ZERO ACCOUNTABILITY: THE CONSEQUENCES OF POLITICALLY DRIVEN SCIENCE

OVERSIGHT HEARING

BEFORE THE

SUBCOMMITTEE ON OVERSIGHT AND INVESTIGATIONS

OF THE

COMMITTEE ON NATURAL RESOURCES
U.S. HOUSE OF REPRESENTATIVES

ONE HUNDRED FOURTEENTH CONGRESS

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OVERSIGHT HEARING ON ZERO ACCOUNTABILITY: THE CONSEQUENCES OF POLITICALLY DRIVEN SCIENCE

Wednesday, April 29, 2015
U.S. House of Representatives
Subcommittee on Oversight and Investigations
Committee on Natural Resources
Washington, DC

The subcommittee met, pursuant to notice, at 2:32 p.m., in room 1334, Longworth House Office Building, Hon. Louie Gohmert [Chairman of the Subcommittee] presiding.

Present: Representatives Gohmert, Labrador, Hice, Radewagen, Mooney; Dingell, Huffman, and Grijalva.

Mr. GOHMERT. The Subcommittee on Oversight and Investigations will come to order.

The subcommittee meeting today is to hear testimony on, "Zero Accountability: The Consequences of Politically Driven Science." Under Committee Rule 4(f), any oral opening statements at hearings are limited to the Chairman and the Ranking Member and the Vice Chair and a designee of the Ranking Member. This will allow us to hear from our witnesses sooner and help Members keep to their schedules.

Therefore, I ask unanimous consent that all other Members' opening statements be made part of the hearing record if they are submitted to the Subcommittee Clerk by 5:00 p.m. today or the close of the hearing, whichever comes first. Hearing no objection, that is so ordered.

STATEMENT OF THE HON. LOUIE GOHMERT, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF TEXAS

Mr. GOHMERT. This is the first meeting of the newly established Subcommittee on Oversight and Investigations. First I would like to thank Congresswoman Dingell for her willingness to serve as Ranking Member, especially having to sit next to me. I am very grateful. I thought a great deal of your husband while he was serving here; he was a man of honor. And I look forward to working with you.

The subcommittee is a reflection of Chairman Bishop's and my commitment to place a greater focus on oversight in the Natural Resources Committee. Our committee has jurisdiction over more than 100,000 employees managing half a billion surface acres. I recognize within these bureaus are many dedicated people working on behalf of the country to see that our lands are worked and enjoyed to the maximum extent possible.

However, as we will hear today, there are also times when individuals take advantage of their position and exercise not good stewardship, but a violation of trust with the American people.

We have a great responsibility here. While the focus of our committee may only be a small fraction of the Government, financially speaking, the authorities we oversee have a major impact on millions of individuals across the Nation. It should be our goal to see that checks are in place to address some of the abuses we are going to hear about today.

I would like to thank the witnesses for traveling here today. I know you did not come just because of the big paycheck. For those that do not know, there is no paycheck. But it is, I know, out of a sense of service to our country; so thank you. Some of what we are going to hear today defies logic, common sense, and even basic compassion. This will be an honest assessment of how the system has failed. There is not any other way to describe it.

It is astounding reading the testimony, as I did last night, of those that are going to be here and are here today. At every level, a lack of accountability let a bureaucracy, or even the bully, win and our constituents, our friends, our neighbors, and our families pay with their livelihoods and their safety. We could have cared for the least of these, but we chose a toad instead.

For this reason, our first hearing of this new subcommittee is entitled "Zero Accountability." I want it seared into the records of this Congress and on the minds of its Members exactly what happens when we leave individuals to fend for themselves against the Federal Government. Why else are we here if not to hold accountable those charged with executing the laws that we establish?

I am looking forward to having more accountability and am open to Minority suggestions for oversight where the Government has become abusive, because we see it from both sides of the aisle, we hear about it from constituents, and look forward to working together to oversee what is entrusted to our care. So thank you.

[The prepared statement of Mr. Gohmert follows:]

PREPARED STATEMENT OF THE HON. LOUIE GOHMERT, CHAIRMAN, SUBCOMMITTEE ON OVERSIGHT AND INVESTIGATIONS

This is the first meeting of the newly established Subcommittee on Oversight and Investigations. First, I'd like to thank Congresswoman Dingell for her willingness to serve as Ranking Member and I look forward to the opportunities we will have to work together on government accountability.

This subcommittee is a reflection of Chairman Bishop's and my commitment to place a greater focus on oversight in the Natural Resources Committee. Our committee has jurisdiction over more than 100,000 employees managing half a billion surface acres. I recognize within these bureaus are many dedicated people working on behalf of the country to see that our lands are worked and enjoyed to the maximum extent possible.

However, as we will hear today, there are also times when individuals take advantage of their position and exercise not good stewardship, but a violation of trust with the American people.

We have a great responsibility here. While the focus of our committee may only be a small fraction of the government financially speaking, the authorities we oversee have a major impact on millions of individuals across the Nation. It should be our goal to see that checks are in place to address some of the abuses we will hear today.

I'd like to thank the witnesses that traveled here to inform our subcommittee about what exactly is going on at the ground level of the Federal Government. Some of what we are going to hear defies logic, common sense and even basic compassion. This will be an honest assessment of how the system miserably failed. There isn't any other way to describe it.

It is astounding reading this testimony how many different times the right choices could have been made. At every level a lack of accountability let the bureaucracy,

or even the bully, win and our constituents, our friends, our neighbors, and our families paid with their livelihoods and their safety. When we could have cared for the least of these, we chose a toad instead.

For this reason our first hearing of this new subcommittee is entitled "Zero Accountability." I want it seared on the records of this Congress and on the minds of its Members exactly what happens when we leave individuals to fend for themselves against this Federal Government. Why else are we here if not to hold accountable those charged with executing the laws that we establish?

At this time I would like to recognize the Ranking Member, Ms. Dingell, for any opening statement.

STATEMENT OF THE HON. DEBBIE DINGELL, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF MICHIGAN

Ms. DINGELL. Thank you, Mr. Chairman, and for those very kind remarks, for your recognition of my husband and his friendship with you, and for holding this hearing today. Though we will almost certainly differ on a number of issues which the subcommittee will explore, I hope we can find common ground on many issues as well. There is no shortage of natural resource issues that deserve oversight, and I am optimistic that there is common ground to be had.

I would also like to thank our witnesses for being here with us today. We know, as the Chairman said, that your traveling here is not always the easiest, but you understand the importance of talking to you and talking about the issues.

That brings me to today's hearing. I think the Chairman has chosen his first hearing topic well. The manipulation of science to achieve a predetermined policy end has become an increasingly common tactic. The tobacco industry, chemical industry, pharmaceutical industry, and the fossil fuel industry have had resounding success when they engage in a particular kind of politically driven science—manufacturing doubt.

One of our witnesses, Naomi Oreskes of Harvard University, specializes in the history of science and has literally written the book that describes these campaigns that aim to create the impression of scientific uncertainty when the science is actually very clear.

When there is doubt about the science of an issue, Americans do not want to take a chance on a policy remedy that might be unnecessary because there is a risk of unintended consequences. We have to wait until the science is clear, and it often moves at a glacial pace.

So we have to hope that the science becomes clear before the problem does too much damage or becomes irreversible. In the meantime, delay represents victory. One of the most popular ways to kill a policy initiative in Washington, DC is to delay it. If it cannot be killed altogether, delay buys more time under the status quo. It is popular because it works.

We are seeing these same tactics used today in the debate on climate change. Delaying action on climate change has consequences. If we let global temperature increase by 3 degrees, it will cost the United States about $150 billion a year from damage to our health, loss of biodiversity, physical impacts from rising seas and more severe storms, droughts, and wildfires alone.

And climate change will have a real impact on the Great Lakes in my home state of Michigan, including increased invasive species, much more frequent harmful algae blooms, and declining beach health, which we are already, unfortunately, seeing and saw last year again, where many people just could not drink water or go into the water.

We are missing important opportunities. According to Ernst & Young, China has now surpassed the United States in investing in renewable energy. Ceding the lead on the transition to a low-carbon economy ensures that they will get a jump on lucrative emerging markets, economies of scale, patents, and a trained workforce.

I do not want to buy my energy created by solar panels made in Japan—or made in China; sorry, I was thinking of the Prime Minister. I want to buy my energy from panels made in the United States. I want to see the jobs created here, where we already have some of the best manufacturing infrastructure and workers in the world, and that you and I agree on. We want to create those here and keep them here. I want those good-paying jobs here, where they can form rungs of ladders out of poverty in a Nation where the ranks of the poor are growing.

There is no doubt in my mind we can transition to a clean energy economy and come out the other side as a stronger Nation. I have faith that we can do better than the status quo if we trust in our workers, and if we trust in Americans to innovate, and if we trust in our scientists who tell us it must be done.

So thank you, Mr. Chairman. I am looking forward to today's hearing.

[The prepared statement of Ms. Dingell follows:]

PREPARED STATEMENT OF THE HON. DEBBIE DINGELL, RANKING MEMBER, SUBCOMMITTEE ON OVERSIGHT AND INVESTIGATIONS

Chairman Gohmert, thank you for the recognition and for holding this hearing today. Though we will almost certainly differ on a number of issues which this subcommittee will explore, I hope we can find common ground on many issues as well. There is no shortage of natural resource issues that deserve oversight and I am optimistic there is common ground to be had. I would also like to thank our witnesses for being here today.

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When there is doubt about the science of an issue, Americans don't want to take a chance on a policy remedy that might be unnecessary because there is a risk of unintended consequences. We have to wait until the science is clear, and it often moves at a glacial pace. So we have to hope that the science becomes clear before the problem does too much damage, or becomes irreversible. In the meantime, delay represents victory. One of the most popular ways to kill a policy initiative in Washington, DC is to delay it. If it can't be killed altogether, delay buys more time under the status quo. It's popular because it works.

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There is no doubt in my mind we can transition to a clean energy economy and come out the other side stronger as a Nation. I have faith that we can do better than the status quo if we trust in our workers, if we trust in Americans to innovate, and if we trust our scientists who tell us it must be done.

Mr. GOHMERT. Thank you very much.

At this time I will introduce our witnesses. Oh, that is right. Mr. Grijalva, do you wish to make an opening statement?

Mr. GRIJALVA. Thank you.

Mr. GOHMERT. Yes, sir.

STATEMENT BY THE HON. RAÚL GRIJALVA, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF ARIZONA

Mr. GRIJALVA. Thank you, Mr. Chairman. Again, I want to, as I did personally, congratulate you on your chairmanship of this new subcommittee. I know we will not agree often, but I think we can agree that congressional oversight is important. It is valuable, and I hope we get some opportunities to do some good things here with our work.

I also want to thank and congratulate Ranking Member Dingell for dedicating her time, effort, and expertise to this subcommittee. We have great confidence in her leadership, and she knows very well that all of us look forward to working with her.

And thank you to the witnesses for taking the time and effort to come here today.

Mr. Chairman, I would like to begin with a quote from a book written by one of our witnesses today. The excerpt goes something like this:

> "Imagine a gigantic banquet. Hundreds of millions of people come to eat. They eat and drink to their heart's content. Then one day a man arrives holding a bill. Not surprisingly, the diners all go into shock. Some begin to deny that this is their bill. Others deny that there is even a bill. Still others deny that they partook of the meal. One diner suggests that the man is not really a waiter, but is only trying to get attention for himself or to raise money for his own projects.
>
> Finally, the group concludes that if they simply ignore the waiter, he will go away. This is where we stand today on

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[1] https://www.whitehouse.gov/sites/default/files/docs/the_cost_of_delaying_action_to_stem_climate_change.pdf.

[2] http://www.ey.com/Publication/vwLUAssets/EY_-_China_reclaims_the_top_spot_for_renewables_energy_investment_attractive/$FILE/EY-recai-Issue42-11-sep-2014.pdf.

> the subject of global warming. For the past 150 years, industrial civilization has been dining on energy stored in fossil fuels, and the bill has come due. Yet we have sat around the dinner table denying that it is our bill and doubting the credibility of the man who delivered it."

That is from the excellent "Merchants of Doubt" book, which I am proud to say was co-authored by one of our witnesses today, Professor Naomi Oreskes. Her book shows how multi-billion dollar industries manipulate science to pad their profits at the expense of the American people. Their favorite tactic is to manufacture doubt about the state of the science, which undermines the case for taking any action at all to address a problem.

Manufacturing doubt can be done in many different ways. You can question the quality of the science that indicates there is a problem with your product. You can find a scientist who agrees with you and fund their research or give them media training. You can take the research to the press and demand that they print both sides of the story as if there was really a controversy.

In a hearing about politically driven science, climate denial is the ultimate case study. Its tactics are well-documented, including paying scientists to produce industry-friendly science. Individual case studies where accusations of scientific misconduct exist should be investigated.

But we need to be clear. There is an ongoing, well-organized, well-funded campaign to deny climate change and the established science behind it. That campaign poses serious risk to the quality of life on this planet and to the American people.

Again, Chairman Gohmert, thanks for helping us give this topic an overdue hearing, and I look forward to the testimony. I yield back.

[The prepared statement of Mr. Grijalva follows:]

PREPARED STATEMENT OF THE HON. RAÚL GRIJALVA, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF ARIZONA

Thank you, Mr. Chairman. I want to congratulate you on your chairmanship of this new subcommittee. I know we don't agree often, but I think we can agree that congressional oversight is important and valuable, and I hope we get some opportunities to do some good work here.

I also want to thank and congratulate Ranking Member Dingell for dedicating her time, effort, and expertise to this subcommittee. I have great confidence in her leadership, and as she knows I very much look forward to working with her.

And thank you to the witnesses for making the time and effort to come here today.

I would like to begin with a quote from a book written by one of our witnesses today:

"Imagine a gigantic banquet. Hundreds of millions of people come to eat. They eat and drink to their hearts' content . . . Then, one day, a man arrives . . . holding the bill.

Not surprisingly, the diners are in shock. Some begin to deny that this is their bill. Others deny that there even is a bill. Still others deny that they partook of the meal. One diner suggests that the man is not really a waiter, but is only trying to get attention for himself or to raise money for his own projects. Finally, the group concludes that if they simply ignore the waiter, he will go away.

This is where we stand today on the subject of global warming. For the past 150 years, industrial civilization has been dining on the energy stored in fossil fuels, and the bill has come due. Yet, we have sat around the dinner table denying that it is our bill, and doubting the credibility of the man who delivered it."

That's from the excellent *Merchants of Doubt*, which I'm proud to say was co-authored by one of our witnesses today, Professor Naomi Oreskes. Her book shows how multi-billion-dollar industries manipulate science to pad their profits at the expense of the American people. Their favorite tactic is to manufacture doubt about the state of the science, which undermines the case for taking action on a problem.

Manufacturing doubt can be done in different ways. You can question the quality of the science that indicates there's a problem with your product. You can find a scientist who agrees with you and fund their research or give them media training. You can take their research to the press and demand that they print both sides of the story as if there were actually a controversy.

In a hearing about politically driven science, climate denial is the ultimate case study. Its tactics are well documented, including paying scientists to produce industry-friendly science.

Individual case studies where accusations of scientific misconduct exist should be investigated, but we need to be clear: there is an ongoing, well-organized, well-funded campaign to deny climate change and the settled science behind it. That campaign poses serious risks to the quality of life on this planet.

I thank Chairman Gohmert for helping us give this topic an overdue hearing, and I look forward to the testimony.

Mr. GOHMERT. Thank you. The gentleman has yielded back.

We will now introduce our witnesses. First of all we have Mrs. Kathleen Hartnett White. She is a Distinguished Senior Fellow-In-Residence and the Director of the Armstrong Center for Energy and Environment with the Texas Public Policy Foundation. Then we have the Honorable Clara Beckett, Bastrop County Commissioner, Precinct 2, from the Austin, Texas area; well, that is what this says, but you are from Bastrop. Yes. Mr. Kevin Lunny, Owner, Drakes Bay Oyster Company, and also Ms. Naomi Oreskes. We are pleased to have you all here.

With that, we will go ahead and begin the opening statements by our witnesses. You each have 5 minutes. Even if you do not finish your oral testimony, your entire written statement is part of the record.

The light will start green. After 4 minutes it goes to yellow; when it turns red, the time is up. You just need to finish the summary from there; but again, your written testimony will be part of the record. Also, each of you will give your opening statements before any questions will be allowed by the Members. So with that, I will ask Mrs. Kathleen Hartnett White, if you would please begin the opening statements. You have 5 minutes.

STATEMENT OF KATHLEEN HARTNETT WHITE, DISTINGUISHED SENIOR FELLOW-IN-RESIDENCE AND DIRECTOR, ARMSTRONG CENTER FOR ENERGY AND ENVIRONMENT, TEXAS PUBLIC POLICY FOUNDATION, AUSTIN, TEXAS

Mrs. HARTNETT WHITE. Thank you, Chairman Gohmert and Ranking Member Dingell and all the members of the subcommittee, for the opportunity to testify on what I think is an increasingly important topic. My testimony will take the angle of the development and use of science in government agencies predominately.

I want to acknowledge my experience as, for 6 years, chairman of the equivalent of the Texas EPA, which is a very large environmental regulatory agency, in which I, as a non-scientist, because of my position as final decisionmaker, frequently was called upon to assess the robustness and the quality and the credibility of all

kinds of science informing what were ultimately final policy decisions.

Science is a critical tool in the development and implementation of regulation, but not all science is created equal. I am going to focus on a single example, of which there could be many, that is a Texas example surrounding the endangered whooping crane, who winters in the lower part of the Guadalupe River Basin, a magnificent species. In the 1940s, it was thought there were only 15 members left, and now there are 500. I am proud that our state agencies and volunteers and the Fish and Wildlife Service are seeing a recovering species.

However, a lawsuit has arisen which I think is an example of how very weak government science could lead to enormous impacts on the state of Texas, an unusual case under the Endangered Species Act.

Instead, as is typical with a challenge to Fish and Wildlife Service for failure to list a species or for failure to implement a habitat conservation plan, this lawsuit sues the state of Texas and claims that the actions of the Texas Commission on Environmental Quality, who under state law is in charge of all surface water allocations and water rights, charging that state agency for the take, in terms of the ESA, for the killing of 23 whooping cranes in 2008 and 2009, which was a record number.

Texas lost at the District Court level. What would that mean? That would mean that according to the judge's ruling, that the Fish and Wildlife Service would really control the state agency's management of surface water. It really would set Texas on a path that we hear a lot about in California, of the Delta smelt. The perceived needs of the species would be a super-priority before any human use of surface water in the basin occurred. At the Appellate Court level, the District Court's ruling was reversed, and now the original plaintiffs have requested a review by the Supreme Court.

There were key facts in this. What the judge called core facts in this issue were the deaths of 23 whooping cranes, developed by local Fish and Wildlife Service biologists in their annual population counts. That was considered dispositive to the judge.

When the evidentiary record of the District Court's ruling was almost complete, Fish and Wildlife issued a report declaring the methodology used for the count of those 23 deaths as "untenable" and "indefensible." There were efforts to submit that evidence, along with a very interesting new set of facts, and the judge denied them.

So, for the lawyers in the room, the District Court establishes the facts. The Appellate Court and the Supreme Court cannot add additional facts. Some very important additional facts, besides the fact that Fish and Wildlife Service has abandoned and really trashed, if you will, the scientific methodology for making these bird counts.

In 2008 and 2009, the claim was, remember, 23 birds dead, mostly because they were missing when the survey was conducted. They were not in their usual places. In the next year when the census was done, the same number, 17 birds, mysteriously reappeared. That really is a scientific issue.

But those facts, that the basis of the count made in 2008 and 2009 at the heart of the case, were in fact factually incorrect, it is one of many examples of how correlation is not necessarily causation. That, as an issue in science, is rampant throughout the Federal agencies.

I am about to conclude. For over 40 years, we have been implementing these major Federal environmental laws. We have learned a great deal. A whole body of environmental science has developed. Now I think it is time just to make sure that it is strong, that the strength of the science is proportionate to the magnitude of the impacts. Thank you.

[The prepared statement of Mrs. Hartnett White follows:]

PREPARED STATEMENT OF KATHLEEN HARTNETT WHITE, DISTINGUISHED SENIOR FELLOW AND DIRECTOR, ARMSTRONG CENTER FOR ENERGY AND THE ENVIRONMENT, TEXAS PUBLIC POLICY FOUNDATION, AUSTIN, TEXAS

Chairman Gohmert and members of the Oversight and Investigation Subcommittee, I thank you for the opportunity to offer testimony on an issue of pivotal importance to our country.

OVERVIEW

Sound, rigorous science is an appropriate driver of regulatory programs across the Federal agencies. The science used by the government to justify regulatory decision, however, has become increasingly weak, cherry-picked, opaque, and at odds with genuine scientific method. Members of the National Academy of Science's review panels have shared this assessment in recent years.

As regulatory programs balloon, their scientific justification weakens. The reverse order should be true. The stakes are high. Yet, there are few available avenues to challenge the credibility of agency science. The Federal courts typically give broad deference to an agency's technical expertise in matters scientific. Yet, government science is now used to justify regulatory initiatives with unprecedented impacts on this country. My testimony will highlight one example, in Texas, of how weak science under the ESA has been used to justify a Federal take-over of fundamental state authority to allocate surface water for human uses.

I offer this testimony from a perspective gained through my 6-year experience as the final regulatory decisionmaker (Chairman) of the Texas Commission on Environmental Quality (TCEQ), the world's second largest environmental agency after the EPA. Through my previous work on environmental issues in Washington, DC for the National Cattlemen's Association and through four other gubernatorial-appointed Commissions in Texas, I have observed the implementation of Federal environmental laws over the last 30 years.

Robust science conducted under empirical methodologies is a critical tool to inform law making and agency regulatory implementation of those laws whether that involves listing decisions and conservation plans under the Endangered Species Act or National Ambient Air Quality Standards under the Clean Air Act.

Some will claim that non-scientists, like me, cannot assess the credibility of the work of credentialed scientists. The structure of our democracy, however, requires that our popularly elected representatives or appointed heads of agencies make the final policy decisions in which all manner of science, of course, plays an essential role. My job as chairman of TCEQ required that I make judgments about science. Making final decisions for Texas on regulations, state implementation plans, environmental standards, permits, and enforcement action necessarily involved my judgments about the rigor, accuracy and relative uncertainties in diverse scientific studies, statistics, modeling protocols and technical analyses.

In recent years, I have observed a substantial deterioration of the quality of science driving regulatory or judicial decisions. Implausible assumptions somehow immune to verification, worst case scenarios, cherry-picked studies, mysteriously missing data, and absurdly precautionary methodology are now regularly used by Federal agencies to justify regulatory regimes of expanding impact.

I believe that science is a critical tool to inform policy, legislation and regulation. But not all of what is called science is equally robust, transparent or objective. Scientific methodology can be easily manipulated to support a pre-determined policy or political preference.

THE WHOOPING CRANE LAWSUIT

My testimony will highlight scientific issues at the core of an unusual lawsuit surrounding the federally endangered whooping crane. This species winters in and around the Aransas National Wildlife Refuge (ANWR) on the Texas Gulf Coast, at the bottom of the Guadalupe and San Antonio river basins. (*See, Aransas Project v. Shaw*, 775 F.3d 641, (2014)). To this end, I submit for the record a study commissioned and published by the Texas Public Policy Foundation, "Analysis of the Science: The Whooping Crane Decision" by a widely regarded technical expert on the issue, Dr. Lee Wilson.

This litigation offers an example of the far-reaching impacts that can flow from science developed by the Federal Government as used by environmental activist litigators. The stakes in this litigation for the state of Texas are unprecedented. If Texas loses, the Federal Government through the U.S. Fish and Wildlife Service (FWS) will control allocations and diversions of all surface water in large river basins. Texas will lose its exclusive authority to manage allocations of water, uphold long vested water rights, or issue new water rights in an entire river basin originating in the Texas Hill Country flowing through San Antonio and into the bays in this fast growing region of the state.

Instead, FWS would control the state's management of surface water diversions throughout the basins under a Federal Habitat Conservation Plan (HCP). The alleged water needs of the whooping cranes would become a super priority over all water rights in the Guadalupe river basin. Vested water rights for beneficial human use would become second priority, to include curtailing existing water rights held in perpetuity. These impacts could put Texas under the kind of Federal water control that California is now experiencing under FWS's "science" designed to protect the Delta Smelt. Federally listed or candidate species exist in all Texas river basins. If Texas does not prevail in this litigation, the likelihood the risk of FWS control of surface water allocations throughout Texas would be high.

This lawsuit is still pending in the Federal courts. Initially, the Federal District Court ruled against Texas and issued an emergency order freezing TCEQ authority to issue new water rights in the San Antonio and Guadalupe River basins until FWS developed a conservation plan that would govern consumptive water use. The Fifth Circuit Court of Appeals reversed and ruled in favor of Texas. The original environmental plaintiff now request review by the U.S. Supreme Court.

The disturbing irony in this litigation is that the assumed polarization of the water needs of an endangered species and the water needs of human beings does not match the facts of this case under the lens of more robust science. The whooping crane population and water diversions for human use in these river basins increased over the same time period. This is a fantastic "win-win" for the well-being of the whooping cranes and Texans!

The Aransas Buffalo Whooping Crane is a magnificent species worthy of the attentive care of mankind. In the 1940s perhaps only 15 cranes existed. Conservation efforts, in which the state of Texas played an important role, have helped the population to increase to around 500 birds. The species is recovering. The data demonstrates that the increasing population of whooping cranes correlates with increasing consumptive water use from 1941–2010. (Wilson, 11). The Texas population of around 300 birds is the only wild (non-captive) flock in the world.

Aransas Project v. Shaw takes an approach unusual in the history of the ESA. The most prevalent form of litigation under the ESA is legal challenge to FWS for failure to list, failure to implement protective measures, or failure to enforce. In this suit, the environmentalist plaintiffs sued the state of Texas—not FWS—through the officials and state agency charged with allocation of surface waters, the TCEQ. Their claim is that the TCEQ is liable for killing a record number of 23 whooping cranes, or, in the ESA's legal terms, what is known as a "Take" of a listed species. The plaintiffs argue that TCEQ's fundamental authority and legal obligation under state law to uphold existing water rights caused the deaths of 23 whooping cranes in 2008–2009—a number established by the FWS' annual local census of the crane population.

But there was a major wrinkle in this census. In the next annual survey (2009–2010), 17 additional whooping cranes "mysteriously returned." According to Dr. Wilson's analysis, these 17 cranes are the exact number that FWS found "missing" from their territory in 2008–2009 and thus presumed dead. "This number is 17: 17 birds dead in 2008–2009 only because they were missing; 17 "unexpected" birds returning in fall 2009." (Wilson, 19).

FWS wildlife biologists' annual estimates of the population of a listed species is fundamentally important to FWS' central job to prevent the risk of extinction by increasing the population and range of the species. The wildlife counts, however,

typically lack rigorous methodology and are thus highly prone to error. Yet, these numbers are critical every step of the way in the ESA's legal ambit—from candidate and listing decisions, to "jeopardy" decisions under Section 7 of the Act, and to regulatory conservation plans and enforcement actions.

In the pending whooping crane litigation, the FWS's claim that 23 whooping crane deaths occurred over the 2008–2009 wintering season was accepted by the judge as the core fact of the case. The accuracy of FWS' whooping crane population survey, and thus the underlying scientific methodology endorsed by FWS to conduct these surveys, were found to be dispositive in the opinion of the District Court judge.

The FWS then abandoned the methodology for estimating the population of whooping cranes as "untenable," soon after the District Judge made her ruling. Texas requested that the evidentiary record be re-opened to include the new evidence about the return of the 17 unexpected cranes and the FWS's new methodology. The Judge declined.

The weakness of the FWS's whooping crane population survey in 2008–2009 became glaringly apparent before the District Court's ruling. First, 17 whooping cranes, thought missing and thus dead in 2008–2009, mysteriously showed up in 2009–2010! Second, a FWS report in 2012 described the assumptions of methodology that led to the 2008–2009 estimate of 23 whooping crane deaths at ANWR as "untenable" and not "defensible." (Wilson, 4); (*See also*, "Aransas-Wood Buffalo Whooping Crane Abundance Survey," released September 24, 2012 by the FWS).

Subsequently, the FWS completely abandoned the old methodology, on which the District Court grounded its ruling against the TCEQ. The FWS was glaringly absent from this litigation. An expert witness testified in support of the conclusions of FWS' local wildlife biologist in ANWR that 23 whooping cranes died during the 2008–2009 season. FWS apparently made no effort to intervene or to supplement the evidentiary record. And note that the report of 23 whooping cranes presumed dead did not spawn any legal action by the FWS. Given the stakes of this litigation, FWS' silence was deafening.

Because the District Court determines what are the facts at trial, a potential Supreme Court review will be without the new, more compelling facts that undermine the evidence on which the District Court ruled. The absence of these new facts could trouble a Supreme Court review.

The conflation of untested correlation and causation is an endemic scientific problem across multiple agencies. Agencies regularly use correlations (crane deaths) to establish legal causation (increasing water consumption in the river basin). Correlations can be analyzed within a causal framework, such as the commonly used Bradford Hill criteria, to determine whether an observed correlation is more or less likely to be a factual cause. Additionally, the causal credibility of a correlation should be tested against alternative explanations for correlation.

As Dr. Wilson reminds: "In science, testing of multiple hypothesis is essential to sound methodology." (Wilson, 4). Note, Dr. Wilson's analysis finds a much stronger correlation between local drought in crane habitat and crane mortality, rather than consumptive water use throughout an entire basin. What the now abandoned FWS methodology used as the measure——missing birds = presumed dead——overlooked the good news that the increasing and stronger crane population was enlarging the reach of occupied territory—a positive sign of recovery.

The Aransas Buffalo Whooping Crane is a magnificent species worthy of the attentive care of mankind. In the 1940s perhaps only 15 cranes existed. Conservation efforts in which the state of Texas played an important role have helped the population to increase to around 500 birds. The species is recovering. And the Texas population of around 300 birds is the only wild (non-captive) flock in the world.

Assuring integrity in government science is possible within our system of government. Agencies should be held by law to minimal criteria for credible science. Over the last 40 years, there has been an enormous growth in the environmental sciences. Some disciplines are more rigorous than others, but all could be strengthened within the terms of the appropriate enabling Acts, or through amendments to the Information Quality Act or the Data Quality Act.

Science rigorously conducted according to the empirical method in which the accuracy of a hypothesis must be tested by physical evidence is essential to sound governance in a democracy. Scientific findings are, however, categorically different than policy judgments based on reasoned weighing of societal trade-offs and relative risks. The depth and breadth of Federal regulatory agencies, typically ruling under the authority of science, is now so vast that it seems a fourth branch of government has emerged, but this administrative power lacks accountability to the constitutional branches of government.

QUESTIONS SUBMITTED FOR THE RECORD TO KATHLEEN HARTNETT WHITE, TEXAS PUBLIC POLICY FOUNDATION

Questions Submitted by Chairman Gohmert

Question 1. Under the current structure, what is the mechanism that gives Federal scientists an advantage, or a level of deference that puts non-Federal entities at a disadvantage?

Answer. Existing law and judicial precedent give broad, relatively unqualified deference to the scientific findings that agencies use to justify regulatory actions under the major Federal environmental laws. When enacted over 40 years ago, Congress accorded relatively unqualified trust in the credentialed experts employed by the agencies as the arbiters of matters scientific. The Federal courts are extremely hesitant to question the technical judgment of agencies because, in the plain language of the law, Congress delegated such broad authority to the agencies. Thus, there are few—if any—legal procedures through which non-government scientists, impacted business and property owners can challenge the validity of regulatory science considered the legal foundation of agency rules.

Although there are multiple required procedures to validate scientific findings, they have become dysfunctional for a variety of reasons. The National Academy of Science review panels, indeed, have challenged some agencies' scientific methodologies or findings. Yet, those panels have no authority to compel agencies to correct their errors or alter their conclusions. And many of the scientific advisory groups intended to provide a kind of peer review are typically hesitant to challenge agency science because many of the individual scientists on these advisory groups depend on agency funding for their income.

Laws like the Data Quality Act (DQA) and the Information Quality Act (IQA) also were intended to assure sound and robust science to inform regulatory decision. The language of these laws, however, is so general that agencies can readily skirt a vigorous justification of their regulatory science.

These problems could be meaningfully addressed with relatively simple amendment to the enabling laws as well as the DQA and IQA. Such amendments would impose on agencies much needed accountability to Congress and could establish meaningful legal grounds for private parties to challenge the adequacy of agency science used to justify regulatory decision of major national consequence.

Question 2. Today we are talking about "Zero Accountability." No one suggests that we throw scientists in prison for mistakes. We do not want to deter creative research that pushes our understanding. So, how do we move beyond the lack of accountability we see in these examples today?

Answer. Creative science undertaken in universities and private institutions and science developed by agency employees or commissioned by Federal agencies to justify regulatory decisions of national importance are quite different. Such Federal legal findings as EPA's Endangerment Finding that CO2 is a pollutant within the authority of the existing law, ESA listing of the Delta Smelt, and current litigation that could put USFW Service in control of surface water allocations in Texas are Federal actions based on science that trigger a massive expansion of Federal control over basic economic activity. Agencies must be required to validate the science they assert to justify those decisions. Otherwise, our country is functioning more like a technocracy run by Federal employees acting under the authority of science rather than a democracy.

Government by popularly elected representatives, on the one hand, and government by Federal administrators swearing by the authority of science, on the other hand, are contradictory notions. I would call the latter, moreover, an acutely dangerous notion. Regrettably, in the modern United States these two incompatible policymaking models clash often and with dire results. Elected officials trying to carry out their public duties—e.g. maximizing access to clean, affordable energy—meet stubborn opposition from Federal mandarins brandishing their scientific credentials. The magnitude of the aggressive regulatory agendas over the last 6 years has elevated the importance of these issues.

Question 3. At first glance, it appears the Fish and Wildlife Service made a simple counting mistake, albeit with a flawed method for several decades. However, what is it that makes this more serious and less innocent? What is it that makes this a dangerous precedent?

Answer. The FWS' methodology for regular census of the endangered Whooping Cranes wintering on the Aransas National Wildlife Refuge in Texas was accepted by the District Court Judge in the Whooping Crane litigation as the determinative

evidence on which the Judge ruled against the state of Texas. FWS changed this methodology shortly after the record was closed in the lawsuit. Under rules of Federal civil procedure, the District Court establishes the evidentiary record. The Appellate Court or the Supreme Court can neither reject nor add new evidence to the trial court record in their appellate reviews. Thus, FWS's weak and flawed annual census of the whooping cranes—now replaced with sounder science by FWS—is part of the evidentiary record and cannot be rejected by the higher courts.

The FWS was unusually absent from this litigation at the District Court level. No effort was made to intervene which would have been invaluable. Typical litigation under the Endangered Species Act (ESA) involves a challenge to FWS for failure to implement actions argued as legally required under the ESA. In contrast, the whooping crane litigation was a challenge by an environmental plaintiff to the state of Texas' oversight of surface water rights. If Texas loses at the Supreme Court level, FWS will assume control of the state's system of surface water rights—first throughout the Guadalupe river basin but likely to extend to other river basins. Such a result could very well lead to impacts as damaging as that now surrounding FWS protection of the Delta Smelt in California.

Question 4. Some people assume that science from government or academia is not driven by an agenda. Is that a reasonable assumption in your experience?

Answer. I have observed, studied and made official decisions on the basis of agency science for over 30 years. As Chairman of the Texas Commission on Environmental Quality, my job required frequent assessment of Federal and state regulatory science. I saw many examples of genuinely objective and rigorous science . . . typically more in agency conducted science at the state level rather than at the state Federal level. On the basis of my experience as the final decisionmaker in a state agency, I believe state agencies tackle environmental issues with more realism and objectivity than Federal employees who often look at the issues on paper with a one-size-fits-all approach that relegates sound science to the backseat while making abstractions like "national consistency" the driver. Regrettably, much agency science used by Federal agencies appears to be a justification for predetermined policy preference.

On the other hand, I think employees in both state and Federal agencies have an inherent agenda to increase their jurisdiction and funding. Such an agenda regularly biases the regulatory science. Also there are career government employees who have strong ideological goals to expand Federal control—a key reason why this country now lives under thousands and thousands of Federal rules without any idea of whether those rules are addressing genuine problems in an effective manner.

Without more binding congressional oversight of this ideologically technocracy now populating the Federal agencies, the rule of law recedes. Under the self-proclaimed authority of science, agencies now operate as if a fourth branch of government but with no accountability to the Congress, the Judiciary or the Executive branch. As a single example, the EPA has refused to release key data requested by Congress that the Agency uses scientific foundation of onerous new National Ambient Air Standards (NAAQS).

Question 5. Was there anything discussed during the hearing that you felt you were not given ample time to elaborate on or properly discuss?

Answer. I believe there are strategic ways to increase agency accountability with regard to regulatory science. The major Federal environmental laws, as well as the IQA and DQA, need to be amended to impose obligations on the agencies to validate the relevant methodologies and findings of their regulatory science.

For example, the EPA calls its many risk assessments the legal foundation of regulation. Yet, EPA will cherry-pick among perhaps hundreds of relevant studies to select a single study that shows the highest risk in order to justify onerous regulation. EPA should be required to perform genuine weight of evidence assessments of background science—an analysis for which there are many widely recognized protocols.

Science, of course, should drive Federal environmental regulation. Drive does not mean dictate. There are, however, very different forms of science some of which are far robust than others. Conflating the difference between correlation and causation is a typical approach used by agencies to exaggerate risk. See my "EPA's Pretense of Science: Regulating Phantom Risks." Agencies throughout the Federal Government rely on scientific methodologies based on observed correlations. Yet, we all know that a correlation like that between a higher incidence of heart attacks in the winter and a higher incidence of purchasing heavy coats in the winter does not mean heavy coats cause more heart attacks in the winter. Yet, many Federal risk assessments use correlations this implausible to establish the causation of an envi-

ronmental problem that therefore justifies Federal regulation. This is absurd, and there are ways to validate or invalidate whether an observed coincidence is likely a cause. Outside of government, one of the most widely used frameworks to assess whether correlation is indeed causation is the Bradford Hill analytical criteria. In regulatory areas where there are weaker and stronger scientific methodologies, agencies should be required to use the stronger approach.

After 40 years of private conservation and environmental regulation under the major Federal environmental laws, most of the greatest risks to human health, wildlife and other natural resources in the United States have been dramatically reduced. Instead of absorbing this successful record of risk reduction and environmental improvements, many Federal agencies are manufacturing science to support more and more onerous regulation.

Science is an essential tool in the environmental arena. The distinction between science and policy, however, is critical to any consideration of the accountability of government science. Science should never dictate a policy conclusion. Under our form of government, the popularly elected representatives serving in Congress are the final policymakers.

Questions Submitted by Congressman Raúl Grijalva

Question 1. Though questions about Federal and foreign funding are asked of non-governmental witnesses before they testify, no questions are asked about private funding.

1a. Have you received funding from any for-profit sources outside your Texas Public Policy Foundation income, including but not limited to grants, sponsored travel, speaking fees, compensation for writing, in-kind services, or any other services between 2010 and 2015? Do you solicit funding for the Texas Public Policy Foundation? If so, from whom have you solicited funding between 2010 and 2015?

Answer. I do not solicit funding for the Texas Public Policy Foundation.

I already have complied with the financial disclosure rules adopted by the U.S. Natural Resources Committee.

1b. Would you support, in principle, a change in disclosure policies for congressional witnesses to include requirements for disclosure of private funding? Why or why not?

Answer. I do not have an opinion on financial disclosure policies for congressional witnesses.

