

**THE ENDANGERED SPECIES ACT:
REVIEWING THE NEXUS
OF SCIENCE AND POLICY**

HEARING
BEFORE THE
SUBCOMMITTEE ON INVESTIGATIONS AND
OVERSIGHT
COMMITTEE ON SCIENCE, SPACE, AND
TECHNOLOGY
HOUSE OF REPRESENTATIVES
ONE HUNDRED TWELFTH CONGRESS

FIRST SESSION

THURSDAY, OCTOBER 13, 2011

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**THE ENDANGERED SPECIES ACT:
REVIEWING THE NEXUS OF SCIENCE AND
POLICY**

THURSDAY, OCTOBER 13, 2011

HOUSE OF REPRESENTATIVES,
SUBCOMMITTEE ON INVESTIGATIONS AND OVERSIGHT,
COMMITTEE ON SCIENCE, SPACE, AND TECHNOLOGY,
Washington, DC.

The Subcommittee met, pursuant to call, at 10:07 a.m., in Room 2318 of the Rayburn House Office Building, Hon. Paul Broun [Chairman of the Subcommittee] presiding.

RALPH M. HALL, TEXAS
CHAIRMAN

EDDIE BERNICE JOHNSON, TEXAS
RANKING MEMBER

U.S. HOUSE OF REPRESENTATIVES
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Subcommittee on Energy & Environment

Harmful Algal Blooms: Action Plans for Scientific Solutions

Wednesday, June 1, 2011
2:00 p.m. to 4:00 p.m.
2318 Rayburn House Office Building

Witnesses

Dr. Robert Magnien, Director of the Center for Sponsored Coastal Ocean Research, National Oceanic and Atmospheric Administration (NOAA).

Dr. Richard Greene, Chief, Ecosystems Dynamics and Effects Branch, Gulf Ecology Division, Office of Research and Development, U.S. Environmental Protection Agency (EPA).

Dr. Donald Anderson, Senior Scientist and Director of the Coastal Ocean Institute, Woods Hole Oceanographic Institution.

Dr. Kevin Sellner, Executive Director, Chesapeake Research Consortium

Dr. Stephanie Smith, Chief Scientist, Algaeventure Systems

Dr. Beth McGee, Senior Water Quality Scientist, Chesapeake Bay Foundation

HEARING CHARTER

**COMMITTEE ON SCIENCE, SPACE, AND TECHNOLOGY
SUBCOMMITTEE ON INVESTIGATIONS & OVERSIGHT
U.S. HOUSE OF REPRESENTATIVES**

**The Endangered Species Act: Reviewing the
Nexus of Science and Policy**

THURSDAY, OCTOBER 13, 2011
10:00 A.M. – 12:00 P.M.
2318 RAYBURN HOUSE OFFICE BUILDING

Purpose

On October 13, 2011, the Subcommittee on Investigations and Oversight will hold a hearing on the nexus of science and policy related to the Endangered Species Act (ESA)¹. The purpose of the hearing is to highlight the combination of science and policy decisions that are made under the ESA. Numerous judicial disputes over ESA-related actions highlight the challenges in weighing best available science against other policy considerations, often under short deadlines. Congress has frequently considered changes to the ESA as a whole, and has also enacted species-specific ESA legislation, most recently with 2011 legislation concerning the grey wolf.²

Although the ESA is designed to protect species, its application is most visible when federally imposed plans to protect and recover a species restrict the actions of private citizens and other entities. For example, landowners may not be able to use their property in a manner they had planned and farmers may not be able to use as much of a river's water as they need. Since takings claims are rarely successful, the science used to make ESA decisions is critical.

Background

Enacted in 1973 and amended on several occasions, the Endangered Species Act is designed to ensure the continued existence of species of plants and animals that are at risk of extinction. The Act sets out a specific timeline for action by federal agencies and requires agency officials to make decisions based upon the best science available under specific deadlines. The timelines cannot be waived or extended in an effort to allow for the development of additional science related to a species in question.³ This results in the focus of public and federal review primarily upon the science used by proponents for a particular action, typically a petition for a new listing.

Almost 1400 U.S. species of plants and animals have been listed under the ESA as threatened or endangered, resulting in the implementation of 1100 active recovery plans.⁴ A small number of species have been delisted, either due to successful recoveries, extinction, or due to data errors in the original listing decision.⁵ The majority of listed species have remained at their original listing level of endangered or threatened. The American bald eagle is viewed by many as the highest profile species to go through the Endangered Species Act process. After federal protections were enacted in 1940 prior to the enactment of the ESA, the bald eagle population of the lower 48 states was listed as endangered in 1967 under a precursor to the ESA, the Endangered Species Preservation Act of 1966, downlisted to threatened in 1995, and delisted all together in 2007.⁶

In a recent high profile action in April 2011, the President signed into law a provision that required the FWS to reissue an earlier final rule published on April 2, 2009 concerning the Northern Rocky Mountain population of the grey wolf as a dis-

¹ 16 U.S.C. §1531–1544.

