive interviews with about 40 Government global warming scientists. I would like to focus on one. Dr. Pieter Tans, who was the Chief Scientist for NOAA's Global Monitoring Division, was asked back in October 2004 to do a press con-

ference with the BBC or an interview with the BBC. That was a month before the Presidential election. How long did it take for Dr. Tans to receive approval to give that interview?

Ms. GRIFO. The interviews were not approved until February 2005.

Mr. YARMUTH. 2005, so it took 4 months to approve the interviews.

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

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.

Ms. GRIFO. That would be consistent with my experience, yes.

Mr. YARMUTH. Just in terms of other interviews that scientists might have given, and any of you can answer, would it take 4 months for even a Government agency scientist to agree to do an interview or turn down an interview?

Ms. GRIFO. To me or to them?

Mr. YARMUTH. Whomever.

Mr. SHINDELL. We had cases at NASA where a request would come in, say from CNN, to talk about the latest global temperature changes. Our public affairs officer would relay that to us and by the time we got back, they would say headquarters has already told them that nobody is available and there will not be such an interview. So those things did happen.

Mr. YARMUTH. Was there—oh, I am sorry.

Ms. GRIFO. I just was letting him go first. Can I just hop in, back in?

Mr. YARMUTH. Sure.

Ms. GRIFO. I mean our report indicates a large number of those instances happening. I mean there is a number that are described, anonymous scientists from NOAA, Christopher Milly, Dr. Shindell's case, Richard Weatherall. There are many of these that have been documented, so it is not an isolated incident.

Mr. YARMUTH. Were there conditions placed on the approval of the interview with Dr. Tans?

Ms. GRIFO. Just there was a minder. There was a public affairs officer, and in fact he flew across the country and even to Mauna Loa, Hawaii in order to be there for those interviews.

Mr. YARMUTH. Did he serve any useful purpose as far as you can tell? Is that standard operating procedure when a scientist is interviewed?

Ms. GRIFO. I think what is important here is that scientists coordinate with the agency, that they let the agency know an interview is taking place and that they report back on this interview after the interview has taken place. That is what the critical role and the relationship should be between a scientist and a public affairs officer.

Mr. YARMUTH. Basically, the taxpayers paid to send someone along over the globe to just watch Peter Tans give an interview.

Ms. GRIFO. Yes, sir, they did.

Mr. YARMUTH. That is all I have. I yield back, Mr. Chairman.

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

Mr. Issa.

Mr. ISSA. Thank you, Mr. Chairman.

Mr. WAXMAN. You are recognized for a second round.

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 Assessment on Climate Change.

Mr. PILTZ. Yes.

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. 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—

Mr. ISSA. We will.

He deserves to be considered as to whether his edits were proper or not. In your resignation letter from June 1, 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 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. WAXMAN. 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 it. 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 12th 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.

Mr. WAXMAN. Thank you.

Mr. ISSA. Mr. Chairman, I would ask unanimous consent to submit for the record the proof that the Clinton administration did in fact settle and that the 2000 assessment has been disregarded as the result of flaws.

Mr. PILTZ. The Bush administration settled.

Mr. WAXMAN. You want to submit?

Mr. ISSA. I will submit it for the record.

Mr. WAXMAN. You will submit some documents for the record?

Mr. ISSA. I will submit the documentation. I do believe it is the Clinton administration. I will submit it for the record.

Mr. WAXMAN. We will be pleased to receive whatever documents you wish to submit for the record.

Mr. ISSA. Thank you.

Mr. WAXMAN. Then we will make our own judgment whether it proves something or not. Thank you.

Mr. Lynch.

Mr. LYNCH. Thank you, Mr. Chairman.

Dr. Shindell, I just wanted to go over another specific example of political interference. Now you have been at NASA's Goddard Institute for Space Studies for 12 years, is that correct?

Mr. SHINDELL. Yes.

Mr. LYNCH. You were there in the late nineties.

Mr. SHINDELL. That is correct.

Mr. LYNCH. When you completed important studies in the late nineties, did you submit press releases for distribution?

Mr. SHINDELL. Yes, I did many times.

Mr. LYNCH. Did you have any problems such as has been described here earlier in the hearing, any problems in terms of editing of those press releases?

Mr. SHINDELL. On the contrary, I found the comments from headquarters and the press corps to be helpful in clarifying the results.

Mr. LYNCH. In September 2004, you submitted a press release to announce the findings of your new study on Antarctica. You suggested a title for the press release, "Cool Antarctica May Warm Rapidly This Century, Study Finds."