Mr. GOHMERT. Thank you so much, Mrs. Hartnett White.

At this time we will hear from the Honorable Ms. Beckett.

STATEMENT OF THE HONORABLE CLARA BECKETT, BASTROP COUNTY COMMISSIONER, PRECINCT 2, BASTROP, TEXAS

Ms. BECKETT. Honorable Chairman and members of the committee, thank you for having me here today. My name is Clara Beckett. I am a County Commissioner over in Bastrop County, Texas. This is where the greatest, most disastrous fire in Texas history, and the third worst fire in U.S. history, occurred in September of 2011.

The fire totally destroyed 1,700 homes and the entire fire occurred within federally listed critical habitat of an endangered species. Compliance with the Endangered Species Act turned out to be our greatest challenge, and what I and others in the county referred to as the "disaster within the disaster".

The threats to public safety were vast. A Presidential disaster was declared, and FEMA public assistance was approved with a cost-share component. Bastrop County would be responsible for 25 percent of all the debris cleanup costs.

The ESA has a unique requirement in that any Federal agency conducting activities where an endangered species could be im-

pacted has to consult with the U.S. Fish and Wildlife Service, and they have to come up with certain findings to ensure the protection of endangered species.

Initially, FEMA and the Service came up with a finding of no effect. Work began in early November, and focus was on tree removal on trees that could fall to public roadways. Subsequently, FEMA requested additional consultation with the Service. They sent letters in November and again in December.

The letters stated, in part, due to the emergency nature of the event, the threat to public safety and help, the County of Bastrop needs to proceed in an expeditious manner to remove this material, and concluded a finding of no effect. The concurrence from the Fish and Wildlife Service never came.

On January 10, 2012, a meeting was held at the JFO (I have learned a lot of acronyms since this; that is the Joint Field Office of FEMA), and a grave concern was expressed by the Fish and Wildlife Service and its expert biologists, independent, that tree removal going forward would result in an adverse effect on the Houston toad unless we developed intense avoidance and minimization measures. On January 27, FEMA proposed, in consultation with the Service and their local biologists, a plan that included a tentative set of measures. The plan presented a monstrous challenge—again, the "disaster within the disaster".

Bastrop has an intense understanding of the ESA. We are a Section 10 permit holder for the Houston toad and are intimately familiar with protecting species while facilitating necessary governmental functions. We have successfully implemented our plan for 10 years, and we not only accepted this responsibility, we took ownership of it.

The consultation, on the contrary, between the Service and FEMA had no accountable elected official input. Zero. No consideration, to my knowledge, was given to the practicality of the measures, the extent to which it would delay Bastrop County, and what effect delays would present to the safety of the public; nor would it provide any real scientific evidence that would conclude the measures were necessary at all.

Every tree that was cut, fell, picked up, and hauled was inspected by a team of qualified toad monitors, and any work could not proceed until they said so. They were in charge. Frustration was intense. The county was forced to rebid the contract because the contractor refused to extend the contract beyond the original terms. Ultimately, a half million trees, vegetative debris, was collected. This is the volume of a football field 30 stories tall. It was a big task.

The project was delayed at least 10 months due to these measures. This is a conservative estimate. Nearly a year, when a family is concerned for their safety, is an eternity to them. I personally expected tragedy every day. Fortunately, thank God, there was no more loss of life. There are a lot of stories I could tell you, individual stories about families.

The biggest concern to me was the fact that there were a thousand homes that still remained intact within the burn area, and those families needed to be kept safe. It is one thing to hold up somebody from rebuilding your home, but it is another that they

cannot be safe in their home. I know people that the fathers stayed in the home and the families stayed elsewhere. Others did not have that choice and just prayed for the best every day.

We recognize the ESA comes with a financial impact, and protection of the species is our responsibility as a society; but during a federally declared disaster and authorized by the Stafford Act, by definition these threats pose a threat to public safety. The ESA must take a back seat to public safety. Respectfully submitted. Thank you.

[The prepared statement of Ms. Beckett follows:]

PREPARED STATEMENT OF CLARA BECKETT, BASTROP COUNTY COMMISSIONER, BASTROP, TEXAS

Honorable Chairman and members of the committee, on September 4, 2011, many lives where changed forever in Bastrop County and the state of Texas and touched many lives throughout the country. All hoping that Hurricane Lee would bring desperately needed rainfall and relief to the drought of record in Central Texas, he only brought the final blow to the perfect storm; a 30 mile per hour hot wind. Emergency personnel, and everyone in the region was anticipating the worst. Numerous fires broke throughout central Texas during this time. The fire first called into the Bastrop County Sheriff's 911 office at 2:21 p.m. from a resident of the neighborhood known as Circle D was dispatched to the Bastrop Fire Department. The fire suppression effort never remotely stood a chance and the quick decision making of emergency personnel saved many lives. What became known as the Bastrop County Complex Fire caused the immediate evacuation of thousands of our residents and resulted in the destruction of 1,677 residential dwellings, the most destructive fire in Texas history and the third most destructive in U.S. history. There were 34,000 acres of the Lost Pines forest that succumbed to the massive fire. The entire burn area also occurred entirely within federally designated Critical Habitat of the Houston Toad.

The President of the United States signed the Major Disaster Declaration, FEMA–4029–DR–TX on September 9, 2011. Six hundred firefighting personnel on the ground assisted by an aerial attack for a fire which was not declared 100 percent contained until October 11, 2011. All residents were given the authorization to re-enter the still smoldering area on day 14. Given the speed and intensity of the fire and the density of residential development, I personally presumed many deaths had occurred. The fire resulted in the death of two souls. The attached Fire Progression Map illustrates the massive speed and intensity of the initial ignition as well as two later ignitions.

During the emergency response period of fire suppression, the Endangered Species Act (ESA) was given due consideration. Each morning and evening at the Incident Command Center, shift briefings by the Unified Command (Federal, State and Local) included instruction and guidance to personnel in an effort to heightened awareness of the potential presence of the endangered Houston toad on the ground. Fortunately, the ESA did not prove to hamper the firefighting efforts. However, after the firefighters left and the fire was declared contained, compliance with the ESA proved to be our greatest challenge and challenges were varied, unique and abundant. The fact that the majority of the fire occurred on private property and occurred entirely within Federally Designated Critical and Potential habitat of an endangered species presented what I and many others in Bastrop County refer to as, the disaster within the disaster. This fire was unlike any that FEMA, the state of Texas or our rural county had ever dealt with. The threats to public safety were vast. Homes that survived the fire and public roadways were now threatened by tens of thousands of pine trees burned by the fire that remained standing and at any time could fall and destroy property and take lives. Piles of rubble, including rock and brick veneer, needed to be removed to prevent vectors for snakes and rodents.

The Disaster declaration was amended numerous times, the last being on November 3, 2011, and provided for Individual Assistance (IA) and Public Assistant (PA). The PA was approved for eligible applicants for 75 percent financial reimbursement for all eligible activities authorized by the Robert T. Stafford Disaster Relief and Emergency Assistance Act, P.L. 93–288, as amended.

Bastrop County was determined to be eligible along with two utility providers. In anticipation of the approval of Public Assistance, specifically, debris removal, Bastrop County went to work immediately performing damage assessments, procuring temporary debris management sites, environmental clearances and hiring a qualified monitoring company as well as a qualified debris removal contractor. Bastrop County officials meticulously followed all local, state and Federal procurement laws, as assuring compliance was critical to the mission. The cost of the debris removal was estimated to be $20 million and Bastrop County would be responsible for paying 100 percent of those costs up front and we were fully aware that we could ill afford to do anything that would put the eligibility of 75 percent reimbursement from FEMA at risk. Bastrop County's 25 percent responsibility was crippling to our fund balance and cash-flow was an incredible challenge.

The ESA requires either an informal or formal Section 7 consultation with any Federal agency—in this case—FEMA and must conclude that the proposed activities funded by FEMA have "no affect" or "are not likely to adversely affect" or "is likely to adversely affect" a federally endangered species. A finding of "is likely" results in a formal consultation that would have completely halted any and all debris removal operations, if and until mitigation measures and a complex plan could be developed. This would have been unfathomable. FEMA initially made a finding of "no affect" for approval of the use of temporary debris management sites and the USF&WS concurred.

Debris removal work began in earnest on November 7 and was focused on dangerous tree removal within the County Rights-of-Way that could fall onto the more than 100 miles of public roads within the burn area. Subsequently, FEMA requested additional informal consultation with the USF&WS on November 7 and again on December 13, 2011, providing more details of the activities on the ground. The letter of December 13 stated in part: "Due to the emergency nature of the event and the threat to public health and safety, the County of Bastrop needs to proceed in an expeditious manner to remove this material to previously designated sites." And concluded in that request a finding of "no affect." The concurrence from the USF&WS of FEMA's finding was not ever received. On the heels of the breading season of the Houston Toad a meeting was held January 10, 2012 at the Joint Field Office of FEMA. There was grave concern expressed by the USF&WS and local biologists that activities going forward would result in an "adverse effect" on the Houston Toad unless we could develop intense avoidance and minimization measures. On January 27 FEMA proposed, in consultation with the USF&WS and local biologists, an extensive set of avoidance and minimization measures for all activities as well as a detailed Houston Toad Monitoring Plan. The USF&WS sent their concurrence letter to FEMA on February 1, 2012. From that day forward all debris removal activities would be conducted under this intense set of procedures and/or similar variations as deemed necessary as work activities varied in nature. We continued to work within these parameters on all projects moving forward which involved any Federal dollars and are still today working with these procedures on Recovery projects. The avoidance and minimization measures established in this informal Section 7 consultation, set a monstrous challenge before the county and its contractors. What seemed to me, on the day the fire occurred up until this time to be the biggest challenge I and others would face in our lifetimes, just got monumentally more difficult. It felt like the blow to the chest I felt when I was 8 years old and shot my grandfather's double barrel shot gun, only that pain simply left a bruise for a few days. This new set of circumstance has left its mark to this day. The January 27, 2012 and the February 1, 2012 letter to initiate consultation from FEMA to the USF&WS and the concurrence from the USF&WS letter are attached. The consultations were updated again in January of 2013 and again in June of 2013 and further avoidance and minimization measures were added.

Bastrop County and our citizens have an intense understanding of the ESA and history of compliance. Bastrop County is a Section 10 permit holder with a Habitat Conservation Plan for the Houston Toad and are intimately familiar with the purpose and need for minimization and avoidance measures that reasonably assure compliance with the ESA while facilitating necessary county functions. We successfully implemented our permit many years before the fires occurred and for over 10 years and have had full-time staff dedicated to protecting the species and assuring compliance with all aspects of our permit. We work with thousands of landowners who also participate in the Habitat Conservation Plan on a voluntary basis. The plan took many years to develop and I believe was developed with solid thought and the best science available. The county was intimately involved for many years during its development.

In complete contrast, the consultation between the USF&WS and FEMA that was implemented for the remaining duration of our disaster had no accountable elected official from Bastrop County input. As a result, no consideration, to my knowledge, was given to the practicality of the measures of the plan, the extent to which it would delay Bastrop County in our efforts and what "affect" delays could potentially present to the health and safety of the public or provide any real scientific evidence that would reasonably conclude the measures were necessary.

A team of biologists, as regulated and determined to be qualified, by the Houston Toad Monitoring Plan and subsequent updates to the Plan, were deployed and the debris removal proceeded under the newly established avoidance and minimization measures and as updated. As stated in the letter of concurrence from the USF&WS, "Implementation of these measures is a condition of Federal funding." It was very clear to me that whatever the document said is what we had to do regardless of anything. If the USF&WS and FEMA concurred that Bastrop County had to implement these measures we had absolutely no other options. Essentially every tree that was cut/fell/picked up/hauled and every pile of rubble that was picked up and hauled was inspected by qualified Houston Toad monitor prior to any work proceeding. Frustrations were intense and the debris removal contractor was under great distress from a production standpoint. The original contract for debris removal was for a duration of 12 months. The contractor at the end of the 12-month period requested an additional $2 million to complete the project via increased unit price costs. Bastrop County was forced, due to state procurement law, to re-bid the entire remaining work items and a contract was awarded to a second contractor. This caused a further 2-month delay in debris removal operations.

Bastrop County and its debris removal contractors ultimately:

Cut 53,000 trees which equated to a volume of about 530,000 cubic yards of vegetative debris. By way of a physical comparison this volume would cover a football field 300 feet in height.

Removed/consolidated and hauled for re-cycling 100,000 tons of rubble, covering the size of a football field 45 feet in height.

From the beginning of the operations on November 7, 2011 through February 1, 2012 under the initial consultation the county cut and removed 14,367 trees. From February 2, 2012 through July 31, 2013 the county cut and removed 35,785 trees under the strict avoidance and minimization measures and updated measures. If one calculates the trees per calendar day and compares the production rates for the time frames referenced above. The project was delayed 311 days. This is a conservative estimate as the month of January 2012, during the initially cutting, was the wettest month in Bastrop County in the proceeding 4 years. The initial ramp-up also effected the initial production numbers. My strong belief is that the debris removal operations could have been completed close to 1 year earlier than it did. I also believe that every elected official in Bastrop County, staff and FEMA personnel on the ground would agree that the Toad Monitoring significantly delayed completion.

Three hundred eleven days when a family is concerned for their safety due to a burnt tree standing 75 feet tall on an adjacent abandoned property is an eternity to them; 311 days where trees could fall into the over 100 miles of county roads within the burn area is an eternity to the public and the county personnel tasked with keeping the public safe as well as the removal. I personally expected tragedy every day the debris removal was prolonged. Many trees did fall onto structures, fences and roadways; however, and most assuredly by the grace of God, we escaped any additional loss of life. There are many stories that I could share with the committee about the human stresses that I personally witnessed and the delay to so many wishing to move on with their lives and many stories I am sure I never knew or heard about. The standing dead trees were a constant reminder to fire victims, survivors, neighbors, friends and my constituents of the fire and the continued dangers to residents. It was also a constant reminder of the environmental destruction. At the end of the day, it is my belief that the delays ironically proved to be an impediment to environmental recovery. Removing this clear threat to human safety and health should have been the first and foremost priority, but I can tell you firsthand it was not. The protection of the Houston Toad was clearly the first priority.

Bastrop County had a population of approximately 74,000 people at the time of the fire. The decision to rebuild for the 1,700 households that were destroyed, for many, hinged upon how long it would take to make the neighborhoods safe. There were also over 1,000 homes that remained intact within the burn area. We estimated that this number of households was approximately 11 percent of the total population of Bastrop County. Everyone knew someone affected. The quicker we

could get these trees removed the quicker the emotional, ecological and economic recovery could begin. The 1,000 dwellings and the people living within the burn area needed to be immediately protected. Many families were so concerned for their safety the decision was made to have the father remain at the house, to protect the contents, while the mother and children stayed with friends or family, others simply had no choice but to remain in their homes and pray for the best. Please see the attached picture that I personally took on April 11, 2013, 19 months after tree removal had commenced. This is one example of the many families that contacted me concerned with trees on adjacent properties threatening their safety and welfare. Delay was the worst case scenario, yet in order to comply with the ESA, we were forced to endure it. County elected officials, county staff, our contractors and, I believe, even FEMA personnel, were dismayed and frustrated with the tree removal process. The electric utility company and their staff were similarly frustrated. With the very limited resources of Bastrop County, we knew that every detail of compliance with local, state and Federal law and processes must be adhered to. I believe that under similar circumstance where debris removal did not involve this intense ESA compliance element, the process would be a significant challenge for any city or county in the country and we are a very small jurisdiction with limited staff. I often felt and compared the feeling I had to trying to breathe through a coffee straw.

I have chosen to not, in detail, enumerate the significant direct and indirect costs of compliance, which many would certainly agree was unacceptable. The direct and indirect costs to the Federal Government and Bastrop County was well into the millions.

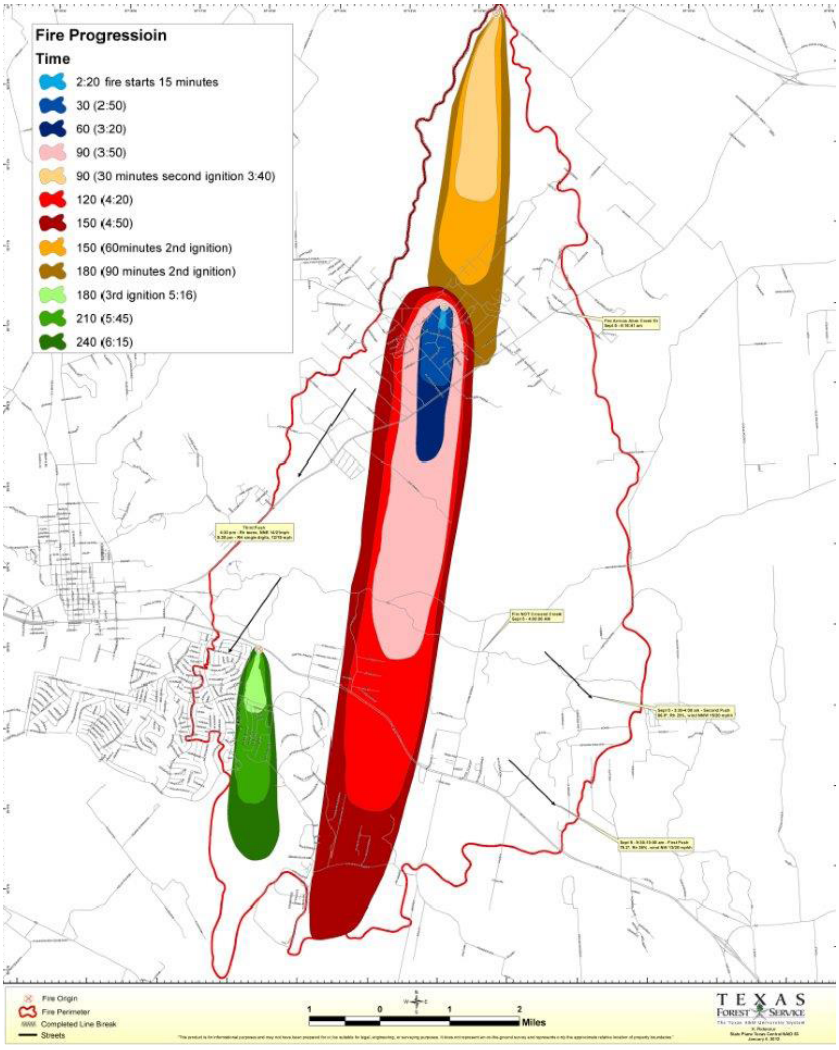
While the ESA is understandably not free and the protection of endangered species is our responsibility as a society, it is my conviction that change must happen. Under the conditions of a Presidential Federally Declared Disaster and the eligibility for FEMA IA and PA, authorized under the authority of the Stafford Act and by definition the activities funded by the Federal Government must present a "threat to public health and safety," compliance with the ESA must take a temporary back seat to removing those threats. We simply cannot continue to enforce a Federal law that impedes the removal of clear and immediate threats to human life.

Attachments:

1. Fire Progression Map
2. January 27, 2012 Letter—FEMA Consultation Request
3. February 1, 2012 Letter—USF&WS Concurrence
4. Picture of a Child

ATTACHMENT 1

Balstrop Complex Fire Progression



ATTACHMENT 2

U. S. Department of Homeland Security
FEMA Region 6
800 North Loop 288
Denton, TX 76209-3698

FEMA

January 27, 2012

Ms. Edith Erfling
Field Supervisor
U.S. Fish and Wildlife Service
17629 El Camino Real, Suite #211
Houston, TX 77058

Dear Ms. Erfling:

This letter is to initiate informal consultation between the Federal Emergency Management Agency (FEMA) and your office regarding ongoing work associated with the recovery from the Bastrop County Complex Fire, which was included as part of the major disaster declaration FEMA–4029–DR–TX. This letter has been revised to capture discussions between FEMA and your office on January 20, 2012, and following a site visit in Bastrop with Jeff Hill of the U.S. Fish and Wildlife Service (USFWS) on January 25, 2012. It also follows an initial consultation letter, dated November 7, 2011, that was submitted to the Austin Ecological Services Field Office and a subsequent letter, dated December 13, 2011, regarding FEMA's "no effect" determination for the impact of debris removal activities to the federally endangered Houston toad (toad; *Bufo houstonensis*) in Bastrop County. In addition, on September 19, 2011, FEMA requested and on September 23, 2011, received USFWS concurrence on proposed debris disposal sites within Bastrop County.

As environmental conditions change and the toad is likely to become more active in Bastrop County, and as FEMA's emergency work activities are going beyond the initial predicted timeframe for completion, FEMA is requesting informal consultation with your office. Per conversations with Adam Zerrenner, Field Supervisor at the Austin Ecological Services Field Office, FEMA is to consult with the Clear Lake Ecological Services Field Office regarding the toad and FEMA work in Bastrop County.

Realizing that FEMA Public Assistance and Individual Assistance efforts were proceeding into the toad chorusing season, FEMA arranged for a meeting on January 10, 2012, among FEMA program and environmental staff; applicants, including Bastrop County and Bluebonnet Electric Cooperative; the Texas Division of Emergency Management; USFWS; Texas Parks and Wildlife Department (TPWD); and representatives from Texas State University, to discuss ongoing FEMA-eligible activities, toad emergence and breeding activity status, potential mitigation measures, and consultation approaches under the Endangered Species Act.

FEDERAL ACTIONS INCLUDED IN THIS CONSULTATION

Approximately 95 percent of the burn area associated with the Bastrop County Complex Fire is located within designated critical habitat for the toad. Therefore, much of the FEMA-eligible work under various funding authorities is taking place within toad critical habitat. A map has been included that shows the burn area, the designated critical habitat for the Houston toad, and the temporary debris staging sites being utilized by Bastrop County and Bluebonnet.

Individual Assistance

Under FEMA's Individual Assistance Program, approximately 73 temporary housing units with associated temporary electric poles have been placed on residential lots within Bastrop County to provide short-term housing for those impacted by the wildfire. Most of the units are located in the Circle D-KC Estates area north of Bastrop, with others located just south of Bastrop State Park and in Tahitian Village. No additional units are anticipated to be placed within the burn area. These units will be decommissioned and removed from residential sites within various timeframes depending on the homeowners' needs. This consultation covers removal of units beginning in January 2012 and through the end of toad breeding season, June 1, 2012. FEMA approximates that between 5 and 1O units will be removed during this timeframe. Removals will be conducted during daylight hours. FEMA

will make separate determinations for removals that continue from June 1, 2012, through the remainder of the year and into early 2013. Removals after June 1, 2012 are therefore not included in this consultation.

Public Assistance

Under FEMA's Public Assistance program, eligible applicants, including Bastrop County, Bluebonnet Electric Cooperative, and TPWD, have requested federal funding assistance for eligible emergency work related to recovery from the fire. Debris on or along roadways may impede the safe passage of emergency vehicles and local traffic, and debris piles on public and private property may also provide habitat for vectors of disease. Therefore, FEMA intends to provide assistance for eligible Private Property Debris Removal (PPDR) and removal of burned, dead, hazardous trees and other debris from public rights-of-way (ROW) in Bastrop County. Most of this work is being conducted along Highway 21, Highway 71, within the Circle D-KC Estates, and within Tahitian Village (see enclosed map).

The PPDR operation in Bastrop County includes removing burned, dead, and hazardous trees within 50 feet of the home and/or driveways. In some limited cases, debris crews will need to remove small quantities of building rubble if it impedes the entrance of debris removal equipment along entrance driveways. As of this date, FEMA projects that approximately 650 home owners will request assistance with debris removal on private property in total. Work has been completed on many of these sites, and at this time FEMA is estimating that about 200 of these 650 sites still need to be worked. Trees are being hand cut and skidded to driveway areas. Contractors are using bobcats, bucket trucks, and self-loading trucks with grapple hooks to remove the debris. Heavy equipment is remaining on driveways. The PPDR operation is running 7 days a week and work is being conducted only during daylight hours. The application period for PPDR will remain open through February 19, 2012, and PPDR work is estimated to conclude by the end of March 2012.

In addition, some private property owners clean their property and move disaster-generated debris such as brush and vegetation and building components and contents to the public road ROW. FEMA and its applicants have little to no control over when the debris is brought to the roadsides. Most ROW debris is being removed from the roadway via self-loading trucks with grapple hooks. Heavier construction and demolition debris must be removed with front end loader equipment. Dead, burned trees within road ROWs have also accumulated and are a potential hazard. Arborists are making determinations of which trees are dead and marking them for contractors to remove; trees deemed at least partially alive are marked and will be re-evaluated at a future date. Trees are being hand cut. There should be little to no heavy trucks or equipment leaving roadways onto undisturbed ground for tree removal activities along ROWs. As of the date of this letter, most ROW work is complete and FEMA crews are responding to debris as it is periodically brought to the ROW by property owners. Finally, stump grinding within the public ROW may become an eligible FEMA-reimbursement activity if the stumps are determined to pose a safety issue. Stumps would be ground down to be level with the adjacent grade and would not be excavated or otherwise mechanically removed. The ROW debris clearing operation is running 7 days a week and work is being conducted only during daylight hours.

All PPDR and ROW debris will be taken to one of the five previously approved debris sites or will be recycled. Heavy equipment is removed from private property and the public ROW at the conclusion of each work day.

Bluebonnet Electric Cooperative is also working to remove debris inside and outside of its maintained utility ROWs. Some of this work, including removal of debris in the ROW that presents a safety hazard and threat to continued electric service, is eligible for FEMA reimbursement. According to Bluebonnet, FEMA-funded tree cutting within the ROW is complete and removal of debris on the ground is about 70 percent complete within the maintained ROW. Heavy equipment is being used to collect and haul the debris, and equipment will remain within the maintained ROW during the workday. Heavy equipment is removed from Bluebonnet ROWs at the conclusion of each work day. This work is estimated to be completed by the end of March, 2012. Bluebonnet is also conducting tree removal, tree trimming, and above-ground reconnection of electricity service to structures on private property where trees present a threat to the provision of electric service. Trees are being hand cut and hauled off site via equipment that will remain on roadways and driveways. Some of this work may also be eligible for FEMA reimbursement. It is difficult to estimate a completion date for work on private property as customers call in on their own timeframe for this service. Bluebonnet's operation is running 5 days a week and work is being conducted only during daylight hours.

TPWD is conducting work within Bastrop State Park. Some debris removal activities at the park will be reimbursable through FEMA. Specifically, TPWD is conducting hazardous tree removal along park roadways using fella-bunchers, skidders, loaders, and chippers. Equipment is operating either on the roadways, or within immediately adjacent roadside cutting areas. Larger trees are being sent to a mill to be used for lumber and the remainder of the vegetative debris is being chipped on site and used for erosion control in the park. Hazardous tree removal is reportedly 50 percent complete as of January 11, 2012, and TPWD estimates that it will be completed by the end of February, 2012. TPWD has prioritized work such that they are moving away from known toad habitats as chorusing season approaches. Therefore, the remaining tree removal work is likely to be in areas of the park that are uninhabited by the toad and where toads have not been documented in the last 6 years. The TPWD debris clearing operation is running up to 7 days a week and work is being conducted only during daylight hours. In addition to implementing the best management practices (BMPs) developed by the USFWS (2011a and 2011b), TPWD is conducting real-time monitoring for toad emergence throughout the project area as work proceeds.

Consultation on permanent work repair projects, such as culvert replacement and building reconstruction under the FEMA Public Assistance Program will be conducted as necessary on an individual basis at a future date and is not included in this consultation.

HOUSTON TOAD STATUS IN PROJECT AREA

The toad depends on healthy and mature forest ecosystems with mixed species composition, significant canopy cover, an open understory layer with a diverse herbaceous component, and breeding areas (ephemeral wet-weather ponds and other water features, such as stock tanks, creeks, streams, wetlands, seeps, and springs) with shaded edges. They are most commonly found within the surrounding upland habitat adjacent to breeding sites. The toad uses drainages and riparian areas for dispersal and movement. The edges of breeding ponds are used by emerging juvenile toadlets after they metamorphose from their larval (tadpole) stage (USFWS, 2011a).

This species is inactive during hot, dry seasons and during the coldest months. Most breeding occurs from February to April, when the minimum air temperature is above 14 C. Breeding has been reported as late as June. Breeding habitat consists of a body of water supporting the reproductive and larval toad life stages. Eggs and larvae develop in shallow water. For successful breeding, water must persist for at least 60 days. Larvae hatch in 4 to 7 days and metamorphose in 3–9 weeks, depending on the water temperature. This species locally migrates between breeding and non-breeding habitats. The adjacent uplands support adults year round and provide patch connectivity outward from the ponds for juvenile dispersal (USFWS, 2011c). The toad tends to occupy areas with 60 percent to 100 percent canopy cover (Forstner *et al.* 2011). Upland forests in the Lost Pines area of Bastrop County serve as occupied and dispersal habitat for the Houston toad and cover/shade is a necessity to facilitate distribution without desiccation (LPRT 2011).

Bastrop County has been surveyed consistently from year to year since the 1970s. By 2003, Dr. Michael Forstner of Texas State University estimated the number of Houston toads in Bastrop County to be between 100 and 200 individuals. The 2011 Houston toad breeding/survey season ended May 2011 with only six Houston toads detected in Bastrop State Park, two Houston toads detected on the Griffith League Ranch in Bastrop County, one Houston toad detected south of the Texas State Highway 290 corridor in Bastrop County, one Houston toad detected in Austin County, one Houston toad detected in Lavaca County, and one Houston toad detected on Cade Lakes in Burleson County (USFWS 2011c). No reproductive events were observed during the 2011 breeding season, despite extensive survey attempts (Forstner and Dixon 2011).

Prior to the Bastrop County Complex Fire, the Houston toad range in Bastrop County was in poor condition as a result of what is speculated to be the worst 1-year drought on recorded history for this area (LPRT 2011). Approximately 41 percent of the high suitability habitat for the Houston toad within Bastrop County was moderately to heavily burned (Forstner *et al.* 2011). Though the toad may have adapted strategies to survive wildfire events, the extent of the impact of the Bastrop County Complex Fire on toad survival and population numbers is not yet known. FEMA is currently working with Dr. Forstner and is being advised of toad emergence and activity through his monitoring efforts throughout Bastrop County.

AVOIDANCE AND MINIMIZATION MEASURES

The following avoidance and minimization measures will be implemented within the burn area for the FEMA-funded activities described above in order to minimize

impact to the toad. These measures have been adapted from the USFWS BMPs (2011a, 2011b); the Lost Pines Habitat Conservation Plan (LPHCP; 2007) and the Bastrop Utilities Habitat Conservation Plan (2005); and discussions at the January 10, 2012 meeting discussed above; and subsequent phone calls and meetings with the USFWS on-site in Bastrop. Implementation of these measures will be a condition of federal funding.

Individual Assistance Projects

- For any removal of temporary housing units from the date of this consultation and through the end of breeding season, June 1, 2012, FEMA will deploy a Houston toad monitor that is a qualified biologist and that will be permitted in identifying, locating, handling, removing, and transporting the Houston toad. Monitors will work in accordance with the attached Houston Toad Monitoring Plan. Should a toad be encountered during removal of a unit, work must cease immediately, the biological monitor will secure and relocate the toad; and the U.S. Fish and Wildlife Service's Clear Lake Ecological Services Office will be contacted at (281) 286–8282.

Public Assistance Projects

- FEMA will deliver an introductory training course on Houston toad life cycle and habitat requirements for FEMA staff, the applicants, and key personnel of the debris removal work crews. Estimated delivery of this training is the week of January 30, 2012, with additional sessions to follow as necessary.
- For work conducted from the date of this consultation and through the end of breeding season, June 1, 2012, FEMA will deploy a team of Houston toad monitors that are qualified biologists and that will collectively be permitted in identifying, locating, handling, removing, and transporting the Houston toad. Monitors must work in accordance with the attached Houston Toad Monitoring Plan. Should a toad be encountered during debris activities, work must cease immediately, the biological monitor will secure and relocate the toad; and the U.S. Fish and Wildlife Service's Clear Lake Ecological Services Office will be contacted at (281) 286–8282.
- For PPDR, cut trees must be removed from the site in this order of priority:
  - — Cut trees will be loaded and hauled away at the end of the work day and no logs will be left behind;
  - — Cut trees will be stacked on hard surfaces (concrete/caliche driveways or structural foundations);
  - — Cut trees will be kept off natural ground via staging on horizontal support structures to minimize the creation of artificial toad habitat. If other logs are used to serve as horizontal supports, a toad monitor must inspect the logs that are in contact with the ground for the presence of toads before those logs can be removed.
- To minimize the creation of toad habitat in non-desirable locations such as rights-of way (ROW), every effort will be made to remove debris piles within 48 hours of the debris being deposited.
- Debris piles will be, to the greatest extent possible, either hand loaded and/or grapple hook loaded.
- Any mulch, chips, or other woody debris from tree removal that is left on site must cover the forest floor in no more than a 1 to 2-inch layer.
- Soil disturbance, clearing, and operation of heavy equipment (for example, tractors, large trucks, bulldozers, skidders) will not occur within a 200-foot distance from potential Houston toad breeding sites and riparian areas at any time of year. These may include ephemeral wet weather ponds and other water features, such as stock tanks, creeks, streams, drainages, wetlands, seeps, and springs.
- For trees that pose an immediate safety threat and that occur within 200 feet of a potential Houston toad breeding site (ponds, stock tanks, creeks, streams, wetlands, seeps, and springs that are within or immediately adjacent to a forested area) or riparian area, tree removal activities must be conducted in consultation with a qualified Houston toad monitor and removal activities cannot begin until that monitor is on site. Trees must be hand cut.
- Hand cutting can occur within a 200-foot radius of a potential Houston toad breeding site between July 1 and December 31 (outside of the Houston toad breeding season and emergence period) without a Houston toad monitor.

- The number and size of entry and exit points for heavy equipment to move into and out of forested areas will be kept to the minimum needed for conducting safe and effective tree and debris removal operations, while also minimizing soil disturbance.
- Streams, riparian zones, wetlands, and areas near potential Houston toad breeding sites will not be used for staging equipment or refueling. Equipment must be stored, serviced, and fueled at least 200 feet away from these sensitive areas.
- Gasoline- and diesel-fueled field equipment must be inspected daily for signs of fuel or hydraulic leaks; such leaks must be repaired promptly and measures will be taken to prevent soil contamination. All hazardous materials related to construction or maintenance activities will be properly contained, used, and/or disposed of.
- Clearing for all utility lines and other structures will be limited to the minimum amount that allows for the safe completion of a particular project. Hand-clearing of vegetation will be used when practical. The use of track equipment for clearing will be minimized.
- Following debris removal activities, the applicants will ensure that equipment used on undisturbed ground has not resulted in potential artificial breeding sites. For example, large tire ruts will be smoothed so as not to create an undesirable breeding pond along a ROW.

In addition to being subject to the conditions above, some activities, such as those on participating private property sites or within the Bluebonnet Electric Cooperative permitted area, must also comply with habitat conservation plans (HCPs) that are already in place, including the Lost Pines Habitat Conservation Plan (LPHCP; 2007) and the Bastrop Utilities Habitat Conservation Plan (2005). While some of the PPDR work will occur on property/landowners enrolled in the county's LPHCP which are covered for incidental take; others are not enrolled. For instance, under their HCP, which covers routine repair, emergency repair, and maintenance of aboveground distribution lines within the permitted area, Bluebonnet distributes a Houston toad information brochure to contractors and landowners that are involved in maintenance work.

DETERMINATION

Toad emergence and breeding is triggered, in part, by rainfall and warm nighttime temperatures. FEMA is communicating regularly with Dr. Forstner at Texas State University to remain informed of his team's monitoring efforts in toad habitat. FEMA is working under the assumption that weather conditions conducive for toad emergence and breeding could materialize any day now, and the toad could begin emerging and breeding very soon.

Upon emergence, there is potential for adult toads to be present among debris piles that are being removed on ROWs and private property. Temporary debris piles, especially brush and vegetative debris, may provide "artificial" habitat for the toad. It is less likely that the toad would shelter within larger construction and demolition debris. There is also potential for toads to seek shelter under temporary housing units that have been installed at residential lots given that the forested habitat no longer provides adequate shade or cover for the toad after the fire. In addition, some tree removal and trimming activities may reduce the already compromised overstory that provides shaded habitat for the local migration of the toad. However, tree removal and trimming activities being funded by FEMA are restricted to dead or severely damaged trees that pose a threat to human safety. The use of debris removal equipment on undisturbed ground may create unsuitable and artificial habitat for the toad by creating ponding areas. Measures are being taken to minimize the work that is conducted immediately adjacent to breeding areas (ephemeral wet-weather ponds, creeks, streams, wetlands, seeps, and springs) during chorusing season.

Based on a review of the Houston toad and its habitat requirements; the assumption that adult toad population numbers are likely low in the project area based on recent past population surveys and uncertainty about survivorship following the fire; the emergency nature of the work to be conducted; the duration and location of work; the implementation of required avoidance and minimization measures, including extensive monitoring by qualified biologists; the additional implementation of various conservation measures under applicable HCPs; and meetings and conversations with USFWS staff and Houston toad specialists, FEMA has determined that the federally funded work described above may affect, but is not likely to adversely affect the Houston toad in Bastrop County.

Furthermore, FEMA contends that the "no action" alternative of leaving the debris along roadsides may result in an adverse effect to the toad by providing undesirable habitat and encouraging toads to occupy high risk areas along roadways. Creating habitat in these areas might contribute to direct mortality due to roadway traffic (USFWS 2011c).

FEMA requests your concurrence with this effect determination and input on any additional conservation measures required to ensure accuracy of this determination. Thank you for your attention and assistance. Should you have any questions, please contact FEMA Environmental Specialist, Dorothy Weir at Dorothy.Weir@fema.dhs.gov or at 940–435–9275.

Sincerely,

Kevin Jaynes, CHMM
Regional Environmental Officer
FEMA Region 6

Attachment: Houston Toad Monitoring Plan

****

U. S. Department of Homeland Security
FEMA Region 6
800 North Loop 288
Denton, TX 76209-3698

FEMA

Houston Toad Monitoring Plan
for
Activities Covered in FEMA Letter Dated January 27, 2012
Bastrop County, Texas, FEMA–DR–4029–TX
(Revised March 15, 2012)

Monitor Qualifications: Monitors will hold a 10(a)(1a) permit. Individually, they must be able to locate and identify wild Houston toads. Collectively they must be able to handle, remove, and transport wild Houston toads and be federally permitted and permitted within the State of Texas to do so. The monitors will be prepared to initiate monitoring activities immediately and will be appropriately equipped to conduct the activities described above. As of March 15, 2012, fourteen toad monitors are rotating daily to fulfill the need to have six monitors in the field in Bastrop on any given day. Two of the monitors hold permits to locate and identify wild Houston toads. Twelve of the monitors are permitted to handle, remove, and transport wild Houston toads.

Monitor Hierarchy: Houston toad monitors will be directed by FEMA Task Monitor, Dorothy Weir. Lead monitors, in order of authority, are Mike Forstner, James Dixon, Jake Jackson, and Jim Bell. The lead monitors hold permits that allow them to handle and relocate the toad. These monitors will have supervisory authority over the other monitors regarding decisions in the field.

Number of Monitors: Fourteen toad monitors will be working on a rotational basis in Bastrop County on FEMA-related operations. FEMA has the capacity to fund six toad monitors on any given day. On average, two toad monitors will work with Bluebonnet Electric Cooperative and four monitors will be assigned to Bastrop County to assist in debris removal along rights-of-way (ROW) and on private property. These monitors will also be tasked as needed to oversee removal of temporary housing units and to assist with site visits to proposed FEMA permanent work projects within critical habitat in Bastrop County. At this time, debris removal work in Bastrop State Park is complete or near completion and Greg Creacy has been monitoring per the February 1, 2012 consultation as approved by USFWS. The number of FEMA-funded monitors working in the field on a given day can be increased or decreased pending recovery effort success and speed of completion. FEMA will coordinate additional individual monitors and their qualifications through the USFWS Clear Lake Ecological Services Field Office.