² Title VII, Section 1713, of P.L. 112–10.

³ 16 U.S.C. § 1533(b) (3).

⁴ The current number of endangered and threatened species can be found at http://ecos.fws.gov/tess_public/pub/boxScore.jsp.

⁵ See http://ecos.fws.gov/tess_public/pub/delisting_Report.jsp for the complete list.

⁶ See <http://www.fws.gov/migratorybirds/baldeagle.htm>

tinct population segment.⁷ The original rule delisted certain species of the grey wolf, but the rule was set aside as a result of federal litigation brought by several environmental groups.⁸ The legislation required the FWS to republish its final rule and prohibited judicial review of the action. It is important to note that the FWS initially determined that the delisting decision was appropriate and the 2011 legislation did not override FWS decisions for this species.⁹

Although the focus of the ESA is preventing the further decline of species populations, significant societal impacts occur when a species is listed as threatened or endangered. Various uses of lands and waters identified as critical habitats for endangered species are restricted. These restrictions make the accuracy of science concerning the status of a particular species crucial to making appropriate policy decisions. If critical habitat designations are not appropriately sized or scoped, then either too much or too little protection for a particular species will be applied. If usage restrictions are too small in size and scope, this could result in additional losses to the species. If restrictions are too large in size and scale, users of a particular area such as home owners or farmers could have their usage of a resource overly restricted.

The process used to list and delist species

The Fish and Wildlife Service and the National Marine Fisheries Service are responsible for the ultimate listing of a species as threatened or endangered through the publication of a final notice in the Federal Register. Initial steps to determine whether a new listing is warranted or an existing listing should be modified can occur within these agencies for two reasons:

1. If federal scientists determine that the status of a species warrants review, or
2. In response to a petition filed with the agency by an outside group.

Upon receipt of a petition filed by an outside group or an internal decision that a listing review should be considered, the agency has 90 days to make an initial determination after publication in the Federal Register. Interested parties can submit additional information regarding a listing review and/or comment upon data included in the initial Federal Register notice. Within one year of publication in the Federal Register, the agency is statutorily required to make a final determination. Under existing statute, listed species are also subject to ongoing review of their status every five years without the need for petitions.

The FWS and NMFS have increasingly used their statutory authority to determine that the listing of a species is “warranted, but precluded.”¹⁰ This status means that the listing of a species is warranted based upon available science, but that other species have a greater priority for protection. No protections apply specifically under the Endangered Species Act for species determined to be “warranted, but precluded” although the Bureau of Land Management and the Forest Service provide additional protections for these species under separate statutory provisions applicable only to those agencies.¹¹ All “warranted, but precluded” determinations are subject to judicial review as are ongoing agency efforts to make a final determination for such species. Recent court litigation brought by environmental groups has focused on FWS actions, or lack thereof, to reduce the number of species identified as “warranted, but precluded”.

Each species identified as “warranted, but precluded” is given a ranking number known as a “Listing Priority Number (LPN)” from 1 to 12 that the FWS and NMFS is supposed to use as a roadmap for identifying which species are listed first. The LPN is based upon three factors: magnitude of the threats to the species, immediacy as to when the threats will begin, and the importance of the species biologically. An annual Candidate Notice of Review identifies all status changes to listed species during the prior year and a ranking of “warranted, but precluded” species. The annual cumulative total of candidate listings identified as “warranted, but precluded” during the past six years have numbered:

- 2010: 251 species

⁷Section 1713 of P.L. 112–10.

⁸*Defenders of Wildlife et al. v. Salazar et al.*, 729 F. Supp. 2d 1207 (D. Mont.).

⁹“Final Rule to Identify the Northern Rocky Mountain Population of Gray Wolf as a Distinct Population Segment and To Revise the List of Endangered and Threatened Wildlife,” *Federal Register* 74, (2 April 2009): 15123.

¹⁰This authority is found at 16 U.S.C. § 1533(b) (3) (B).

¹¹The spotted owl is one example of a species that the Forest Service gave additional habitat protection. A review of Forest Service actions regarding the spotted owl can be found at <http://www.fs.fed.us/pnw/pubs/marcot.pdf>.