First of all, can I ask you, was this a significant study?

Mr. SHINDELL. Well, as I mentioned in my oral testimony, I thought it was significant, both because this was an unexplained feature of the world's temperature trends, why Antarctica was going the other way from the rest of the planet, and it is an area we worry about quite a lot for 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 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. OK, I will yield back.

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

Mr. LYNCH. Thank you.

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 heard 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 decisionmaking. 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 appended 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 moved out of science and especially out of Earth science. So we are likely 5 years to 10 years from now to have far less ability to even observe our own planet than we do now.

Mr. WAXMAN. Thank you.

Mr. Welch.

Mr. WELCH. Thank you, Mr. Chairman.

In February 2006, the New York Times reported that political appointees in the NASA press office were in fact exerting strong pressure during the 2004 Presidential campaign to cut the flow of news releases on climate change in the article entitled Call for Openness at NASA Adds to Reports of Pressure. I would like to ask that be made part of the record Mr. Chairman.

Mr. WAXMAN. Without objection, so ordered.

[The information referred to follows:]

HENRY A. WAXMAN, CALIFORNIA
CHAIRMAN

TOM DAVIS, VIRGINIA
RANKING MINORITY MEMBER

ONE HUNDRED TENTH CONGRESS
Congress of the United States
House of Representatives
COMMITTEE ON OVERSIGHT AND GOVERNMENT REFORM
2157 RAYBURN HOUSE OFFICE BUILDING
WASHINGTON, DC 20515-6143

Majority (202) 225-5051
Minority (202) 225-5074

January 30, 2007

Mr. James L. Connaughton
Chairman
Council on Environmental Quality
722 Jackson Place, N.W.
Washington, DC 20503

Dear Mr. Chairman:

We are writing to express our concern over your failure to provide the Committee with the documents we have requested in our inquiry into whether senior Administration officials edited scientific reports and took other actions to minimize the significance of global warming.

Over the past six months, we have had numerous communications with CEQ about this document request. The Committee initially requested that the documents be provided by August 11, 2006.¹ This deadline was extended to October 2, 2006,² and subsequently to October 23, 2006.³ During this process, CEQ has accommodated the Committee's requests for copies of redacted documents that were previously released under the Freedom of Information Act. But with the exception of fewer than ten documents provided to the Committee yesterday evening, CEQ has refused to produce nonpublic documents to the Committee.

To date, we have made considerable concessions to CEQ to ease compliance with the Committee's request. On August 17, 2006, the Committee agreed to limit the timeframe covered

¹ Letter from Chairman Tom Davis and Rep. Henry A. Waxman to James Connaughton, Chairman, Council on Environmental Quality (July 20, 2006).

² Email from Jennifer Safavian, Chief Counsel for Oversight and Investigations, House Government Reform Committee, to Ted Boling and Ashley Cohen, Council on Environmental Quality (Aug. 29, 2006).

³ Letter from Chairman Tom Davis and Rep. Henry A. Waxman to James Connaughton, Chairman, Council on Environmental Quality (Sept. 20, 2006).

Mr. James L. Connaughton
January 30, 2007
Page 2

by the request.⁴ On August 29, 2006, the Committee agreed to limit the scope of our request to only seven CEQ staff members and officials.⁵ On September 20, 2006, we further narrowed the request by eliminating two out of five criteria for documents to be produced from our original July 20, 2006, request.⁶ These reductions in scope are significant and have reduced the scope of our request to the minimum necessary to fulfill our oversight responsibilities.

Most recently, the Committee requested that unredacted copies of 39 specific documents be provided by close of business last Thursday, January 25, 2007.⁷ These documents were specifically identified by reference number and are easily accessible to CEQ staff. Discussions between our staffs indicate that these documents have already been pulled from their files and are ready to be delivered to the Committee.

In a letter sent yesterday evening, however, you indicated that you would produce only nine of these documents to the Committee.⁸ As for the remaining thirty documents, you stated that those documents “include deliberative process materials and communications between CEQ and other agencies, between senior advisors to the President and senior CEQ officials, and information concerning the process of Presidential decisionmaking. These documents include the candid exchange of views in deliberations within the Executive Office of the President (EOP) regarding the development, bases, and articulation of policy. Therefore, releasing such documents could harm the candor and quality of deliberations within the EOP. Moreover, ten of these documents reflect foreign policy deliberations related to the development of Asia-Pacific Partnership on Clean Development and Climate, an international agreement involving the United States and multiple foreign nations, rather than CEQ edits to materials produced by other federal agencies regarding climate change.” As a result of that, you offered to make the documents available again for staff review, and to bring the documents to Committee Members to review. This latest offer is still unsatisfactory to the Committee.