Work Hours: Monitors will work when the debris crews are working, which is dependent on weather conditions and availability of personnel and equipment. At this time, Bastrop County debris operations run 6 days a week. At this time, Bluebonnet operations run 7 days a week. Work is only conducted during daylight hours, which averages about 10–12 hours a day. Precise scheduling will be contingent on field activities. Daily work assignments will be coordinated with FEMA Public Assistance and Environmental staff, the applicants, and their contractors.

Work Duration: Monitors will work through breeding season until FEMA operations included in the January 27, 2012, consultation letter are completed, or until such time in the year that FEMA is able to make a "no effect" determination for debris removal activities. Monitors began work in the field on February 2, 2012, when there was an initial indication of toads chorusing in the wild. The period of performance for monitoring can be shortened and/or extended depending on duration of FEMA operations.

Work Plan and Prioritization: Monitors will be engaged with work being done by Bastrop County (debris removal along rights-of-way (ROWs) and on private property); Bluebonnet Electric Cooperative (debris removal along utility ROWs and tree removal at private property); Texas Parks and Wildlife Department (debris removal along ROWs within Bastrop State Park); and by FEMA's Individual Assistance Program for the removal of individual temporary housing units at residential sites. Work schedules for the biological monitors will be based on daily situational input from FEMA staff and work crews. Applicant implementation of the avoidance and minimization measures in the February 1, 2012, consultation letter, including adherence to this Houston Toad Monitoring Plan, is a condition of federal funding. Monitors will accompany work crews according to the following list of prioritized FEMA activities:

- ***Private Property Debris Removal (PPDR):*** Debris crews will initially focus PPDR efforts in neighborhoods with higher toad probability. In particular, areas north of Highway 21 in the Circle D-KC Estates will be worked as soon as possible. Areas to the south and east of Bastrop State Park will be the secondary focus area. Areas to the south of Highway 71 are a third priority and Tahitian Village is the last priority. Toad monitors can advise, assist, and provide oversight regarding the prioritization of work based on their expertise on known toad locations.

  PPDR sites that are ready to cut have been assigned a monitoring level of effort of easy, medium, or hard, which enables the County to schedule cut sites appropriately. PPDR crews work 5 properties per day on average. Each morning, the Houston toad monitor will arrive at their assigned PPDR site and conduct monitoring for toads and potential toad habitat based on the cut plan for that site, which is determined by the County's contractor. The toad monitors are available to provide guidance to the County on how best to implement conditions that are specific to toad habitat. If no habitat is present, PPDR is cleared to commence and must commence that day or the following day, or the clearance becomes null.

  - If potential toad habitat is discovered at the site, the toad monitor will inspect the debris for toads.
    - If no toads are identified in the potential habitat on the site, including any small amount of building rubble that may need to be removed to allow the entrance of equipment, work can proceed in line with the conditions in the consultation letter. If ground contact debris that creates toad sheltering habitat is left overnight at the PPDR site, the site clearance becomes null and the site has to be monitored for toad presence again before work commences.
    - If a toad is located, if permitted to do so, the monitor will secure and relocate the toad according to protocols associated with their permit. If the monitor is only permitted for survey, they will call another FEMA assigned monitor that is permitted for handling and relocation of the Houston toad, and that monitor will come to the site immediately to secure and relocate the toad. The U.S. Fish and Wildlife Service's Clear Lake Ecological Services Field Office will be contacted at (281) 286–8282. If ground contact debris that creates toad sheltering habitat is left overnight at the PPDR site, the site clearance becomes null and the site has to be monitored for toad presence again before work commences.

For trees that pose an immediate safety threat and that occur within 200 feet of a potential Houston toad breeding site (field-verified ponds, stock tanks, creeks, streams, wetlands, seeps, and springs that are within or immediately adjacent to a forested area) or riparian area, tree removal activities must be conducted in consultation with a qualified Houston toad monitor and removal activities cannot begin until that monitor is on site. Potential breeding sites are likely to increase following periods of heavy rains. **Therefore debris crews should remain aware that tree removal cannot begin within 200 feet of a potential breeding site until a toad monitor is on site and has evaluated and cleared the project area.** Lead monitors will assist in the identification of potential Houston toad breeding sites and prioritization of tree removal in proximity to potential Houston toad breeding sites.

Removal of Debris and Hazardous Trees Along Rights of Way: For Bastrop County, much of this work has been completed and work will be sporadic. As required, the Bastrop County toad monitors will survey any ROW debris and will assist with and provide oversight regarding prioritization of its removal. The debris contractor will alert the toad monitors to the location of ROW debris. The toad monitor will evaluate and pre-clear debris removal work in certain areas or pre-clear the removal of specific debris piles based on their knowledge of toad habitat and toad activity throughout the burn area. Once pre-clearance has been completed, debris work can continue without the presence of toad monitor during the removal operation, provided that the monitor determines the site is clear and that debris pickup occurs during the same work day. If the site is examined by a monitor and the debris cannot be removed until the following day, the inspection process must be reinitiated.

FEMA-funded removal of debris on the ground within Bluebonnet ROWs is estimated to be complete by March 31, 2012. The toad monitor assigned to Bluebonnet will determine which areas of Bluebonnet's remaining ROW debris areas are located in higher probability toad areas. Bluebonnet will work to remove debris in those areas as soon as possible. The toad monitor will evaluate and pre-clear debris removal work in certain areas or pre-clear the removal of specific debris piles based on their knowledge of toad habitat and toad activity throughout the burn area. Once pre-clearance has been completed, debris work can continue without the presence of toad monitor during the removal operation, provided that the monitor determines the site is clear and that debris pickup occurs during the same work day. If the site is examined by a monitor and the debris cannot be removed until the following day, the inspection process must be reinitiated. Bluebonnet is continuing to receive customer requests to cut and remove hazardous trees along power lines at private property sites. These requests are likely to continue through the summer of 2012. Toad monitors are accompanying Bluebonnet cut crews to these sites to monitor for toad presence and potential habitat through the duration of the existing consultation.

Hazardous tree removal along ROWs in Bastrop State Park is estimated for completion by early March 2012. The Texas Parks and Wildlife Department (TPWD) has prioritized work such that they are moving away from known toad habitats. Therefore, the remaining tree removal work is likely to be in areas of the park that are uninhabited by the toad and where toads have not been documented in the last 6 years. FEMA toad monitors will periodically confer with TPWD to observe operations and review future work sites. FEMA monitors will become involved at particular cutting sites if they determine it is necessary based on known toad locations within the park. The FEMA monitoring effort will complement real-time monitoring that is already being conducted by TPWD biologists.

For all applicants, for trees or debris that pose an immediate safety threat and that occur within 200 feet of a potential Houston toad breeding site (field-verified ponds, stock tanks, creeks, streams, wetlands, seeps, and springs that are within or immediately adjacent to a forested area) or riparian area, tree and debris removal activities must be conducted in consultation with a qualified Houston toad monitor and removal activities cannot begin until that monitor is on site. Potential breeding sites are likely to increase following periods of heavy rains. **Therefore debris crews should remain aware that tree removal cannot begin within 200 feet of a potential breeding site until a toad monitor is on site and has evaluated and cleared the**

project area. Lead monitors will assist in the identification of potential Houston toad breeding sites and prioritization of tree removal in proximity to potential Houston toad breeding sites.

Removal of Temporary Housing Units: FEMA's Environmental Planning and Historic Preservation (EHP) section will be alerted several days prior to the scheduled removal of any temporary housing unit and will schedule a toad monitor, permitted to handle, remove, and transport the Houston toad, to inspect the site for toad habitat or toad activity immediately prior to and during removal. For any removal of temporary housing units from the date of this consultation and through the end of breeding, emergence, and dispersal season, August 31, 2012, FEMA will deploy a Houston toad monitor that is a qualified biologist and that will be permitted in identifying, locating, handling, removing, and transporting the Houston toad. Should a toad be encountered during removal of a unit, work must cease immediately, the biological monitor will secure and relocate the toad, and the U.S. Fish and Wildlife Service's Clear Lake Ecological Services Field Office will be contacted at (281) 286–8282.

Documentation: Monitors will be equipped with GPS units so that if they encounter a toad, they can record its exact location. Monitors will handle and relocate toads in accordance with their 10(a)(1a) permits. Should a toad be encountered during work, Jeff Hill or Edith Erfling of the U.S. Fish and Wildlife Service's Clear Lake Ecological Services Field Office will be contacted at (281) 286–8282, at extensions x241 and x228 respectively.

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ATTACHMENT 3

United States Department of the Interior
FISH AND WILDLIFE SERVICE
Division of Ecological Services
17629 El Camino Real, Suite 211
Houston, Texas 77058
281/286-8282 / (FAX) 281/488-5882

In Reply Refer To:
FWS/R2/CLES/
21430-2012-I-0042

February 1, 2012

Mr. Kevin Jaynes
U.S. Department of Homeland Security
FEMA Region 6
800 North Loop 288
Denton, Texas 76209–3698

Dear Mr. Jaynes:

Thank you for your letter dated January 27, 2012, continuing consultation pursuant to Section 7 of the Endangered Species Act for FEMA's recovery operations related to the Bastrop County Complex Fire. Our consultation regarding these activities commenced on January 18, 2012 with FEMA's initial consultation request. Earlier consultation activities were described in FEMA letters dated November 7, 2011 and December 13, 2011 and related to other aspects of FEMA's recovery actions in Bastrop and surrounding counties as part of the major disaster declaration FEMA–4029–DR–TX. The recovery operations considered herein occur within Bastrop County, Texas.

Based on the scope of the January 27, 2012 request, the project includes removal of debris (as defined therein) from public rights-of-way and qualifying private property, based upon an assessment of risk to life and property, and the removal of temporary housing units within the fire-impacted area. Based on your January 27, 2012 letter, FEMA determined that the recovery operations may affect, but are not likely to adversely affect the federally endangered Houston toad *Bufo houstonenesis*.

As stated above, FEMA has determined that the proposed project may affect, but is not likely to adversely affect the Houston toad. This determination is based on the following information:

1. For any removal of temporary housing units from the date of this consultation and through the end of breeding season, June 1, 2012, FEMA will deploy a Houston toad monitor that is a qualified biologist and that will be permitted in identifying, locating, handling, removing, and transporting the Houston toad. Monitors will work in accordance with the attached Houston Toad Monitoring Plan. Should a toad be encountered during removal of a unit, work must cease immediately, the biological monitor will secure and relocate the toad and the U.S. Fish and Wildlife Service's Clear Lake Ecological Services Office will be contacted at (281) 286–8282.
2. FEMA will deliver an introductory training course on Houston toad life cycle and habitat requirements for FEMA staff, the applicants, and key personnel of the debris removal work crews. Estimated delivery of this training is the week of January 30, 2012.
3. For work conducted from the date of this consultation and through the end of breeding season, June 1, 2012, FEMA will deploy a team of Houston toad monitors that are qualified biologists and that will collectively be permitted in identifying, locating, handling, removing, and transporting the Houston toad. Monitors must work in accordance with the attached Houston Toad Monitoring Plan. Should a toad be encountered during debris activities, work must cease immediately, the biological monitor will secure and relocate the toad and the U.S. Fish and Wildlife Service's Clear Lake Ecological Services Office will be contacted at (281) 286–8282.
4. For Private Property Debris Removal (PPDR), cut trees must be removed from the site in this order of priority:
   - Cut trees will be loaded and hauled away at the end of the work day and no logs will be left behind;
   - Cut trees will be stacked on hard surfaces (concrete/caliche driveways or structural foundations);
   - Cut trees will be kept off natural ground via staging on horizontal support structures to minimize the creation of artificial toad habitat. If other logs are used to serve as horizontal supports, a toad monitor must inspect the logs that are in contact with the ground for the presence of toads before those logs can be removed,
5. To minimize the creation of toad habitat in non-desirable locations such as rights-of-way (ROW), every effort will be made to remove debris piles within 48 hours of the debris being deposited.
6. Debris piles will be, to the greatest extent possible, either hand loaded and/or grapple hook loaded.
7. Any mulch, chips, or other woody debris from tree removal that is left on site must cover the forest floor in no more than a 1 to 2-inch layer.
8. Soil disturbance, clearing, and operation of heavy equipment (for example, tractors, large trucks, bulldozers, skidders) will not occur within a 200-foot distance from potential Houston toad breeding sites and riparian areas at any time of year. These may include ephemeral wet weather ponds and other water features, such as stock tanks, creeks, streams, drainages, wetlands, seeps, and springs.
9. For trees that pose an immediate safety threat and that occur within 200 feet of a potential Houston toad breeding site (ponds, stock tanks, creeks, streams, wetlands, seeps, and springs that are within or immediately adjacent to a forested area) or riparian area, tree removal activities must be conducted in consultation with a qualified Houston toad monitor and removal activities cannot begin until that monitor is on site. Trees must be hand cut.
10. Hand cutting can occur within a 200-foot radius of a potential Houston toad breeding site between July 1 and December 31 (outside of the Houston toad breeding season and emergence period) without a Houston toad monitor.
11. The number and size of entry and exit points for heavy equipment to move into and out of forested areas will be kept to the minimum needed for conducting safe and effective tree and debris removal operations, while also minimizing soil disturbance.

12. Streams, riparian zones, wetlands, and areas near potential Houston toad breeding sites will not be used for staging equipment or refueling. Equipment must be stored, serviced, and fueled at least 200 feet away from these sensitive areas.
13. Gasoline- and diesel-fueled field equipment must be inspected daily for signs of fuel or hydraulic leaks; such leaks must be repaired promptly and measures will be taken to prevent soil contamination. All hazardous materials related to construction or maintenance activities will be properly contained, used, and/or disposed of.
14. Clearing for all utility lines and other structures will be limited to the minimum amount that allows for the safe completion of a particular project. Hand-clearing of vegetation will be used when practical. The use of track equipment for clearing will be minimized.
15. Following debris removal activities, the applicants will ensure that equipment used on undisturbed ground has not resulted in potential artificial breeding sites. For example, large tire ruts will be smoothed so as not to create an undesirable breeding pond along a ROW.
16. The consultation is limited spatially to Bastrop County and temporally as described in the FEMA consultation request dated January 27, 2012.
17. Tree stump grinding will be conducted only if determined by FEMA to be a safety concern and under no circumstances will stumps be removed mechanically (i.e., excavated or pushed).
18. All PPDR and ROW debris will be taken to one of the five previously approved debris sites or will be recycled.

Based on the aforementioned information, the U.S. Fish and Wildlife Service (Service) concurs that the debris cleanup operations and temporary housing removal activities as described in the January 27, 2012 consultation letter are not likely to adversely affect the Houston toad. This concurrence is based upon a review of the Service's files, our site inspection on January 25, 2012, communications with Dr. Michael Forstner at Texas State University and others, and is contingent upon the implementation of the avoidance and minimization measures. In the event the project changes or additional information on listed or proposed species becomes available, the project should be reanalyzed for effects not previously considered.

Our comments are provided in accordance with the provisions of the Endangered Species Act of 1973 (16 U.S.C. 1531 et seq.). If you have any questions, or need additional information, please contact Staff Biologist Mr. Jeff Hill or myself at 281/286–8282.

Sincerely,

Edith Erfling,
Field Supervisor

ATTACHMENT 4

QUESTIONS SUBMITTED FOR THE RECORD BY CHAIRMAN GOHMERT TO THE HONORABLE CLARA BECKETT, BASTROP COUNTY COMMISSIONER, PRECINCT 2

The Honorable Clara Beckett did not submit responses to the Committee by the appropriate deadline for inclusion in the printed record.

Question 1. Would you describe some of the restrictions you faced in potential toad habitat? You said you had to have special toad monitors, but what other modifications were made to your recovery projects?

Question 2. What were the costs you had to absorb that you hadn't anticipated as a result of the toad requirements?

Question 3. Was there anything discussed during the hearing that you felt you were not given ample time to elaborate on or properly address?

Mr. GOHMERT. Thank you. Thank you very much.

At this time we will hear from Ms. Oreskes. Thank you. You are recognized for 5 minutes.

STATEMENT OF PROFESSOR NAOMI ORESKES, Ph.D., PROFESSOR OF THE HISTORY OF SCIENCE AND DIRECTOR OF GRADUATE STUDIES, DEPARTMENT OF THE HISTORY OF SCIENCE, HARVARD UNIVERSITY, CAMBRIDGE, MASSACHUSETTS

Dr. ORESKES. Thank you. Thank you for the opportunity to be with you here today and to share my insights gleaned from three decades as a professional historian studying science in America.

Witnesses here are trying to cast doubt on environmental science, arguing that it is politically driven and we should not be using it to make important decisions. I would like to challenge the presumption that politically driven science is bad science, because that presumption is demonstrably false.

History shows that some of the best science in the history of this country was driven by goals that were explicitly political. Consider the Manhattan Project. Scientists during World War II gathered and mobilized to determine the details of fission reactions, of isotope separation, and many more matters for the purpose of building an atomic bomb. The political goal of stopping Adolf Hitler and the sense that the future of this Nation, and perhaps the entire free world, might rest on their success was a powerful motivation for scientists to get the science right.

The Apollo program put men on the Moon and brought them safely home again, and in doing so expanded our horizons and our understanding of the universe in which we live. But it was created in no small part to demonstrate the superiority of American democracy and democratic capitalism over Soviet communism.

Plate tectonics is the unifying theory of modern earth science. It emerged from oceanographic work sponsored by the U.S. Navy as part of its program in underwater warfare and from seismological research developed to differentiate earthquakes from nuclear bomb explosions. These were military and political goals, part of the cold war commitment to containing communism, but they led to research that provided fundamental understanding of planetary processes. And the recent tragedy in Nepal shows us how important that is.

But what about environmental science? In the 1970s, two scientists at the University of California, Irvine, Sherwood Rowland and Mario Molina, realized that a certain class of chemicals known as chlorinated fluorocarbons, or CFCs, found in hairspray and other products, had the potential to destroy ozone on a global scale.

At first their predictions were viewed skeptically, even by their colleagues. Could hairspray really lead to the end of life on Earth? That seemed a pretty bold claim. But in 1985, Joseph Farman of the British Antarctic Survey announced the discovery of the ozone hole. In 1986, a team led by a NOAA atmospheric scientist, Susan Solomon, confirmed that finding.

In 1987, Harvard Professor James Anderson put an experiment on a NASA U-2 spy plane that flew over Antarctica, establishing through direct measurement that ozone had been massively

depleted and that the depletions correlated in time and space with chlorine compounds derived from CFCs. If anyone is interested, I can explain the science to you. It is one of the most beautiful pieces of science of the 20th century, but we do not have time right now.

On the basis of this work, President George H.W. Bush's Secretary of State George Schultz and Assistant Secretary of State John Negroponte lent their support to the Montreal Protocol, committing the world to reducing use of CFCs, the chemicals that these scientists had shown had created the ozone hole. In 1985, this body, Congress, ratified the protocol, and in 1995, Molina and Rowland won the Nobel Prize.

Few people realize how much the Montreal Protocol has protected us and at how little cost. Were it not for the actions taken under the Protocol, skin cancer rates in America would be about 60 percent higher than they are today. Livestock and crops would be affected, too, so our economy was protected as well.

Now, I would like to underscore two things about this history. First, this was government science. This science, which protected us from real harm, was almost all done by scientists and agencies like NASA and NOAA or funded by those agencies.

Second, it was attacked at the time as corrupt and politically motivated. In 1995, Representative Dana Rohrabacher organized a hearing distressingly similar to the one in which we are participating today. Ostensibly focused on scientific integrity, its real purpose was to discredit not just ozone science but environmental science in general.

Ozone science is now history, but climate science is very much alive. Like ozone science, climate science is being attacked, and not only in the same way but by the same people. Indeed, many of those attacking science today previously attacked the science that demonstrated the harms of tobacco use. Today, we know that millions of people have died from preventable, tobacco-related diseases. Do we really have to wait for people to die before we accept the evidence of climate change?

Thank you.

[The prepared statement of Dr. Oreskes follows:]

PREPARED STATEMENT OF NAOMI ORESKES, PROFESSOR OF THE HISTORY OF SCIENCE, AFFILIATED PROFESSOR OF EARTH AND PLANETARY SCIENCES, HARVARD UNIVERSITY

Thank you for the opportunity to be here with you today.[1]

Our topic here today is politically driven science. I speak here as a historian who has spent the bulk of my professional life studying science, and I am interested in particular in the conditions that foster good science, and the conditions that undermine it. I have done research on the history of geology, geophysics and oceanography, focusing on American science in the 20th and 21st century. I have also studied environmental science, including studies of pesticides, endocrine-disrupting chemicals, acid rain, the ozone hole, and man-made climate change.

Witnesses here today are trying to cast doubt on environmental science, arguing that is politically driven, and we should not be using it to make important decisions.

As a guest of the democratic minority, I might be expected to attempt to refute the premise and argue that the science under consideration is *not* politically driven.

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[1] Unless otherwise noted, the materials presented here are drawn from Naomi Oreskes and Erik M. Conway, *Merchants of Doubt: How a Handful of Scientists Obscured the Truth on Issues from Tobacco Smoke to Global Warming* (Bloomsbury, 2010). On the details of NASA research on ozone, see also Erik M. Conway, Atmospheric Science at NASA: A History (The Johns Hopkins University Press, 2008).

What I want to do is slightly different. I want to challenge the presumption that politically driven science is bad science. That presumption—while widely held—is demonstrably false.

A great deal of science is politically driven

History shows that a much—maybe most—science is driven by political, economic, or social goals. Some of the best and most famous science in the history of our country was driven by goals that were explicitly political.

Consider the Manhattan Project. Scientists during World War II gathered and mobilized to determine the details of fission reactions, of isotope separation, of high-temperature and high-pressure metallurgy and many more matters, for the purpose of building an atomic bomb. The political goal of stopping Adolf Hitler—and the sense that the future of the United States, and perhaps the entire free world, might depend on their success—provided a powerful motivation for scientists to get the science right.

Another example is the space program. The United States first developed rocketry to be able to deliver ballistic missiles, carrying nuclear warheads, to the Soviet Union. The political goal of containing Communism was a power motivation for scientists. In later years, the goal of maintaining peace through the doctrine of Mutual Assured Destruction further motivated our scientists to ensure that our weapons worked, and would go where they were sent.[2]

In the Apollo program, NASA scientists knew that getting the science right would make the difference between astronauts getting to the Moon or not, and more important, getting home. Knowing that the lives may depend on your calculations is a powerful form of accountability.

Some might argue that these were not scientific projects but technological ones, but this is not a meaningful distinction. These various projects led to the construction of new and significant technologies, but they all also required—indeed were founded upon—newly developed science. Moreover, we can find examples that are not technological at all, yet still show us how politics can drive good science.

Plate tectonics is the unifying theory of modern earth science, and it too was a product of political goals. The key work that led to this theory came from oceanography and seismology. The oceanography was done as part of the U.S. Navy's programs in underwater warfare to use science to detect Soviet submarines, and to safely hide our own. The seismology emerged largely from efforts to differentiate earthquakes from nuclear bomb tests.

These were military and political goals—part of the cold war commitment to contain Communism—but they led to research that provided the fundamental understanding of planetary processes; understanding that, not incidentally, forms the basis for oil and gas exploration, for mining and mineral exploration, and for predicting and protecting against seismic hazard.

Nearly all of this work was done by government scientists. It was done either by scientists working directly for the U.S. Government, for example at the U.S. Naval Research Laboratory or U.S. Geological Survey, or by scientists in universities and research institutions like the University of California, Columbia University, and the Woods Hole Oceanographic Institution, with funds that were supplied almost entirely by the U.S. Government.

The Manhattan project was government science.

The Apollo program was government science.

Plate tectonics was government science.

Virtually every major development in the physical sciences in America in the second half of the 20th century was government science—either done by scientists in government agencies and national laboratories, or by academics primarily funded by the Federal Government. The academic scientists, if they were at public universities, like the University of California, had their salaries paid by their states, so in some sense they were government scientists, too.

Is environmental science any different?

The history of ozone science

Consider the men and women who laid the scientific foundations for the Montreal Protocol to the Vienna Convention for the Protection of the Ozone Layer.[3] The Vienna Convention, established in 1985, protects us from the potentially devastating effects of ozone depletion. Today, the ozone hole is recovering, and scientists expect

[2] Hugh Gusterson, Nuclear Rites: A Weapons Laboratory at the End of the Cold War (University of California Press, 1998).

[3] http://ozone.unep.org/new_site/en/vienna_convention.php.

it to recover fully in the coming decades.[4] This recovery would not have happened without the work of environmental scientists.

Scientists first recognized threats to stratospheric ozone in the early 1970s. Scientists working at NASA and the University of California realized that chemicals released into the atmosphere from supersonic transport and the space shuttle could react with ozone in the stratosphere, and destroy it. Because of this threat, NASA began to fund studies of the chemical reactions involved. Meanwhile, two scientists at the University of California, Irvine, Sherwood Rowland and Mario Molina, realized that a certain class of chemicals known as Chlorinated Fluorocarbons—or CFCs—found in hairspray and other products, had the potential to destroy ozone on a global scale. At first, their predictions were viewed skeptically, even by their colleagues: could hairspray really lead to the end of life on Earth? That seemed a pretty bold—if not outrageous—claim.

But in 1985, Joseph Farmer of the British Antarctic Survey announced the discovery of an "ozone hole" over Antarctica, Farmer had made a set of ground-based observations, using ultra-violet absorption measurements, that demonstrated that ozone was dramatically depleted in the Antarctic region. The following year a team led by NOAA atmospheric scientist, Susan Solomon, undertook further ground-based observations to confirm significant ozone depletion, and suggested that ozone was being depleted by chlorine chemicals—derived from CFCs—in catalytic reactions on polar stratospheric clouds.

In 1987, Harvard Professor James Anderson sent an experiment in a NASA U-2 plane over the Antarctic, establishing through direct measurement that ozone had been massively depleted, and that the depletions correlated in time and space with chlorine compounds derived from CFCs, thus confirming the earlier hypotheses (Figure 1). Later his team obtained similar measurements over the Arctic demonstrating the same catalytic chemistry in the northern hemisphere. All this research was NASA funded.

On the basis of this work, President Bush, Secretary of State George Schultz, and Assistant Secretary of State John Negroponte leant their support to the Montreal Protocol to the Vienna Convention, committing the world to reducing the use of CFCs—the chemicals that these scientists had shown had created the ozone hole. In 1988, with the President's support, Congress ratified the Montreal Protocol.[4]

Susan Solomon has been elected to the U.S. National Academy of Sciences, the European Academy of Sciences, and the French Academy of Sciences. In 2008, she was named by *Time* magazine as one of the 100 most influential people in the world.

Jim Anderson has won more prizes than you can count, including Harvard University's Ledlie Prize for Most Valuable Contribution to Science by a Member of the Faculty (and I teach at Harvard so I can tell you that the competition at Harvard is stiff.)

In 1995, Rowland and Molina shared the Nobel Prize in chemistry for this work.

If ozone science had been distorted, corrupted or was otherwise incorrect, Rowland and his colleagues would not have received the world's highest scientific honors. More important, if the science had been wrong, the ozone hole would not today be recovering. But it was right, and we were, and are, protected.

President Bush was not duped; President Bush did the right thing. He protected us from harm.

Few people realize how much the Montreal Protocol has protected us—and at how little it cost. Were it not for the Montreal Protocol, skin cancer rates in America would be about 60 percent higher than they are today. Livestock and crops would be affected too. And few people realize how little this protection cost, as DuPont, the major manufacturer of CFCs, realized that it could replace those chemicals with new, less harmful products.

I'd like to underscore two things about this history.

First, this was government science. These men and women worked either at government agencies like NASA and NOAA, publicly funded universities like the University of California, Irvine, or received their funding through government agencies: NOAA, NASA, and the NSF. And many of these scientists spoke out publicly to explain to the American people—and to Congress—what their work meant, and why it showed that we needed to act.

Second, this science was attacked at the time as corrupt and politically motivated. It was attacked in the Halls of Congress, in much the same way as science is being attacked here today. In 1995, Representative Dana Rohrabacher organized a hear-

[4] http://montreal-protocol.org/Assessment_Panels/SAP/SAP2014_Assessment_for_Decision-Makers.pdf.

ing distressingly similar to the one we are participating in today. Ostensibly it focused on "scientific integrity;" its real purpose was to challenge ozone science.

Industry representatives claimed the science was incorrect and that fixing the problem would be devastating to our economy. They claimed that scientists were exaggerating the threat to get more money for their research. Entered into the Congressional Record was the claim that there was "no scientific consensus on ozone depletion," a claim that was shown to be completely false by the award of the Nobel prize just a few weeks later. And, when the DuPont Corporation phased out production of CFCs, our economy did not collapse.

Yet, similar claims are being made today, particularly with respect to climate science.

These claims are as misguided today as they were 20 years ago.

Who is behind these attacks?

Many of the same people who attacked ozone science. Climate science is being attacked by many of the same individuals and organizations who attacked ozone science, and using many of the same arguments.

Climate science

Let's look a bit at the history of climate science.

Scientists have known for more than 100 years that greenhouse gases, such as carbon dioxide and methane, are greenhouse gases that trap heat in a planet's atmosphere. If you increase their concentration in a planet's atmosphere, the planet will get hotter. Venus is incredibly hot—(864 degrees Fahrenheit) not because it is closer to the sun, but because it has an atmosphere hundreds of times denser than Earth's, and composed mainly of CO_2.

In the United States, the first scientist to focus attention on the risk of increased CO_2 from burning fossil fuels was oceanographer Roger Revelle. During World War II, Revelle served an officer in the U.S. Navy Hydrographic Office, and he continued to work closely with the Navy throughout his career, including with the Hydrographic Office, the Office of Naval Research, and the Bureau of Ships. In the 1950s, he argued for the importance of scientific research on man-made climate change, calling particular attention to the threat that sea level rise from melting glaciers and thermal expansion of the oceans posed to the safety and security of major cities, ports, and naval facilities.

In the 1960s, he was joined in his concern by several colleagues, including Dave Keeling, the man who first began to measure atmospheric carbon dioxide in 1958, and by Gordon MacDonald, a geophysicist who served on the first Council on Environmental Quality, under President Richard Nixon.

In the 1974, the emerging scientific understanding was summarized by Alvin Weinberg, the head of the Oak Ridge National Laboratory, who explained that our use of fossil fuels was likely to be limited by the threat they represented to the Earth's stable and beneficent climate. He wrote: "Although it is difficult to estimate how soon we shall have to adjust the world's energy policies to take this limit into account, it might well be as little as 30–50 years."[5]

In 1977, Robert M. White, the first administrator of NOAA and later President of the National Academy of Engineering, summarized the scientific findings this way:

> We now understand that industrial wastes, such as carbon dioxide released during the burning of fossil fuels, can have consequences for climate that pose a considerable threat to future society. . . . [E]xperiences of the past decade have demonstrated the consequences of even modest fluctuations in climatic conditions [and] lent a new urgency to the study of climate. . . . The scientific problems are formidable, the technological problems, unprecedented, and the potential economic and social impacts, ominous."[6]

In 1979, the U.S. National Academy of Sciences concluded: "If carbon dioxide continues to increase, [we] find no reason to doubt that climate changes will result, and no reason to believe that these changes will be negligible."[7]

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[5] Alvin Weinberg, 1974. Global Effects of Man's Production of Energy, *Science* 186: 205. http://www.sciencemag.org/content/186/4160/205.citation.

[6] Robert M. White, 1978, Oceans and Climate: An Introduction, Oceanus, 21: 2–3.

[7] Jule Charney et al., Carbon Dioxide and Climate: A Scientific Assessment, Report of an Ad-Hoc Study Group on Carbon Dioxide and Climate, Woods Hole, Massachusetts, July 23–27, 1979, to the Climate Research Board, National Research Council (Washington, DC: National Academies Press, 1979), on p. 2.

These findings led the World Meteorological Organization to join forces with the United Nations to create the Intergovernmental Panel on Climate Change, to establish a stable scientific foundation for informed public policies. Just as good science laid the foundation for the Vienna Convention, good science would now lay the foundation for the United Nations Framework Convention on Climate change, signed in 1992 by President George H.W. Bush.

Since then, the scientific world has affirmed and re-affirmed the scientific evidence over and over again. It has been affirmed in the United States by our own National Academy of Sciences, the American Meteorological Society, the American Geophysical Union, the American Association for the Advancement of Sciences, and many more, as well as by leading scientific societies and academies abroad.

In 2006, 11 national academies of science around the globe, including the oldest in the world—the Accademia nazionale dei Lincei of Italy— issued an unusual joint statement, noting that the "threat of climate change is clear and increasing," and that "delayed action will . . . incur a greater cost." That was nearly a decade ago. Today scientists tell us that human-made climate change is now "unequivocal" and the costs are already being felt.

This work was done by scientists around the globe—men and women, old and young, Democrats and Republicans. In fact, probably more of them were Republicans than Democrats: Gordon MacDonald was a close advisor to President Nixon; Dave Keeling was awarded the National Medal of Science by President George W. Bush in 2002.

Yet, despite the long history of this work and the bipartisan character of the scientists who did it, climate science continues not merely to be questioned, but to be attacked. Just yesterday, the world's most revered climate scientists met with Pope Francis to advise him on the facts of climate change, and the threat that it represents to the future health, wealth, and well-being of men, women and children—not to mention the other species with whom we share this unique planet we call our Earth. Yet at the same time, climate change deniers met across the road from the Vatican, to attempt to prevent the Pope from speaking out on the moral meaning of climate change. Whenever we see signs that the political landscape is shifting, and that the world might be ready to act to prevent dangerous climate change, the forces of denial redouble their efforts to stop us.

Time does not permit me to recount the long history of climate change denial, so let me just say this. The organization responsible for the denialist meeting in Rome is the Heartland Institute, a group with a long history not only of rejecting climate science, but also of rejecting science generally. They were responsible for the infamous billboards comparing climate scientists to the Unabomber. They have a documented history of working with the tobacco industry to question the scientific evidence of the harms of tobacco. Indeed, many of the groups who today question the reality or significance of human-made climate previously questioned the scientific evidence of the harms of tobacco.[8]

Today, we know that millions of people have died from tobacco-related diseases. Do we really have to wait for people to die before we accept the evidence of damaging climate change?

Does politics distort science?

Let me return to our question of politically driven science.

Ozone science was not attacked because it was wrong *scientifically*; it was attacked because it was politically and economically *consequential*. The realities of ozone depletion had political and economic consequences that some people did not like, consequences that threatened their interests. It is the same with climate science. The reality is that climate science has told us that business as usual threatens our health, our wealth, and our well-being. Hence it is hardly surprising that some sectors of the business community have tried to undermine that message, supporting attacks on science and scientists, and funding distracting research and misleading conferences to create the impression of scientific debate, confuse the American people, and delay action.

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[8] In 1997, Philip Morris paid $50,000 to the Heartland Institute, it gave $200,000 for the Advancement of Sound Science Coalition, $125,000 for the Competitive Enterprise Institute, $100,000 to the American Enterprise Institute, and many more. All of these groups have questioned the scientific evidence of man-made climate change. Often financial contributions were referred to in company documents as "philanthropy," and because these organizations all claim to be nonprofit and nonpartisan. But it is hard to see how defending tobacco use exactly qualifies as "philanthropy." Indeed, one wonders if this is not in fact a violation of the tax code. See Oreskes and Conway, Merchants of Doubt, p. 234.

This brings me to my most important point. Science *can* be biased, particularly when the financial support for that science comes from parties who have a vested interest in a particular outcome. But history suggests that such vested interests have, at least in our country, come more from the private sector than from the public sector.

The clearly documented example of this is tobacco.

For decades tobacco companies supported scientific research, both in their own laboratories and in universities, medical schools, and even cancer research institutes. But we know, from their own internal records, that the purpose of this research was not to determine the truth about tobacco, but to create the impression of scientific debate, to create doubt about whether or not tobacco was really harmful, and therefore protect the industry against lawsuits and regulation.

The research that industry funded was less likely to find that tobacco use was damaging than research that was not funded by the industry. Nearly all of that research has today been discredited.

Not only was much of the industry-funded research biased, but the industry knew it was. Industry executives knew in the 1950s that tobacco caused cancer, they knew by the 1960s that it caused a host of other diseases as well, they knew by the 1970s that it was addictive, and they knew by the 1980s that secondhand smoke caused cancer in non-smokers, and sudden infant death syndrome in babies.

What lessons can we learn from this experience? One important lesson is the disclosure of funding sources. In preparing my testimony for today I was asked to disclose all sources of government funding of my research. This is a reasonable request. But there was no comparable request for disclosure of private funding. This is an unreasonable omission.

Because the potential for distortion is real, it is important that funding sources be disclosed. But this means *all* funding sources—both private and public, for profit and not. To ask for disclosure of public funds and not ask the same of private sources would be like asking for automotive inspections of half your engine, or safety inspections of half an airplane.

Concluding remarks

Many people resist accepting the scientific evidence of climate change because they fear it will be used as an excuse to expand big government. The logic of this is wrong on two counts.

The first should be obvious: denying a problem does not make it go away. On the contrary, delay makes the problem harder to cure. Delay in acting on tobacco control led to millions of preventable deaths. Delay in acting on climate change will increase the costs we pay to deal with the impacts, at minimum in dollars and very likely in lives.

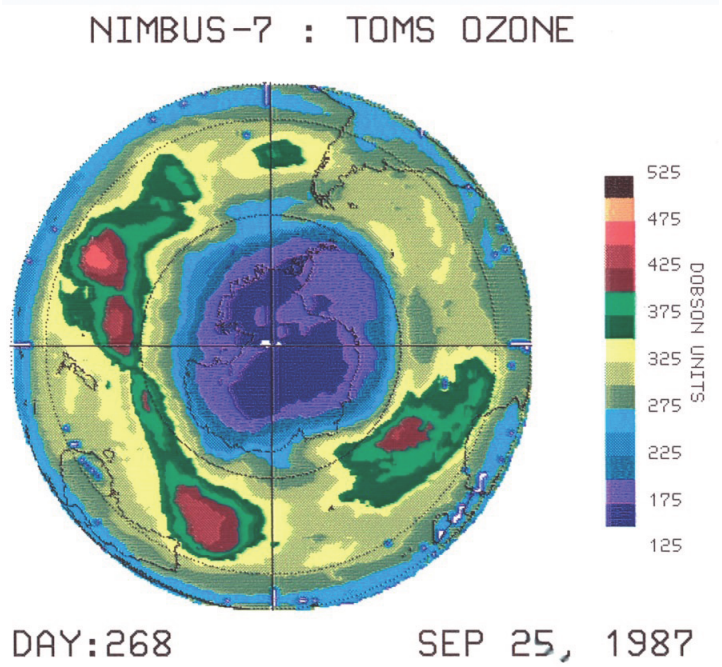
The second is perhaps a bit less obvious. By delaying action on global carbon emission for more than two decades, we have increased the likelihood that disruptive global warming will lead to the very government interventions that many of you seek to avoid. Climate change is already causing an increase in extreme weather events—events that almost always need governmental response.

As climate change unfolds here in the United States, natural disasters—especially those that disrupt food and water supply—will cause us to have to rely more on government—especially the Federal Government—to deal with them. As climate change unfolds around the globe, natural disasters will give undemocratic forces the justification they seek to commandeer resources, declare martial law, interfere with the market economy and, suspend democratic process. But note one thing: our grandchildren will not call them "natural" disasters, because they will know that we caused them.