- 2009: 305 species
- 2008: 251 species
- 2007: 280 species
- 2006: 279 species
- 2005: 286 species

Biological opinions

Section 7 of the ESA requires any federal agency that seeks to undertake an action such as issuing a permit or undertaking a project that may impact an endangered species to conduct a biological assessment to identify the likely impact of its action on an endangered species.¹² The Federal agency requesting formal consultation shall provide the Service with the best scientific and commercial data available or which can be obtained during the consultation for an adequate review of the effects that an action may have upon listed species or critical habitat.¹³ FWS or NOAA will review the assessment and then issue its response in the form of a biological opinion, BiOP for short. Although the document is called an opinion, it is binding upon federal agencies and is subject to judicial review. Judicial disputes over an endangered species that do not concern the act of listing itself often focus on the contents of particular biological opinions. For example, recent judicial activity noted later in this memo regarding the Delta Smelt has been focused on the biological opinions concerning minimum water flows necessary to protect the species.

Issues

Recent DOI Settlement Agreements Concerning “Warranted, but Precluded” Species

In 2009 and 2010, WildEarth Guardians filed ten complaints in federal court seeking declaratory and injunctive relief alleging that the Secretary of Interior failed to comply with a statutory duty to make 12-month findings on petitions made by WildEarth Guardians to list 12 species as threatened or endangered under the ESA.¹⁴ In a May 2011 settlement between the parties to resolve the case, FWS committed to a number of activities related to listing petitions under a set time frame as follows:

- 130 of 251 outstanding listing petitions will be resolved by September 30, 2013
- 30 more listings petitions will be resolved by September 30, 2014
- 40 more listings petitions will be resolved by September 30, 2015
- All 251 listing petitions will be resolved by September 30, 2016
- By September 30, 2013, the Distinct Population Segment for the Canada Lynx will be extended to include New Mexico
- Decisions regarding the New Mexico Jumping Mouse¹⁵, the Greater Sage Grouse¹⁶, and the Sonoran Desert Tortoise¹⁷ will be made by specific dates
- Payment of an undetermined amount of legal fees to WildEarth Guardians

In 2010, the Center for Biological Diversity filed a similar complaint in federal court seeking declaratory and injunctive relief alleging that the Secretary of Interior failed to comply with a statutory duty to make 12-month findings on petitions made by the Center for Biological Diversity to list over 500 species as threatened or endangered under the ESA.¹⁸ In a July 2011 settlement between the parties to resolve the case, FWS committed to a number of activities related to listing petitions under a set time frame as follows:

- The 90 day petitions for 477 aquatics species must be made by September 30, 2011
- The 12 month findings for 11 non-aquatic species must be made by September 30, 2011
- Seven specific listing petitions must be resolved by September 30, 2012

¹² 16 U.S.C. § 1536.

¹³ 50 C.F.R. § 402.14(d).

¹⁴ Cases Numbers 1:09–2290, 1:09–2997, 1:10–57, 1:10–169, 1:10–256, and 1:10–263. (D. Colo.); Numbers 1:10–0048 and 1:10–421 (D. D.C.); and Numbers 1:10

¹⁵ *Zapus hudsonius luteus*.

¹⁶ *Centrocercus urophasianus*.

¹⁷ *ophelus agassizii*.

¹⁸ Case Number: 10–0230.

- 14 specific listing petitions must be resolved by September 30, 2013
- Seven specific listing petitions must be resolved by September 30, 2014
- Seven specific listing petitions must be resolved by September 30, 2015
- Two specific listing petitions must be resolved by September 30, 2016
- One specific listing petitions must be resolved by September 30, 2017
- Payment of an undetermined amount of legal fees to the Center for Biological Diversity

In contrast to 1400 total species listings under the ESA since its enactment in 1973, the two court settlements will require a review of 750 candidate species in only six years. The settlements assume that there will be no increase in federal funding to manage the sharply increased workload of reviewing approximately one petition per week for the next five years. Even if the agencies can meet the logistical challenge, there will be a limited amount of time available to review the research that accompanies each petition.

Shift to Outside Science

In the initial years of the ESA, outside petitions were rare. In recent years, most listing decisions have been initiated through public petitions submitted by outside entities such as WildEarth Guardians and the Center for Biological Diversity. Their submissions contain science conducted by non-government scientists. In cases where the scientific record is thin, decisions that could have a major financial or societal impact upon land owners and users are essentially being made upon the research of a few.