⁴ Meeting between House Government Reform Committee staff and Council on Environmental Quality staff (Aug. 17, 2006).

⁵ Email from Jennifer Safavian, Chief Counsel for Oversight and Investigations, House Government Reform Committee, to Ted Boling and Ashley Cohen, Council on Environmental Quality (Aug. 29, 2006).

⁶ Letter from Chairman Tom Davis and Rep. Henry A. Waxman to James Connaughton, Chairman, Council on Environmental Quality (Sept. 20, 2006).

⁷ Letter from Chairman Henry A. Waxman and Rep. Tom Davis, Chairman, Council on Environmental Quality (Jan. 22, 2007).

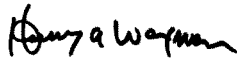
⁸ Letter from James Connaughton, Chairman, Council on Environmental Quality, to Chairman Henry A. Waxman and Rep. Tom Davis (Jan. 29, 2007).

Mr. James L. Connaughton
January 30, 2007
Page 3

The Committee must be able to take custody of the documents in order to make a thorough and complete review. During this review process, we will give due consideration to the concerns you have raised. But unless the President is prepared to assert a constitutional claim of executive privilege, the documents sought by the Committee should be provided without further delay.

As such, we request again the full production of the documents requested in the January 22, 2007, letter by February 9, 2007.

Sincerely,



Henry A. Waxman
Chairman



Tom Davis
Ranking Minority Member

HENRY A. WAXMAN, CALIFORNIA
CHAIRMAN

TOM DAVIS, VIRGINIA
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MEMORANDUM

January 30, 2007

To: Members of the Committee on Oversight and Government Reform
From: Chairman Henry A. Waxman
Re: CEQ Documents

This memorandum provides additional information about the documents from the White House Council on Environmental Quality being sought by the Committee.

We know from an *in camera* review of a subset of the documents the Committee is seeking that the White House possesses documents that appear to provide evidence that White House and other Administration officials attempted to inject doubt into conclusions reached by the Environmental Protection Agency about the significance of global warming. The limited subset of documents reviewed by Committee staff indicate that Administration officials sought to edit an EPA report (1) to add "balance" by emphasizing the "beneficial effects" of climate change, (2) to delete a discussion of the human health and environmental effects of climate change, (3) to strike any discussion of atmospheric concentrations of carbon because carbon levels are not a "good indicator of climate change," and (4) 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, a former lobbyist for the American Petroleum Institute who served as chief of staff at the CEQ.

I. BACKGROUND

There have been a number of allegations of political interference by Administration officials in the work of government climate change scientists. In some cases, the allegations have directly implicated your office. Beginning over six months ago, on July 20, 2006, the Committee sought to evaluate these allegations by requesting documents from CEQ related to (1) Mr. Cooney's activities on global warming; (2) CEQ attempts to edit scientific reports on global

warming; (3) CEQ communications with other federal agencies regarding climate change science; (4) CEQ efforts to manage or influence the statements about global warming made by government scientists; and (5) contacts between CEQ and any nongovernmental party related to climate change.¹

Over the past six months, we have had numerous communications with CEQ about this document request. The Committee initially requested that the documents be provided by August 11, 2006.² This deadline was extended to October 2, 2006,³ and subsequently to October 23, 2006.⁴ During this process, CEQ has accommodated the Committee's requests for copies of redacted documents that were previously released under the Freedom of Information Act. But with the exception of fewer than ten documents provided to the Committee yesterday evening, CEQ has refused to produce nonpublic documents to the Committee.

To date, we have made considerable concessions to CEQ to ease compliance with the Committee's request. On August 17, 2006, the Committee agreed to limit the timeframe covered by the request.⁵ On August 29, 2006, the Committee agreed to limit the scope of our request to only seven CEQ staff members and officials.⁶ On September 20, 2006, we further narrowed the request by eliminating two out of five criteria for documents to be produced from our original July 20, 2006, request.⁷ These reductions in scope are significant and have reduced the scope of our request to the minimum necessary to fulfill our oversight responsibilities.

Most recently, the Committee requested that unredacted copies of 39 specific documents be provided by close of business last Thursday, January 25, 2007.⁸ These documents were

¹ Letter from Chairman Tom Davis and Rep. Henry A. Waxman to James Connaughton, Chairman, Council on Environmental Quality (July 20, 2006).