All of us who care about political freedom—and I believe that is all Americans—should do everything we can to support our climate scientists, and to act to prevent the threats they have so clearly documented. To do otherwise can only increase the chances that authoritarian forms of governance will come out ahead in the end.

FIGURE 1

Ozone Loss in Southern Hemisphere from Satellite



Supplementary Material Submitted for the Record and Retained in Committee's Official Files

—Essay beyond the Ivory Tower: "The Scientific Consensus on Climate Change," Naomi Oreskes. 3 December 2004, Vol 306, *Science*, p. 1686.

—"The Long Consensus on Climate Change," Naomi Oreskes, February 1, 2007, WashingtonPost.com.

—Excerpt from Chapter 4 of Oreskes, Naomi and Erik M. Conway, 2010. *Merchants of Doubt: How a Handful of Scientists Obscured the Truth on Issues from Tobacco Smoke to Global Warming*. (New York: Bloomsbury Press); reproduced with permission.

QUESTIONS SUBMITTED FOR THE RECORD BY CONGRESSMAN RAÚL GRIJALVA TO NAOMI ORESKES, PROFESSOR OF THE HISTORY OF SCIENCE, HARVARD UNIVERSITY

Question 1. Questioning of Kathleen Hartnett White at the hearing went, in part, as follows:

MR. GRIJALVA. You have written that climate change is real but not caused by humans. Is that a correct summary of your position?

MRS. HARTNETT WHITE. That is not how I would express my opinion about the issue. I tried to say at the conclusion of my earlier oral testimony that I think that as the impacts of certain policy decisions or regulatory decisions that Congress makes, as the magnitude of those get greater or bigger, I think the elimination of fossil fuels as rapidly as possible would have enormous impacts across the world. But the science that supports the need to do that has to be extremely robust. I think that the current state of climate science is not strong enough, nor are the key models validated, in order to support policy of that magnitude.

Do you agree that "the current state of climate science is not strong enough nor are the key models validated in order to support" the phase out of fossil fuels? Why or why not?

Answer. Absolutely not. Any person who would make such a claim is either ignorant of the state of climate science or fails to understand its implications. The scientific evidence and consensus on the reality of anthropogenic climate change is robust, extensive, and of long standing. Its implications in terms of the grave risks posed by continued, unrestricted fossil fuel combustion have been documented at great length.[1]

Scientists have known for more than 100 years that greenhouse gases, such as carbon dioxide and methane, are greenhouse gases that trap heat in a planet's atmosphere. If you increase their concentration in a planet's atmosphere, the planet will get hotter. Venus is incredibly hot (864 degrees Fahrenheit) not because it is closer to the sun, but because it has an atmosphere composed mainly of carbon dioxide (CO_2).

In the United States, the first scientist to focus attention on the risk of increased CO_2 from burning fossil fuels was oceanographer Roger Revelle. During World War II, Revelle served an officer in the U.S. Navy Hydrographic Office; he continued to work closely with the Navy throughout his career, including with the Hydrographic Office, the Office of Naval Research, and the Bureau of Ships. In the 1950s, he argued for the importance of scientific research on man-made climate change, calling particular attention to the threat that sea level rise from melting glaciers and thermal expansion of the oceans posed to the safety and security of major cities, ports, and naval facilities. In the 1960s, he was joined in this concern by several colleagues, including Dave Keeling, the man who first began to measure atmospheric CO_2 in 1958, and by Gordon MacDonald, a geophysicist who served on the first Council on Environmental Quality, under President Richard Nixon.

In the 1974, the emerging scientific understanding was summarized by Alvin Weinberg, the head of the Oak Ridge National Laboratory. Weinberg explained that fossil fuel use was likely to be limited not by the total amount of fuel in the world, but by the threat their use represented to the Earth's stable and beneficent climate: "Although it is difficult to estimate how soon we shall have to adjust the world's energy policies to take this limit into account, it might well be as little as 30–50 years."[2]

In 1977, Robert M. White, the first administrator of the National Oceanic and Atmospheric Administration (NOAA) and later President of the U.S. National Academy of Engineering, summarized the scientific findings this way:

> We now understand that industrial wastes, such as carbon dioxide released during the burning of fossil fuels, can have consequences for climate that pose a considerable threat to future society. . . . [E]xperiences of the past decade have demonstrated the consequences of even modest fluctuations in climatic conditions, [and] lent a new urgency to the study of climate. . . . The scientific problems are formidable, the technological problems, unprecedented, and the potential economic and social impacts, ominous."[3]

In 1979, the U.S. National Academy of Sciences concluded: "If carbon dioxide continues to increase, [we] find no reason to doubt that climate changes will result, and no reason to believe that these changes will be negligible."[4]

These findings led the World Meteorological Organization to join forces with the United Nations to create the Intergovernmental Panel on Climate Change to establish a stable scientific foundation for informed and prudent public policies. Following the model established by the Montreal Protocol on Substances that deplete the ozone layer—a science based Protocol supported by diverse constituencies, including the private sector and President George H.W. Bush—the United Nations Framework Convention on Climate Change would use substantiated science to inform prudent policy. It was signed by President Bush in 1992. However, time political resistance—led by libertarian think tanks and the fossil fuel sector—was already emerging, and Congress never ratified the Convention.

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[1] Intergovernmental Panel on Climate Change, five reports since its founding in 1988, all available on line at http://www.ipcc.ch.

[2] Alvin M. Weinberg, "Global Effects of Man's Production of Energy," *Science* 186, no. 4160 (October 18, 1974): 205.

[3] Robert M. White, "Oceans and Climate—Introduction," Oceanus 21 (1978): 2–3.

[4] Jule Charney et al., Carbon Dioxide and Climate: A Scientific Assessment, Report of an Ad-Hoc Study Group on Carbon Dioxide and Climate, Woods Hole, Massachusetts, July 23–27, 1979, to the Climate Research Board, National Research Council (Washington, DC: National Academies Press, 1979).

Meanwhile the science was becoming clearer, and by 1995 a consensus had emerged that man-made climate change—long predicted by scientists—was now underway. In the Second Assessment Report of the Intergovernmental Panel on Climate Change, scientists affirmed that: "The balance of evidence suggests a discernible human impact on global climate" (IPCC, 1995). However, this conclusion was attacked by climate change deniers, who were by this time fully engaged in a strategy of sowing doubt about the science. They did this in a pattern developed and used to great effect by the tobacco industry in delaying government action to control tobacco and decrease its adverse effects on American public health. In fact, some of the groups and individuals now challenging climate science were active in these prior campaigns to defend tobacco by challenging the scientific evidence of its harms.[5]

Since 1995, the scientific world has affirmed and re-affirmed the scientific evidence over and over again. It has been affirmed in the United States by our own National Academy of Sciences, the American Meteorological Society, the American Geophysical Union, the American Association for the Advancement of Sciences, and many more, as well as by leading scientific societies and Academies abroad.

In 2004 I wrote the first peer-reviewed article that reviewed the state of climate science and asked the question: Does the peer reviewed literature comport with the statements of these leading scientific bodies? (Oreskes, 2004), The answer was yes. This result has been replicated by other, independent scientists, most recently by John Cook and colleagues.[6]

In 2006, 11 national academies of science around the globe, including the oldest in the world—the Accademia nazionale dei Lincei of Italy— issued an unusual joint statement, noting that the "threat of climate change is clear and increasing," and that "delayed action will . . . incur a greater cost." That was nearly a decade ago. Today scientists tell us that human-made climate change is now "unequivocal" and the costs are already being felt.[7]

This science, done over the course of more than a century, was done by scientists around the globe—men and women, old and young, Democrats and Republicans. Probably more of them were Republicans than Democrats: Gordon MacDonald was a close advisor to President Nixon; Charles David Keeling was awarded the National Medal of Science by President George W. Bush in 2002. What all these men and women had in common was that all would have agreed that the scientific basis for any public policy decision should be robust. Scientists today would say the same, and their work over many decades has been a sustained effort to ensure just that.

Despite the long history of this work and the bipartisan character of the scientists who did it, climate science continues not merely to be questioned, but to be attacked. In the very week that our hearing took place, the world's most revered climate scientists met with Pope Francis to advise him on the facts of climate change, and the threat that it represents to the future health, wealth, and well-being of men, women and children—not to mention the other species with whom we share this unique planet we call our Earth.[8] Yet at the same time, climate change deniers met across the road from the Vatican, to attempt to prevent the Pope from speaking out on the moral meaning of climate change.[9] Whenever there are signs that the political landscape is shifting, and that the world might be ready to act to prevent dangerous climate change, the forces of denial redouble their efforts to stop us.

The history of climate change denial is recounted in my book, co-authored with Erik M. Conway, *Merchants of Doubt*.[10] The organization responsible for the denialist meeting in Rome is the Heartland Institute, a group with a long history not only of rejecting climate science, but of rejecting science generally. They were

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[5] Gelbspan, Ross, 1998. *The Heat is On, The Climate Crisis, The Cover-Up, The Prescription*, (New York: Basic Books), and idem, 2004, *Boiling Point: How Politicians, Big Oil and Coal, Journalists, and Activists Have Fueled the Climate Crisis—and What We Can Do to Avert Disaster* (New York: Basic Books).

[6] John Cook et al., 2013. "Quantifying the consensus on anthropogenic global warming in the scientific literature," *Environmental Research Letters* 8(2): 024024 doi:10.1088/1748-9326/8/2/024024.

[7] Intergovernmental Panel on Climate Change, Fifth Assessment Report, 2013, https://www.ipcc.ch/report/ar5/wg1/; see also https://www.ipcc.ch/news_and_events/docs/ar5/press_release_ar5_wgi_en.pdf.

[8] http://www.casinapioiv.va/content/accademia/en/publications/extraseries/sustainable.html; See also http://www.casinapioiv.va/content/accademia/en/events/2014/sustainable/statement.html.

[9] http://www.theguardian.com/environment/2015/apr/24/heartland-institute-koch-pope-francis-lobbying-climate-change-global-warming.

[10] Oreskes, Naomi and Erik M. Conway, 2010. *Merchants of Doubt: How a Handful of Scientists Obscured the Truth on Issues from Tobacco Smoke to Global Warming* (New York: Bloomsbury Press).

responsible for the infamous billboards comparing climate scientists to the Unabomber. They are an institute with a documented history of working with the tobacco industry to question the scientific evidence of the harms of tobacco. They are not the only ones with a history in tobacco. Many of the groups who today question the reality or significance of human-made climate previously questioned the scientific evidence of the harms of tobacco.[11] The strategy that Ms. White uses—to raise questions about the science, and suggest that it is insufficiently robust on which to base public policy—is precisely the one that was used for decades by the tobacco industry and its allies.

All sensible people agree that major public policy decisions should be rooted in good information. When the issues depend in part on scientific information—which action on climate change inescapably does—then that information must necessarily be in part scientific. It is essential for public safety and well-being that decision-makers be well-informed about and understand that science. It is not in the interest of the American people to be misled, either by ignorance or intent.

Despite the allegations and innuendo of individuals like Ms. White and her colleagues, scientific world is not at war with fossil fuels. Scientific investigations are a sustained attempt to understand the ways in which the natural world—the world on which we depend on both for our prosperity and our survival—works. As Rachel Carson argued so eloquently many years ago, we break the laws of nature at our peril. And a war against nature is a war we cannot win. This is a lesson that both Republicans and Democrats heeded in the past, but which many seem of late to have forgotten.

As for model validation (sic), much of the scientific work of the past three decades has been dedicated to model development and testing. In the early 1990s, I wrote what is now considered a benchmark paper on the question of how models are evaluated.[12] In this work, my colleagues and I explored the ways and means scientists test their models. Since that time, the scientific community has put extraordinary effort into evaluating and testing climate models. The important point to underscore here is that models are tools, not facts. Scientists use them to answer questions about the behavior of the natural world. We have learned a great deal about Earth's climate system through modeling: among the things we have learned is that the observed warming trend of the past 50 years cannot be accounted for by natural variability, but can only be explained by dominant contribution of greenhouse gas-driven warming.

Question 2. You mentioned in your testimony that you were asked to disclose your Federal and foreign funding sources but there were no questions about private funding. From the perspective of a historian of science and an expert on the politicization of science, what are the implications of that for public policy generally, and for the climate denier movement, specifically?

Answer. From any perspective, disclosure of funding sources—whether public or private—is essential to the preservation of scientific integrity. A robust scientific literature, dating to the mid-eighties, has found that research outcomes can be statistically correlated with funding sources, in what is called the "funding effect."[13] This does not mean that the researchers have been "corrupted"—although in some cases they may be—since the funding effect may be the result of unconscious bias. Researchers make many choices in the design, implementation and interpretation of their work that involve expert judgment. This opens a pathway through which

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[11] In 1997, Philip Morris paid $50,000 to the Heartland Institute, $200,000 to the Advancement of Sound Science Coalition, $125,000 to the Competitive Enterprise Institute, $100,000 to the American Enterprise Institute, and many more. All of these groups have questioned the scientific evidence of man-made climate change. Often financial contributions were referred to in company documents as "philanthropy," and because these organizations all claim to be nonprofit and nonpartisan. But it is hard to see how defending tobacco use exactly qualifies as "philanthropy". See Oreskes and Conway, Merchants of Doubt, p. 234.

[12] Oreskes, Naomi, Kristin Shrader-Frechette and Kenneth Belitz, 1994. "Verification, validation, and confirmation of numerical models in the earth sciences," *Science* 263: 641–646; Oreskes, Naomi, 1998. "Evaluation (not validation) of quantitative models," *Environmental Health Perspectives* 106 (supp. 6): 1453–1460; Oreskes, Naomi, 2007, "The scientific consensus on climate change: How do we know we're not wrong?" *Climate Change: What It Means for Us, Our Children, and Our Grandchildren*, edited by Joseph F.C. DiMento and Pamela Doughman, MIT Press, pp. 65–99.

[13] Good points of entry into this literature are Lundh A, Sismondo S, Lexchin J, Busuioc OA, Bero L. Industry sponsorship and research outcome. *Cochrane Data base of Systematic Reviews* 2012;12:MR000033. dx.doi.org/10.1002/14651858.MR000033.pub2, and Sheldon Krimsky, "Do Financial Conflicts of Interest Bias Research? An Inquiry into the "Funding Effect" Hypothesis," Science, Technology, and Human Values, September 20, 2012, doi: 10.1177/0162243912456271, http://sth.sagepub.com/content/38/4/566.abstract.

unconscious bias may exert itself, both in study design and in data interpretation. In theory, such bias should be noticed in peer review; in practice, these subtleties often escape notice until results are contested by whistleblowers, challenged by other scientists, re-examined in litigation, or detected in later meta-studies.

Editors, reviewers, readers, and the public make the default assumption that the research before them is unbiased; disclosure is essential because it alerts them to the fact that honest researchers may nevertheless be subject to unconscious bias.

Scientists themselves may not be fully aware of how subconscious bias may affect their results. Many researchers have a narrow conception of research integrity, restricting it in their own minds to avoiding egregious misconduct such as fraud, fabrication, and plagiarism. But many other behaviors can compromise research integrity, and evidence suggests that these behaviors may be widespread. One large, well-designed study, published in *Nature* in 2005, found that 33 percent of researchers surveyed admitted to questionable behaviors within the previous 3 years, including 20 percent of mid-career researchers who acknowledged "changing the design, methodology or results of a study in response to pressure from a funding source."[14]

A survey of researchers conducted by the Nuffield Council on Bioethics found that 58 percent of respondents aware of scientists feeling tempted to compromise on research integrity and standards, yet only 26 percent of these same respondents felt personally tempted to engage in the same behavior. A similar study of medical residents found that 61 percent argued that gifts from pharmaceutical companies would not affect their behavior, while only 16 percent of their colleagues could remain similarly unaffected by such gifts. This is a clear example of what social scientists call the "third person effect": that we all think that other people are more prone to bias and error than we are ourselves.[15]

This problem is of especial concern in relation to climate science, because prominent climate change deniers have received substantial funding from private sector sources.[16] Indeed, in some cases, they may have *only* private sector sources, because the quality of their work is too poor to be able to compete for competitive scientific funding, such as that provided by the National Science Foundation, the National Institutes of Health, NASA, NOAA, or the any of the various executive branch departments, such as Energy and Defense, that fund basic and applied scientific research. The notable recent example of this is Dr. Wei-Hook ("Willie") Soon, whose contrarian climate research of recent years has, apparently, been wholly funded by fossil fuel interests. While every scientific community has its outliers, and these individuals are entitled to their views, Dr. Soon's outlier views have been mischaracterized and exploited by the climate change denial movement for political purposes. His industry-funded publications have been used in *political* debate to support the misleading claim that there is substantial scientific uncertainty about the causes of recent global warming. Fossil fuel interests thus create and sustain the impression of continued scientific disagreement and debate about an issue that is, for all intellectual intents and practical purposes, scientifically settled.

Industry funding is also a potential source of concern because of the potential for the biasing of research results, even among respected scientists working on topics that are not yet settled. An example of this may be found in the recent dispute over disclosure of funding sources for research on the environmental impacts of hydraulic fracturing in oil and gas drilling.[17] The author of the study, who failed to disclose private sector logistical and financial support for his work, including salary to him, personally, has been quoted as stating that his analysis was not influenced by the source of his funding.[18] The problem is that he has no way to know that, and neither do we.

Disclosure is essential so that those who use scientific work can adequately judge both whether or not there was a risk of bias, and whether that risk may have affected the research outcomes. This has been a major risk in research on hydraulic fracturing, in part because the lack of adequate public funding for research on the topic has forced researchers to look to industry for funds, and in part because industry secrecy and non-disclosure can make it effectively impossible to answer the relevant questions without industry cooperation.

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[14] http://www.nature.com/nature/journal/v435/n7043/full/435737a.html.

[15] On third-person effect in climate science, see Lewandowsky, Stephan, Naomi Oreskes, James S. Risbey, Ben R. Nerwell and Michael Smithson, 2015 "Climate Change Denial and its Effect on the Scientific Community," *Global Environmental Change* 33: 1–13. http://www.sciencedirect.com/science/article/pii/S0959378015000515.

[16] http://www.nature.com/nature/journal/v435/n7043/full/435737a.html.

[17] Donald Siegel et al., *Environmental Science and Technology* 49: 4106–4112, and 49: 5840.

[18] http://insideclimatenews.org/news/06042015/fracking-study-water-contamination-under-ethics-review.

The Cochrane Reports, the leading source of systematic reviews in health care, recently concluded that the funding effect "is a known bias that should be assessed." However, this is difficult to do on a case-by-case basis, because absent evidence of fraud, one cannot prove that a research result would have been different had the funders been different. The Cochrane researchers thus conclude that bias is best assessed "by using empirical methods to identify factors that are [systematically] associated with research results."[19] Such assessments of funding effects can only be performed if sources are known.

Mr. GOHMERT. Thank you very much.

At this time we will hear from Mr. Lunny. You are recognized for 5 minutes.

STATEMENT OF MR. KEVIN LUNNY, OWNER, DRAKES BAY OYSTER COMPANY, POINT REYES, CALIFORNIA

Mr. LUNNY. Good afternoon, Chairman Gohmert, Ranking Member Dingell, and members of the subcommittee. My name is Kevin Lunny. My family owned the Drakes Bay Oyster Company and operates the "G" Ranch at the Point Reyes National Seashore in Marin County, California. On behalf of the entire Lunny family, our 30 workers who lost their jobs, and the overwhelming majority of citizens in West Marin, I am here today to tell you our story.

On December 31, 2015, the National Park Service forced our iconic 80-year-old oyster farm to shut down. Let me be clear, we did not fail as a business. This was not bad luck. Rather, the Park Service engaged in a taxpayer-funded enterprise of corruption to run our small business out of Point Reyes.

Our family experienced the worst of what a motivated Federal agency can do to a small business. We incurred millions of dollars in expenses and debts defending our farm from relentless misrepresentation, deception, and the complicit participation of multiple Federal agencies. These actions culminated in an Environmental Impact Statement that can only be described as weaponized.

It is important to understand that Point Reyes National Seashore is not a typical Park Service unit. Point Reyes has been settled for almost two centuries, with ranches dating back to the California Gold Rush, and our oyster farm sited squarely in the middle. The Seashore was created in part to preserve that unique working landscape. Point Reyes is not Yosemite. It was never intended to be.

Living and working inside a National Park unit is unusual. Rather than a mayor, city council, or a police department, we have only the unelected Park Service serving in all those capacities. We have no vote and no input. Unfortunately, this creates an environment ripe for intimidation.

In the early 2000s, the Park Service interpretation of Congress' intent at Point Reyes changed. No longer was agriculture at Point Reyes viewed as the cornerstone of the seashore. Instead, we became the scapegoats in every new issue. Our existence was suddenly a problem, a roadblock in an ideological pursuit of pure wilderness.

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[19] Lundh A, Sismondo S, Lexchin J, Busuioc OA, Bero L. Industry sponsorship and research outcome. *Cochrane Data base of Systematic Reviews* 2012;12:MR000033. dx.doi.org/10.1002/14651858.MR000033.pub2.

In an effort to drive out nonconforming uses from Point Reyes, they accused us of all manner of sins. The pattern became quite familiar. First the Park Service would make false claims, either in public hearings or published studies and reports. Confronted with evidence refuting their claims, they would ignore the data, refuse to correct the record, and simply move on. The process would then repeat itself. In a letter to then-Secretary of the Interior, Ken Salazar, Senator Feinstein called it "deceptive" and "fraudulent."

In the course of pursuing these attacks, at various times we were accused of causing an 80 percent decline in harbor seals, industrial-level noise pollution, and countless other claims, all of which were shown to be false. In addition to this, we were covertly monitored and photographed by the Park Service for several years. These surveillance photos exonerated the oyster farm from seal disturbance and were concealed by the Park Service.

One of the most disturbing actions was when the Park Service asked another agency, USGS, to review these secret photos. Their seal expert found no disturbance by our oyster farm, but the Park Service altered his findings to falsely claim harm. This issue was documented in a *Newsweek* story published in January of this year.

After building this multi-year record of false accusations against us, the Park Service manipulated the NEPA process initiated to renew our permit. All of the false science, and more, was combined into a draft environmental impact statement so flawed that it was never finalized.

No record or decision was issued. No final public comment period was held. We were not even sent a copy of that document. Not only was this flawed, incomplete document used to inform the Secretary in his decision to evict us, it was also used against us in Federal court.

The President promised scientific integrity, and we are here today to ask for this committee's help in securing it. Congress could right these wrongs. The science dictates that we should preserve, protect, and promote oysters around the world, and Drakes Estero is no different. Thank you for the opportunity.

[The prepared statement of Mr. Lunny follows:]

PREPARED STATEMENT OF KEVIN LUNNY, PRESIDENT, DRAKES BAY OYSTER COMPANY

Good afternoon Chairman Gohmert, Ranking Member Dingell, and members of the subcommittee.

My name is Kevin Lunny. My family owned the Drakes Bay Oyster Company and operates the "G" Ranch at Point Reyes National Seashore in Marin County, California. On behalf of the entire Lunny family, our 30 workers who lost their jobs, and the overwhelming majority of citizens in West Marin, I am here today to tell you our story.

On December 31, 2014, the National Park Service forced our iconic 80-year-old oyster farm to shut down. Let me be clear, we did not fail as a business. This was not bad luck. Rather, the Park Service engaged in a taxpayer-funded *enterprise of corruption* to run our small business out of Point Reyes.

Our family experienced the worst of what a motivated Federal agency can do to a small business. We incurred millions of dollars in expenses and debts defending our farm from relentless misrepresentation, deception, and the complicit participation of multiple Federal agencies. These actions culminated in an Environmental Impact Statement preparation process that can only be described as *weaponized*.

The history of procedural and ethical missteps by the Park Service at Point Reyes is stunning in its complexity and boldness. From the beginning of our stewardship of the farm, false science has been used as the primary tool to divide our community, intimidate government officials, and ostracize our family. Our family run

oyster farm became ground zero for scientific misconduct in the United States. No leaders at the Park Service were willing to stop this campaign of false science, and no agencies outside of the Park Service were willing or able to step in despite countless guidelines, policies, and codes of conduct governing the application of science in the Federal Government.

It is important to understand that Point Reyes National Seashore is not a typical Park Service unit. Point Reyes has been settled for almost two centuries, with ranches dating back to the California Gold Rush, and our oyster farm sited squarely in the middle. The Seashore was created in part to preserve that unique working landscape. Its original authorization by Congress in 1962 was secured through a partnership of agricultural and environmental interests working to prevent development spreading rapidly up the coast from San Francisco. Point Reyes isn't Yosemite. It was never intended to be.

Contrary to this historic intention, Park Service management and interpretation of policies changed around the early 2000s. No longer was agriculture at Point Reyes viewed as a benefit to the Seashore. Instead, we became the scapegoats in every new issue. Our existence was suddenly a problem—a roadblock in the new ideological pursuit of pure Wilderness, free from "non-conforming" uses like agriculture and mariculture. In an effort to drive those uses from Point Reyes, starting with DBOC, they accused us of all manner of sins. The pattern became quite familiar. First the Park Service would make false claims—either in public hearings, as they did before the Marin County Board of Supervisors, or in interviews and press statements, published studies, or reports, Then, when confronted with evidence refuting their claims, they would ignore the data, refuse to correct the record, and simply move on. The process would then repeat itself. Senator Feinstein described it as "deceptive and potentially fraudulent" in a letter to then-Secretary of Interior Ken Salazar.

The Park Service campaign against us began in earnest in early 2007, when they publicly claimed that DBOC was responsible for an 80 percent decline in harbor seals in Drakes Estero. Not only did the Park Service lack scientific data to support such a serious claim, but they acknowledged in an email to NOAA just before the hearing that no actual records of harm existed.

Another early claim by the Park Service was that sedimentation from oyster production was upsetting the ecological balance in the Estero and cited a 1991 USGS study as proof. According to that USGS study, and affirmed by the State Health Department, the water bottom of the Estero was and is healthy. Regardless, the Park Service misrepresented that study—they instead attempted to demonstrate harm by substituting data from a 60-year-old study conducted at the Sea of Japan and attributing it to our farm.

Perhaps most telling of all, the Park Service embarked on a covert surveillance operation of Drakes Estero, a fishing expedition seeking justification for their unsupported claims of disturbance. The results were only discovered years later and following multiple unfulfilled FOIA requests. The covert cameras were focused on our boats and our oyster beds in Drakes Estero, and captured hundreds of thousands of photos, as often as one photo per minute. Once it was determined that these photos exonerated us, the Park Service hid them from the Marine Mammal Commission and National Academy, and excluded them from the EIS process.

Following publication of the so-called Final EIS, these covert photos reappeared as the subject of a USGS review. That report, and its subsequently altered findings, were recently featured in a January 2015 article in *Newsweek* ("The Oyster Shell Game," by Michael Ames, January 18, 2015). As reported in the article, Dr. Brent Stewart (the marine biologist and seal expert with the Hubbs-Sea World Research Institute) was enlisted by USGS to perform an analysis of the photos. Stewart's independent conclusion was that the Park Service photos showed no disturbance to seals by DBOC operations—that conclusion, according to *Newsweek*, was altered in the final USGS report commissioned by the National Park Service. The USGS report inferred that there were in fact some potential disturbances by DBOC boats—a clear change from Stewart's original findings. In the story, Stewart says the following:

> "*Its clear that what I provided to them and what they produced were different conclusions and different values. In science, you shouldn't do that*."

Specifically, Dr. Stewart stated that his original phrase, "no evidence of disturbance," was changed to read "were associated with boat activity." Months later, USGS asked Dr. Stewart to re-verify his findings, which he did. Despite this reiteration of his finding of no disturbance, USGS and the Park Service moved forward with their altered version, going a step further in the never-completed Final EIS

by implying causation of disturbance to the seals at the hands of our boats. This causation was explicitly ruled out in Dr. Stewart's original, unaltered work.

According to the article, when Dr. Stewart discovered the altered conclusion and asked USGS to correct it, the response he got was: *"No, it's done. It can't be changed."*

"That was a bit shocking," Dr. Stewart said.

After building this multi-year record of false accusations against us, the Park Service manipulated the NEPA process initiated to renew our permit. In September 2010, Department of Interior Regional Solicitor Barbara Goodyear and Point Reyes National Seashore Superintendent Cecily Muldoon informed DBOC at a meeting that a NEPA review was required to consider our request to extend our lease and that the Secretary had already determined that a full Environmental Impact Statement would have to be prepared (a highly irregular decision for a simple permit renewal to continue an ongoing activity that's been in place since 1934).

In an attempt to make amends for past misconduct and start fresh, Park Service Director Jon Jarvis negotiated and executed a Statement of Principles with DBOC to guide the process. We were to have a seat at the table. It was to be a working partnership. It was nothing of the kind. We were told little, asked less and there was no working partnership of any kind. Instead, it became evident that a predetermined outcome remained the agenda.

Repeatedly during preparation of the EIS—and despite protests from a wide range of interested parties and observers—the Park Service doubled down on its use of manipulated data. The harbor seal disturbance, sedimentation, and more, were compiled into a Draft EIS.

For example, in assessing the noise impact of our small outboard motor boats, the Park Service, rather than measuring our boats on our soundscape (as required), instead used the measurements from a 70-horsepower, 700cc Kawasaki jet ski in New Jersey. When describing how our oysters caused sedimentation in the Estero, the Park Service again chose not to use site-specific information, instead substituting data from a 1955 study from Japan. It should be noted that NPS formal management policies mandate site-specific measurements for use in these kinds of studies—obviously not followed in this EIS process. The Park Service never corrected the record, and was never held accountable.

The Park Service enjoyed free reign to manipulate processes, data, and policy at Point Reyes. In fact, the Park Service never officially completed the NEPA EIS process. After 2 years and more than $2,000,000 spent, the final draft was published without a Record of Decision or notice in the Federal Register. There was no final comment period. Further, the unofficial final version of the EIS was never submitted to EPA for review as required by regulation. The Park Service never even sent us a copy of the so-called "Final" EIS. These omissions did not prevent the Park Service from using the incomplete document as a weapon against DBOC. The Secretary of Interior, in deciding our oyster farm would be closed, indicated that he was disregarding the flawed data and utilizing only those parts of the EIS that were sound—in his sole discretion. As if to add insult to injury, the Justice Department submitted approximately 250 pages of this document as evidence during our challenge of the permit denial in Federal court. In that submission, DOJ referred to the incomplete document as a "valid EIS," a term without meaning in the NEPA process.

Perhaps most shocking to us—as newcomers to such a complex process—was learning, one investigation at a time, that there was no way to stop the Park Service from executing their agenda. When we first heard the Park Service staff make false accusations against us back in May 2007, we went to the Park Superintendent to correct what we thought was a simple mistake. The local Park Service staff were not willing to correct the false claims, so we went to the Regional Director. No help there. Then we went to the Park Service Director, and finally the Secretary of Interior. No one, at any level, was willing to admit that false science was being used against us, or to at least correct the record and stop the false accusations.

Numerous Data Quality Act complaints were filed asking the Park Service to correct the record of false science—with no relief. The Department of Interior Inspector General investigated and found misconduct and deliberate misrepresentation of facts, yet failed to actually stop misconduct or force a correction of the record. Instead, the three Park Service employees cited in the Inspector General's report have since been rewarded for their work with promotions and greater responsibilities. The National Academy of Sciences conducted two studies on the science in our case, and the Marine Mammal Commission did one. Despite nearly all reports finding wrongdoing in what the Park Service did to our family and our community, all of these agencies and safeguards failed to correct the record or curb Park Service over-

reach at Point Reyes. The Inspector General at Interior told us that they were not equipped to deal with science issues. The National Academy told us they were not equipped to deal with policy issues and would not enter the misconduct arena. We felt helpless, bullied, and ignored.

In fact, even this week the Park Service at Point Reyes continues its nearly decade-long pattern of false claims in the pursuit of a predetermined outcome. Now that the Park Service has driven out our family's oyster farm, they are turning their attention to the ranchers at Point Reyes. We are heartsick to see the same tactics we faced used against our neighbors. The Park Service has been using a playbook of false science at Point Reyes, and there seems to be no individual or agency who is capable of, or willing to, stop this campaign against our community.

What the Park Service did to our family was unconscionable. This polluted legacy of false science has tainted our dealings with state (California Coastal Commission, California Department of Fish and Game, California Fish and Game Commission) and Federal agencies (United State Geological Survey, National Oceanic and Atmospheric Administration, Marine Mammal Commission), and has resulted in unnecessary regulatory and legal action against our family and our farm. The Park Service false accusations and misconduct infected nearly every interaction we had and impacted otherwise non-controversial processes.

The committee's hearing is entitled "Zero Accountability: The Consequences of Politically Driven Science." The National Park Service, armed with an agenda to purge the oyster farm and all agriculture from the Seashore, ran wild with taxpayer dollars. They evaded and avoided accountability at every turn. Immediately after the National Academy of Sciences issued a report highly critical of Park Service science, we wrote a detailed letter to Park Service Director Jarvis and asked how Park Service would inform other Federal and state agencies, local officials, and the public that their scientific claims and accusations were wrong and further asked how the Park Service would correct the record. Director Jarvis refused to answer our letter.

The President promised scientific integrity and we are here today to ask for this committee's help securing it. If a schoolyard bully takes a ball, he should be caught and punished, and the ball returned. The situation at Point Reyes is no different. Congress should right these wrongs. Those who committed fraud should be held accountable. Drakes Estero is an outstanding body of water, in a remote place, ideal for growing oysters. Until vilified by activist environmental groups, our farm had been compatible with Park Service values, the current PRNS General Management Plan, and the congressionally designated pastoral zone. Further, our shellfish cultivation lease with the state of California is still valid through 2029. In purging us from the Seashore and claiming the Estero as Wilderness, the Park Service has overstepped its authority and ignored state-level regulatory partners like the California State Fish & Game Commission.

For almost a century, Point Reyes has been a destination for visitors from the community, the state, the Nation, and the world. Next year, the Nation celebrates the National Park Service Centennial. The first act of that Centennial should be to restore scientific integrity, right these wrongs, and protect Congress' intent to preserve these working landscapes.

Thank you for the opportunity to appear before the subcommittee and tell our story.

QUESTIONS SUBMITTED FOR THE RECORD TO KEVIN LUNNY, OWNER, DRAKES BAY OYSTER COMPANY

Questions Submitted by Chairman Gohmert

Question 1. What affect did the National Park Service shutting down the Drakes Bay Oyster Company have on your employees? How many employees were affected? How were they affected and how detrimental was it to them?

Answer. The most immediate effect was that our 31 workers lost their jobs, some of whom had been with the farm for decades. Since DBOC also provided housing to many employees, these workers and their families, including at least 12 children, have also lost their homes. These families are part of the Point Reyes family, their children attend the local schools and churches, and their eviction from the Seashore is quite literally destroying part of our community.

It is important to understand that these are not unskilled laborers. Our workers possess specialized skill sets and have spent years honing their craft. With

continued pressure in northern California from special interests that would like to eliminate agriculture entirely, opportunities are quickly vanishing for these workers to find alternate employment.

The Park Service promised to aid these workers in their transition as part of our farm closure settlement, yet we've seen little evidence of such aid, and only to a few of the workers. Soon our workers will be sent packing to attempt to rebuild their lives and families elsewhere.

For supporting documentation, please see Ninth Circuit Amicus Brief filed by oyster farm workers telling their own story—[This document can be found on page 65 as a response to Staff question 4.]

Question 2. Please elaborate on the decisionmaking process for the purchase and financing of the Oyster Farm.

2a. What did your lending bank require to satisfy them that the lease would not terminate any time soon and allowed them to grant you a loan to fund your business?

Answer. DBOC used the same Bank (Bank of Oakland) as Johnson Oyster Company (JOC) used. The Bank was already quite familiar with the NPS Reservation of Use and Occupancy (RUO), covering 3 acres land above the high tide line where the oyster buildings are, that would be up for renewal in 2012 and with the California Fish and Game Commission (CFGC) shellfish lease, covering all submerged areas of Drakes Estero below the high tide line) that would be up for renewal in 2029. The Bank was also aware of the PRNS General Management Plan which supports the continuation of the oyster farm beyond 2012. The Bank also reviewed the NPS 1998 Environmental Assessment for the replacement of all of the oyster farm buildings with new docks, a new hatchery and a new processing plant. Nothing in this NEPA document suggested the oyster farming would end in 2012, or ever. The Bank was also given a letter from Don Neubacher, Superintendent, Point Reyes National Seashore, in support of the permanent new construction evaluated in the 1998 EA. With these facts and encouragement from NPS directly, the Bank of Oakland approved a large loan to JOC to remove and rebuild the entire oyster farm building complex as approved in the FONSI. JOC did not begin the NPS supported project and therefore did not borrow the money from the Bank. Shortly after, JOC sold the farm to DBOC. The Bank recognized that the same assurances were in place. There were no new policy changes, no management plan changes and the same supportive superintendent. Therefore, the Bank of Oakland agreed to a loan for DBOC that was not required to be paid off until 2015.

For supporting documentation, please see 1996 letter from NPS Neubacher to the Bank of Oakland supporting the oyster farm expansion plan, Excerpts from the 1980 PRNS General Management Plan regarding mariculture in the Seashore, 1998 Environmental Assessment (EA), Finding of No Significant Impact (FONSI) for oyster farm expansion plan—[These documents have been submitted for the record and are being retained in the Committee's official files.]

2b. Would you have gotten the loan and invested approximately $750,000 in the Oyster Farm if you did not have some assurance that your lease would be extended beyond 2012? Please specify from whom the assurance or assurances came and what they were.

Answer. DBOC would not have taken the risk to borrow and invest more money than we could pay back before the lease expired without certain assurances. Furthermore, we would not have invested the time and energy to clean up the site and rebuild the business without the likelihood that the use could continue beyond 2012. DBOC had all the same assurances that the Bank of Oakland had before it risked approving a long-term loan that would extend beyond the renewal date. We also had other assurances. We have lived and worked on the Pt. Reyes peninsula since long before it became a unit of the Park Service. We supported the creation of the seashore because we were told that our way of life—farming and ranching—would be protected. We knew that all other ranching and farming reservations of use and occupancy were extended by special use permits (SUP) upon expiration. We knew that the congressional sponsors of the Pt. Reyes Wilderness Act both said that the oyster farm should continue operations in the wilderness area as a pre-existing use. We knew the PRNS Superintendent and knew that he supported the long-term continuation of the oyster farm as demonstrated by his full support of the complete replacement of the oyster farm building complex only a few years prior. I was personally told by the Superintendent that he would be happy if we (DBOC) took over operations. PRNS chose to approve the sale of JOC to DBOC instead of choosing to exercise its first right of refusal to purchase the balance of the leasehold interest from

JOC, if JOC decided to sell, as allowed for in the RUO. If the Park Service actually planned to force the closure of the shellfish farm in Drakes Estero, it would reasonably have exercised this right to purchase the leasehold interest from JOC and wind down operations. This gave us further assurance. In 2004, the California Fish and Game Commission (CFGC) renewed the Drakes Estero shellfish lease for 25 years. CFGC had full authority over operations in Drakes Estero and the Park Service RUO was limited only to the upland area where the buildings are situated—3 acres in total. Last, in 2004, before purchasing the oyster farm, the Lunny family retained the services of the law firm Baker & McKenzie to review all of the above mentioned documents. Baker & McKenzie concluded that there was no reason that the oyster farm would not be granted an SUP in 2012. The renewal clause, the enabling legislation, the Point Reyes Wilderness Act, the seashore GMP, the administrative record showing that all other agricultural operations within PRNS were issued SUPs at the time that the RUOs expired. There was no reason to believe that this agricultural permit for the 3 acres within the pastoral zone would be treated differently than the others. We feel that we did responsible due diligence so as not to put our family in harm's way.