Distinct Population Segments

Under the 1976 amendments to the Endangered Species Act, the FWS is required to protect distinct population segments of vertebrate species. In practice, this means that a large subpopulation of a species facing minimal threats to its existence may not be listed under the Endangered Species Act while a smaller subpopulation elsewhere facing greater threats to its existence may be listed. Although determining distinct subpopulations is becoming easier due to the increased use of genetic testing, making such decisions are still a subject of vigorous scientific and policy debates.¹⁹ Under guidance issued in 1996, the FWS and NOAA consider three criteria regarding the listing of a distinct population segment:

1. Discreteness of the population segment in relation to the remainder of the species to which it belongs;
2. The significance of the population segment to the species to which it belongs; and
- 3 The population segment's conservation status in relation to the Act's standards for listing (i.e., is the population segment, when treated as if it were a species, endangered or threatened?).²⁰

Although increased usage of genetic testing can help answer the first criteria question, the second and third criteria are a combination of science and policy decision-making. For example, the Florida panther is listed as endangered with less than 200 animals found in the wild in southern Florida although genetic testing has shown that the genetic differences between the Florida panther and the other thirty species of cougars are minimal.²¹ In this case, the science concerning genetic differences and population numbers are fairly certain, but the policy decisions are not.

Concerns over Agency Science

The scientific work and opinions made by federal scientists is given significant deference by federal courts. Federal scientists are considered independent experts in their specific field working on behalf of the United States and its citizens in contrast to scientists that either directly represent or have a connection to one or more specific entities. Disputing the decisions and testimony of federal scientists is therefore challenging.

In one recent example, on September 16, 2011 U.S. District Court Judge Oliver Wanger of California sharply criticized the work and testimony concerning the Delta Smelt Biological Opinion by two federal scientists, one from the Fish and Wildlife

¹⁹Fallon, Sylvia, "Genetic Data and the Listing of Species Under the U.S. Endangered Species Act" Conservation Biology Volume 21 (2007), Pages 1186-1195.

²⁰"Policy Regarding the Recognition of District Vertebrate Population Notice of Policy." *Federal Register* 61, (7 February 1996): 4722-4725.

²¹Whoriskey, Peter. "Plan to Protect Florida Panther Reopens Issue of Its Identity," Washington Post, 21 February 2006.

Service and one from the Bureau of Reclamation. Commenting upon the FWS scientist, Judge Wanger stated “I find her testimony to be that of a zealot.” In further comments about the Bureau of Reclamation scientist, he stated

“And I am going to make a very clear and explicit record to support that finding of agency bad faith because, candidly, the only inference that the Court can draw is that it is an attempt to mislead and to deceive the Court into accepting what is not only not the best science, it’s not science.”

Although Judge Wanger’s comments were in reference to one specific case, they do highlight the concerns over the quality of science and the related federal actions that follow from relying upon that science. If the science used by Congress, federal agencies, and federal courts to make specific determinations is flawed or biased in some way, then the policies that result will similarly be flawed and biased.

In another example, a memo dated March 22, 2011 from the Solicitor General’s office to the Acting Assistant Secretary for Fish and Wildlife and Parks found that National Park Service employees had failed to satisfy the Interim Code of Scientific and Scholarly Conduct regarding their actions concerning research on the impact of shellfish mariculture activities upon protected harbor seal populations.²² Although no intent to deceive or scientific misconduct was found by the Solicitor’s office, “this misconduct arose from incomplete and biased evaluation and from blurring the line between exploration and advocacy through research.”²³

Witnesses

- Mr. Gary Frazer, Assistant Director, Endangered Species, U.S. Fish and Wildlife Service
- The Honorable Craig Manson, General Counsel, Westlands Water District
- Mr. Douglas Vincent-Lang, Senior Biologist, Alaska Department of Fish and Game
- Dr. Neal Wilkins, Director, Texas A&M Institute of Renewable Natural Resources
- Mr. Jonathan Adler, Professor, Case Western Reserve University School of Law
- Dr. Francesca T. Grifo, Senior Scientist and Director, Scientific Integrity Program, Union of Concerned Scientists

Appendix A

Excerpt of Recent Comments by Federal District Court Judge Wanger from Court Transcript in the Delta Smelt Cases Concerning the Testimony of Two Federal Employees and a Finding of Agency Bad Faith by the Bureau of Reclamation