² *Id.*

³ Email from Jennifer Safavian, Chief Counsel for Oversight and Investigations, House Government Reform Committee, to Ted Boling and Ashley Cohen, Council on Environmental Quality (Aug. 29, 2006).

⁴ Letter from Chairman Tom Davis and Rep. Henry A. Waxman to James Connaughton, Chairman, Council on Environmental Quality (Sept. 20, 2006).

⁵ Meeting between House Government Reform Committee staff and Council on Environmental Quality staff (Aug. 17, 2006).

⁶ Email from Jennifer Safavian, Chief Counsel for Oversight and Investigations, House Government Reform Committee, to Ted Boling and Ashley Cohen, Council on Environmental Quality (Aug. 29, 2006).

⁷ Letter from Chairman Tom Davis and Rep. Henry A. Waxman to James Connaughton, Chairman, Council on Environmental Quality (Sept. 20, 2006).

⁸ Letter from Chairman Henry A. Waxman and Rep. Tom Davis, Chairman, Council on Environmental Quality (Jan. 22, 2007).

specifically identified by reference number and are easily accessible to CEQ staff. Discussions between our staffs indicate that these documents have already been pulled from their files and are ready to be delivered to the Committee. In a letter sent yesterday evening, however, the White House indicated that it would produce only nine of these documents to the Committee.⁹

II. THE SIGNIFICANCE OF THE DOCUMENTS

On October 20, October 27, and November 17, 2006, the Committee staff was permitted to conduct an *in camera* review at CEQ offices of a select subset of the documents the Committee had requested. The documents viewed by the Committee staff comprise only a small part of the information requested by the Committee. These documents did not include, for example, over 10,000 email records that CEQ has identified as potentially responsive to the Committee's request.¹⁰ A review of the full set of responsive documents is necessary for the Committee to reach accurate conclusions about the role played by CEQ and other Administration officials.

Nonetheless, the limited review conducted by the Committee staff confirmed that CEQ possesses — and has failed to produce to the Committee — documents of direct relevance to the Committee's inquiry. According to the notes taken by the staff who reviewed the documents, the White House has documents that appear to contain evidence of a vigorous effort by senior Administration officials to downplay the certainty and negative impacts of global warming.

Many of the documents reviewed by the Committee staff involved White House and interagency review during 2003 of a draft EPA document entitled *Report on the Environment*. This draft report contained a discussion of the dangers global warming posed for human health and the environment. The release of EPA's conclusions would have put the Administration on record as recognizing the prevailing scientific consensus on global warming. This would have been a significant milestone in the public debate about global warming.

The documents provide evidence, however, that White House and agency officials repeatedly pushed to undermine EPA's scientific conclusions about global warming during the review process. The Office of Management and Budget commented that EPA's climate change section "needs balance. Global climate change has beneficial effects as well as adverse impacts."¹¹ OMB also suggested striking a discussion of climate change from the executive

⁹ Letter from James Connaughton, Chairman, Council on Environmental Quality, to Chairman Henry A. Waxman and Rep. Tom Davis (Jan. 29, 2007).

¹⁰ *Id.*

¹¹ Committee Staff Notes, Document Numbered ARMS 16, Attachment 1 (EPA Draft Report on the Environment).

summary.¹² The White House Office of Science and Technology Policy urged deletion of a discussion of the human health and ecological effects of climate change.¹³ One CEQ staffer urged EPA to “delete climate change or use previously agreed upon material.”¹⁴ The Department of Energy argued through the White House that EPA should strike any discussion of atmospheric concentrations of carbon, arguing that it was not a “good indicator of climate change.”¹⁵

Another Administration commenter cautioned: “Take care here and be sure to be consistent with existing administration policy. Let us try to avoid another CAR scenario.”¹⁶ This was a reference to the Climate Action Report (CAR) prepared by the U.S. State Department, which had concluded that human activities are “causing global mean surface air temperature and subsurface ocean temperature to rise.”¹⁷ President Bush had distanced himself from the Climate Action Report by referring to it as “the report put out by the bureaucracy.”¹⁸

There are many examples in the documents of edits requested by the White House that seem to minimize the impacts of climate change or inject unjustified doubt into the issue. One OMB set of edits contains many deletions from the EPA text, including a deletion of a reference to the fact that climate change may “alter regional patterns of climate” and “potentially affect the balance of radiation.”¹⁹ Other edits deleted the phrase “changes observed over the last several decades are likely mostly the result of human activities” and replaced it with the phrase “a causal link between the buildup of greenhouse gases in the atmosphere and the observed climate changes during the 20th century cannot be unequivocally established.”²⁰

¹² Committee Staff Notes, Document Numbered WH 19 (EPA Draft Report on the Environment).