For supporting documentation, please see 2011 letter from McCloskey, Burton, and Bagley in support of the continuation of the oyster farm and discussing congressional intent—[This document has been submitted for the record and is being retained in the Committee's official files.]

2c. Did anyone with the Federal Government give you any reason to believe that the lease would not be extended beyond 2012? If so, who was the person?

Answer. Before our family purchased the Drakes Estero oyster farm, I met with the PRNS Superintendent Don Neubacher several times. I explained our plans for upgrading and continuing oyster operations in a more sustainable manner at Drakes Estero, to which Superintendent Neubacher responded that we were the answer to his prayers.

Superintendent Neubacher told us at the time of our purchase that, like any lease, the oyster farm lease would need to be renewed at the end of the current term. He could not guarantee that renewal, although a specific renewal clause existed in the lease and customary practice at the Seashore is to renew. Every Federal land use lease expires and must be renewed—and this lease was no different. With the assistance of the Superintendent, a renewal clause in place, and assurances from the Superintendent that it would be treated like any other agricultural lease at Point Reyes, we proceeded.

A few months after DBOC began operations, spending hundreds of thousands of dollars to clean up the site and plant oysters to recover production, Superintendent Neubacher reversed course and told DBOC that the Park Service could not renew the Reservation of Use and Occupancy (RUO) because Congress mandated that the estero be converted wilderness. No record of such a requirement exists in the enabling legislation, legislative history, or subsequent administrative history for Point Reyes. Furthermore, as found in the Congressional Record, even if converted to full wilderness, the oyster farm was to stay as a pre-existing use. (See above referenced 2011 letter from California legislators McCloskey, Burton, and Bagley discussing congressional intent and pre-existing use intentions.)

Question 3. The Park Service went above and beyond to portray you as a bad steward of the environment. Now that they have closed the oyster farm, have the attacks continued?

Answer. Yes, the Park Service attacks on DBOC and the Lunny family have continued following our eviction. Despite complying with the terms of our settlement, which stipulated that the Park Service would spearhead the removal of our remaining infrastructure from Drakes Estero (at their insistence), Park Service staff have repeatedly spoken to the press in the months since our departure about the condition of the Estero and inferred that DBOC somehow didn't hold up its end of the settlement. We have seen numerous articles itemizing "debris" recovered from the Estero, or characterizing infrastructure removal as "cleanup" and "mariculture debris," which clearly implies that we were poor stewards of the Estero.

In fact, we dramatically improved the quality and cleanliness of the Estero throughout our stewardship and always took great care to leave the Estero better than we found it. Our settlement agreement with the Park Service stipulated that all cleanup following the December 31 eviction date be handled by them exclusively. It was made clear to us that our involvement was not wanted.

Recent news stories in which the Park Service continues its attacks on us and the oyster farm, even after it has closed—[These documents have been submitted for the record and are being retained in the Committee's official files.]

Question 4. You have no doubt become an expert on the issues surrounding wilderness and NEPA in particular. What would you recommend to this committee that could be done to bring statutory fairness to NEPA?

Answer. In our experience, NEPA was not used to inform public officials, but rather to drive a predetermined outcome. As structured, NEPA can be exploited by any agency willing to engage in such misconduct. NEPA, as it currently exists, creates opportunities for administrative abuse by agencies, the DBOC situation being a prime example. The Department of Interior enjoyed broad leeway to prosecute their agenda and drive us off our farm.

As referenced elsewhere in my testimony, every aspect of the NEPA process at Drakes Estero was tainted or manipulated to the Government's advantage, including:

- improper handling and characterization of draft EIS public comments and arbitrary exclusion of over 7,000 comments in support of the oyster farm,
- establishment of two environmental baselines, in violation of basic scientific principles,
- exclusion of valid data and alteration of independent scientific findings,
- submission and use of false and mislabeled data in order to overstate oyster farm impacts, and
- failure to complete the NEPA process, publish the Final EIS, seek mandatory fEIS public comments, submit fEIS to EPA, or even provide a copy of the final EIS to the Lunnys.

Having failed in all of the above areas of NEPA implementation, Interior and the Park Service even failed to adhere to their own regulations for abandoning a NEPA process, and insisted in Federal court that the document was a "valid EIS."

Our petition to the Supreme Court to review the Ninth Circuit decision in *DBOC v. Jewell* sets out two significant jurisdictional issues that arise under NEPA that Congress could easily cure:

(1) Whether Federal courts lack jurisdiction under the Administrative Procedure Act to review an agency action that is arbitrary and capricious or an abuse of discretion when the statute authorizing the action does not impose specific requirements governing the exercise of discretion; and

(2) Whether Federal agencies can evade review of their actions under NEPA by designating their actions as 'conservation efforts' when the record shows that the action will cause significant adverse environmental effects.

Because of the asserted lack of jurisdiction under the APA, the majority in our case could not evaluate whether, as the dissent concluded, the agency had relied on factors Congress did not intend the agency to consider and had misinterpreted the law on which it relied. According to our attorneys, nine circuits have split five ways on this jurisdiction issue. The courts are also split on the environmental-review issue.

Congress could improve NEPA by amending it to ensure that Federal court review under the APA is not limited when considering whether agency action is arbitrary, capricious or an abuse of discretion. Equally important, NEPA could be amended to make it clear that agencies cannot avoid environmental review of actions under NEPA simply by designating an action as a 'conservation effort.' The cynical use of this phrase by Federal agencies undermines the value of and public confidence in NEPA. There should be little if any opposition to curing these procedural deficiencies in NEPA as interpreted by Federal courts.

For supporting documentation, please see DBOC petition to the Supreme Court more fully discussing these issues—[This document has been submitted for the record and is being retained in the Committee's official files.]

Question 5. Was there anything discussed during the hearing that you felt you were not given ample time to elaborate on or properly address?

Answer. It was asserted repeatedly during the hearing that the various investigations and reviews of the NEPA process (and general Park Service conduct at Point Reyes) found no wrongdoing. This is simply not the case. In fact, the Department of Interior's Inspector General and Solicitor, as well as the National Academy of Sciences all cited substantial misrepresentation and misconduct in violation of DOI's ethics policies by the Park Service in their reviews, as evidenced by Rep. Huffman's concession during the hearing that the case against DBOC had been "overstated" by the Park Service and that the Lunnys had been treated "unfairly." The fact that these various reviews found wrongdoing yet took no action speaks more to a flawed internal review mechanism than it does to the facts of this particular case.

For supporting documentation, please see list of relevant citations and findings of wrongdoing contained in the various reviews and investigations—[These documents have been submitted for the record and are being retained in the Committee's official files.]

Mr. GOHMERT. Thank you, Mr. Lunny.

At this time normally, as Chair, I would begin the questioning. But I am going to be here until the end of the hearing, so I know we have some people that are in markups voting in committee. So let me start by recognizing Mrs. Radewagen for 5 minutes.

And before she starts, let me say what I should have said at the very beginning. We had votes, and I am so sorry. I do not like to start a hearing that is not promptly on time. But this is Washington, and we find out it runs a little differently than some places.

I really appreciate, not just the witnesses but those that came for the hearing, I appreciate your indulgence, and we sure want to start closer to on time, but I do not control the votes. So thank you for your indulgence.

Mrs. Radewagen.

Mrs. RADEWAGEN. Thank you. I want to thank you, Mr. Chairman and Ranking Member Dingell, for holding this important hearing today to examine the consequences of inserting political views into the science that formulates policy. Thanks also to the witnesses for being here. As legislators, it is our job to write laws and implement policy. It is that simple.

When outside influences, whether they be political action groups from the right or left or even foreign nations, insert themselves into one process, it often becomes detrimental. And when these outside influences start to have sway in the science that drives our decision, the impact can be far-reaching, often beyond the issue of the moment.

In my home district of American Samoa, we rely heavily upon fishing for our economic well-being and the continued livelihood of the people. Later this afternoon, the full committee will be conducting opening statements for a markup on several bills that will address our Nation's fishing policies, including Chairman Young's Magnuson-Stevens reauthorization bill.

I mention this because in that bill, of which I am an original cosponsor, we aim to address this exact issue. As we all know, NOAA is the agency that provides oversight for our Nation's fisheries. We also know that it is no secret that NOAA is often influenced by the large environmental lobbies that have no personal stake in the region when formulating the "science" that will be used to set policy for the Nation's fisheries.

This often leads to questionable findings, which are then used to smother industry. It is common knowledge that the best stewards of the environment are most often those who utilize it for their livelihood. After all, would any fisherman who counts on a steady and reliable catch want to deplete the resource that their family relies upon? Would a farmer continuously plant crops in the same field year after year, thereby depleting the soil, simply for a larger profit for just 1 year?

While I am sure that these things do happen, it certainly is not the norm. No, these people care for their land and the waters that provide their income, certainly much more so than a lobbyist in Washington. So why is it that they have no say in how these resources are regulated?

This is just one reason that I am an original co-sponsor of the Chairman's bill. It will provide greater input from the local people who use these resources when formulating the data that sets policy, not an environmental lobby with an agenda that has no concern for those people or their continued economic well-being.

Mr. Chairman, as the only member of this subcommittee from the islands, I would be happy to take special responsibility for watching over the DOI Office of Insular Affairs and the island governments for which this committee has jurisdiction.

I want to thank Chairman Gohmert and Ranking Member Dingell once again for holding this hearing on a subject that impacts policy making across nearly every agency, and I look forward to hearing from the panel on how, we have just heard, they have been affected by this dangerous and misleading practice.

Thank you, Mr. Chairman. I yield back.

Mr. GOHMERT. Thank you. Since you are the one representative on the committee from the islands, should you see a need for a hearing on oversight on any aspect of that, we certainly want to cooperate in any way because of your special position. So thank you.

At this time we are going to recognize the Ranking Member, Mrs. Dingell, for 5 minutes.

Mrs. DINGELL. Thank you, Mr. Chairman. As I said in my opening statement, this is a very important hearing topic, and there are a number of critical issues to discuss. One thing I would like to focus on is the statement that was made by some of my friends on the other side of the aisle, that government-funded science is somehow tainted or often manipulated for predetermined purposes.

Yet the record demonstrates just the opposite. Government-funded research creates jobs throughout the country and has led to countless breakthroughs, such as the Apollo program and the theory of plate tectonics.

Dr. Oreskes, can you discuss existing mechanisms and methods that are used to detect and correct errors in government-funded science?

Dr. ORESKES. Yes. Absolutely. Thank you for that question.

Government-funded science works in many respects the exact same way that any other science works, privately funded, which is through the peer review process. Every Federal agency that has scientific work has a mechanism for internal peer review. In fact, I would argue that in most agencies the peer review is actually more stringent than it is in academic science, because there are actually two levels of peer review.

Because typically, in an agency like NOAA, NASA, the U.S. Geological Survey, or the Weather Service, there is internal review of the scientific reports first. Then if they are published in external peer-reviewed journals, there will be a second level of review as well.

In addition, there is a third mechanism available, and it is one that has been used by people here at this table today, which is National Academy of Sciences review. The issue that Mr. Lunny has raised, in fact, was reviewed for a third time by the National Academy of Sciences, and unfortunately these materials were not made available to me before this committee.

But I have had a chance to read the executive summary. One of the interesting things about this report is that they do point out some errors that they do think were made in some earlier work, but they also say that those errors were corrected. They also point out that the question of whether or not mariculture should continue in this case is essentially not a scientific question, but a social, political, and economic one.

Mrs. DINGELL. Thank you. I want to sort of build on what you just said and ask you, are there differences in the way peer review works in the context of government science versus nongovernment science?

Dr. ORESKES. Well, there can be differences in some cases, and the different agencies sometimes have differences. As an historian who has studied this, I would say the chief difference is that the peer review in Federal agencies is actually more expansive, more capacious, hears from more different voices, including members of the community, state, and local agencies.

Industry representatives are often heard, almost always heard, in Federal reviews in a way that they would not necessarily be heard in academic life. So actually, the Federal Government agency review is broader, more capacious, more open, and I would say actually much more responsive to the needs of the American people than would be the case if academics were undertaking that work.

Mrs. DINGELL. Thank you, Doctor.

Mr. Chairman, I have a number of unanimous consent requests of information we would just like to have put in the record. I do not know if you want to do that at the end of the hearing, if I should do it now, how you would like to——

Mr. GOHMERT. We can wait until the end of the hearing so it does not take your time. Just whatever you want to do.

Mrs. DINGELL. OK. Then I am going to yield back.

Mr. GOHMERT. Well, if you are yielding back, we could go ahead and do it now.

Mrs. DINGELL. All right. I will start. Mr. Chairman, I would like to request unanimous consent to enter into the record documents pertaining to the assertion that the Houston toad protective action caused a slowdown in the hazardous tree removal after January 2012. It is a FEMA letter.

Mr. GOHMERT. Oh, OK. The FEMA letter will be accepted into evidence without objection.

Mrs. DINGELL. Thank you, Mr. Chairman. I ask for unanimous consent to enter into the record an April 2013 letter from the Texas Department of Public Safety showing the scope of work was significantly expanded, which would also cause major delays.

Mr. GOHMERT. Without objection.

Mrs. DINGELL. I ask for unanimous consent to enter into the record a statement by renowned biologist Dr. Michael Forstner, who was one of the biologists on the ground during the Bastrop

recovery efforts, and who details the logistical coordination and inefficiency problems by the contractors that caused him to sometimes wait for the contractors instead of the other way around.

Mr. GOHMERT. Without objection, so ordered.

Mrs. DINGELL. I ask for unanimous consent to enter into the record the minutes of the Bastrop Wildfire interagency meeting on September 13, 2011, in which the Fish and Wildlife Service made it clear to all the agencies in attendance that the ESA should not prevent the protection of homes, lives, and property; and that they could not legally require anything more stringent than measures outlined in the community-negotiated habitat conservation plan.

Mr. GOHMERT. Without objection, so ordered.

Mrs. DINGELL. And I think we can go to the next after the next round.

Mr. GOHMERT. All right. At this time I will recognize the gentleman from West Virginia, Mr. Mooney, for 5 minutes.

Mr. MOONEY. Thank you, Mr. Chairman. I just have a couple questions for Mr. Lunny about his testimony and some followup as to what you said. I appreciate your coming, and it is important that we heard from you about what happened, and certainly share your concerns.

I know you mentioned in your testimony that the National Park Service has turned its attention to attacking the ranchers at Point Reyes National Seashore. How is the Park Service's management of the elk impacting ranches?

Mr. LUNNY. In 1998, there was an elk management plan, which directed the Park Service—one of the alternatives in that plan and the NEPA process was to allow the elk to roam on the pastoral zone where the ranches are. That alternative was rejected.

The alternative selected in the process says that they are to be moved to an 18,000-acre elk range, which is found in a wilderness area, and that they would not affect other permitted uses within the Seashore. The Park Service actually managed it that way for a couple of years.

Now, since about 2002, the elk have been reproducing on the pastoral zone, causing very, very serious adverse effects to the ranchers, and to the other permitted uses. We have been unsuccessful in working with the Seashore to actually bring them to remove the elk, as allowed for in the plan.

So, there is a new environmental process that has been initiated by the Park Service, an environmental assessment, to look into this. Our concern is that it is the same people, the same scientists, the same staff, who very much abused the NEPA process with the oyster farm.

Mr. MOONEY. Thank you for that. As followup, are there any other examples of the National Environmental Policy Act abuse at Point Reyes?

Mr. LUNNY. There are. There are other abuses, in two ways. For example, we do not believe the National Environmental Policy Act really required an EIS in the first place for the oyster farm. Our request to the Secretary of the Department of the Interior was to renew our existing use, a use that had been going on for 80 years. There would be, to our understanding, no change in the effect to the human environment. So, we do not know what triggered that.

The same thing is true with the ranch environmental assessment right now. The ranchers have asked to continue their way of life, the same activity that pre-existed the park by over a hundred years. We want to continue farming. Now we are faced with another process that has every potential of harming our way of life.

Another way that the Park Service has abused the National Environmental Policy Act is to act without review. One of our neighbors, one of our ranch neighbors, was kicked out of their ranch within the pastoral zone, a zone set aside by Congress to allow grazing and to allow our way of life. That is the cultural resource Congress asked the Park Service to preserve.

That ranch was kicked out. They renamed it a "natural area." They have allowed the elk to proliferate there, right in the middle of all the ranch lands, which is now spreading to the other ranches. This absolute, complete change of use was done with no review and no public input. It was done by the Park Service unilaterally.

Mr. MOONEY. Thank you. I know after what you have been through, it was a lot of effort to come down here and testify. But it is really important that you bring this to our attention, so I appreciate you and the other panel experts for coming down here and sharing your stories with us.

I yield back my time, Mr. Chairman.

Mr. GOHMERT. The gentleman has yielded back.

At this time apparently we have a procedural vote, but I would like to continue for a bit further. So, I recognize the Full Committee Ranking Member, Mr. Grijalva, for 5 minutes.

Mr. GRIJALVA. Mr. Chairman, with your indulgence, if sitting members of this committee—I am a visitor—if they could go first, that would be fine with me, sir. Thank you.

Mr. GOHMERT. Fine. Then Mr. Huffman, you are recognized for 5 minutes.

Mr. HUFFMAN. Thank you, Mr. Chairman and Mr. Ranking Member, and thanks to the witnesses. I especially want to welcome my constituent, Kevin Lunny, and your wife, Nancy. It is good to see you both. Welcome to the Capital.

I want to say a few words, Mr. Chairman, about the nature of this hearing, and then I will talk about the oyster lease conflict that for several years has deeply divided the West Marin community that I represent.

First, Mr. Chairman, this hearing purports to be about ensuring scientific accountability and accuracy. I have to say that is a tough sell, given the Majority party's consistent record of attacking government science, of underfunding science and research; and frankly, of flouting science, especially when it comes to our climate and our environment.

Just a few months ago, my Republican colleagues jammed through a bill aimed at making it harder to list species under the Endangered Species Act. That bill would require that any information transmitted by industry in opposition to a species listing by law would have to be considered "best available science." That is how much concern for accountability and scientific accuracy we have at this committee and in this body.

Meanwhile, when it comes to actual science, specifically the overwhelming consensus of the world's scientists on the causes and

effects of global climate change, my friends across the aisle simply dismiss it as a liberal hoax.

Meanwhile, we continue to have these so-called oversight hearings where Federal agencies are attacked and accused of all manner of misconduct without even giving them the courtesy to appear and tell their side of the story. Last week, it was an attack on management of our national forests. The Obama administration was accused of choosing to let the West burn because they do not want to allow timber harvest, but the Forest Service was not even allowed to appear and testify and tell their side of the story. Today the Majority is again leveling harsh accusations against Federal officials without giving them the chance to defend themselves.

Now, you may not agree with the Department of the Interior's decision regarding Mr. Lunny's oyster lease. A lot of my constituents disagreed with it. But when you set up a hearing to accuse Federal officials of fabrication, fraud, and scientific misconduct, basic fairness requires that you at least give them a chance to tell their side of the story. And whether you like it or not, they would tell you a different side of the story.

They would point out that the allegations of fraud and deception were investigated by the Department of the Interior's Inspector General, who found, and I quote, "no evidence, documents, EIS revisions, or witnesses that supported these allegations." They were rejected by the Administration's Scientific Integrity Office.

The National Academy of Sciences, through their peer reviews, did not always agree with every aspect of the National Park Service science, but the NAS did not find fraud or deception. And in the end, they actually agreed with the Park Service's main scientific findings. So did the U.S. Marine Mammal Commission, and when this issue was presented as part of the litigation, so did the courts all the way up to the Supreme Court of the United States.

So clearly, we have a case where there were debates. There were disputes about the science. That is the way science works. But we have to acknowledge that Secretary Salazar's decision to exercise his authority in favor of wilderness, whether you agree with it or not on a policy level, has been upheld. It is final. And the allegations that the Park Service engaged in fraud and misconduct have consistently been rejected by other agencies, investigators, the National Academy of Sciences, and the courts.

Now, in West Marin, we are trying to move on. We are trying to rebuild a relationship of trust and collaboration between the National Park Service, the ranchers, the dairymen, and the environmental community. Most people do not want the divisive oyster dispute to poison what has historically been a harmonious relationship among these groups. There is a very important ranch management planning process underway. It has been referenced.

The whole point is to provide certainty and a better working relationship with the Park Service for the dairies and ranches in the Seashore, including long-term leases, to ensure that these historic agricultural uses continue in perpetuity as part of our unique heritage.

It is going to be good for the Lunnys. It is going to be good for everyone else on the Seashore. I am committed to it. The Park Service is committed to it. The ranchers and environmentalists I

am working with are committed to it. And they are starting to talk to each other, understand each other, and repair relationships that were badly strained, or even broken, by the oyster issue.

So it is not helpful when this committee re-litigates old allegations about National Park Service scientific misconduct in the oyster matter as another partisan attempt to attack the Obama administration. I do not think this hearing is in the best interests of my constituents, including Mr. Lunny.

I hope that the real story that comes out of today is the fact that we are beginning to move on and starting to work together again in West Marin for the benefit of our great sustainable agriculture and our environment; and how both of these values, we hope, will be part of the Point Reyes National Seashore experience for many generations to come.

I yield back, Mr. Chairman.

Mr. GOHMERT. Thank you. Just so there is no question, when you say this hearing is not in the best interests of Mr. Lunny, that is not any kind of veiled threat, is it? Right?

Mr. HUFFMAN. Not at all, no. I think my point, and I have had this conversation with Mr. Lunny, is that he is one of those ranchers, all of whom need to start building a better and more trusting relationship with the Park Service and with their neighbors. We have to put this divisive dispute behind us, especially since it has already been litigated all the way to the Supreme Court. It is time for everyone to move on.

Mr. GOHMERT. All right. I understand that we have just 7 minutes to get over there and vote, and then we will come right back. I am so sorry for the temporary recess. But let's be recessed for 10 minutes and then—well, we can get over there in 2 minutes; so let's go ahead and do questioning by Mr. Labrador at this time.

Mr. LABRADOR. I am glad that I have this opportunity to follow Mr. Huffman, because this is such a partisan issue that I am going to read a letter that was written by a very partisan person.

> "The Park Service's latest falsification of science at Point Reyes National Seashore is the straw that breaks the camel's back.
>
> The Park Service presented charts of noise measurements in its draft environmental impact statement that appear to irrefutably establish that oyster boats at Drakes Bay disturb the pastoral quiet of the nearby wilderness.
>
> Here is the problem: the noise did not come from oyster boats, nor did it come from anywhere near Drakes Estero or Point Reyes National Seashore. Amazingly, the decibel recordings the Park Service attributed to Drakes Bay oyster boats came from jet skis in New Jersey 17 years ago.
>
> I am frankly stunned that after all the controversy over past abuse of science on this issue, Park Service employees would feel emboldened to once again fabricate the science in building a case against the oyster farm. I can only attribute this conduct to an unwavering bias against the oyster farm and historic ranches.
>
> My attention was drawn to the Seashore when I fought to extend local ranching leases from 5 to 10 years so there

> would be sufficient investment and time for the farmers . . .
>
> The Park Service has falsified and misrepresented data, hidden science, and even promoted employees who knew about the falsehoods, all in an effort to advance a predetermined outcome against the oyster farm."

I am not going to finish the letter, but I move to enter this letter into the record. It is signed, "Sincerely, Dianne Feinstein, United States Senator," because you know she is a strong Republican and a strong partisan on our side on these issues.

Mr. HUFFMAN. Would the gentleman yield?

Mr. LABRADOR. I will not.

Mr. GOHMERT. Without objection, so ordered.

Mr. LABRADOR. So Mr. Lunny, you characterized NEPA as a weapon. What did you mean by that?

Mr. LUNNY. These allegations of harm, harm to harbor seals, an 80 percent decline was charged. This noise that you brought up, during the draft we corrected the Park Service. We provided them with actual noise data from engineers. We showed them in their policies where they have to measure it themselves. They cannot go to the literature because their rules do not allow it. What did they do in what they called the final that was never finalized? They did the same thing.

Mr. LABRADOR. Now, Mr. Huffman said that this was litigated all the way up to the Supreme Court. Did the Supreme Court make a decision on the merits of your case?

Mr. LUNNY. This issue was not litigated in the courts. What we asked for in the courts was a preliminary injunction that would allow us to stay open, so the merits of the lawsuit could be heard.

Mr. LABRADOR. So the preliminary injunction was rejected, correct, by the courts?

Mr. LUNNY. That is correct.

Mr. LABRADOR. But the merits of your case were not adjudicated either way?

Mr. LUNNY. That is correct.

Mr. LABRADOR. OK. Are you worried about any negative consequences resulting from your appearance here today?

Mr. LUNNY. Just as Mr. Huffman mentioned, there could be consequences. We are terrified. Ranchers that are sitting behind me are terrified, because we are challenging the Park Service very seriously. They did lie. They did falsify science, and they used that science in the courts after we——

Mr. LABRADOR. Apparently very partisan people like Dianne Feinstein agreed with you that they lied and they falsified information. Correct?

Mr. LUNNY. Those are her words.

Mr. LABRADOR. One of my favorite quotes is by Thomas Jefferson. He said, "When the people fear their government, there is tyranny. When the government fears the people, there is liberty." Do you feel that there is liberty or tyranny in the way that you have been treated by the Federal Government?

Mr. LUNNY. We are terrified.

Mr. LABRADOR. You have paid a heavy price in the battle to keep your farm. Why was it so important for you to keep fighting for your farm?

Mr. LUNNY. We see this as a much bigger issue. This is not about the Lunny family. This is about 50,000 visitors a year who use this destination with their families and love it. It is about sustainable agriculture in Marin County, California. That is ground zero for good stewardship and sustainability. This is in the middle of the working landscapes.

What happens here at the oyster farm, regardless what anybody else feels, actions speak louder than words. If the Park Service was successful in evicting the oyster farm, we have grave concern about what might follow. So we had an enormous—we were told by Mr. Huffman's staff that 90 percent of his constituency supported the oyster farm, in her opinion.

Mr. LABRADOR. Has anybody ever apologized to you for the falsified information?

Mr. LUNNY. No one has apologized. Some of it has been recognized, and yet the record has not been corrected.

Mr. LABRADOR. Thank you very much.

Mr. GOHMERT. The time of the gentleman has expired. We will be in recess for 10 minutes.

[Recess.]

Mr. GOHMERT. Thank you for your patience. We will resume the hearing. All four of our witnesses are here. I will take my 5 minutes at this time, I recognize myself for 5 minutes.

Mr. Lunny, we were talking about your situation when we left. Was there anything else you wanted to point out about your oyster farm, or the use of it being ended by the National Park Service?

Mr. LUNNY. Well, there is a whole chapter that could be told about the damage and the harm done by the loss of the oyster farm. It is interesting we are in the Natural Resources Committee hearing this, because there is a huge body of science that supports our industry and our activity throughout the Nation. We are spending money everywhere else. The Federal Government is spending money to encourage aquaculture in the Chesapeake, in the Gulf, and in the Pacific Northwest.

Mr. GOHMERT. But I was curious if you had something specifically about your situation you did not finish speaking about before we had to take off. But I will give you a chance to think on that.

Let me jump back to the whooping crane situation. I am a little concerned about that. We have heard that there is good science being used by the Government, and yet I am intrigued. What was the basis? We hear it is all about science and scientific study. So what was the reason for the Park Service saying there were 23 birds, whooping cranes, missing, Mrs. Hartnett White?

Mrs. HARTNETT WHITE. I would be happy to explain. The local wildlife biologist at Aransas National Wildlife Refuge at the base of the Guadalupe River Basin was in charge of making annual counts of individual cranes. Those population counts, called a census survey, a variety of things, are a critical component of all kinds of Endangered Species Act implementation.

On the basis of the methodology that he used there, he came up with that number. Among other things, any birds missing from areas he had seen them in before, they were presumed dead.

As I said, very soon after those facts—that he claimed 23 birds missing, therefore dead—the Fish and Wildlife Service issued a report very critical, abandoned the methodology, called it, as I said, untenable and indefensible, and then later have articulated actually a much more robust protocol that I think everyone agrees with it.

But the facts in the case, and also that the judge considered the core facts for her ruling against the state of Texas, were based on this very weak methodology for counting whooping cranes there. The Fish and Wildlife Service, who was, oddly, never a part of this trial—they could have intervened at the beginning, or they could have tried to introduce that opinion of a locally used methodology. But they did not, so those facts——

Mr. GOHMERT. Do you have any idea how long they have been using that ridiculous methodology?

Mrs. HARTNETT WHITE. I do not. But those facts will remain the key facts in the record if the Supreme Court uses it. I would like to think, if the system worked right, if in fact the Regional Office or the Headquarters Office of Fish and Wildlife Service has decided that a certain methodology is indefensible and replaces it, somehow the system could absorb that.

Mr. GOHMERT. It is still broken.

Well, let me ask one other matter of Commissioner Beckett. And also, I have a couple of counties—one of the county judges was saying there are two weeds that they have been told were going to be listed as threatened, and they had scientific evidence.

A road was put through there, and it is a threatened species. They went through and showed, as I understand it, pictures of these weeds being all over the place. And they said, "All you are doing is going through showing they are everywhere. We actually have a scientific study that trumps your having people out there showing that they are everywhere, so you lose. It is threatened."

But let me ask, what was the meeting that changed FEMA's tune? They had initially sent letters saying to Fish and Wildlife that there was no effect, and then that turned around after a meeting. And you may finish by answering the question.

Ms. BECKETT. I believe that the meeting was called out of concern over the fact that we were coming onto the heels of the breeding season of the Houston toad. It was the belief of staff at U.S. Fish and Wildlife Service, as well as Dr. Forstner, who was mentioned earlier, that significant additional measures needed to be taken to protect the toad moving forward.

And I do not doubt that that was necessary. The problem is, if at the end of the day the U.S. Fish and Wildlife Service determines that you must do XYZ, whatever it is, that is what you have to do. You have no other choice. There is no consideration for how that affects or could potentially affect human life in a disaster.

Mr. GOHMERT. Thank you for your answer.

At this time we have done one round of questioning, and in talking with the Ranking Member here, we will do a second round. So

do you wish to be recognized again for 5 minutes? Mr. Grijalva, you are recognized for 5 minutes.

Mr. GRIJALVA. Thank you, Mr. Chairman. Thank you, Madam Ranking Member. Some really quick questions. But first, if I may, a unanimous consent request, Mr. Chairman. I ask unanimous consent to enter in the record two copies of the same letter, one in English and one in Spanish, from Carlos Porrata, a retired Ranger from California Parks and Recreation Department, who presents another side of the Drakes Bay Oyster Company story, how it treats its workers, and in particular, its Latino workers. I would pass that on for the record. Thank you.

Mr. GOHMERT. Does the gentleman yield back?

Mr. GRIJALVA. No. If there is no objection, I am fine with it, thank you.

Mr. GOHMERT. OK. Without objection.

Mr. GRIJALVA. Let me proceed, if I may, Mr. Chairman.

Mrs. Hartnett White, I want to ask you quickly about some stuff. I want to ask about your climate change work. You have written that climate change is real but not caused by humans. Is that a correct summary of your position?

Mrs. HARTNETT WHITE. That is not how I would express my opinion about the issue. I tried to say at the conclusion of my earlier oral testimony that I think that as the impacts of certain policy decisions or regulatory decisions that Congress makes, as the magnitude of those get greater or bigger, I think the elimination of fossil fuels as rapidly as possible would have enormous impacts across the world.

But the science that supports the need to do that has to be extremely robust. I think that the current state of climate science is not strong enough, nor are the key models validated, in order to support policy of that magnitude.

Mr. GRIJALVA. You stated that you are not a scientist yourself. So whose opinions do you rely on primarily when coming to that particular view, given the fact in the last 50 years we have a preponderance of science that says that—virtually all of them agree that most warming over the past 50 years is due to human activities.

Mrs. HARTNETT WHITE. I try to, however imperfectly, for the past 30 years and to the extent of which I am capable, have continual input from all sides of this issue. I think that the empirical method is a jewel of Western civilization, whereby a hypothesis or theory must be confirmed by measured physical evidence, and that is not the way science by consensus operates.

Mr. GRIJALVA. Well, science by consensus, I do not know what that means. But I would suggest that empirical science, objective science, needs to be the cornerstone of any decisions that Members of Congress make relative to issues as delicate and as far-reaching as something dealing with issues of drought, issues of warming, change in our climate—particularly where I live, in the arid Southwest, it is getting worse. So there has to be a basis for decisionmaking. If the basis is always under question, there is no basis for decisionmaking other than subjectivity.

And let me ask you about your funding. The Texas Public Policy Foundation received from Koch-affiliated foundations between 2003 and 2010, how much money?

Mrs. HARTNETT WHITE. I have no idea. There is a line drawn in our foundation between those engaged in policy work and those engaged in fundraising.

Mr. GRIJALVA. So, it would surprise you to know it is $500,000?

Mrs. HARTNETT WHITE. It truly would, sir. I know there are multiple sources of funding. For one, funding people can dedicate contributions to certain areas. And I know there is——

Mr. GRIJALVA. The Donors Trust or Donors Capital Fund organization, who specialize in assuring that funding is not disclosed, particularly around the issue of climate denying, that came out to about $2.5 million. Do you personally receive any funding from for-profit sources outside your income from the Foundation?

Mrs. HARTNETT WHITE. I am not quite sure I understood that question.

Mr. GRIJALVA. Do you personally receive funding from for-profit sources outside your Foundation income, whether that takes the form of grants, sponsored travel, speaker fees, or other options? Those payments and benefits——

Mrs. HARTNETT WHITE. I understand. No. No. The answer is no.

Mr. GRIJALVA. None from an affiliated fossil fuel industry?

Mrs. HARTNETT WHITE. No.

Mr. GRIJALVA. Mr. Chairman, and I have no reason to question the answer, but if any affirmation to that statement can be provided to the committee in the record, I think it would be very much appreciated, and we could put this little question to rest. And with that, I yield back.

Mr. HUFFMAN. Mr. Chair, if I might, I did want to object to entry into the record of that last letter, with great respect to the Ranking Member, but I really think that a letter questioning Mr. Lunny's treatment of his employees and implying that there was some mistreatment of Latino employees is of no relevance to the subject matter today, and is actually a good example of the divisiveness and vitriol that I have been trying to move my community past. I think it has no place in the record, and I object.

Mr. GOHMERT. If the objection were timely, then it would not have come in. But it has already been entered, so it is not a timely objection.

Mr. HUFFMAN. Well, could I ask the Ranking Member if he would consider withdrawing it?

Mr. GRIJALVA. No, I will not. I think it is relevant. As we go through these things, and certainly not having the constituency responsibilities you do to that area, my friend, we have had inquiries. I have had communications with workers and with their representatives relative to this issue. This letter came in. It was germane to the overall discussion.

Mr. GOHMERT. I will take that as a no.

Mr. GRIJALVA. Thank you, Mr. Chairman.

Mr. GOHMERT. Time has now expired. The gentleman from Georgia, Mr. Hice, is recognized for 5 minutes.

Dr. HICE. Thank you, Mr. Chairman.

Mr. Lunny, thank you for being here and for providing your testimony. I am a bit concerned that the National Park Service has, as you referred to, created a playbook. Could you explain what you mean a little bit further by a playbook, and specifically how that may impact cattle ranchers?

Mr. LUNNY. The playbook that I am referring to was how the NEPA process is initiated, and then how they actually are undertaken. What we saw in the original EIS was we sat down and we made an agreement, an agreement signed by then-Pacific West Regional Director, John Jarvis, that we, the most affected party, would have an active and meaningful seat at the table as we went through this process. The agreements were that we would know what studies would be undertaken, we would understand the process, and we could be as much a part of it as we could legally be.

What happened was quite the opposite. We would go out there in our boats and there would be divers under our racks. And we said, "What are you doing?" They would say, "Oh, we are here studying this and we are studying that, and we cannot talk to you." So we actually asked the Park Service, what about our agreement? And they said, "Well, that is unenforceable. You can go to the Web site and read Citizen's Guide to NEPA and you can find out how you can participate."

So, the reason we see it repeating with the ranchers, we were promised that we were going to be involved at this stage and that stage. They have had lots and lots of meetings, and they will tell you, "We have had 50 meetings with ranchers." What they did promise is we would have meaningful meetings.

They told us that we would have a part in helping to select alternatives so there were not poison pills jammed into the alternatives, as they did in the oyster farm. They made every single alternative unpalatable and impossible for the oyster farm to survive.

Now, when we are asking to follow through on that opportunity to play a part in the decisions of what those alternatives will look like, the Park Service has told us no. So we are starting to see the same things unfold——

Dr. HICE. Please hurry with your answer. I have some more questions.

Mr. LUNNY. OK. So that is it.

Dr. HICE. You also mentioned in your testimony that—you referred to the National Environmental Policy Act as a weapon. Would you further explain what you meant by that statement?

Mr. LUNNY. We believe, by the actions of the Park Service, that they did not need to use it in the first place for our permit. It could have simply been renewed. Because they initiated the permit, they actually put improper and incorrect information, stuff that was knowingly false——

Dr. HICE. How was it a weapon? How was it a weapon?

Mr. LUNNY. It was used as a weapon by giving that to the decisionmaker, the Secretary of the Department of the Interior; and even upon our objection, gave it to the Federal courts, and used against us in both cases.

Dr. HICE. All right. Last, you referred to covert cameras being used by the Park Service. Did the cameras capture any disturbance

of the seal population? Just generally, was there anything captured on those cameras that we need to be aware of?

Mr. LUNNY. No. There was no disturbance captured. There were over 300,000 photos taken without our knowledge with a secret camera program. They showed absolutely zero disturbances. It was completely exculpatory data. When the National Academy of Sciences asked for all the information, they hid it. They did not give it to them. The same was true at the beginning of the Marine Mammal Commission study. They show no disturbances, and they would have solved the controversy if they would have allowed that to be used.

Dr. HICE. Would the Geological Survey show the same thing?

Mr. LUNNY. The scientist chosen, the seal/mammal expert that was chosen to review those very same photos, found absolutely no disturbances by the oyster farm. Unfortunately, by the time it made it into the Park Service's environmental impact statement, it was cited as the reason that they could tell us there were long-term adverse effects to the harbor seals because of the disturbances.

Dr. HICE. Ms. Beckett, in light of the massive fires in Texas in September of 2011, were you ever provided with any evidence or rationale that slowing down the recovery would help the toad population?

Ms. BECKETT. That the act of slowing it down would—no. My perception would be the quicker we could get to some of the ecological restoration projects, the better the toad would be. That was an assumption on my part. I am not a scientist, but I do not think the delay was ever intended to be of any benefit to the toad. It certainly was not of benefit to the citizens, that is for sure.

Dr. HICE. Good point. Thank you.

Mr. GOHMERT. Thank you. The gentleman's time is expired.

At this time we will recognize the Ranking Member, Mrs. Dingell.

Mrs. DINGELL. Thank you, Mr. Chairman.

Obviously, we are really grateful to all of the witnesses for being here, and it clearly is a very emotional, passionate issue, as each of us has experienced in our own communities when things happen like this. I think there is a lot of good faith between all of the parties here, so I think both the Chairman and I are hopeful that we are just in an objective, fact-finding mission here, and that everybody understands that what we are trying to do is find the facts. And nobody wants retribution or anything like that.

Having said that, though, your testimony—and I was up very late last night studying all of these issues, and they are important issues. But your testimony was titled, "No Accountability." But I also read Senator Feinstein's letter last night and was told, Dr. Oreskes, maybe you would be the best person to answer this.