The Court believes that the testimony of Mr. Feyrer, Bureau of Reclamation’s expert, and Dr. Norris, the Fish & Wildlife Service’s expert, are—and I’m going to be making findings that are going to be justified by specific factual instances. Their testimony is riddled with inconsistency. The Court finds that Dr. Norris’ testimony, as it has been presented in this courtroom and now in her subsequent declaration, she may be a very reasonable person and she may be a good scientist, she may be honest, but she has not been honest with this Court. I find her to be incredible as a witness. I find her testimony to be that of a zealot. And I’m not overstating the case, I’m not being histrionic, I’m not being dramatic. I’ve never seen anything like it. And I’ve seen a few witnesses testify. Mr. Feyrer is equally inconsistent. Self and internally contradictory. I—and most of you, some of you have been in these cases for 20 years. I have never seen anything like what has been placed before this Court by these two witnesses. And the suggestion by Dr. Norris that the failure to implement X2 at 74 kilometers, that that’s going to end the delta smelt existence on the face of our planet is false, it is outrageous, it is contradicted by her own testimony, it is contradicted by Mr. Feyrer’s testimony, it’s contradicted by the most recent adaptive management plan review, it’s contradicted by the prior studies, it is—candidly, I’ve never seen anything like it.

I’m going to start with Mr. Feyrer, and I’m going to go issue by issue, point by point. Because, candidly, I’m going to be making a finding in this case of agency bad faith. There is simply no justification. There can be no acceptance by a court of the United States of the conduct that has been engaged in this case by these wit-

²²The Solicitor’s memo can be found at http://www.eenews.net/assets/2011/03/23/document_gw_05.pdf.

²³Ibid. page 35.

nesses. And I am going to make a very clear and explicit record to support that finding of agency bad faith because, candidly, the only inference that the Court can draw is that it is an attempt to mislead and to deceive the Court into accepting what is not only not the best science, it's not science. There is speculation. There is primarily, mostly contradicted opinions that are presented that the Court not only finds no basis for, but they can't be anything but false because a witness can't testify under oath on a witness stand and then, within approximately a month, make statements that are so contradictory that they're absolutely irreconcilable with what has been stated earlier.

And the Court draws the inferences of knowledge and draws the inference of intent. Because those are intentional misstatements, they can't be anything else. And they're made for only one purpose, they're made for the purpose of attempting to influence the Court to decide in a way that is misleading, confusing and the detail and the factual complexity of this case obviously requires close scrutiny and great effort. And if anybody had been just, quite frankly, a little bit inattentive or a little bit less diligent than digging into and trying to get to the bottom of every one of these assertions, it would be very easy to simply accept these opinions with these record citations. And when the record says the opposite of what you cite the record for, or when the record doesn't say what you cite the record for, there's simply an absence of the data, then that is a further misleading of the Court. That is a further, if you will, distortion of the truth.

Chairman BROUN. The Subcommittee on Investigations and Oversight will come to order.

Good morning. Welcome to today's hearing entitled "Endangered Species Act: Reviewing the Nexus of Science and Policy."

The Endangered Species Act (ESA) is one of the most influential and far-reaching environmental laws this Nation has ever passed. Since its passage in 1974, it has been the subject of considerable debate—not only about its impact on our Nation's economy, but also about its ultimate effectiveness. Everyone wants to save species from extinction, but honest people can have an honest debate about the most efficient and effective way to do so. In terms of effectiveness, I believe it would be hard to argue that the law has been anything but an abject failure. Of the roughly 2,000 species listed as endangered or threatened, only about one percent have actually recovered. As a tool for advancing other special interest policy goals, it has certainly been very influential, and I am sure that that was not the Act's original intent.

Today's hearing will explore how the science is used to inform policy decisions under ESA. The written testimonies provided by our witnesses highlight major flaws in the basic construct and implementation of the Act. Landowners are penalized rather than rewarded for protecting habitat and reporting populations. Dr. Wilkins writes that only with a guarantee of anonymity will most landowners consent to having their property surveyed for the existence of particular species. As one example, his scientists found 28 more locations where the dunes sagebrush lizard was found, compared to only three previously known locations. This data was only captured after landowners viewed Texas A&M researchers as something other than a threat to their property rights. Professor Adler's testimony highlights many other weaknesses in how the Act threatens science and policy, and Mr. Vincent-Lang will provide a state's perspective on ESA.

Recent events at the Department of Interior have also attracted this Subcommittee's attention. On September 16, 2011, U.S. District Court Judge Oliver Wanger of California sharply criticized the work and testimony concerning the Delta Smelt Biological Opinion by two federal scientists, one from the Fish and Wildlife Service and one from the Bureau of Reclamation. Commenting on the Fish and Wildlife Service scientist, Judge Wanger stated "I found her testimony to be that of a zealot." In further comments about the Bureau of Reclamation scientist, he stated, "And I am going to make a very clear and explicit record to support that finding of agency bad faith because, candidly, the only inference that the Court can draw is that this is an attempt to mislead and to deceive the Court into accepting what is not only not the best science, it is not science."