¹³ Committee Staff Notes, Document Numbered ARMS 23, Attachment 1 (EPA Draft Report on the Environment).

¹⁴ Committee Staff Notes, Document Numbered ARMS 34 (EPA Draft Report on the Environment).

¹⁵ Committee Staff Notes, Document Numbered ARMS 39, Attachment 5 (EPA Draft Report on the Environment).

¹⁶ Committee Staff Notes, Document Numbered ARMS 39, Attachment 18 (EPA Draft Report on the Environment).

¹⁷ U.S. State Department, *U.S. Climate Action Report* (2002).

¹⁸ *President Distances Himself From Global Warming Report*, New York Times (June 5, 2002).

¹⁹ Committee Staff Notes, Document Numbered ARMS 69, Attachment 2 (EPA Draft Report on the Environment).

²⁰ Committee Staff Notes, Document Numbered WH 15 (EPA Draft Report on the Environment).

Among the documents reviewed *in camera* were copies of some handwritten notes by Phillip Cooney, who was the CEQ chief of staff. Although Mr. Cooney was a former oil industry lobbyist, not a scientist, he made several technical scientific changes to the draft report. He inserted the claim that satellite data disputes global warming,²¹ and he deleted the statement that “regional patterns may be altered” by climate change.²²

Mr. Cooney also struck climate change from a discussion of environmental issues that have global consequences,²³ deleted a chart depicting historical temperature reconstruction,²⁴ and inserted the word “potentially” in several places to reduce the certainty of scientific statements regarding the impacts of climate change.²⁵ Another set of Mr. Cooney’s edits deleted the phrase “climate change has global consequences for human health and the environment,”²⁶ struck a reference to the observation that the warmest eight years on record have occurred between 1990 and 2001,²⁷ and excised a reference to the National Research Council’s finding that human activities are causing temperatures to rise.²⁸

One note from Mr. Cooney directed, “these changes must be made.”²⁹

In another document, Mr. Cooney informs Kevin O’Donovan in the Executive Office of the President that CEQ will start to use a paper by Willie Soon and Sally Baliunas to rebut the views of the National Academy of Sciences and Intergovernmental Panel on Climate Change and assert that the 20th century is probably not the warmest nor a uniquely extreme climatic period of the last millennium. In the document, Mr. Cooney states that he has put a reference to this paper

²¹ Committee Staff Notes, Document Numbered WH 6 (EPA Draft Report on the Environment).

²² Committee Staff Notes, Document Numbered WH 6 (EPA Draft Report on the Environment).

²³ Committee Staff Notes, Document Numbered WH 6 (EPA Draft Report on the Environment).

²⁴ Committee Staff Notes, Document Numbered WH 6 (EPA Draft Report on the Environment).

²⁵ Committee Staff Notes, Document Numbered WH 6 (EPA Draft Report on the Environment).

²⁶ Committee Staff Notes, Document Numbered WH 5 (EPA Draft Report on the Environment).

²⁷ Committee Staff Notes, Document Numbered WH 5 (EPA Draft Report on the Environment).

²⁸ Committee Staff Notes, Document Numbered WH 5 (EPA Draft Report on the Environment).

²⁹ Committee Staff Notes, Document Numbered WH 6 (EPA Draft Report on the Environment).

into EPA's draft report.³⁰ The Soon-Baliunas paper was the focus of considerable criticism. It had been funded by the American Petroleum Institute and the editor-in-chief of the journal that published the paper resigned in its aftermath, believing the paper was fundamentally flawed and never should have been published.³¹

One email indicates that CEQ Chairman James Connaughton was personally involved in the review of the EPA report. In this email, Mr. Connaughton requested to know every edit made to the EPA draft report and whether EPA was able to accept the edit or suggest an alternative.³²

These edits resulted in an EPA memo in June 2003, in which EPA staff described three options from which the EPA Administrator could choose. Option 1 was for the EPA Administrator to accept the CEQ and OMB edits. While EPA staff noted this was the "easiest" course of action, they also cautioned that "EPA will take responsibility and severe criticism from the science and environmental community for poorly representing the science."³³ The EPA staff warned that the edited report "undercuts" the National Research Council and the Intergovernmental Panel on Climate Change.³⁴ According to the EPA staff, the edited report "provides specific text to attack" and creates the "potential to extend the period of criticism."³⁵

The second option that EPA staff outlined for the EPA Administrator was to remove the climate change section entirely from the report. The benefits of this approach, according to EPA staff, were that it would provide "little content for attacks on EPA's science" and it "may be the only way to meet both WH and EPA needs."³⁶ EPA staff expressed concern that "EPA will take criticism for omitting climate change" from the report.³⁷

³⁰ Committee Staff Notes, Document Numbered WH 18 (EPA Draft Report on the Environment).