There was also a National Academy of Sciences study done addressing the issues, the allegations, that Senator Feinstein brought up in her letter. I think you may have even had it there at the table. Could you comment on the National Academy of Sciences study, please?

Dr. ORESKES. Yes, of course. So I would just like to say, with all due respect to Senator Feinstein, that she is not a scientist. And

I would say that it seems that she may have jumped to certain conclusions in this case, a shocking thing that any politician would do.

Mrs. DINGELL. Let's not go there, please.

Dr. ORESKES. OK. I am sorry. The National Academy of Sciences report is a very long one. It is a very detailed one, and they look at a lot of different things. But what they conclude, and I can read to you from that, they say, "Oyster mariculture necessarily has ecological consequences in Drakes Estero, as in other lagoons and estuaries." And that is the bottom line.

So, the whole question is then a judgment call, a value judgment, about whether or not those consequences are sufficiently minimal that one might grant an exception and allow this farming to continue. I am a little surprised that no one has pointed out, it is my understanding, that Mr. Lunny bought the farm knowing that the leases would expire in 2012, because there had already been an agreement to allow them to go a certain amount of time.

The National Academy also points out that under the Wilderness Act, the National Park Service has a mandate to convert a potential wilderness to wilderness status "as soon as the nonconforming activity can be removed." So in other words, the National Park Service was obeying the law under the Wilderness Act.

That is the other thing I would like to add, if I am not out of line here. I am a little concerned to hear people talking about the Government overstepping and referring to necessary government functions. The last I understood, enforcing the law was a necessary government function.

The Environmental Protection Act, the Endangered Species Act, the Marine Mammal Protection Act, these are the law of the land. These scientists are serving Government agencies in trying to best help those agencies understand how to enforce that law. These are laws that were passed by large bipartisan majorities of this Congress, laws that polls show the American people continue to support.

Mrs. DINGELL. Let me ask you a different question. You have written extensively about the extensive track record of casting doubt on science as a way to prevent the implementation of certain public policies. Why is casting doubt on the science of an issue an effective tactic? What is the effect in someone's mind when they read in the news that there is still a debate about an issue, as opposed to reading that the science is clear?

Dr. ORESKES. Casting doubt is extremely effective because it leads to delay, and we have heard that discussed here already. If people—there is a lot of research that shows this, including industry research; the tobacco industry did extensive research on this in order to exploit it—if people think the science is uncertain, then they will think that it is premature to act.

So if you want to delay action, if you want to prevent action, if you are manufacturing a product that is hurting people like tobacco and you want to continue to manufacture that product, then creating confusion, creating doubt, is a very effective way to do that.

Mrs. DINGELL. So let me ask you, if you can in an objective way, how can someone tell the difference between what is legitimate science—tobacco is a good example.

Dr. ORESKES. It is easy.

Mrs. DINGELL. But what is it—and that has been manufactured. How can a consumer that is out there listening to all of this tell the difference?

Dr. ORESKES. Legitimate science comes from scientists, and it is often in reports that are long and boring and difficult to read. That is part of the challenge, and that is part of why I think the scientific community does need to do more to explain more clearly, in language that people can understand, what results like this mean in ordinary language.

But you look to scientists published in peer-reviewed journals, working in Government agencies and universities, at the National Academy of Sciences, peer-reviewed work, work that shows the data. That is where the science is.

Mr. GOHMERT. Thank you. At this time we will recognize Mr. Huffman for 5 minutes.

Mr. HUFFMAN. Thank you, Mr. Chairman. I do want to talk a bit more about the oyster issue. It is my district. It has been a huge issue in my district. Even though I do believe the Majority is up to no good with this hearing, I want to say that this constituent of mine that you have brought to Washington is a good and decent guy.

I have had a lot of respect for Kevin and his family, who I have known for years, since before I was elected to Congress. I want to make it clear that I consider him an upstanding member of the community, a good steward. I think he is sincerely committed to sustainable agriculture and aquiculture.

He and his family have certainly fought the good fight. They have worked tirelessly to persuade Secretary Salazar that their oyster lease should be extended notwithstanding Congress' designation of Drakes Estero as potential wilderness. When the Secretary chose not to extend the lease, the Lunnys vigorously contested that decision, as was their right; and I respected that.

They have made their case at every level of government, all the way up to the Supreme Court of the United States. And even though Mr. Lunny has now signed a settlement agreement and vacated the oyster farm, it is clear that he still feels—that you still feel, Kevin, that you were wronged by the National Park Service and Secretary Salazar. I get that, and I respect that.

I will be the first to acknowledge that Kevin was not always treated as fairly and respectfully as he should have been. In their zeal to secure the first marine wilderness on the West Coast, some advocates overstated the environmental impacts of the oyster operation. I think some people impugned Kevin's stewardship and his integrity.

As the conflict escalated, I can assure you that the insults and poor treatment went both ways. I know that many who favored wilderness were accused of hating agriculture and wanting to get rid of all ranches and dairies in the Seashore, not just the oyster lease. It got very nasty and very personal. It strained relationships that we are still working very hard to put back together.

So if you want a story, Mr. Chairman, of a good guy who worked hard to extend his oyster lease on public land and was not always treated fairly during the process, this is certainly that story. But if you want to tell a story of scientific fraud and misconduct, we

just have to acknowledge that those allegations have been studied and reviewed and rejected at every level.

Those issues, the disputes about those studies, at the end of the day did not even form the basis for Secretary Salazar's decision. He made the decision based on policy and based on discretion that Senator Feinstein herself gave him through a specific Act of Congress. It was a policy call.

Now, most of the ranchers in Point Reyes that I talk to, and I believe I can fairly say most of the ranchers in the Seashore, have historically had pretty good relationships with the National Park Service. I think Kevin, going back in the past, would even say historically he had a decent relationship with the Park Service. And without exception, I think, the ranchers that I am working with and that I talk to want to get back to a good working relationship with the Park Service.

I think we can do that. But again, I think re-litigating these old accusations from a matter that has been closed at a time when this community is really trying to move on is not helpful and productive. That is what I mean when I say that it is not in my constituents' interests and not in Kevin's interest.

It is absurd to suggest that that is a threat. I do not have the power to threaten anyone, and I would not do it if I did. What I am really saying is that we have an opportunity here to do the right thing for agriculture and the environment and to restore a good working relationship with the Park Service. That is what I am focused on, and the tone and the direction of today's hearing is not helpful toward that end. I yield back.

Mr. GOHMERT. Thank you.

Well, I have a couple things I wanted to address. One, our witness, Ms. Oreskes, has indicated in her testimony that Dana Rohrabacher had organized a hearing distressingly similar to this one. I am sorry that it is distressingly similar because the purpose of the hearing is to hear from real people, mammals called human beings, that have been harmed by the Federal Government.

I understand that there are toads out there that some people in the scientific community that accept hearsay without proper foundation think, well, gee, it may work to the toad's advantage if we keep an environment out here that has been burned and destroyed and that no toad can live in—which, by the way, no mammal can live in.

But I want to go back to Ms. Beckett on the issue of who was truly adversely affected by the delay of the Government to allow the rebuilding of the homes in your county.

Ms. BECKETT. I am going to answer your question, Chairman, but if you will allow me, the notion that the project was not delayed is absurd. We have data of how many trees we cut each day prior to the consultation and after the consultation, and the data is very, very plain and simple.

The people that were most affected were the people that needed the help the most. Those that could afford to hire a contractor, a private contractor, which there were many—it did not entirely happen in poor neighborhoods or rich neighborhoods; it pretty much hit everybody—but the folks that could afford and did not have to wait, did not. They simply hired a private contractor.

The contractor came in there, bulldozed up all the trees, put them in a big pile, burned them, hauled them off, whatever they wanted to do, because the U.S. Fish and Wildlife Service was not going to enforce with regard to that. It just simply was not going to happen. So the people that had to sit and wait for the help, that had no other resources——

Mr. GOHMERT. These were not rich people?

Ms. BECKETT. No, sir. These were the people—why FEMA was there.

Mr. GOHMERT. You mean the Government was hurting poor people?

Ms. BECKETT. Yes, sir. Most definitely. Like I said, there were contractors everywhere doing work on private property, clearing dangerous trees, because we knew, based on the production numbers, look, it is going to be 9 months before we get to your neighborhood. We knew. We could tell people that.

Mr. GOHMERT. My time is running out. I want to get back to Mr. Lunny. Our scientific witness had indicated that it was her understanding Mr. Lunny acquired the lease knowing that it was going to run out or expire. So instead of taking that hearsay testimony as the gospel, let me ask you what you knew at the time you—how much money did you pay for that oyster farm?

Mr. LUNNY. Well, Mr. Chairman——

Mr. GOHMERT. Now, you need to be quick.

Mr. LUNNY. We spent about $750,000 up front.

Mr. GOHMERT. And tell us what information you had in your mind, government representations to you, at the time you spent around $750,000 on the oyster farm.

Mr. LUNNY. We had done our homework. We recognized that it was explicitly renewable. Every lease document—this was a reservation of use and occupancy—was renewable in 2012. We looked at the sponsors of the wilderness bill. Both had said in the record that the oyster farm can stay as a pre-existing use in wilderness because of all of its public values. We did our homework. We invested into the farm, and yes, we did know that it was up for renewal in 2012.

Mr. GOHMERT. Well, did you have any indications that it would be renewed, and from whom?

Mr. LUNNY. We got a letter from the Park Service in March of 2005, months after we took over and after we did the cleanup operations and reestablished the production, that says, "Now we have to tell you we legally believe we cannot renew your lease."

Mr. GOHMERT. And as far as your exhausting all remedies so that this is final, actually you reached an agreement rather than get drug through any more fight. Correct?

Mr. LUNNY. Our concern is, it was made clear——

Mr. GOHMERT. Well, my time is running out.

Mr. LUNNY. The answer is yes. We did that.

Mr. GOHMERT. All right. Let me just finish, because I have 8 seconds. After what I saw on October 1, 2013 of our Government keeping veterans out of their World War II Memorial, spending more money to keep them out than it took to close, I knew we had a problem. You can expect more hearings to get to the bottom of what our Government is doing to our people.

Anyone who has any additional information they would like submitted for the record, you have 5 days to do so.

Mrs. DINGELL. I do ask for unanimous consent to enter into the record a Drakes Bay Special Use Permit, former Secretary Salazar's decision, consistent with congressional intent.

The report—you want me to do one by one or all of them together?

Mr. GOHMERT. You can do them all together.

Mrs. DINGELL. Report by the Department of the Interior's Office of the Inspector General, articles from the California press about Drakes Bay Oyster Company, and any relevant correspondence related to the subject matter of the hearing.

Mr. GOHMERT. All right. Without objection, those will be entered into the record.

I would also ask unanimous consent that an article entitled, "Conspiracy Queen;" an article entitled, "Response to the Climate Change Debates;" an article entitled, "Merchants of Smear;" a letter from the Pacific Coast Shellfish Growers Association in response to today's hearing; a letter from the East Coast Shellfish Growers; a letter from the Arctic Slope Regional Corporation in response to today's oversight hearing; and a letter from Mr. John Hulls, be admitted for the record. Without objection, that will be done.

Also, if any Member wishes to ask further questions in writing to the witnesses, then we would ask that any written responses be provided to this subcommittee within 10 days.

And I can tell you that I am going to ask a written question, since there was a letter admitted without objection about Mr. Lunny's treatment of some employees, I am going to want to know how many employees the Government adversely affected when they shut down the farm. So you will be getting that written question from me, Mr. Lunny, and I would like you to expand on your answer.

With that, this hearing is adjourned. Thank you.

[Whereupon, at 4:25 p.m., the subcommittee was adjourned.]

[ADDITIONAL MATERIALS SUBMITTED FOR THE RECORD]

Supplemental Documentation Submitted for the Record by Kevin Lunny, Owner, Drakes Bay Oyster Company

Question 1. There has been debate over the original intention of Congress in authorizing Point Reyes National Seashore. Can you point to anything that discusses that intention by the original legislative authors?

Answer. See below—August 11, 2011 Letter from Pete McCloskey, William Bagley, and John Burton to DOI Secretary Ken Salazar

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August 11, 2011

Secretary Ken Salazar
Department of the Interior
1839 C Street, NW
Washington, DC 20240

Re: Continuance of a Permit in Drakes Estero, Point Reyes National Seashore for the Drakes Bay Oyster Company

Dear Mr. Secretary:

We write to recommend that you exercise your discretion to grant a Special Use Permit for the continuance of the Drakes Bay Oyster Company in the Point Reyes National Seashore when its present Reservation of Use and Occupancy expires in November, 2012.

We write as three former Northern California legislators who were personally involved in either the transfer of state tidal lands in 1965 to the Park Service, the necessary additional $35 million funding authorized in 1969 to acquire the 20,000 acres of ranches for the Park's pastoral zone, or the 1976 Wilderness Act which assigned a portion of the Park to wilderness, but retained the 20,000 acres of ranchlands to be operated by lease to private ranchers and the oyster farm to continue to operate as a "prior, non-conforming use."

As you know this has been a controversial issue since April, 2007 when Superintendent Don Neubacher and a senior Park Service scientist accused the oyster operator of endangering the seal population in the Park. The charges were subsequently determined to be false by the Department of Interior in 2008 and by a National Academy of Sciences panel in 2009. Not until 2010, did the Service release three years of logs and daily photographs secretly taken of the seal pupping areas which disclosed that kayakers and others than the oyster operators were the primary cause of seal disturbances.

For some ten weeks we have been talking to leaders on both sides of the controversy and examining the documents, particularly with regard to the environmental issues and the legislative history of the Seashore. The Seashore is somewhat unique in the National Park System in that from the beginning, it was intended to have a considerable part of its area, consisting of the historic scenic ranches being leased back to their owners, and to retain an oyster farm and California's only oyster cannery in the Drakes Estero. The Estero sits in the middle of those 20,000 acres of ranches designated as a pastoral zone; the oyster plant and cannery on the shores of Drakes Estero are in that pastoral zone.

Point Reyes National Seashore was created in 1962 through the leadership of three remarkable men, Congressman Clem Miller, Secretary of Interior Stuart Udall, and Park Director Conrad Wirth.

> Wirth's words to the Congress and to the people of Marin County in 1961 were specific:
>
> "EXISTING COMMERCIAL OYSTER BEDS AND THE OYSTER CANNERY AT DRAKES ESTERO . . . SHOULD CONTINUE UNDER NATIONAL SEASHORE STATUS BECAUSE OF THEIR PUBLIC VALUES. THE CULTURE OF OYSTERS IS AN INTERESTING AND UNIQUE INDUSTRY WHICH PRESENTS EXCEPTIONAL EDUCATIONAL OPPORTUNITIES FOR INTRODUCING THE PUBLIC, ESPECIALLY STUDENTS, TO THE FIELD OF MARINE BIOLOGY."

In 1965, Assemblyman William Bagley, at the request of the Park Service, caused to be enacted A.B. 1024, conveying the State of California's tidelands and bottomlands within the Seashore to the Park Service, reserving however the fishing rights which then included shell fishing rights, traditionally leased by the state for oyster production.

Then in 1969, when the initial appropriation of $19 million became exhausted, with the threat of subdivision hanging over the Seashore, a second term Congressman was able to convince a reluctant Nixon White House to grant an additional $35 million to purchase the remaining ranch lands, which were to be continued to be operated in the 20,000 pastoral zone surrounding the Estero.

In 1972, the late Congressman Phil Burton gave the Bay Area the priceless gift of the Golden Gate National Recreation Area (GGNRA) situated just south of Point Reyes.

In 1974, Congressman John Burton and Senator John Tunney introduced bills to designate a portion of the Seashore as wilderness. Department of Interior Secretary Jon Kyl pointed out that the State of California had reserved fishing rights in the submerged lands, which was inconsistent with the submerged lands qualifying as pure wilderness. The bills were amended to add 8,000 acres surrounding and including Drakes Estero as potential wilderness. Both Congressman Burton and Senator Tunney testified that the oyster farm was intended to continue as a prior, non-conforming use within the potential wilderness area.

> BURTON: "THERE ARE TWO AREAS PROPOSED FOR WILDERNESS WHICH MAY INCLUDED AS WILDERNESS WITH 'PRIOR, NON-CONFORMING USE.' ONE IS DRAKES ESTERO WHERE THERE IS A COMMERCIAL OYSTER FARM. . . ."

> TUNNEY: "ESTABLISHED PRIVATE RIGHTS OF LANDOWNERS AND LEASEHOLDERS WILL CONTINUE TO BE RESPECTED AND PROTECTED. THE EXISTING AGRICULTURAL AND AQUACULTURAL USES CAN CONTINUE."

Prior to the passage of the Act, both the Citizens' Advisory Commission of the GGNRA and the Sierra Club also concluded, and so recommended that the oyster farm and cannery could continue as a prior, non-conforming use.

For your convenience, we have attached the precise words of Park Director Wirth in 1961, and the words of the principals approving the continuation of the oyster farm at the time of the 1976 Wilderness Act as Exhibit A. Relevant excerpts from the California Bancroft Library's historical essay, SAVING POINT REYES NATIONAL SEASHORE, 1969–70, are attached as Exhibit B, and the affidavit of Assemblyman Bagley, with related documents attached as Exhibit C.

We think you will find the words of former Assistant Secretary Nathaniel Reed (last page of Exhibit A) or particular significance.

In our inquiries we have identified three opposing views held by honorable people, all of whom, however, have forgotten or want to set aside as no longer applicable, the commitments made in 1962 and particularly their own words and those of Senator Tunney, Congressman Burton and Assistant Secretary Reed regarding the preservation of the oyster farm as a non-conforming use in 1976/1975.

Former State Secretary of Resources Huey Johnson argues that all private operations in National Parks should be eliminated. Another group center on the single sentence in the House Committee Report accompanying the 1976 Act, setting forth the expectancy that non-conforming uses will be removed with all due speed. A third view is held that whenever there is a chance to add additional "pure" wilderness, for use only by kayakers, canoeists and hikers, the opportunity should be seized.

We have weighed these views, but believe that they are far less compelling than the commitments made back in 1976 and earlier. We are satisfied after hearing from several leading scientists outside the Service, and from the report of the National Academy of Sciences panel requested by Senator Feinstein that the 77 years of operation of the oyster farm has not endangered the local seal or bird life populations. The cannery is perhaps visited by more school children and other visitors than any other spot in the Park. The Academy of Sciences panel, in addition to finding that there was no substantial evidence of any danger to the seal population, has pointed out that the oyster farm serves as a wonderful basis for future research. Finally, producing 80% of the Bay Area's oysters, over 440,000 pounds annually, for human consumption, it meets the Commerce Department's new emphasis on local mariculture.

Each of us agreed some weeks ago that we would not make this recommendation to you if we found that the oyster farm represented any significant danger to the Estero's environment, its seal population or its bird life. It's only drawback seems

to be that kayakers, canoeist and hikers will see some 140 acres of the 2,200 acre Estero covered with oyster racks and bags at low tide when they go out to see the seals and wildlife.

The convincing point was made by the Coastal Commission biologist, Dr. John Dixon, when he stated: "I don't think there is any non-correlative evidence either way whether the oyster operation endangers the seal population." This of course put the lie to the Park Service's claims back in 2007 that started this whole controversy.

We are also compelled to note that the deliberate misrepresentations of science by the Park Service, and particularly its failure for three years to disclose its logs and photographs which not only disproved its contentions of damage to the seals by the oyster farm, but put the blame on kayakers and others for most of the seal disturbances has created a wide distrust of a one of the few remaining revered institutions of our Government. None of us have ever met a Park Ranger who wasn't courteous, helpful, truthful and competent. The Neubacher Administration, however has been guilty of misconduct and deceit, as found by the Department's Inspector Genera]. We have attached a summary of the deceits and withholding of factual data prepared by a Member of the National Academy of Sciences whose home overlooks the Seashore as Exhibit D. A copy of the Seashore's brochure, with a map of the pastoral and wilderness areas is appended as Exhibit E.

It seems highly possible to us that the there are elements in the Park Service Administration, which have had a secret agenda for some years to drive out not only the oyster farm, but the privately-leased ranches as well. There have been a whole series of small impositions on the ranchers which serve to make their operations more difficult. As of last weekend, for example, the Park Service had made no attempt to keep the wild tule elk herds in the northern wilderness section of the Seashore from breaking out onto the cattle ranches in the pastoral zone.

We think it might go a long way to restore public confidence in the Park Service to hold appropriate congressional committee hearings to ascertain why the Service seems dedicated to setting aside the words of Director Wirth of fifty years ago, and the testimony of Congressman Burton and Senator Tunney and the words of former Assistant Secretary Nat Reed regarding the 1976 Wilderness Act.

Thanking you for your public service which has done so much to restore the integrity of the Department of Interior after the scandals of the previous Administration, we remain,

Respectfully,

WILLIAM T. BAGLEY,
California State Assembly, 1961–74.

JOHN L. BURTON,
Member of Congress, 1974–82.

PETE MCCLOSKEY,
Member of Congress, 1967–82.

Attachments: Exhibits A–E [These documents have been submitted for the record and are being retained in the Committee's official files]

Question 2. It has been asserted that the IG, Solicitor's Office, National Academy of Sciences, and others who reviewed this process found no wrongdoing, you assert otherwise. Can you point out specific examples of wrongdoing cited in these various reports?

Answer. See below—Memo-Report Excerpts and Quotes on NPS False Science

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Weaponizing, Falsifying, Fabricating and Misrepresenting Science by the National Park Service

Excerpts from: Inspector General Investigations, National Academy of Sciences Reports, Environmental Impact Statements and Other Reports on National Park Service Science at Drakes Estero, Point Reyes National Seashore, CA

Senator Dianne Feinstein wrote to Interior Secretary Ken Salazar on March 29, 2012:

> *The Park Service's latest falsification of science at Point Reyes National Seashore is the straw that breaks the camel's back. I am frankly stunned that after all the controversy over past abuse of science on this issue, Park Service employees would feel emboldened to once again fabricate the science in building a case against the oyster farm. I can only attribute this conduct to an unwavering bias against the oyster farm and historic ranches. The Park Service has falsified and misrepresented data, hidden science and even promoted employees who knew about the falsehoods, all in an effort to advance a predetermined outcome against the oyster farm. Using 17-year-old data from New Jersey jet skis as documentation of noise from oyster boat engines in the estuary is incomprehensible. It is my belief that the case against Drakes Bay Oyster Company is deceptive and potentially fraudulent.*

Between 2007 and 2013, National Park Service science was investigated and reviewed six different times, each highly critical, including the Inspector General, DOI (2008 on NPS and 2013 on NPS and USGS), National Academy of Sciences (2009 and 2011), DOI Office of the Solicitor, Frost (2011), and National Marine Fisheries Service-NOAA on NPS Science in the NPS DEIS (2011).

Congress statutorily mandated review of the validity of NPS science. NPS initiated other reviews. Independent scientists submitted scientific misconduct petitions. This list does not include four Data Quality Act Complaints, or requests for investigations that disappeared, were ignored or otherwise not acted upon. It does not include the Marine Mammal Commission Report, the DEIS, the incomplete FEIS, or the Federal court case.

This document is a representative selection of findings from these six reports.

Note: The following items (text in *italics*) are all direct quotes pulled from the source reports.

U.S. Department of the Interior, Office of the Inspector General Report, 2008 [1]

On NPS Misrepresenting Scientific Research

> *Our [IG] investigation determined that in this report and in the newspaper article,* ***PRNS Senior Science Advisor Sarah Allen had misrepresented research regarding sedimentation in Drakes Estero completed in the 1980s by U.S. Geological Survey scientist Roberto Anima.*** (pg 2)

On Failure to Correct Misrepresentation After Being Informed of It

> *After reading those articles, [USGS Scientist] Anima told [NPS Chief Scientist] Allen that his report did not state that he had "collected sediment cores from the estero and identified pseudo feces of oysters as the primary source for sediment fill."* ***He [USGS Scientist Anima] said he was "tick[ed] . . . off" that she had misrepresented his findings that way . . . Anima said he let Allen know he was "not happy" with her portrayal of his research.*** *According to him,* ***she did not offer a "good justification" for inaccurately referencing his work.*** (pg 16)

[1] United States Department of Interior Office of Inspector General. *Investigative Report Point Reyes National Seashore*. 2008.

On NPS Scientific Misconduct

While Allen denied any intentional misrepresentation of Anima's work, ***our [IG] investigation revealed that Allen was privy to information contrary to her characterization of Anima's findings in the Sheltered Wilderness Report and other public releases, and she did nothing to correct the information before its release to the public.*** (pg 2)

National Academy of Sciences Report on NPS Science Reports at Point Reyes National Seashore, 2009 [2]

On NPS Misrepresenting Scientific Research

While NPS in all versions of [NPS Report] Drakes Estero: A Sheltered Wilderness Estuary accurately depicted the ecological significance and conservation value of Drakes Estero, in several instances ***the agency selectively presented, over-interpreted, or misrepresented the available scientific information on potential impacts of the oyster mariculture operation.*** (From NAS Report Section "Accuracy of the Scientific Conclusions Released by NPS to the Public," pg 71)

On NPS Scientific Misconduct

Consequently, [NPS Report] Drakes Estero: A Sheltered Wilderness Estuary did not present a rigorous and balanced synthesis of the mariculture impacts. ***Overall, the [NPS] report gave an interpretation of the science that exaggerated the negative and overlooked potentially beneficial effects of the oyster culture operation.***

On NPS Credibility and Motivation

NPS has issued two documents correcting and clarifying Drakes Estero: A Sheltered Wilderness Estuary—"Acknowledgment of Corrections to Previous Versions of the Park News Document Drakes Estero: A Sheltered Wilderness Estuary," posted on July 25, 2007 (NPS, 2007e), and the September 18, 2007 document, "National Park Service Clarification of Law, Policy, and Science on Drakes Estero" (NPS, 2007d). The Clarification document represents the most accurate NPS release of science relating to mariculture impacts, although it does not fully reflect the conclusions of this committee. It appears that hasty responses to local stakeholder concerns by ***NPS led to the publication of inaccuracies and a subsequent series of retractions and clarifications during this process from 2007–2008, which cast doubt on the agency's credibility and motivation.*** (pg 73)

Frost Report, Office of the Solicitor, Department of Interior, Public Report on Allegations of Scientific Misconduct at Point Reyes National Seashore, 2011 [3]

On NPS Scientific Misconduct

Apparently truthful ***responses from the NPS employees reveal a collective but troubling mind-set that S1[4] enjoyed the unrestricted freedom to research harbor seals at upper Drakes Estero in any manner s/he deemed fit,*** *without the corresponding need to share any data generated, so long as the research was not closely evaluated and the research method(s) remained, in the NPS employees' unilateral view, inferior or ancillary to other research, such as volunteer observations. That questionable state of mind, even if analyzed in conjunction with speculation that digital photos showing DBOC-caused disturb-*

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[2] Committee on Best Practices for Shellfish Mariculture and the Effects of Commercial Activities in Drakes Estero, Pt. Reyes National Seashore, California; National Research Council. *Shellfish Mariculture in Drakes Estero, Point Reyes National Seashore, California.* 2009. Link: http://www.nap.edu/catalog/12667.html.

[3] Frost, Gavin. Office of the Solicitor, United States Department of the Interior. *Public Report on Allegations of Scientific Misconduct at Point Reyes National Seashore, California.* 22 March 2011. Link: http://www.doi.gov/news/pressreleases/loader.cfm?csModule=security/getfile&pageid=238859.

[4] 4 "S1" identifies PRNS Sarah Allen.

ance(s) of harbor seals would have magically become "sound" science and "compatible" research, and thus would have been immediately used and disclosed, fails to meet the demanding standard of intent needed to prove falsification and misrepresentation. ***The evidence instead confirms that the NPS employees needed better instruction and more effective supervision; someone in their chain-of-command should have recognized the errors, sounded the alarm, and demanded disclosure*** *of all research which a reasonable, objective scientist could interpret as data suggesting that DBOC mariculture operations did not disturb harbor seals at upper Drakes Estero on May 8, 2007, or March 14 2008.* (pg 32)

On NPS Scientific Bias

Boredom with, or insufficient time for, the labor-intensive analytic review process does not excuse any failure to scrutinize all of the research, which S1 voluntarily initiated to "detect natural and human-induced changes" in the harbor seal populations. Quite possibly, digital photos from the monitoring cameras definitively prove or disprove that DBOC mariculture operations negatively impact harbor seals at upper Drakes Estero. As a direct consequence of S1's failure to process the data completely and speedily, potentially powerful evidence remains unknown. ***This misconduct arose from incomplete and biased evaluation and from blurring the line between exploration and advocacy through research.*** (pg 35)

On NPS Violations of the Code of Scientific and Scholarly Conduct

Further, SE2, S1, S2, S3, and S4[5] ***violated NPS Code of Scientific and Scholarly Conduct*** *language, from the Interim Guidance, that not only required timely and "full disclosure of all research methods used [and] available data," but also obligated the NPS employees to "communicate the results of scientific . . . activities, objectively, thoroughly, and expeditiously." . . . On and before May 1, 2009, these NPS employees, all of whom "work[ed] with scientific . . . information in performing their duties," knew about the camera research project, and partial results associated therewith, yet failed to notify the informant, DBOC, the NAS, and the NRC Committee . . .* (pg 35)

Finally, the decision made by [NPS employees] S3, S2, and S1, who collectively but covertly used the photographic research to refute arguments unrelated to the information's specific scientific purpose, was arguably ***inappropriate and violative of the NPS Interim Code provision requiring "full disclos[ure]."*** *The NPS scientists referenced the "ancillary" or "incompatible" digital data, which rebutted the informant's assertions regarding tidal activity and Sunday employment, in an uncontested, and seemingly improper, effort to shield their own scientific findings and to defend the reputation/reliability of volunteers who allegedly observed pinniped disturbances on April 29 2007.* (pg 36)

National Academy of Sciences, Review of NPS Science (mandated by Congress[6]), 2012[7]

On NPS Lack of Evidence

At the request of the NPS, the National Research Council conducted a study to help clarify potential impacts of shellfish farming on the ecology and socioeconomics of Drakes Estero (NRC, 2009). After evaluating the limited scientific literature available on Drakes Estero and relevant research on other similar ecosystems, ***the committee concluded that "there is a lack of strong scientific evidence that shellfish farming has major adverse effects on Drakes Estero"*** *at current (2008–2009) levels of production and operating practices (NRC, 2009).* (pg 9)

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[5] "SE2" is PRNS Superintendent Don Neubacher; "S1" is PRNS Sarah Allen; "S2" is PRNS Ben Becker; "S3" is PRNS David Press; "S4" is NPS David Graber.

[6] "Point Reyes National Seashore, Extension of Permit." Public Law 111–8. October 30, 2009. 123 STAT 2932.

[7] Committee on the Evaluation of the Drakes Bay Oyster Company Special Use Permit DEIS and Peer Review; Ocean Studies Board; Division on Earth and Life Studies; National Research Council. *Scientific Review of the Draft Environmental Impact Statement: Drakes Bay Oyster Company Special Use Permit.* 2012. Link: http://www.nap.edu/catalog.php?record_id=13461.

On NPS Failure to Follow CEQ/NEPA Guidelines

The DEIS employs two different baselines in assessing the impacts of the no action and action alternatives. *In a typical EIS, the "no action" alternative is considered the current baseline environmental condition against which the impacts of the action alternatives are compared. However, for the DBOC Special Use Permit EIS, the no action alternative (alternative A) refers to a change from the current condition (the Special Use Permit would expire and DBOC would cease operation) and shifts to a new, future condition that is unknown. Impacts associated with action alternatives B, C, and D (10 year extension of the permit for the mariculture operation) are then compared to this projected future "baseline" (alternative A), while impacts of alternative A are compared to the better known existing conditions (i.e., with DBOC facilities and operations as described for alternative B) as the baseline. This introduces an extra level of uncertainty to the evaluation of the action alternatives and creates asymmetry in the assessments conducted for the action alternatives relative to the no action alternative.* ***By invoking two baselines, the DEIS essentially contains two separate impact assessments, one for the no action alternative and another for the action alternatives, such that there is not a common basis for comparing the potential impacts of the no action alternative (A) with the potential impacts of the action alternatives (B, C, and D).*** (pg 3)

On NPS Failure to Have a Proper No-Action Alternative Pursuant to NEPA

While reviewing the scientific information and analysis in the Draft Environmental Impact Statement (DEIS), the committee found common issues across resource categories that are related to how the DEIS is framed and merit discussion upfront . . . ***The committee recognizes that, in NEPA practice, the "no action" alternative is usually considered the "baseline" under which current environmental conditions are compared.*** *In these situations, environmental conditions would not change under a "no action" alternative. However, in the case of the DBOC, if the Secretary of the Interior took no action, the Special Use Permit (SUP) would expire and alternative A would be implemented, which would change current conditions. Given that the environmental impacts associated with existing conditions are known with greater certainty than those associated with alternative A (potential future conditions), assessing the impacts of action alternatives B, C, and D against "no action" alternative A increases the level of uncertainty in conclusions about the impacts of alternatives B, C, and D. Also, the use of two baselines introduces asymmetry into the analysis such that the impacts of "no action" alternative A cannot be compared to the impacts of the action alternatives (alternatives B, C, and D). This becomes a particular problem in the Summary of Environmental Consequences, which presents the potential impacts of the four alternatives as if they were comparable, even though the impacts of the "no action" alternative A are assessed using a different baseline than that of the action alternatives (B, C, and D).* (pg 13–14)

On NPS Manipulation of NEPA Impact Categories

It is noteworthy that ***only one category of beneficial impact is used, hence effects that may range from minor to major beneficial cannot be distinguished.*** (pg 18)

On NPS Manipulation of NEPA Impact Categories—II

As mentioned in Chapter 2 of the committee's report, there are no gradations for beneficial impacts in parallel with the minor, moderate, and major gradations of adverse impacts. This results in an asymmetric assessment of the no action (A) and action alternatives (B, C, and D) in the DEIS. For instance, under alternative B, DBOC's operations would be largely unchanged from existing conditions, while under alternative A, DBOC would cease operation. Alternative A "could result in long-term major adverse impacts to California's shellfish market." Alternative B "would result in a long-term beneficial impact to shellfish production in California." If eliminating DBOC entails a major adverse impact, then maintaining DBOC should lead to a major beneficial impact . . . The conclusions reached in the DEIS might change if a more rigorous, cost-benefit analysis were conducted . . . ***Because the DEIS economic impact assessments were not based on quantitative metrics, it includes inferences and interpretations of impacts that have a high level of uncertainty.*** (pg 41)

On NPS Manipulation of NEPA Impact Categories—III

Across the eight resource categories reviewed by the committee, the most common concern that arose was the lack of an assessment of the level of uncertainty associated with the scientific information on which conclusions were based. (pg 47)

On NPS Manipulation of NEPA Impact Categories—IV

The DEIS did not include negligible as an impact level, although negligible impact is a useful category provided in the examples for the NPS NEPA guidance *document "Summary of Regulations and Policies—Impact Indicators and Criteria," Director's Order 12.* (pg 47)

On NPS Factual Errors in the DEIS

The Kelly et al. (1996) paper is the most relevant study concerning the impacts of mariculture activities on shorebird behavior and population distributions and it is referenced in the DEIS. ***Unfortunately, the DEIS contains several factual*** *errors in Chapter 4 with regards to this paper . . . While it might be true that DBOC operations influence foraging behavior, it is not clear how they would have an adverse impact if the acreage available for foraging is not a limiting factor, especially since the actual acreage used for bag culture has been less than permitted acreage. The DEIS could be improved by correcting these factual errors regarding the Kelly et al., 1996 citation.* (pg 29)

On NPS Factual Errors in the DEIS—II

The DEIS does not include references to support the conclusions regarding coho salmon in the Estero. ***Coho are not currently found in Drakes Estero,*** *but "the watershed is included in the critical habitat designation because it has habitat elements required by the coho salmon."* (pg 31)

On NPS Failure to Obtain Proper Sound Data

The DEIS concludes that alternatives B, C, and D would present a major adverse impact. ***The committee assigns a high level of uncertainty to this conclusion regarding impacts of DBOC operations on the soundscape because there are no data on underwater sound,*** *lack of a scientifically based sampling scheme (e.g., poor spatial and temporal coverage), lack of direct measurements of sound levels associated with DBOC activities, limited data on how noise impacts harbor seals at the population level, unknowns related to boat traffic with potential decreases or increases in production, and uncertainty associated with potential changes in human noise from onshore improvements proposed in alternative D. Because of these unknowns, the committee finds that other conclusions could be reached for alternatives B, C, and D, i.e., adverse impacts could be classified as moderate or minor, rather than major, even with the impact criteria used in the DEIS . . . There would be less uncertainty in the DBOC sounds sources if the DEIS did not use proxies for sound levels and if the measurements accounted for duty cycle (continuous vs. intermittent vs. impulse sources) to estimate the percent of time various DBOC activities impact the soundscape.* (pg 39)

National Marine Fisheries Service-NOAA, 2011 [8]

On NPS DEIS—Comments from the National Marine Fisheries Service on the Draft Environmental Impact Statement for Drakes Bay Oyster Company Special Use Permit

Based on a review of our records relating to the trust resources for with NMFS has responsibilities under the Marine Mammal Protection Act, the endangered Species Act, and the Essential Fish Habitat provisions of the Magnuson-Stevens Fishery Conservation and Management Act:

- *Based on the evidence and information that has been made available, the* ***harbor seal population in Drakes Estero appears stable and healthy.*** *We have* ***no documentation of any recent disturbance of harbor seals by the aquaculture operation. We have no records of violations by DBOC***

[8] National Marine Fisheries Service, National Oceanic and Atmospheric Administration, United States Department of Commerce. *Memo and Comments on Draft Environmental Impact Statement for Drakes Bay Oyster Company Special Use Permit.* 17 November 2011.

or law enforcement investigation of DBOC *under the Marine Mammal Protection Act.*

- *There is* ***no indication of negative impacts to fish species of concern to NMFS, including ESA-listed salmonids and their critical habitat.***
- ***There do not appear to be any significant impacts of DBOC operations on Essential Fish Habitat in Drakes Estero overall. We have no records to indicate that DBOC is impacting eelgrass to the degree that the eelgrass is not healthy or not providing adequate habitat values in the estero."*** *(Memo, pg 1)*

This approach to the defining of, and comparing alternatives to different baselines, is unusual. *It is common practice in NEPA documents to compare all alternatives to one baseline defined as existing conditions.* ***NMFS questions whether it is appropriate to compare the impacts of one alternative to one baseline, and then compare impacts of other alternatives to a different baseline in the DEIS. NMFS recommends all the alternatives be compared to the existing conditions baseline.*** (Enclosure, pg 6)

Senator Feinstein Criticisms of Serial NPS Misconduct and NPS False Science

Response to the National Academy of Sciences Report

Press Release and Letter from Senator Feinstein. "Senator Feinstein Urges Interior Department to Carefully Review New Scientific Report on Oyster Farming in Drakes Estero." 5 May 2009. Link: http://www.feinstein.senate.gov/public/index.cfm/press-releases?ID=16348dda-5056-8059-7610-55b9d8709435

Citing the conclusions of a new report released today by the National Academy of Sciences (NAS), U.S. Senator Dianne Feinstein (D-Calif.) today said that she found it ***"troubling and unacceptable" that the National Park Service had exaggerated the negative effects of oyster farming on the ecosystem of Drakes Estero in the Point Reyes National Seashore.***

Response to the National Academy of Sciences Report—II

Op-ed by Senator Feinstein: "Why Oyster Farm Should Stay"—Marin Independent Journal. 17 July 2009. Link: http://www.feinstein.senate.gov/public/index.cfm/op-eds?ID=89376a5d-5056-8059-7633-0d9e6660d61c

So, I asked independent scientists at the ***National Academy of Sciences*** *to evaluate the controversial park service report on the estero.* ***They concluded that the park service science was shoddy, misleading, and in some cases, flat wrong.***

Response to the Frost Report

Fimrite, Peter. "Sen. Feinstein hits Drakes Bay oyster farm report." SF Gate. 23 March 2011.