I am also concerned about the flood of ESA petitions and the related litigation that could potentially challenge the quality of the Service's work. I find it revealing that some of the same entities that have brought lawsuits over hundreds of species brag in their annual reports about the money that they make from filing environmental lawsuits against federal agencies. In its 2010 annual report, WildEarth Guardians states that ten percent of their income came from their litigation settlements and that they depend upon

this income to “survive and thrive.” I note that this so-called income is at taxpayers’ expense. Maybe supporting environmental trial lawyers is part of the President’s job plan, but I doubt that the American people would agree that these are “green jobs.”

Two recent court settlements require over 600 species to be jammed through the Fish and Wildlife Service listing process regardless of other agency priorities. I have serious concerns about whether these listings will be made based upon science, as they should be, or on legal expedience.

In a time of record unemployment, the Administration continues to choose regulations over jobs. While I agree an appropriate balance can be met, constituents in my district need jobs, not red tape. We don’t live in a vacuum and neither should our environmental laws. Many of the witnesses before us today have identified serious weaknesses with ESA, as well as practical solutions that can bring about real conservation. It is a time—it is past time actually for an overhaul of the Endangered Species Act.

You will find in front of you packets containing our witness panel’s written testimony, biographies, and truth-in-testimony disclosures.

I recognize myself now for an opening statement. Excuse me. I recognize Ranking Member from Maryland, my friend, Ms. Edwards, for her opening statement. I just did mine. Ms. Edwards, you are recognized for five minutes.

[The prepared statement of Dr. Broun follows:]

PREPARED STATEMENT OF CHAIRMAN PAUL BROUN

The Endangered Species Act (ESA) is one of the most influential and far-reaching environmental laws this nation has ever passed. Since its passage in 1974, it has been the subject of considerable debate—not only about its impact on our nation’s economy, but also about its ultimate effectiveness. Everyone wants to save species from extinction, but honest people can have an honest debate about the most efficient and effective way to do so. In terms of effectiveness, I believe it would be hard to argue that the law has been anything but an abject failure. Of the roughly 2,000 species listed as endangered or threatened, only about one percent have actually recovered. As a tool for advancing other special interest policy goals, it has certainly been very influential, but I’m not sure that was the Act’s original intent.

Today’s hearing will explore how the science is used to inform policy decisions under ESA. The written testimonies provided by our witnesses highlight major flaws in the basic construct and implementation of the Act. Landowners are penalized rather than rewarded for protecting habitat and reporting populations. Dr. Wilkins writes that only with a guarantee of anonymity will most landowners consent to having their property surveyed for the existence of particular species. As one example, his scientists found 28 more locations where the dunes sagebrush lizard was found, compared to only three previously known locations. This data was only captured after landowners viewed Texas A&M researchers as something other than a threat to their property rights. Professor Adler’s testimony highlights many other weaknesses in how the act treats science and policy, and Mr. Vincent-Lang will provide a state’s perspective on ESA.

Recent events at the Department of Interior have also attracted this Subcommittee’s attention. On September 16, 2011 U.S. District Court Judge Oliver Wanger of California sharply criticized the work and testimony concerning the Delta Smelt Biological Opinion by two federal scientists, one from the Fish and Wildlife Service and one from the Bureau of Reclamation. Commenting upon the FWS scientist, Judge Wanger stated “I find her testimony to be that of a zealot.” In further comments about the Bureau of Reclamation scientist, he stated

“And I am going to make a very clear and explicit record to support that finding of agency bad faith because, candidly, the only inference that the Court can draw is that it is an attempt to mislead and to deceive the Court into accepting what is not only not the best science, it’s not science.”

I am also concerned about the flood of ESA petitions and the related litigation that could potentially challenge the quality of the Service's work. I find it revealing that some of the same entities that have brought lawsuits over hundreds of species brag in their annual reports about the money they make from filing environmental lawsuits against federal agencies. In its 2010 annual report, WildEarth Guardians states that ten percent of their income came from their litigation settlements and that they depend upon this income to "survive and thrive." I note that this so-called income is at taxpayer expense. Maybe supporting environmental trial lawyers is part of the President's job plan, but I doubt the American people would agree that these are "green jobs."

Two recent court settlements require over 600 species to be jammed through the Fish and Wildlife Service listing process regardless of other agency priorities. I have serious concerns about whether these listings will be made based upon science, as they should be, or on legal expedience.

In a time of record unemployment, the Administration continues to choose regulations over jobs. While I agree an appropriate balance can be met, constituents in my district need jobs, not red tape. We don't live in a vacuum and neither should our environmental laws. Many of the witnesses before us today have identified serious weaknesses with ESA, as well as practical solutions that can bring about real conservation. It is time for an overhaul of the Endangered Species Act.