³¹ *Three Journal Editors Resign Over Paper by Skeptics, Journal Editors Resign in Protect Over Flaws in Paper by Skeptics*, Cox News Service (July 29, 2003).

³² Committee Staff Notes, Document Numbered ARMS 34 (EPA Draft Report on the Environment).

³³ Committee Staff Notes, Document Numbered WH 22 (EPA Draft Report on the Environment).

³⁴ Committee Staff Notes, Document Numbered WH 22 (EPA Draft Report on the Environment).

³⁵ Committee Staff Notes, Document Numbered WH 22 (EPA Draft Report on the Environment).

³⁶ Committee Staff Notes, Document Numbered WH 22 (EPA Draft Report on the Environment).

³⁷ Committee Staff Notes, Document Numbered WH 22 (EPA Draft Report on the Environment).

Finally, EPA staff described a third option for consideration. The EPA Administrator could refuse to accept the White House's "no further changes" direction and try to reach compromise.³⁸ EPA staff seemed to prefer this approach, stating that it was the "only approach that could produce a credible climate change section" in the *Report on the Environment*.³⁹ However, they warned, this course of action could "antagonize the White House" and "it is likely not feasible to negotiate agreeable text."⁴⁰

In the end, EPA elected option 2 and deleted discussion of climate change from the report.⁴¹

The majority of documents reviewed by Committee staff related to the draft EPA report. But other documents reviewed by the staff suggested that White House officials acted in other contexts in ways that impeded public understanding of the threat of climate change. Some of the documents Committee staff reviewed involved the development of the Administration's Asia-Pacific Partnership on Clean Development and Climate. At least one of these documents alludes to the goal of superseding the mandatory reductions in global warming gases prescribed under the Kyoto Protocol with voluntary pollution reductions.⁴²

In addition, documents independently obtained by the Committee provide evidence that the White House sought to oversee the statements made by federal climate change scientists to the media. According to a set of internal emails from the National Oceanographic and Atmospheric Administration, CEQ approved and monitored press interviews for specific climate change scientists in 2005. In these email exchanges, CEQ and the White House Office of Science and Technology Policy gave the "green light" for a media interview with a NOAA scientist, but required NOAA staff to "monitor the call and report back."⁴³

³⁸ Committee Staff Notes, Document Numbered WH 22 (EPA Draft Report on the Environment).

³⁹ Committee Staff Notes, Document Numbered WH 22 (EPA Draft Report on the Environment).

⁴⁰ Committee Staff Notes, Document Numbered WH 22 (EPA Draft Report on the Environment).

⁴¹ *Report by EPA Leaves Out Data on Climate Change*, New York Times (June 19, 2003).

⁴² Committee Staff Notes, Document Numbered CEQ 35 (Asia-Pacific Partnership).

⁴³ Email from Jana Goldman to Kent Laborde (11:09 a.m., June 13, 2005); Email from Jana Goldman to Kent Laborde (1:05 p.m., June 13, 2005).

III. CONCLUSION

Many experts regard global warming as the most significant environmental threat facing the nation and the world. The challenges of confronting global warming are immense, with potentially enormous health, environmental, and economic consequences. For these reasons, both Congress and the American public need access to the best possible science from federal agencies to understand the nature of the problem and to assess appropriate policy responses. It would be a serious matter if any Administration officials, particularly officials in the White House, sought to manipulate the science of global warming or to otherwise mislead Congress or the public about the magnitude of potential threat.

The documents the Committee has requested are essential to our investigation into this issue. Even the limited subset of documents that the staff have reviewed raise serious questions about the actions of CEQ staff and others in the White House. Both these documents and the others we have requested should be provided to the Committee without further delay.

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 decisionmaking.

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 [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 of Greenland 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 decisionmakers? Was there any evidence based on your survey that decisionmakers 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 6 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.]