"The National Park Service and the Department of the Interior have once again failed to grasp the severity of recent misconduct at Point Reyes National Seashore," Feinstein wrote in a letter to Interior Secretary Ken Salazar and Peggy O'Dell, the park service deputy director. ***The senator demanded immediate steps to eliminate political agendas and instill in employees "a rigorous and objective pursuit of scientific truth."***

"It is critical," she said, that the government "publicly disavow the practice of selectively misusing and misconstruing science to achieve a desired outcome."

Response to the Frost Report—II

Press Release, Senator Feinstein. "Time to Rebuild Confidence in the Park Service"—Marin Voice. 24 March 2011. Link: http://www.feinstein.senate.gov/public/index.cfm/2011/3/45e612d3-5056-8059-7659-9db56a8e6d50-post

Rather than accepting the Frost Report's verdict of misconduct and taking decisive action, the Department of the Interior responded defensively by noting the absence of ***"criminal violation," admitting that "mistakes" were made, and declining to inform the public whether corrective action is taken.***

This response does nothing to rebuild confidence in the objectivity of the National Park Service.

Three separate investigative reports have reached the same conclusion:

- *The Frost Report details a* ***"collective but troubling mindset"*** *(p. 32) of misusing science for advocacy purposes. "This misconduct arose from incomplete and biased evaluation and from blurring the line between exploration and advocacy through research." (p. 35)*
- *The National Academy of Sciences found that the Park Service* ***"selectively presented, over-interpreted, or misrepresented the available science on the potential impacts of the oyster mariculture operation."***
- *Likewise, the Office of the Inspector General concluded that the Point Reyes science adviser* ***"misrepresented research."***

Letter to California Fish and Game

Senator Feinstein letter to California Fish and Game on Drakes Bay Oyster Co. 24 May 2012. Link: http://www.feinstein.senate.gov/public/index.cfm/press-releases?ID=601fe5b6-41c2-4712-860c-ab0548b7373b

I became concerned about this issue when I found that the science regarding the impacts of the oyster farm had been manipulated, and that the oyster farm operator had been treated in a biased and unfair manner. The Park Service has repeatedly misrepresented the scientific record since 2006 to portray the farm as environmentally harmful, and it is my belief that the Park Service is doing everything it can to justify ending the oyster farm's operations . . .

The Park Service's repeated misrepresentations of the scientific record have damaged its trust with the local community, and stained its reputation for even-handed treatment of competing uses of public resources. ***I firmly believe the only way to begin to repair that trust, and to send an unmistakable signal that the Administration is committed to scientific integrity, is to renew Drakes Bay Oyster Company's permit.***

Response to Interior Department Decision on Drakes Bay

Senator Feinstein Statement on Interior Department Decision on Drakes Bay. 29 Nov 2012. Link: http://www.feinstein.senate.gov/public/index.cfm/press-releases?ID=94865224-aa77-4842-8fbf-db4b52c2d9ef

The National Park Service's review process has been flawed from the beginning with false and misleading science, which was also used in the Environmental Impact Statement. *The Secretary's decision effectively puts this historic California oyster farm out of business. As a result, the farm will be forced to cease operations and 30 Californians will lose their jobs.*

Senator Feinstein to DOI Secretary Salazar on NPS Falsification of Science

Senator Dianne Feinstein letter to Interior Secretary Ken Salazar. 29 March 2012.

The Park Service's latest falsification of science at Point Reyes National Seashore is the straw that breaks the camel's back.

I am frankly stunned that after all the controversy over past abuse of science on this issue, Park Service employees would feel emboldened to once again fabricate the science in building a case against the oyster farm. I can only attribute this conduct to an unwavering bias against the oyster farm and historic ranches.

The Park Service has falsified and misrepresented data, hidden science and even promoted employees who knew about the falsehoods, all in an effort to advance a predetermined outcome against the oyster farm. *Using 17-year-old data from New Jersey jet skis as documentation of noise from oyster boat engines in the estuary is incomprehensible.* ***It is my belief that the case against Drakes Bay Oyster Company is deceptive and potentially fraudulent.***

Question 3. Did any Federal agencies with relevant oversight weigh in as to your oyster farm's stewardship at Drakes Estero during the NEPA process?

Answer. See below—NOAA Nov. 17, 2011 Letter to Point Reyes National Seashore with Comments

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UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
Southwest Region
501 West Ocean Boulevard, Suite 4200
Long Beach, California 90802-4213

NOV 17 2011

DBOC SUP EIS
c/o Superintendent
Cicely Muldoon
Point Reyes National Seashore
1 Bear Valley Road
Point Reyes Station, California 94956

Dear Ms. Muldoon:

NOAA's National Marine Fisheries Service (NMFS) appreciates the opportunity to comment on the Draft Environmental Impact Statement (DEIS) for Drakes Bay Oyster Company (DBOC) Special Use Permit (SUP), September 2011, prepared by the National Park Service (NPS) and their consultants.

NMFS reviewed the DEIS primarily from the perspective of the impacts of the action alternatives on marine resources and ecosystems. We also reviewed the adequacy of the methodology used in the analysis and identified additional information NPS should consider as it develops the final Environmental Impact Statement (FEIS). Our detailed comments are provided in the attachment.

Based on a review of our records relating to the trust resources for which NMFS has responsibilities under the Marine Mammal Protection Act, the Endangered Species Act, and the Essential Fish Habitat provisions of the Magnuson-Stevens Fishery Conservation and Management Act:

- Based on the evidence and information that has been made available, the harbor seal population in Drakes Estero appears stable and healthy. We have no documentation of any recent disturbance of harbor seals by the aquaculture operation. We have no records of violations by DBOC or law enforcement investigations of DBOC under the Marine Mammal Protection Act.
- There is no indication of negative impacts to fish species of concern to NMFS, including ESA-listed salmonids and their critical habitat.
- There do not appear to be any significant impacts of DBOC operations on Essential Fish Habitat in Drakes Estero overall. We have no records to indicate that DBOC is impacting eelgrass to the degree that the eelgrass is not healthy or not providing adequate habitat values to the estero.

To improve the overall technical quality of the FEIS, we recommend that NPS:

- Modify the methodology so that all the alternatives are compared to the existing conditions baseline (as described in sections 1502.14,1502.15, and 1502.16 in the CEQ regulations at https://ceq.hss.doe.gov/ceq_regulations/regulations.html)
- Add the National Aquaculture Act of 1980 as a relevant law informing this DEIS
- Expand the analysis to consider impacts on cultural resources and visitor experience

- Modify the analysis to take into account the ability of ecosystems to recover from negative impacts
- Provide a more balanced consideration of the ecosystem services and the positive impacts of shellfish aquaculture on habitat and water quality
- Include additional citations from the scientific literature.

In June 2011, NOAA adopted a new Marine Aquaculture Policy to enable the development of sustainable marine aquaculture within the context of NMFS multiple stewardship missions and broader social and economic goals. Under this policy, NOAA is committed to protecting wild species and ecosystems, and making timely and unbiased management decisions based upon the best scientific information available. We are committed to working with Federal partners to provide the depth of resources and expertise needed to address the challenges facing expansion of aquaculture in the United States. In keeping with the policy of encouraging sustainable aquaculture while protecting wild species and ecosystems, NMFS offers the attached comments on the Park Service's DEIS.

Thank you for consideration of our comments and recommendations. If you have any questions regarding our comments please contact Monica DeAngelis, 562–980–3232, Monica.DeAngelis@noaa.gov or Diane Windham, 916–930–3619, Diane.Windham@noaa.gov.

Sincerely,

RODNEY R. MCINNIS,
Regional Administrator.

Enclosure: National Marine Fisheries Service Comments on the Draft Environmental Impact Statement for Drakes Bay Oyster Company Special Use Permit—[This document has been submitted for the record and is being retained in the Committee's official files]

Question 4. Mr. Huffman has objected to Mr. Grijalva's submission to the record of an unsubstantiated letter alleging mistreatment of workers at DBOC. Can you provide anything in support of Mr. Huffman's objection to this letter?

Answer. See below—October 28, 2013—Amicus Brief to Ninth Circuit from Jorge Mata and Isela Meza

No. 13-15227

UNITED STATES COURT OF APPEALS
FOR THE NINTH CIRCUIT

DRAKES BAY OYSTER COMPANY and KEVIN LUNNY,
Plaintiff-Appellants,

v.

SALLY JEWELL, in her official capacity as Secretary,
U.S. Department of the Interior; U.S. DEPARTMENT OF THE INTERIOR;
U.S. NATIONAL PARK SERVICE; and JONATHAN JARVIS, in his official
capacity as Director, U.S. National Park Service,

Defendant-Appellees.

On Appeal from the United States District Court
for the Northern District of California
(Hon. Yvonne Gonzales Rogers, Presiding)
District Court Case No. 12-cv-06134-YGR

BRIEF OF JORGE MATA AND ISELA MEZA, AMICI CURIAE
IN SUPPORT OF PETITION FOR REHEARING EN BANC

Paul S. Cohen, SBN: 148371
LEGAL AID OF MARIN
30 N. San Pedro Road, Suite 220
San Rafael, CA 94903
Phone: (415) 492-0230

Limited Scope Attorneys for Jorge Mata
and Isela Meza, Amici Curiae

FRAP RULE 29(c)(4) STATEMENT

This brief is filed pursuant to FRAP 29(a) and 29–2(a). All parties have consented to its filing.

Jorge Mata has worked at the oyster farm with his family for 28 years. His wife Veronica has worked at the oyster farm for 24 years and is currently in charge of the shellfish packing operation. His sister Leticia has worked at the oyster farm for 29 years. His grown son Jorge Mata Jr. and his daughter Ruby work part-time at the oyster farm. His youngest child attends West Marin Elementary School in Point Reyes Station, California. Over the many years he has worked at the oyster farm, Mr. Mata has developed specialized skills and become very experienced at growing oysters, setting oyster larvae and complying with seafood safety rules. He is proud to work at the oyster farm where his family is treated with respect, earns a living wage, are able to live and work together and have developed personal relationships with his coworkers and the Lunny family. Mr. Mata and his family stand to lose their jobs, and their respective homes, if the oyster farm is closed.

Isela Meza is Drakes Bay Oyster Company's staff marine biologist. She received a degree in Marine Science, and was trained as an Oceanologist at the University of Mexico, Baja graduating in 2008. Ms. Meza has worked and lived at the oyster farm for five years. Her job entails handling microscopic oyster larvae and ensuring

that they "set" and begin to grow properly. Ms. Meza stands to lose her job if the oyster farm is closed.

Counsel for Appellants initially assisted in the drafting of this brief.

BRIEF OF JORGE MATA AND ISELA MEZA, AMICI CURIAE

Closing the oyster farm will hurt real working people and their families. Approximately thirty-one skilled men and women worked full-time—many for decades—at the oyster farm before the government made its decision to deny a renewal of the farm's lease. Between fifteen and twenty-five individuals, oyster farm workers and their families, continue to work full-time or part-time at the oyster farm and/or live in safe and affordable on-site housing. Collectively, the employees have twelve children that attend the high quality schools of Marin County. This community of workers will be lost if the oyster farm is forced to close.[1]

Oyster farming requires specialized skills and compliance with numerous regulatory requirements. The process begins with staff trained in marine biology nurturing microscopic oyster larvae to ensure that they "set" and begin to grow properly. Once they do, workers then gently place the baby oysters in mesh bags, or string them on special tubes, and transport them by boat to the growing areas in Drakes Estero. The process requires that oyster farm workers meticulously follow regulatory protocols designed to avoid disturbing the seals and other wildlife that are thriving in Drakes Estero. For the next several years after they are placed in the growing areas, staff carefully tend the oysters as they mature.

When the oysters are ready, staff brings them back to shore where they are prepared for market. Oysters are sold, and often eaten, raw and a consumer can get very sick from eating a bad oyster. To keep consumers safe, staff diligently follows the strict sanitary requirements imposed by the California Department of Public Health and the U.S. Food and Drug Administration. Oysters destined for sale on the half shell must be sorted and cleaned. Canned oysters have to be washed, shucked and processed. It takes years for individual employees to become proficient at their work.

Oyster farm life is a familial endeavor. Many workers live on the same property as the place they work. Co-workers and the employer are considered like family. Oyster farming is often a family affair with men women and children over the age of 16 contribute to supporting the family by working on the oyster farm. Husbands and wives, grandparents and grown grandchildren often work together at the oyster farm. All of the workers reside in the rural areas within a short distance from the oyster farm. They volunteer in the community and participate in the lives of their children at the excellent local schools. The oyster farm community and the region in which they live is their home and perhaps the only home they have known.

If the farm is closed, it is extremely unlikely that the employees will be able to find other jobs in the area where they can put their specialized skills to work. If the workers lose their jobs, they will likely have to pull their children out of the local schools and take lower paying jobs perhaps far away from the community they call home. Closing the farm will be devastating to these workers and their families.

CERTIFICATE OF COMPLIANCE

I certify that this brief complies with Fed. R. App. Proc. 32(c) and does not exceed 15 pages.

CERTIFICATE OF SERVICE

I certify that I electronically flied the foregoing with the Clerk of the Court for the United States Court of Appeals for the Ninth Circuit by using the appellate CM/ECF system on October 28, 2013.

[1] The facts in this brief are drawn generally from the declarations filed in the district court of amicus curiae Jorge Mata (docket no. 81.1), educator James Patterson (docket no. 36), and appellant Kevin Lunny (docket no. 38, paras. 69–74).

I certify that all participants in this case are registered CM/ECF users and that service will be accomplished by the appellate CM/ECF system.

DATED: October 28, 2013

Respectfully submitted,

LEGAL AID OF MARIN

By: _____
PAUL S. COHEN

Limited Scope Attorneys for Jorge Mata and Isela Meza, Amici Curiae

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UNITED STATES SENATE,
WASHINGTON, DC,
MARCH 29, 2012.

Hon. Ken Salazar,
U.S. Department of the Interior,
1849 C Street, N.W.,
Washington, DC 20240.

DEAR SECRETARY SALAZAR:

The Park Service's latest falsification of science at Point Reyes National Seashore is the straw that breaks the camel's back.

The Park Service presented charts of noise measurements in its draft environmental impact statement (DEIS) that appear to irrefutably establish that oyster boats at Drakes Bay disturb the pastoral quiet of the nearby wilderness. Here is the problem: the noise did not come from oyster boats, nor did it come from anywhere near Drakes Estero or Point Reyes National Seashore. Amazingly, the decibel recordings the Park Service attributed to Drakes Bay oyster boats came from jet skis in New Jersey 17 years ago.

I am frankly stunned that after all the controversy over past abuse of science on this issue, Park Service employees would feel emboldened to once again fabricate the science in building a case against the oyster farm. I can only attribute this conduct to an unwavering bias against the oyster farm and historic ranches.

My attention was drawn to the Seashore when I fought to extend local ranching leases from 5 years to 10 so there would be sufficient investment and time for the farmers and ranchers to not only operate viable businesses, but to perform environmental improvements. Despite efforts to comply, the ranches and oyster farm have been subject to repeated mistreatment that is unbecoming of your Department.

The Park Service has falsified and misrepresented data, hidden science and even promoted employees who knew about the falsehoods, all in an effort to advance a predetermined outcome against the oyster farm. Using 17-year-old data from New Jersey jet skis as documentation of noise from oyster boat engines in the estuary is incomprehensible. It is my belief that the case against Drakes Bay Oyster Company is deceptive and potentially fraudulent.

The Park Service's conduct is a serious breach of trust with the farming and ranching community at Point Reyes National Seashore. The ranchers are concerned that if Drakes Bay Oyster Company's permit is not renewed, they will be next. I share that concern.

I firmly believe that renewal of the permit is the only way for the Park Service to send an unmistakable signal that the Administration's commitment to scientific integrity is real and that repeated misrepresentations of the scientific record to advance employees' personal agendas will not be tolerated. I also believe that renewal of the permit is the only way for the Park Service to begin to repair the trust of the Seashore's ranching and farming community.

I look to you to bring resolution to this very serious matter.

Sincerely,

DIANNE FEINSTEIN,
United States Senator.

ARCTIC SLOPE REGIONAL CORPORATION,
ANCHORAGE, ALASKA,
APRIL 28, 2015.

Hon. LOUIE GOHMERT, *Chairman*,
House Subcommittee on Oversight and Investigations,
1334 Longworth House Office Building,
Washington, DC 20515.

Re: Oversight Hearing on "Zero Accountability: The Consequences of Politically Driven Science"

DEAR CHAIRMAN GOHMERT:

On behalf of Arctic Slope Regional Corporation ("ASRC"), I am pleased to submit comments on the subject of the Subcommittee's oversight hearing titled "Zero Accountability: The Consequences of Politically Driven Science."

ASRC is an Alaska Native Corporation, representing the Iñupiat people of the North Slope region of Alaska. We were created at the direction of Congress under the terms of the Alaska Native Claims Settlement Act of 1971 ("ANCSA"). ANCSA was designed to settle the aboriginal claims of Alaska Natives and authorized the transfer of roughly 45 million acres of land to Alaska Natives. This landmark legislation extinguished Alaska Native aboriginal land rights, and authorized and directed us to adopt a western corporate model to manage Native lands and natural resources for the benefit of our shareholders.

Through ANCSA, Congress authorized ASRC to use the North Slope's natural resources to benefit the Iñupiat people both financially and culturally. Consistent with this unique legislation, ASRC is a for-profit business committed both to providing sound returns to its shareholders and to preserving Iñupiat culture and traditions. ASRC owns nearly 5 million acres of land on Alaska's North Slope, much of which has potential for oil, gas and other natural resource development.

The responsible development of natural resources and maintenance of our Iñupiat traditions is challenging. On the North Slope, we are challenged by the climate, by the cost of energy, by the lack of transportation infrastructure and distance to markets, and by the regulatory environment in which we work.

ASRC acknowledges our longstanding relationship with some of the Federal agencies and the many hardworking public servants. Unfortunately, we have had numerous experiences in which Federal agencies imposed poorly conceived and paternalistic rules on our people and our land. We rarely know with certainty that the science behind bad decision-making is "politically driven," but, as explained below, we recognize insufficient science and inadequate support for Federal decision making.

ESA Species Listings and Critical Habitat Designations

Our Iñupiat shareholders continue to rely upon the wildlife species of the North Slope for subsistence purposes, as we have done for thousands of years. Alaska Natives have been the Arctic's primary conservation stewards, carefully balancing subsistence needs and cultural traditions with a profound respect for the wildlife that shares our natural environment. Based upon this relationship, our people have developed a deep and substantial understanding of the biological and physical processes affecting our subsistence species and the habitat that they rely upon.

In recent years, under the Endangered Species Act ("ESA"), the U.S. Fish and Wildlife Service ("USFWS") and National Marine Fisheries Service ("NMFS") have listed and designated critical habitat for the polar bear, listed the bearded seal, and listed and proposed critical habitat for the ringed seal. These actions have been undertaken based upon estimated projections of the impacts of climate change, a phenomenon that has not been caused by Alaska Natives. Although we objected to these actions, and pointed out flaws in the underlying science, the Federal Government did not heed our comments. Instead, the polar bear was listed under the ESA based upon modeling projections of sea ice by mid-century, and the bearded and ringed seal were listed based upon further projections out to the end of the 21st century. Similarly, USFWS designated critical habitat for the polar bear and NMFS has proposed critical habitat for the ringed seal based upon broad generalizations of essential habitat features without the requisite scientific data demonstrating where this habitat may be located with any specificity or certainty. Instead of fulfilling its obligation to utilize the best available science, the Federal Government has shifted the burden to our people and our affected communities to demonstrate that these actions have been in error.

In order to protect our way of life and subsistence culture, we have been forced to file lawsuits challenging each of these ESA actions. Fortunately, in several instances, our resort to litigation has been successful. Notably, in 2013, the U.S. District Court for Alaska vacated USFWS's designation of critical habitat for the polar bear.[1] Likewise, in 2014, the Court also vacated NMFS's listing of the Beringia distinct population segment of bearded seal.[2] In both of these decisions, the court found that the underlying scientific data did not support the Services' conclusions. We are now in the process of challenging NMFS's decision to list the Arctic subspecies of ringed seal as a threatened species under the ESA.

Unfortunately, we are becoming accustomed to using litigation as a tool to protect our people. The expense, time, and burden of pursuing this approach can and should be avoided. The Federal Government must fulfill its responsibility to make ESA decisions based upon the best scientific data available, and traditional knowledge and information gathered and maintained by our people and communities must be included.

The ESA requires USFWS and NMFS to take certain actions based upon the best available science, including decisions to list species, designate critical habitat, and conduct consultation on federal actions that may affect listed species or critical habitat.[3] However, the ESA does not currently include a statutory definition of what constitutes best available science, giving Federal agencies discretion to determine which data are appropriate. While there is general recognition that traditional knowledge should be considered in ESA decision-making, it is typically not relied upon or incorporated as fully as other sources of data. This current practice is flawed. Too often traditional knowledge is sought at the end of the listing or habitat designation process, after the Services have already made their decision. Instead, ASRC believes that traditional knowledge is an integral component of the best scientific data available and, as a critical source of information, must be considered early and throughout the ESA deliberation process, and not merely relegated to an afterthought in the Services' decision-making.

USFWS's recent exercise in considering whether to list the yellow-billed loon is an example that highlights the need to incorporate traditional knowledge and information at the start of the ESA deliberation process instead of at the end. ASRC believes that had traditional knowledge been sought and incorporated into the best scientific data available when considering whether to list the species, the Federal Government would have arrived at its conclusion *not to list* the loon much sooner. Further frustrating matters, ASRC had to invoke consultation privileges pursuant to Executive Order 13175 and Secretarial Order 3317, to garner the attention of the Federal Government.

Our experiences lead us to believe that the Federal Government continues to rely upon unsupported assumptions and overbroad interpretations of limited data in efforts to use the ESA to address and mitigate the effects of climate change. This policy-driven approach contravenes the intent of Congress in enacting the ESA, and disproportionately harms the cultural and economic well-being of the Iñupiat people.

WOTUS Proposed Rule

On April 6, 2015, ASRC testified before the Senate Committee on Environment and Public Works Subcommittee on Fisheries, Water, and Wildlife on the Environmental Protection Agency ("EPA") and U.S. Army Corps of Engineers ("Corps") proposed rule (the "Proposed Rule") defining the scope of waters protected under the Clean Water Act ("CWA"),[4] a hearing chaired by Senator Dan Sullivan.

As explained in our testimony, and in comments submitted to EPA and the Corps on the Proposed Rule, Alaska has more wetlands than all of the other 49 states combined. According to a 1994 USFWS report, wetlands cover 43.3 percent of Alaska. In the Lower 48 states, wetlands only occupy 5.2 percent of the surface area. While USFWS used an expansive definition of "wetlands" in its study, that definition is very similar to the jurisdictional waters categories added to the definition of "waters of the United States" by the EPA and Corps in their Proposed Rule. Thus, on the North Slope of Alaska, more than *80 percent* of the region could be deemed "waters of the United States" by the Proposed Rule without application of the "significant nexus" test or any other individualized inquiry.

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[1] *Alaska Oil and Gas Ass'n v. Salazar*, 916 F.Supp.2d 974 (D. Ak. 2013).

[2] *Alaska Oil and Gas Ass'n v. Pritzker*, 2014 WL 3726121 (D. Ak., July 25, 2014).

[3] *E.g.*, 16 U.S.C. §§ 1533(b)(1)(A) (listing species based on "best scientific and commercial data available"); 1533(b)(2) (designation of critical habitat based on "best scientific data available"); 1536(a)(2) (consultation shall use "best scientific and commercial data available").

[4] Definition of "Waters of the United States" under the Clean Water Act, 79 Fed. Reg. 22,188 (Apr. 21, 2014).

Unlike the many exceptions proposed for agricultural and other uses, the Proposed Rule creates no exceptions for any material portion of the wetlands in Alaska. Yet Alaskan waters and wetlands are unusual in many respects that, in many cases, make them unsuitable for this broad assertion of jurisdiction by the Federal Government. Many of Alaska's wetlands are frozen for nine months out of the year, and their hydrologic functions are different from those in other parts of the country. For example, unlike wetlands in temperate zones, Arctic wetlands, lying above of thousands of feet of frozen permafrost, are not connected to aquifers subject to water flow. Thus, while there may be saturated soils that support hybrid vegetation, there is limited or no wetland connectivity to navigable waters. Yet the Proposed Rule fails to consider any of these unique aspects of Alaskan wetlands.

Economic development in America's Arctic is already challenging, and those challenges will grow alarmingly if our Federal Government can simply deem 80 percent of the entire North Slope region to be "waters of the United States" without considering the requisite scientific information. Whether politically driven or simply poorly conceived, the Proposed Rule threatens to have enormous impacts on our ability to build our communities and develop our natural resources. It threatens our ability to use those very lands that we received in exchange for our surrender of our aboriginal claims.

The Threat to End the Bowhead Hunt

The fight of the Iñupiat Eskimo people to preserve our subsistence way of life has been a foundational and often negative experience for our people. Our struggle to maintain our traditional way of life is exemplified by the effort to preserve our seasonal bowhead whale hunt, a tradition we have carried on for thousands of years. The entire community participates and shares in the hunt, ensuring that the traditions and skills of the past will be carried on by future generations. Each whale provides thousands of pounds of meat and maktak, which is shared by all the people in our communities.

To preserve our traditional bowhead hunt we have had to fight science with science for nearly forty years. I want to emphasize that the Federal Government is now a partner in this fight to preserve our cultural hunt—but this was not always so.

In the late 19th and early 20th centuries, Yankee and British whaling operations substantially reduced the size of our regional Bering Sea stock of bowhead whales. In the early 1970s, as opposition to commercial whaling operations started to grow, some countries raised concerns about the status of the regional bowhead population and our subsistence harvest of this stock. We were not made aware of this international interest until 1977, when the International Whaling Commission ("IWC") imposed a ban on the subsistence harvest of bowhead whales by Alaska Eskimos. The ban was based upon a Federal Government report that erroneously estimated that only 600 to 2,000 bowhead whales existed in the Bering Sea stock. Had our Iñupiat hunters been consulted, the IWC would have been informed (correctly) that there were at least 4,000 bowhead whales in the population.

In response to the ban, our Iñupiat whale hunters established the Alaska Eskimo Whaling Commission ("AEWC"), which undertook the difficult task of convincing the Federal Government that our Iñupiat elders knew more about the bowhead whale population than Western scientists. The North Slope Borough, our county-level government, also established its own Department of Wildlife Management, which has now spent decades uniting Western science with Native traditional knowledge to better understand the bowhead whale. Traditional knowledge and local science have prevailed, but not before our tiny communities were forced to make enormous investments of resources (time, energy, and money) to preserve our traditional way of life.

We have had similar experiences with migratory birds, polar bears, and other marine mammals. Our communities are rife with stories of Federal law enforcement officers harassing our elders and intimidating our young people. We, as Iñupiat people living in the United States, have had to create our own organizations, hire our own scientists, expend our own limited resources, and argue our case for forty years just to preserve a way of life that we have maintained for thousands of years.

Conclusion

This letter highlights just three examples of costly challenges we have faced as a people due to the failure of Federal agencies to support decision-making with sufficient scientific data. Unfortunately, we have become accustomed to fighting these decisions to prevent any disproportionate and harmful impacts on our people. The expense, time, and burden of protecting our traditional way of life and building our communities would not fall so heavily on our shoulders if the Federal Government

fulfilled its responsibility to make decisions based upon the best scientific data available, including information and traditional knowledge gathered and maintained by our people and communities.

ASRC has been working with Congressman Don Young to determine how best to tackle some of the challenges we discuss in this letter. We hope the Subcommittee will be able to work with our Congressman on this effort as well.

We appreciate this opportunity to share our views with the Subcommittee.

Sincerely,

REX A. ROCK, SR.,
President & CEO.

EAST COAST SHELLFISH GROWERS ASSOCIATION,
TOMS RIVER, NEW JERSEY,
APRIL 25, 2015.

Hon. ROB BISHOP, *Chairman*,
Committee on Natural Resources

Hon. LOUIS GOHMERT, *Chairman*,
Subcommittee on Oversight and Investigations

1324 Longworth House Office Building,
Washington, DC 20515.

HONORABLE CONGRESSMEN:

I am writing to comment on the upcoming April 29th hearing concerning the "Consequences of Politically Driven Science." As a scientist I find the consequences of agenda-driven science offensive and pernicious. I find it even more egregious when such science is financed by public dollars and advanced by federal agencies. The specifics of the National Park Service investigations and reports pertaining to the Drakes Bay Oyster Farm in Drakes Estero on California are but one example of how biased, agenda-driven science can destroy jobs and propagate false information to achieve a pre-determined outcome.

My association represents 1,300 small shellfish farms from Maine to Florida. These proud stewards of the environment harvest over $155 million worth of local, sustainable and nutritious oysters and clams while employing thousands in rural coastal areas. These hard-working farmers have had their reputations tarnished by National Park Service allegations of West Coast impacts that were untrue and misrepresented.

There are numerous examples where the Park Service used questionable practices, poor scientific protocols, and deceptive data in an attempt to make their case that the Oyster Farm in Drakes Estero created negative environmental impacts, when in fact the opposite was true. Oyster farms provide documented ecosystem services and improve water quality while providing habitat for fish and many other organisms.

Scientists and industry experts provided hundreds of pages of comments to refute each claim of harm alleged in the Draft EIS that the NPS published in their efforts to eradicate the Drakes Bay Oyster Lease after decades of operation. These comments effectively refuted each of the claims of impact alleged in the NPS DEIS, yet (in an apparent violation of NEPA) the NPS ignored these comments when the final EIS was produced. The claims of impacts raised in these documents are damaging an industry that has received kudos for environmental stewardship from numerous environmental groups and government agencies.

New applicants for leases to conduct shellfish farms are now asked to prove a negative—to demonstrate that their proposed farming activities will not result in some of the impacts described in these unfounded and misleading federal publications. Here are just a few examples:

- The NPS misrepresented sound data from Jet Skis and jackhammers to make the case that the farm was noisy and offended park goers. Had they used a meter to measure actual farm sound levels they would have been hard pressed to find an issue.
- The NPS cherry-picked seal abundance data in an attempt to prove an impact to seal breeding in the Estero, and they withheld two years of photographic

records that would have exonerated the farm from these charges. The National Research Council and the Marine Mammal Commission have both published documents refuting the NPS allegations of harm.

- Further NPS allegations of introduced exotic species, eelgrass damage, sediment accumulation and flow alterations were also shown to be false and misleading. Comments on the DEIS refuting the NPS allegations of impacts were ignored in the final EIS.

Other examples of agenda-driven science have led to listing species as endangered or threatened. When a species is listed it often forces those who interact with it to make drastic and expensive modifications to culture practices. In some cases farmers are forced to cease or move entire operations. In many cases, permits are delayed or denied because of perceived or feared impacts. It is important that decisions with such significant implications are driven by accurate and unbiased science.

It is NOAA's stated policy that shellfish aquaculture in the U.S. should be expanded to create jobs, improve coastal water quality, provide domestic seafood and lessen our dependence on imported seafood that currently comprises 91% of consumption, adding $11.7 trillion to our trade deficit. NOAA submitted comments in response to the NPS DEIS on Drakes Estero suggesting that the impacts were insignificant and unsupported by scientific evidence. The reckless and misleading NPS publications relating to the Drakes Bay Oyster Farm will make it more difficult for growers to obtain permits and respond to permitting agency concerns.

Our Association would like to see Congress statutorily mandate that the entire body of science prepared at Point Reyes National Seashore by the NPS staff (or developed by contract) be retracted—for cause, bias and misconduct.

Thank you.

Sincerely,

ROBERT B. RHEAULT, PH.D.,
Executive Director.

PACIFIC COAST SHELLFISH GROWERS ASSOCIATION,
OLYMPIA, WASHINGTON,
APRIL 27, 2015.

Hon. LOUIE GOHMERT, *Chairman*,
House Subcommittee on Oversight and Investigations,
Committee on Natural Resources,
1324 Longworth House Office Building,
Washington, DC 20515.

Re: Hearing on Zero Accountability: The Consequences of Politically Driven Science

DEAR CHAIRMAN GOHMERT AND SUBCOMMITTEE MEMBERS:

This letter is submitted on behalf of the Pacific Coast Shellfish Growers Association ("PCSGA") regarding the Subcommittee's upcoming hearing concerning the consequences of politically driven science, particularly as it relates to science employed by the National Parks Service ("NPS") in its review of the potential environmental impacts associated with renewal of Drakes Bay Oyster Company's ("DBOC") lease of its shellfish farm in Drakes Estero, California. PCSGA appreciates the Subcommittee's review of this issue and opportunity to comment on an issue of great concern to the shellfish industry as a whole.

PCSGA, founded in 1930, represents over 120 private and tribal shellfish growers in California, Oregon, Washington, Alaska and Hawaii. PCSGA's members grow a wide variety of healthful, sustainable shellfish including oysters, clams, mussels and geoduck. The majority of our members represent multiple generations of shellfish farming. Shellfish have played an important role in several Pacific Coast coastal communities for nearly a century and support family wage jobs, are a critical component to healthy marine ecosystems and provide a healthy, high quality, sustainably produced protein source. PCSGA works on behalf of its members on a broad spectrum of issues, including environmental protection, shellfish safety, regulations, technology and marketing.

PCSGA has expressed serious concerns over the Drakes Bay Oyster Company Special Use Permit Draft and Final Environmental Impacts Statements and

associated studies referenced therein (collectively, the "EIS"), prepared by Point Reyes National Seashore ("PRNS") as the lead agency for the project pursuant to the National Environmental Policy Act ("NEPA"). PCSGA does not believe that the EIS provided an unbiased analysis that would have helped to inform the public and decisionmakers regarding potential environmental impacts. PCSGA submitted a comment letter on December 9, 2011, including comments from its consultant Confluence Environmental Company, which criticized a number of statements made in the Draft EIS, including (1) a flawed description and characterization of the alternatives available; (2) a consistent exaggeration of negative impacts and understatement or ignorance of potential positive impacts; and (3) a failure to recognize or discuss a significant amount of available published science on the interactions between shellfish and the surrounding environment. A copy of these comments is included as Exhibit A.

PCSGA's concerns were reiterated by the National Academy of Sciences ("NAS"), which twice submitted significant criticisms of NPS' analysis of potential impacts. The majority of these concerns were not addressed in the Final EIS prepared by PRNS.

Given the failure of NPS to adequately respond to concerns raised by NAS, PCSGA, and others in the Final EIS, PCSGA submitted a Complaint about Information Quality on May 30, 2013 (the "Complaint"). The Complaint noted that the flawed environmental analysis in the EIS regarding alleged adverse environmental impacts associated with shellfish aquaculture potentially created a significant precedent that could be used by other state or federal agencies or project opponents seeking to deny shellfish farm permits. A copy of the Complaint is attached as Exhibit B.

PCSGA received a response to the Complaint from the NPS on August 1, 2013. A copy of the NPS response is attached as Exhibit C. The letter notes that the Compliant is moot, given that the EIS did not "provide the central basis for the [DOI's] decision" not to renew the DBOC lease and that DOI's decision was not based "on the data that was asserted to be flawed."[1] NPS asserted that the "information challenged in your compliant has not been used and will not be used in a decision-making process . . ." and that "no further dissemination of the information is expected . . ."[2] Despite the acknowledgement that DOI did not rely on the EIS to make its determination, and tacit agreement that the EIS analysis was fundamentally flawed, NPS has not withdrawn the EIS from public consideration and maintains it on its website.[3]

PCSGA appreciates the opportunity to comment on this important topic concerning the use, or misuse, of scientific analysis when considering impacts associated with shellfish farms. The evaluation of potential environmental impacts associated with shellfish farms is a crucial component for both project applicants and regulatory agencies to ensure that shellfish operations can continue to sustainably coexist with their surrounding environment, as they have successfully done for decades on the West Coast. An objective, complete, and unbiased analysis of a farm's effects on the surrounding environment is critical to inform the public and regulatory decisionmakers. The DBOC EIS is inconsistent with a reasonable and objective evaluation of potential impacts.

Sincerely,

MARGARET PILARO BARRETTE,
Executive Director.

Exhibits A–C were submitted as attachments; due to size constraints, these documents are being retained in the Committee's official files.

[1] Letter from Christine S. Lehnertz to Robert M. Smith and Margaret Pilaro Barrette, August 1, 2013, at 2.
[2] *Id.*
[3] http://www.nps.gov/pore/learn/management/planning_dboc_sup.htm.

JOHN R. HULLS,
POINT REYES, CALIFORNIA,
APRIL 27, 2015.

Hon. LOUIE GOHMERT, *Chairman*,
House Subcommittee on Oversight and Investigations,
1324 Longworth House Office Building,
Washington, DC 20515.

DEAR CHAIRMAN GOHMERT AND MEMBERS OF THE SUBCOMMITTEE ON OVERSIGHT AND INVESTIGATIONS:

For more than 30 years, Point Reyes has been my home and during those years, I had a front-row seat to witness the Department of Interior and National Park Service's blatant abuse of science, law, policy and procedure. This serial scientific misconduct, taking place over several years, severely damaged the community, both socially and economically, and resulted in the National Park Service's closure of the second largest employer in the area, Drakes Bay Oyster Company (DBOC), located in Drake's Estero.

As an independent consultant, I served as project scientific coordinator on coastal ecology research and management projects, including a multi-year study for California's State Water Resources Control Board examining the microbial ecology of the coast from San Francisco to Bodega Bay. Based on my familiarity with the science and ecology, I have also written extensively on oyster farm issues for local papers.

My coverage of the story dates back to 2007, the very beginning of the controversy, when Point Reyes Seashore Superintendent, Don Neubacher, attempted to shut down the oyster farm, based on alleged criminal harm being caused by Kevin Lunny, operator of DBOC.

A subsequent Inspector General's (IG) investigation determined that the so-called data on which the NPS Superintendent made his charges was completely nonexistent at the time he made the charges. DOI science and ethics have not gotten any better since. The long history of the oyster farm fight at Drakes Estero has been documented by others, so I will focus on a major issue where NPS behavior can be traced from the initial misconduct and distortion of issues.

In the process, certain NPS officials and consultants were willing to distort or misrepresent the scientific or financial record to support a predetermined NPS agenda. In the process, data was manipulated, reports were distorted and false information was publicly disseminated.

In the end, accountability collapsed when an inadequate DOI IG investigations failed to disclose that NPS' falsely cited data directly implicated NPS scientists in the manufacturing of misleading science. Accountability at NPS? There is none.

Over the years, I have authored dozens of columns and articles. Here, I submit four articles for the Committee's consideration and review in this hearing:

- "*Drake's Estero Inspector General Report, Investigating the Investigators*," March 2, 2013, Russian River Times.
- "*The Gang That Couldn't Map Straight*," November 16, 2011, Russian River Times.
- "*Statistics, Damnable Statistics and Lies*," November 20, 2008, Point Reyes Light.
- "*Environmental Justice in West Marin?*" December 19, 2012, Russian River Times.