Ms. EDWARDS. Thank you, Mr. Chairman, and thank you for holding the hearing and our witnesses for being here today. And pardon my laryngitis. It will hurt you more to listen to it than it does me to talk.

At the heart of this hearing is really about scientific integrity and whether we plan to face the problems with science in the management of the Endangered Species Act. I want to begin by quoting one of our country's most famous conservationists, President Richard Nixon. And he said, "Nothing is more priceless and more worthy of preservation than the rich array of animal life with which our country has been blessed. It is a many-faceted treasure of value to scholars, scientists, and nature-lovers alike and it forms a vital part of the heritage we all share as Americans." And I do share that sentiment. I just want to remind everyone that President Nixon said those words on the occasion of signing into law the Endangered Species Act of 1973.

Part of the reason I share that quote is because protecting wildlife and protecting nature from destruction used to be a bipartisan cause, but unfortunately, my Republican colleagues no longer see eye to eye with their party's former President. And let us make no mistake about it—the Endangered Species Act, when it is allowed to work, protects wildlife from utter destruction.

But since 1973, protection of wildlife has increasingly become with the "liberal cause." And what is most disturbing about this is that since 1973, we have learned so much about the benefits of biodiversity and the value of healthy ecosystems and the value that that provides to people. And as I look in this room, we do see the portrait of my friend, former Chairman here, Sherry Boehlert, who is a Republican, who was a proud environmentalist. I was a colleague of his on the Board of the League of Conservation Voters, and it really saddens me that he may have been one of the last of his kind in the Republican Party.

The focus of today's hearing seems to be on attacking the integrity of agency scientists with little help from former U.S. District Court Judge Oliver Wanger's inflammatory opinion in the Delta Smelt case from last month. In the wake of that widely reported decision, the Judge appears to have backtracked on his over-the-top comments, and I think that his extreme language was misguided

and efforts to attack the credibility of agency scientists also misguided. The evidence of the past decade show that the real scientific integrity at issue at our federal agencies generally and the Fish and Wildlife Service specifically has been political meddling with the agency science. I hope our group of witnesses can speak to that problem.

And I want to thank you, Chairman Broun, for calling such a superb panel for that purpose. Present on today's panel you also have a former Bush Administration Assistant Secretary Craig Manson, who was mentioned 155 times in a 2008 investigative report by the Department of Interior Inspector General. The then-Interior Inspector General Earl Devaney was looking into allegations of misconduct by Mr. Manson's Deputy, Julie McDonald. To quote just a small portion of the Inspector General's memorandum, he noted, "McDonald's zeal to advance her agenda has caused considerable harm to the integrity of the ESA program and to the morale and reputation of Fish and Wildlife, as well as potential harm to individual species. Her heavy-handedness has cast doubt on nearly every ESA decision issued during her tenure. Of the 20 decisions we reviewed, her influence potentially jeopardized 13 ESA decisions. McDonald's conduct was backed by the seemingly blind support of former Assistant Secretary for Fish and Wildlife and Parks, Judge Craig Manson. Judge Manson so thoroughly supported McDonald that even when a known error in a federal register notice—which was caused by McDonald's calculations—was brought to Manson's attention, he directed that notice to be published regardless of the error."

If I am not mistaken, Mr. Chairman, I believe that the Fish and Wildlife witness we have today here, Craig Frazer, was the very person who brought the aforementioned error to the federal register notice to Mr. Manson's attention. And how was he rewarded for trying to correct the error? Mr. Manson transferred him out of the Agency. Thankfully, one of Mr. Manson's successors had the good sense to rectify this abuse conduct with respect to Mr. Frazer, a dedicated public servant who just wanted to get the correct information published and not simply spit out whatever was politically expedient. He is back at the Department and I am happy to see him here today before us in an official capacity, and I look forward to his very candid testimony today.

And with that, Mr. Chairman, I would yield.

[The prepared statement of Ms. Edwards follows:]

PREPARED STATEMENT OF RANKING MEMBER DONNA EDWARDS

I would like to thank Chairman Broun for holding this hearing, and also thank our witnesses for being here today. At its heart, this hearing is about scientific integrity and whether we face problems with science in the management of the Endangered Species Act.

I'd like to start off by quoting one of our country's most famous conservationists, President Richard Nixon:

"Nothing is more priceless and more worthy of preservation than the rich array of animal life with which our country has been blessed. It is a many-faceted treasure, of value to scholars, scientists, and nature lovers alike, and it forms a vital part of the heritage we all share as Americans."

I share that sentiment.