The record is clear and overwhelming: NPS is willing to manufacture science and distort policy to achieve a pre-determined position. In the Drakes Estero Inspector General's Report, *Investigating the Investigators*, NPS statements are simply taken at face value, despite glaring inconsistencies and outright misstatements. In *The Gang that Couldn't Map Straight*, NPS simply redraw maps to create a new hypothesis of harm. In *Statistics, Damnable Statistics and Lies* they completely distort a major segment of the West Marin economy in a study required by NPS policy, simply eliminating the oyster farm (West Marin's second largest employer) and they then ignore a Data Quality Act filing by Point Reyes Light seeking to correct the NPS report. *Environmental Justice in West Marin?* shows NPS and Interior riding roughshod over executive orders and National Environmental Protection Act requirements.

Highlights of each article are found below. Web links to these and other articles, with expandable images, may be found at: https://russianrivertimes.wordpress.com/category/oyster-farm/. Finally, I look at a few very specific issues raised by the various articles.

The origin of the word science comes down from the Latin *scientia*, or knowledge, so it's important not to be blinded by NPS 'science' but to look at what we know.

In the first *Inspecting the Inspector* article, we know that someone at NPS elected to import data of the sound of a souped-up 2 stroke jet ski as opposed to a small 4 stroke modern outboard on the oyster boats, then failed to measure the actual source of the sound as required by NPS standards? Who made this decision, which violated mandatory NPS policy, and how did NPS supposedly expert consultants, who had actually visited the oyster farm fail to note the obvious discrepancies? Who is responsible?

In the *Gang that Couldn't Map Straight*, who at NPS directed the staff time and supposed research for drawing of a map in direct conflict with earlier maps prepared by NPS but the federal and state agencies directly responsible for the management of estero and marine mammals? Likewise, was it NPS or the NPS consultant who caused the oyster farm to be eliminated from the socio-economic study, and who made the decision not to follow the NEPA guidelines and the NPS policy on outreach regarding the impact on the oyster worker community?

All of these and the many other questions raised do not require hard-core science or complicated statistics or convoluted interpretations of policy, but rather, a common-sense approach to facts and behavior that in many ways identical not only to science, but good journalism and indeed to well-run committee hearings, where at the end of the day, the old questions of "Who? What? When? Where? How?" are answered in such a way that we can all move forward. Our West Marin community needs the committee's help not only to restore honesty and integrity and achieve accountability, but to protect us from the ongoing arrogance of an NPS that feels it is above the law, science and policy.

Respectfully,

JOHN R. HULLS

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Drake's Estero IG Report: Investigating the Investigators
Posted on March 2, 2013 by russianrivertimes

Highlighted Text

". . . the [Russian River] Times is left with two options to explain the IG's failure to uncover any of the damning evidence found by the Times. Either (1) the IG investigation is incompetent, and they merely took the NPS responses on their face with no proper investigation, or (2) the final IG report simply omits information that would be damaging to the NPS and the Department of the Interior, and that Interim IG Mary Kendall, as the committee implies, has essentially abandoned her watchdog responsibility."

". . . the IG report will stand as just another in a long line of NPS and DOI investigations of themselves, costing the taxpayers literally millions of dollars, that are nothing more than whitewash and cover-up."

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The Gang that Couldn't Map Straight
Posted on November 16, 2011 by russianrivertimes

Highlighted Text

There are real consequences to NPS presenting biased and unsubstantiated information to the public. An Oct 2009 Russian River Times article on coastal sustainability quoted a 2008 NOAA presentation by Dr. Stonich, who characterized the behavior of different environmental groups, saying some groups work with regulatory agencies to preserve both the environment and sustainable mariculture, while

others (citing an anti-mariculture group in Puget Sound) support ". . . strategies of mobilization and confrontation rather than sitting down with diverse stakeholders to reach consensus . . . support bringing suit against shellfish firms" . . . and "view sitting down at the table with adversaries as co-option." NPS' politically motivated policy positions on Drake's Estero, dressed up as science, feed into the negative behavior, divide communities and threaten the sustainability of our coastal towns.

So, who pays?

We do. Investigations by the Department of Interior Inspector General, the National Academy of Sciences, the Frost report, and a forthcoming report from the Marine Mammal Commission represent an expense to the taxpayers of millions of dollars, yet the NPS pattern continues: after each report, a new set of claims of harm, and the disclosure of previously undisclosed information. From all this time and expense, the only thing that can be said for certain is that the NPS cannot be trusted to reach a fair and impartial decision regarding the fate of Drake's Estero.

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POINT REYES LIGHT
OPINION: ARCHIVES
Statistics, Damnable Statistics and Lies
John Hulls—November 20, 2008
Web address: http://www.ptreyeslight.com/cgi/opinion_archives.pl?record=59

Highlighted Text

Even more telling: the study never even mentions mariculture. Though Drake's Bay Oyster Company is the second largest single employer next to the Park Service itself; represents a major factor in California mariculture; and is the State's last oyster cannery, it doesn't even warrant mention. Yet cannery employment represents a major secondary source of income for many ranch worker' families in the area and is a valuable partner in West Marin's sustainable food production.

The Economic Impact Study, as it is now titled, is a prelude to the upcoming presentation of the draft of the long-overdue General Management Plan. Right now, it looks as though the Park Service is preparing by cooking the books via statistics that say agriculture in the park is not 'important.' White deer with oyster stew on the menu, again? To get ready to understand the draft Management plan when it is released, West Marinites should read the park's socio-economic impact study. Also try Darrell Huff's delightful little book, 'How to Lie with Statistics,' in print since 1954 and just as useful today.

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Environmental Justice in West Marin?
Posted on December 19, 2012 by russianrivertimes

Highlighted Text

The November 29, 2012 Secretarial decision to reject a renewal permit to the oyster farm is the last of a long series of NPS actions that have converted Drakes Estero into a regulatory free-fire zone for NPS, where neither law, regulation nor policy seem to apply. Under Jon Jarvis, as Pacific West Regional Director and now, Director, NPS, and Park Superintendent Don Neubacher, (now promoted to Yosemite) NPS dealing with the communities of West Marin has been anything but transparent, open and honest.

Despite repeated complaints from the community, overly aggressive law enforcement by Park Rangers led to an initial 2003 incident where an off-duty ranger hosed down passing motorcyclists on Highway 1, leading to an altercation resulting in NPS losing a lawsuit brought by the motorcyclists. This was then followed by a 2004 incident where the same ranger and a fellow officer, off Seashore property, handcuffed two teenagers and pepper sprayed them in the face and eyes. This eventually resulted in a $50,000 settlement, but most damaging in the eyes of the small West Marin communities was the fact that then-superintendent Neubacher lied at a public meeting, claiming that he was asking the Marin County DA to investigate

the incident, when in fact he was asking the DA to bring charges against the teenagers. The community was justifiably incensed.

The Park Service actions are *extensively documented* by Pulitzer Prize winning editor Dave Mitchell in the Point Reyes Light and on his blog, *Sparsely Sage and Timely*. These two incidents were extensively reported in the local press and seeded a great deal of community distrust in the Park Service.

Secretary Salazar can't claim that he did not know about such problems in the agency. Inspector General Devaney was asked by Congress to address the "institutional culture of managerial irresponsibility and lack of accountability" in the Interior Department. In his 2006 Congressional testimony, he described a major problem within DOI, namely, "intricate deviations from statutory, regulatory and policy requirements to reach a predetermined end." This mirrors exactly the rogue actions of NPS in the Drakes Estero case today, riding roughshod over the rights of the oyster farmer, the oyster workers and the community at large. It's time to send a strong message to Secretary Salazar and NPS Director Jarvis: such behavior will not be tolerated, and remove them from management of the estero and the pastoral zone, and replace it with a separate park management body. If that's unacceptable, then it's time for the White House and the President to provide leadership at Interior and the NPS who will respect the law and the citizens of West Marin.

Naomi Oreskes, Conspiracy Queen

By: Norman Rogers

June 7, 2011

http://www.americanthinker.com/articles/2011/06/naomi_oreskes_conspiracy_queen.html

Naomi Oreskes is the environmentalist Noam Chomsky. She thinks that anyone who questions environmentalist doctrine is evil. Her crusade is to expose the presumed ulterior motives of the critics. According to Oreskes, if you question the dubious studies concerning secondhand tobacco smoke, you must be in the pay of tobacco companies. If you question global warming, you must be working for a fossil fuel company. If you question the DDT ban, you must part of a right wing conspiracy to weaken faith in government regulators.

Oreskes is the author of one of the silliest articles ever to appear in the journal *Science*. She claimed that she analyzed 928 peer-reviewed papers on global warming and 100% agreed with the Intergovernmental Panel on Climate Change (IPCC) concerning global warming. If you go to the website of the Nongovernmental International Panel on Climate Change (NIPCC) you can find hundreds of peer reviewed papers that disagree with the IPCC in one way or another.

Her latest book, with co-author Erik Conway, is *Merchants of Doubt*. In this tedious book she treats us to the details of numerous disputes between those who subscribe to normative environmental theology and those who don't. Normative environmental theology is the sort of theology that is preached by the Sierra Club or the Union of Concerned Scientists. Oreskes is a professor and an important administrator at the University of California. Like Chomsky, she cloaks her endless conspiracy theories in the machinery of scholarship. Her 343 page book has 64 pages of notes. A pig with lipstick is still a pig.

Neither Oreskes nor her co-author have strong scientific educations and it shows. From her book it is obvious that she enjoyed access to many scientists, but somehow none of her scientist friends found the time to proof read *Merchants of Doubt*. This is not hard to understand. *Merchants of Doubt* is a book of unsurpassed monotony. Conspiracy theories get boring very quickly, especially when the conspiracies are all variations of a few crude plots. A number of informed critiques of *Merchants of Doubt* can be seen in the 1-star Amazon reviews.

In the introduction to *Merchants of Doubt* the fact that adding CO2 to the atmosphere causes the stratosphere to cool and the troposphere to warm is explained as follows:

> But if the warming is caused by greenhouse gases emitted at the surface and largely trapped in the lower atmosphere, then we expect the troposphere to warm, but the stratosphere to cool.

It is a bit difficult to know what this sentence means but it is clear that Oreskes hasn't the faintest idea concerning radiation and the role of greenhouse gases. Greenhouse gases (mostly CO2) are not trapped in the lower atmosphere but are well mixed up to and including the stratosphere. CO2 causes the stratosphere to cool because CO2 is a good radiator of infrared radiation and thus improves the capability to exhaust stratospheric heat to space as radiation. Cooling of the stratosphere is not evidence of global warming. It is evidence of increased CO2 in the atmosphere. The distinction is important.

The climategate emails are hundreds of emails among important scientists that show them to be perverting scientific protocols and practicing propaganda to promote global warming alarmism. Ben Santer is a prominent player in the climategate emails. He is most famous for saying this about the global warming skeptic scientist Patrick Michaels:

> Next time I see Pat Michaels at a scientific meeting, I'll be tempted to beat the crap out of him. Very tempted.

Oreskes, apparently before the release of the climategate emails, said this about Ben Santer:

> He's thoroughly moderate . . . soft-spoken, almost self-effacing . . . you might think he was an accountant . . . [i]

Ben Santer, who may be Oreskes' favorite scientist, has been struggling for years with the skeptics concerning the relative heating of the upper troposphere. He has resorted to publishing papers with as many of 24 co-authors, apparently in an attempt to make his arguments more credible by collecting a lot of scientists willing to support him.

In Oreskes' milieu, it is apparently a bad thing to be anti-communist. She attacks and psychoanalyzes the physicist Frederick Seitz for his "strident" and "unalloyed" anti-communism. She puts thoughts in Seitz's head. He thinks his colleagues are "ingrates" and he "has an uneasy time with the masses." He was "hawkish" and "superior." Another physicist, William Nierenberg, is also psychoanalyzed by Oreskes. According to her Nierenberg "hated environmentalists" and was "overconfident." Nierenberg's son Nicholas Nierenberg has been so upset by Oreskes' distortions of his father's work that he started a website to refute Oreskes. The sin of these eminent physicists for Oreskes is that they were critics of environmental extremism and strong supporters of the United States in the cold war. Seitz and Nierenberg are both dead and thus cannot defend themselves.

Fred Singer is a scientist who has been in the forefront of defending science against junk science. This is not an easy road to take. Junk science is a basic tool for groups that are pushing ideological positions. Subtle distinctions are not welcomed by the ideological groups. If you acknowledge that smoking cigarettes causes cancer, but then you dare to say that the hazard presented by secondhand smoke is exaggerated, you are tagged as a supporter of cancer. If you say that the case for man-caused global warming is full of holes you are tagged as an agent of fossil fuel companies. Very few scientists are brave enough to take the heat and personal attacks the come from standing up to junk science. Fred Singer has been doing it for a long time. In his late 80s, he is still writing scientific papers and traveling the world giving lectures. Oreskes is a promoter of junk science and for that reason cannot abide Fred Singer. Singer is her favorite punching bag. His name appears dozens of times in *Merchants of Doubt*.

Should we be surprised that Naomi Oreskes is a professor at the University of California and has been promoted to an administrative position? After all Noam Chomsky was a professor at MIT. But Chomsky was a professor because of his work in linguistics, not because he believes in crazy conspiracies. It seems that Naomi Oreskes is successful not in spite of her love of conspiracy, but exactly because she promotes conspiracies. This makes one wonder what has happened to the intellectual climate at the University of California.

The science establishment has fallen so low that it thinks it is a useful tactic to deal with its critics by accusing them of conspiracies financed by tobacco companies and oil companies. For the last 50 years, starting with DDT, we have been subjected to junk science scares. The scares were invariably false or exaggerated. Most of these scares were not more than brief media sensations, but some scares have been disruptive, diverting attention from real problems. The king of all scares is global warming. Taken seriously, it requires revamping the entire world economy and

making us all poorer. The predictions of global warming disaster are deeply flawed junk science dressed up with an impressive "scientific" structure of panels, committees and organizations. The global warming scare is rapidly collapsing. Scientists outside of the global warming bubble are pointing out the flaws in the science and a coterie of well-informed bloggers is getting out the message by bypassing the establishment media where critics' voices are generally blocked. Nature is helping because the earth and the oceans are failing to warm according to script.

That a conspiracist like Naomi Oreskes would be welcomed by the global warming scientific establishment and invited to speak at the December 2010 American Geophysical Union meeting is a symptom of increasing desperation. The global warming advocates have dug themselves into a deep hole and they can't seem to stop digging. Ironically Oreskes spoke at a meeting where Exxon Mobil was the biggest financial contributor.[ii] Apparently it's not a conspiracy if Exxon Mobil gives its money to the right people.

[i] Merchants of Doubt page 1.
[ii] Exxon Mobil was a titanium sponsor, the highest category.

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Science and Smear Merchants
By: S. Fred Singer
June 21, 2011
http://www.americanthinker.com/2011/06/science_and_smear_merchants.html

Professor Naomi Oreskes, of the University of California in San Diego, claims to be a science historian. One can readily demonstrate that she is neither a credible scientist nor a credible historian; the best evidence is right there in her recent book, "*Merchants of Doubt: How a Handful of Scientists Obscured the Truth on Issues from Tobacco Smoke to Global Warming*," coauthored with Eric Conway. Her science is faulty; her historical procedures are thoroughly unprofessional. She is, however, an accomplished polemicist, who has found time for world lecture tours, promoting her book and her ideological views, while being paid by the citizens of California. Her book tries to smear four senior physicists—of whom I am the only surviving one. I view it as my obligation to defend the reputations of my late colleagues and good friends against her libelous charges.

Oreskes is well known from her 2004 article in *Science* that claimed a complete scientific consensus about manmade global warming; it launched her career as a polemicist. Her claim was based on examining the abstracts of some 900 published papers. Unfortunately, she missed more than 11,000 papers through an incorrect Internet search. She published a discreet "Correction"; yet she has never retracted her ideologically based claim about 'consensus.' Al Gore still quotes her result, which has been contradicted by several, more competent studies [by Peiser, Schulte, Bray and von Storch; Lemonick in *SciAm*, etc].

Turning first to her science, her book discusses acidification, as measured by the pH coefficient. She states that a pH of 6.0 denotes neutrality [*page 67, MoD*]. Let's be charitable and chalk this off to sloppy proofreading.

Elsewhere in the book [*page 29*], she claims that beryllium is a "heavy metal" and tries to back this up with references. I wonder if she knows that the atomic weight of beryllium is only 9, compared to, say, uranium, which is mostly 238. A comparison of these two numbers should tell anyone which one is the heavy metal.

Her understanding of the Greenhouse Effect is plain comical; she posits that CO2 is "trapped" in the troposphere—and that's why the stratosphere is cooling. Equally wrong is her understanding of what climate models are capable of; she actually believes that they can predict forest fires in Russia, floods in Pakistan and China—nothing but calamities everywhere—and tells climate scientists in a recent lecture: *If the predictions of climate models have come true, then why don't people believe them?* [see http://tinyurl.com/3wrvon2] Perhaps because people are not gullible.

But the most amazing science blunder in her book is her hypothesis about how cigarette smoking causes cancer [*page 28*]. She blames it on oxygen-15, a radioactive isotope of the common oxygen-16. I wonder if she knows that the half-life of O-15 is only 122 seconds. Of course, she does not spell out how O-15 gets into cigarette smoke, whether it is in the paper or in the tobacco itself. If the latter, does she believe that the O-15 is created by the burning of tobacco? If so, this would be a fantastic discovery, worthy of an alchemist. Perhaps someone should make her aware of the difference between radio-active and 'reactive' oxygen; the two words do sound similar.

I am sure one would find more examples of scientific ignorance in a careful reading of the rest of the book. But why bother?

Having demonstrated her scientific 'expertise,' let's turn to her historical expertise. Any careful historian would use primary sources and would at least try to interview the scientists she proceeds to smear. There is no trace of that in Oreskes' book. She has never taken the trouble to interview Dr. Robert Jastrow, founder of the NASA-Goddard Institute for Space Studies, and later Director of the Mt. Wilson Astronomical Observatory and founding president of the renowned George C Marshall Institute in Washington, DC. I can find no evidence that she ever interviewed Dr. William Nierenberg, director of the Scripps Institution of Oceanography, who actually lived in San Diego and was readily accessible. And I doubt if she ever even met Dr. Frederick Seitz, the main target of her venom.

Seitz was the most distinguished of the group of physicists that are attacked in the book. He had served as President of the U.S. National Academy of Sciences and of the American Physical Society, and later as President of Rockefeller University. He had been awarded numerous honorary degrees from universities here and abroad, as well as the prestigious National Medal of Science from the White House.

Instead of seeking firsthand information—in the tradition of historical research—Oreskes relies on secondary or tertiary sources, quoting people who agree with her ideology. A good example of this is her discussion of Acid Rain and of the White House panel (under Reagan, in 1982) chaired by Bill Nierenberg, on which I also served. Here she relies on what she was told by Dr. Gene Likens, whose research funding depends on portraying acid rain as a very serious environmental problem. It most definitely is not—and indeed, it disappeared from view as soon as Congress passed legislation designed to reduce the effect.

An amazing discovery: I found that Oreskes gives me credit (or blames me) for inventing 'cap-and-trade,' the trading of emission rights under a fixed cap of total emissions [*see pp. 91–93*]. I had never claimed such a priority because I honestly don't know if this idea had been published anywhere. It seemed like the natural thing to suggest—in order to reduce total cost, once an emission cap had been set. My example involved smelters that emit SO2 copiously *versus* electric utilities that burn coal containing some sulfur. I even constructed what amounts to a 'supply curve' in which the bulk of the emission control is borne initially by the lowest-cost units.

Of course, Likens and some others on the panel, antagonistic to coal-burning electric utilities, objected to having my discussion included in the panel report. Nierenberg solved the problem neatly by putting my contribution into a signed Appendix, thereby satisfying some panel members who did not want be responsible for a proposal that might let some electric utilities off the hook.

We have established so far that Oreskes is neither a scientist of any sort nor a careful professional historian. She is, however, a "pop-psychologist." It seems she has figured out what motivates the four senior physicists she libels in her book; it is "anti-communism." Really! This is not only stated explicitly but she also identifies them throughout as "cold warriors."

Well, now we know at least where Oreskes stands in the political spectrum.

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Atmospheric physicist S. Fred Singer pioneered upper-atmosphere ozone measurements with rockets and later devised the satellite instrument used to monitor ozone. He is Professor Emeritus of Environmental Sciences at the University of Virginia and founding director of the U.S. Weather Satellite Service (now NESDIS-NOAA). He is a Fellow of the Heartland Institute and the Independent Institute.

A RESPONSE TO "THE CLIMATE CHANGE DEBATES"

http://www.sciencemag.org/cgi/reprint/328/5983/1230-a.pdf

S. Fred Singer

"In questions of science, the authority of a thousand is not worth the humble reasoning of a single individual."

—Galileo Galilei

Philip Kitcher, a philosophy professor at Columbia University, has written a book review, entitled "The Climate Change Debates" (*Science*, vol 328, 4 June, 2010, pp. 1230–34). His recipe for an "open discussion and debate" about climate change seems to be a one-sided coverage by an elitist, self-chosen group. "Genuine democratic participation" is out, in favor of "reliance on expert opinion." And who might these 'experts' be? No surprise there; Kitcher knows—and shapes his review accordingly. Making his point, Kitcher then juxtaposes "aging" scientists to "serious" scientists.

It's all downhill from there. To emphasize his recommendation to deny a platform to "deniers" (his term), consider his choice of books for review. All eight books are basically polemics for anthropogenic global warming (AGW), with precious little science in them. Assuming a rough balance of such books on both sides of the AGW debate, the probability of such a choice by pure chance is about 0.39 percent. So much for balance.

To make matters even worse, he plugs the very worst of the eight books selected—*Merchants of Doubt*, written by science historians Naomi Oreskes and Erik Conway.[1] It attempts to smear mainly four scientists, all physicists with long records of publications, public service, and honors. In defense of three of these (recently deceased), who were founders of the George C. Marshall Institute, the GMI has published a reply to this attack on the integrity of the Institute and its founders. The reply is available at http://www.marshall.org/pdf/materials/894.pdf and is worth quoting from:

> *"Replete with half-truths and mischaracterizations, Naomi Oreskes and Erik Conway's book besmirches the reputations of three great American scientists to silence dissent within the ranks of scientists and stifle debate among policymakers about how to respond to global warming. Their message is both anti-science and anti-democratic. Whether the goal of reducing greenhouse gas emissions is desirable or not is irrelevant, the merits of their scholarship and its implications are clear. Predictably, they create a tobacco strawman and knock it down to set the tone of a grand conspiracy to harm the public. Specifically, the work overstates the linkage between Dr. Seitz, a past president of the National Academy of Science—the nation's most senior scientific establishment, and a past president of a leading biomedical institution, the Rockefeller University in New York City, and R.J. Reynolds. Yes, Seitz helped establish an advisory committee to direct a research and development program upon his retirement as president of Rockefeller. Why? Because Reynolds and Rockefeller University (as well as the Rockefeller family) had a long-standing relationship and it was an opportunity to provide input into a multi-million dollar program in basic medical and human health research. Seitz assembled a team of eminent health scientists to provide insight and advice. What did the research contribute? A Nobel Prize, for one, while others included studies of the effect of renin on blood pressure, factors affecting cell development, and contributors to arterial sclerosis.*
>
> *The very documents Oreskes and Conway cite to build the tobacco strawman reveal that Seitz and his colleagues did nothing more than direct an advanced research program. The underlying citations state the Seitz-led research program was independent of Reynolds and conducted by scientists and scientific institutions of the highest regard. Other than asserting guilt by association, Oreskes and Conway present no evidence that Seitz and his many colleagues were participants in some grand conspiracy. That conspiracy exists only in their minds.*

[1] "Merchants of Doubt: How a Handful of Scientists Obscured the Truth on Issues from Tobacco Smoke to Global Warming" by Naomi Oreskes and Erik M. Conway, Bloomsbury Press, New York. 2010. 357 pp, According to S. Fred Singer" a shoddy and truly unprofessional book by two academics who claim to be historians of science. True historians would present an unbiased account of the available facts and carry out sufficient due diligence to obtain such facts. In this case, we have little more than a polemic that expresses the considerable prejudices of the authors, particularly those of professor Naomi Oreskes."

Next, Oreskes and Conway claim Seitz and the George C. Marshall Institute wrongly defended the creation of a ballistic missile defense. Yes, Seitz and his colleagues, Dr. Robert Jastrow and Dr. William Nierenberg, believed it was morally repugnant to allow citizens to stand defenseless before the prospect of nuclear annihilation as an intentional U.S. government policy. Construction of a defense was technically possible and would enhance the security of the United States, they believed. Others didn't and the debates across the foreign policy and scientific establishments were as charged and vociferous as any seen before or since. The facts are: the Soviet Union fell; President Reagan's advocacy of missile defense was part of the equation contributing to their fall; the emerging missile defense offers the prospect of security against rogue states and terrorists for whom traditional deterrence likely fails; and a world where nuclear weapons were rendered obsolete (Dr. Jastrow's 1983 book outlines steps toward this end) remains a goal of presidents of both political parties.

Next comes the charge that Seitz et al engaged in personal attacks on prominent climate scientists in hopes of fostering doubt about whether humans were causing global warming. If Oreskes or Conway had bothered to speak with anyone who actually knew or worked with these men, they would have quickly learned that they were men of principle, motivated by concerns about the erosion of scientific literacy and dangers of manipulation of science for political ends arising from that erosion. What caused them to look at climate change science? Curiosity about the scientific basis of claims of apocalyptic global warming and worry about the implications that political leaders would draw from potentially inflated claims. Each had decorated scientific careers and each had been leaders of world-class scientific institutions and participants on government-sponsored scientific panels. Jastrow was a professor of Earth Sciences at Dartmouth and founder of the Goddard Institute for Space Studies; and Nierenberg was the head of the Scripps Institution of Oceanography. Each had considerable experience working at the nexus of science and public policy and understood the role that scientific information played in shaping policy and political outcomes.

Oreskes and Conway claim an opposition to government regulation motivated the Institute's founders' positions on climate change. Speculating about what Drs. Jastrow, Seitz, and Nierenberg felt about global warming is unnecessary as they clearly described their concerns, "If the changes in our atmosphere are likely to cause consequences, we must understand the problems and promote sensible policies to remedy them. What would be unwise is to lapse into apocalyptic thinking or ostrich-like denial. We believe ourselves far more sophisticated, more enlightened, than preceding generations. Until we can calmly and objectively approach our environmental challenges without promoting public hysteria and exciting short-sighted, self-interested reaction, we cannot claim that we are." (Scientific Perspectives on the Greenhouse Problem, Jameson Books, 1990: 92–93).

In fact, their work is remarkably prescient. Writing 20 years ago, Seitz, Jastrow and Nierenberg identified the critical variables affecting estimates of temperature and man's impact of climate that remain the central focus of the scientific debate today. They were: adjustments for uncertainty in the temperature observations (the quality of the surface temperature record has been shown to be in question); the effect of the ocean thermal lag (the role of the oceans and the movement of heat and carbon dioxide in the oceans remains an area of active study); adjustments for natural variability (our understanding of the natural patterns of Earth's climate is still under development); and procedures for estimating 21st century warming (a process based entirely on computer models and forecasts which have known limitations).

For its part, the Marshall Institute is not a "merchant of doubt." Our long-held position is simple—take action on climate change commensurate with the state of knowledge, and have that action be flexible so it can adjust as our understanding of man's impact on the climate changes. Do we oppose cap-and-trade or Kyoto Protocol-like policies? Yes. They are expensive and will yield little environmental return. Do we propose actions to take? Yes. Did Oreskes and Conway bother to inquire about them? No. Oreskes and Conway's work is the latest in a long line of one-sided, fearmongering pseudo-exposes whose purpose is to incite and intimidate. Readers are left with a clear message—Doubt and dissent are dangerous and scientists that question the conventional view of climate change are corrupt charlatans in the pocket of industry. Doubt and dissent are cornerstones of the advancement of knowledge and the scientific process."

It is quite clear that Kitcher doesn't have a clue about climate science or its history. There are a few facts he should learn first about scientists he lists:

- Roger Revelle was indeed a "prominent climate scientist" but he was also a skeptic, as evident from his many publications. Full disclosure: He co-authored a skeptical article with me, which caused a lot of grief for Al Gore and led to a libel suit, in which I prevailed. For detail, see "*Politicizing Science: The Alchemy of Policymaking*" (Michael Gough, ed.) Hoover Institution Press, Stanford, 2003.
- Ben Santer is "prominent" for quite a different reason. He altered the text and doctored a graph in the 1996 IPCC report, to promote the impression that "the balance of evidence" favored AGW. When these changes were discovered, he could not deny them but instead assumed the role of victim from unjust persecution. For detail, see "*Climate Policy from Rio to Kyoto: A political issue for 2000 and beyond*" by S. Fred Singer. Hoover Essay in Public Policy No. 102. 2000.
- Kitcher evidently admires Naomi Oreskes. But does he know that in her zeal she claimed (and perhaps still does) that there are no publications that contradict AGW? In her sloppy research, published in 2004 *Science*, she had overlooked more than 90% of listed publications, and later published a quiet correction to her paper that had enshrined a phony "scientific consensus" which never existed.
- Kitcher also admires Jim Hansen—he of failed catastrophic climate predictions. Starting with his temperature forecasts of 1988, he now holds the world record for predicting a 20-foot rise in sea level by 2100. Al Gore loves that number, which is about 20 times the value given by the IPCC 'consensus.' Question: Does this make Hansen a 'contrarian'—and perhaps even a 'denier'?
- And then we come to Steven Schneider—who has admitted quite candidly that sometimes one has to doctor the science (shades of Ben Santer) and invent disasters—if it will help to persuade the public. All for the greater good, of course.

Unfortunately, Kitcher lacks any insight into science. So there is little point in trying to tell him that current research shows the human contribution to climate change to be minor and well below IPCC model calculations—while the evidence for natural influences is becoming ever stronger. [For detail, see the NIPCC summary report "*Nature—Not Human Activity—Rules the Climate*" http://www.sepp.org/publications/NIPCC_final.pdf]

Perhaps he does not realize that respected economists and historians consider a warmer climate to be beneficial overall. Certainly, all agriculturists know that higher levels of carbon dioxide promote the growth of crops and forests.

And the IPCC agrees (and has said so for 20 years) that even severe emission controls will have negligible effects on future levels of atmospheric greenhouse gases.

Elsewhere, Kitcher doesn't seem to distinguish between the health effects of smoking and secondhand smoke (SHS). Yes, smoking leads to lung cancer; but on SHS he should read Congressional Research Service report CRS–95–1115 and assorted academic studies to learn how EPA fudged statistical analysis to come up, in 1993, with their scary conclusion of 3000 annual deaths from lung cancer. [To discredit my work on climate science, and because I agree that EPA misused statistics, I have been falsely accused to be "in the pay of the tobacco lobby." Not only untrue, but I have never smoked, find SHS irritating, and serve on the advisory board of an anti-smoking organization.]

He also mixes up (purposely?) the revelations of the Climategate e-mails with various errors in the IPCC report. Yes, Prof. Kitcher, the conspiracy to "hide the decline [of global temperature]" by using "[Michael] Mann's trick" is a far more serious matter than getting a wrong date for the melting of Himalayan glaciers. And so are the other conspiracies that the leaked e-mails have uncovered: Keeping dissenting scientists from publishing in refereed journals; intimidating editors; perverting the peer-review process, etc. Why this effort to conflate obvious and inconsequential IPCC errors with conspiracies aiming to affect major public policies? So, Kitcher should disqualify himself for his lack of science, his extreme bias (as shown by his choice of books and his comments), and his inflammatory language. It reflects poorly on the editors of *Science* magazine that they would permit this kind of article to be published and then refer to it as a "debate."

But perhaps one should take the long-range view. The AGW alarmists are losing the scientific debate—and they are becoming desperate. It's not just that the current domestic economic problems make some future climate change seem unimportant;

it's the changes in climate science itself: the rapidly disappearing evidence for any significant AGW. These people are destructive to the normal process of scientific debate, replacing argument by reason and fact with the politics of personal attack and libel. In so doing, they are eroding the trust the public has invested in science and scientists, who are coming to view scientists as just another special-interest group. You can see it in the polls. Works like Oreskes/Conway and their ideological supporters are accelerating this process. It is time to return to a focus on the science (which the AGW alarmists seem to be incapable of doing).

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Atmospheric physicist S. Fred Singer is Professor Emeritus of Environmental Sciences at the University of Virginia and founding director of the U.S. Weather Satellite Service (now NESDIS–NOAA).

TETRA TECH

Working Paper: Disaster Debris Monitoring and Bastrop County, TX Federal Emergency Management Agency (FEMA) DR–4029

Tetra Tech, Inc. (formerly Science Applications International Corporation, Inc.) was retained by Bastrop County, Texas (the County) to monitor disaster debris removal operations following the Texas Wildfires (FEMA DR–4029) that impacted the County. Tetra Tech monitoring operations began October 3, 2011. Prior to the beginning of monitoring operations, the County was aware of the presence of the Houston Toad in the designated work areas. However, the FEMA submitted their findings to the U.S. Fish and Wildlife Service that debris removal operations were not likely to adversely affect the federally listed species. As a result, in a letter dated September 23, 2011, the U.S. Fish and Wildlife Service agreed that debris removal operations would not impact the federally listed species. The County commenced with hazardous debris and tree removal operations with TFR, Enterprises as the County's debris collection hauler and Tetra Tech as the monitoring firm.

In addition to a right-of-way (ROW) debris and hazard removal program, a private property debris removal (PPDR) program was also authorized by FEMA. The PPDR program addressed hazardous trees and debris that were a result of the fires but beyond the capacity of residents to address themselves. Debris removal and monitoring operations continued for approximately four months until the operations were significantly impacted by a letter from FEMA dated January 27, 2012. FEMA and the U.S. Fish and Wildlife Service determined that new operational requirements would need to be implemented for field operations due to the Houston Toad. Specifically, additional monitors designated as "Houston Toad Monitors" would be required for all debris removal operations. See Attachment A for the FEMA Houston Toad Monitoring Work Plan.

The implementation of the Houston Toad Monitoring Work Plan significantly impacted debris removal operations, decreased debris removal contractor productivity, and ultimately increased the length of time needed to complete the project. Examples of Houston Toad Monitoring Work Plan requirements and the impact on operations efficiency or schedule are as follows:

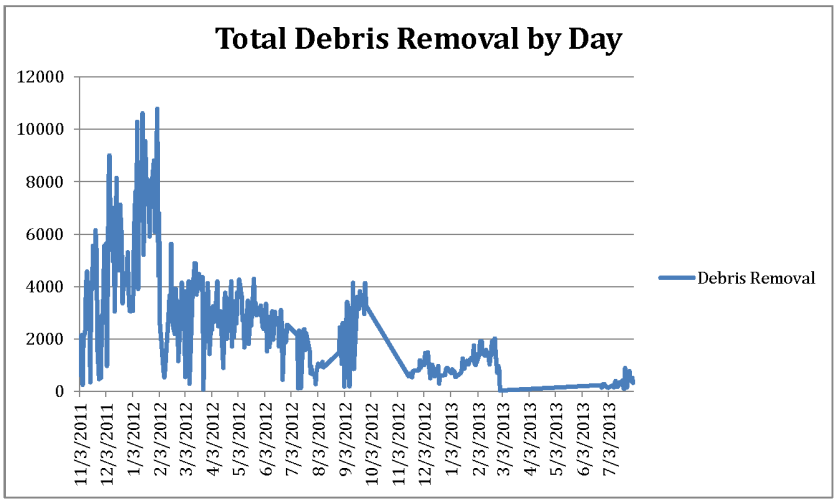
Availability of Houston Toad Monitors: Houston Toad Monitors were required to be on site and clear areas prior to debris or hazardous tree removal work. However, FEMA could only fund a total of four Houston Toad Monitors to the County on any given day. As a result, operations and contractor crews were limited to the number of available Houston Toad Monitors, which had a maximum capacity of four per day for the County.

Working Hours: The Houston Toad Monitoring Work Plan placed requirements on same-day debris collection or re-inspection from a Houston Toad Monitor prior to removal if completed the next day. This requirement limited the contractors' working hours each day due to the time needed for debris to be collected from the site and moved to the contained debris management site.

Means and Methods: The Houston Toad Monitoring Work Plan allowed the Houston Toad Monitors to dictate means and methods for PPDR. For example, the Houston Toad Monitors could dictate the routes for the contractor to move equipment on private property so as to minimize ground disturbance. This increased the time to complete work at each property. Additionally, the Houston Toad Monitors could often dictate trees be removed using "climbers" to remove portions of a tree at a time instead of being felled from the ground.

As a result of the implementation of the Houston Toad Monitoring Work Plan, debris contractor efficiency was reduced by at least 50 percent. Specifically, the number of tree removals completed each day following January 27, 2012 was reduced by approximately 20 percent. The average number of tree removals completed per day for the PPDR program decreased from 191 trees to 151 trees. Additionally, as Figure 1 shows, total debris collected per day for the right-of-way program was drastically impacted due to the Houston Toad Monitor requirements and availability. Figure 1 shows a clear decrease in productivity following the implementation of the Houston Toad Monitoring Work Plan.

Figure 1—Total Debris Removal by Day for Right-of-Way (ROW) Collection



In closing, Tetra Tech understands the need to implement guidelines and requirements to protect wildlife, especially those that are federally listed species. During the course of the project, the Tetra Tech project management team adhered to the requirements specified in the Houston Toad Monitoring Work Plan. However, it is clear that the Houston Toad Monitoring Work Plan had a direct correlation to the decreased contractor efficiency and the increased time needed to complete the project.

Attachment A: FEMA Houston Toad Monitoring Work Plan—[This document can be found on page 26 as part of the attachments to Clara Beckett's prepared statement].

[LIST OF DOCUMENTS SUBMITTED FOR THE RECORD RETAINED IN THE COMMITTEE'S OFFICIAL FILES]

—Bastrop Wildlife Interagency Meeting—Natural Resources, Incident Command—Bastrop Convention Center, September 13, 2011, Minutes of Meeting.

—California Coastal Commission—Staff Report to the Drake's Bay Oyster Company recommending "Restoration of Drakes Estero through removal of marine debris and equipment associated with the former Drake's Bay Oyster Company aquaculture operation."

—Editorial titled "Truth on the half shell in oyster debate." *Press Democrat*, May 13, 2013.

—Editorial titled "A Deal is a Deal," by Lynn Scarlett, *The Huffington Post*, January 17, 2013.

—Fifth Circuit Court of Appeals Verdict in the case of "*Arkansas Project* v. *Shaw*".

—Forstner, Michael, Alexander Stone Chair in Genetics, Texas State University, Statement to Chairman and Members of the Committee.

—Investigative Report by the Office of the Inspector General, Department of the Interior, on the Environmental Impact Statement issued by the National Park Service on the Drake's Bay Oyster Company.

—Kennedy, Pete, President, Farm-to-Consumer Legal Defense Fund®, Statement to Chairman and Members of the Committee.

—Porrata, Carlos, November 1, 2012 Letter (both in English and Spanish) addressed to Director Jon Jarvis of the National Park Service, titled "Latino Jobs at Drakes Bay Oyster Company, Point Reyes National Seashore."

—Robinson, George, Acting Regional Administrator for FEMA, December 5, 2012 Letter to Chief Kidd, Assistant Director, Texas Dept. of Public Safety.

—Salazar, Ken, then-Interior Secretary, November 29, 2012 Letter to the National Park Service titled "Point Reyes National Seashore—Drake's Bay Oyster Company."

—Special Use Permit issued by the National Park Service to the Drakes Bay Oyster Company.

—Texas Department of Public Safety, April 18, 2013 Letter to Mr. Gregory Eaton, Director, Recovery Division, FEMA-Region VI.