President Nixon said those words on the occasion of signing into law the Endangered Species Act in 1973.

I share that quote because protecting wildlife and protecting nature from utter destruction used to be a bipartisan cause. Unfortunately, my Republican colleagues no longer see eye to eye with their Party's former president. Let's make no mistake about it, the Endangered Species Act, when it is allowed to work, protects wildlife from utter destruction.

However, since 1973, protection of wildlife has increasingly become associated with "the liberal cause." What's most disturbing about this is that since 1973 we've learned so much about the benefits of biodiversity and the value healthy ecosystems provide to people.

As I look up, I see the portrait of Chairman Sherry Boehlert, a Republican, and a proud environmentalist. It truly saddens me that he may have been the last of his kind . . .

The focus of today's hearing seems to be on attacking the integrity of agency scientists, with a little help from former U.S. District Court Judge Oliver Wanger's (pronounced: *Wayne-ger*) inflammatory opinion in the Delta Smelt case from last month. In the wake of that widely reported decision, Judge Wanger appears to have backtracked on his over-the-top comments.

I think Judge Wanger's extreme language was misguided, and efforts to attack the credibility of agency scientists are also misguided. The evidence of the past decade has shown that the real scientific integrity issue at our Federal agencies generally, and the Fish and Wildlife Service specifically, has been political meddling with agency science. I hope our group of witnesses can speak to that.

I have to thank you, Chairman Broun, for calling such a superb panel for just that purpose. Present on today's panel you have a former Bush Administration Assistant Secretary, Craig Manson, who was mentioned 155 times in a 2008 Investigative Report by the Department of Interior Inspector General. The then-Interior IG, Earl Devaney, was looking into allegations of misconduct by Mr. Manson's Deputy, Julie MacDonald. To quote just a small portion of the Inspector General's Memorandum, he noted that:

"MacDonald's zeal to advance her agenda has caused considerable harm to the integrity of the ESA program and to the morale and reputation of the FW, as well as potential harm to individual species. Her heavy-handedness has cast doubt on nearly every ESA decision issued during her tenure; of the 20 decisions we reviewed, her influence potentially jeopardized 13 ESA decisions. MacDonald's conduct was backed by the seemingly blind support of former Assistant Secretary for Fish and Wildlife and Parks, Judge Craig Manson. Judge Manson so thoroughly supported MacDonald that even when a known error in a *Federal Register* notice, which was caused by MacDonald's calculations, was brought to Manson's attention, he directed that the notice be published regardless of the error."

If I'm not mistaken Mr. Chairman, I believe that the Fish and Wildlife witness we have here today, Gary Frazer, was the very person who brought the aforementioned error in the *Federal Register* notice to Mr. Manson's attention. And how was he rewarded for trying to correct this error? Mr. Manson transferred him out of the agency. Thankfully, one of Mr. Manson's successors had the good sense to rectify this abusive conduct with regard to Mr. Frazer, a dedicated public servant who just wanted to get the correct information published, and not simply spit out whatever was politically expedient. He is back at the Department and I am happy to see him here before us today in an official capacity.

The DOI Inspector General found that during Julie MacDonald's tenure she had "bullied, insulted, and harassed the professional staff of FWS to change documents and alter biological reporting," disclosed nonpublic information to private sector sources including to lobbyists, and participated in the editing process for a species for which she had a potential personal financial conflict of interest. All of this was done with Mr. Manson's unwavering support.

The Chairman has repeatedly asked about the status of the Obama Administration's science integrity policy. I am sure you join me in finding satisfaction from the fact that the Department of Interior has put a final policy in place. But the reason such a policy was even needed was because of conduct during the prior Administration by political appointees such as Mr. Manson.

If Mr. Manson's tenure at Interior was all that we had to look forward to covering in today's hearing, this would be a great opportunity. However, we also have a witness from the State of Alaska who can explain to the Subcommittee his State's unique new policy which says that once the state takes a position, such as on an endangered species issue, state scientists must advocate that position—regardless of the facts—or face punishment. That sort of gag rule is precisely the kind of thing that I am sure the Chairman wants to make sure the Obama Administration does

not condone in its own agencies and this is something we can certainly both agree on.

So I look forward to a spirited discussion today, and expect that by the end of this hearing we will all have some newfound respect for the difficult environment our Federal agency scientists work in—and perhaps some state scientists too—to try and do the right thing, day in and day out, while getting attacked from the outside, and sometimes from within.

I yield back Mr. Chairman.

Chairman BROWN. Thank you, Ms. Edwards.

If there are Members who wish to submit additional opening statements, your statements will be added to the record at this point.

At this time I would like to introduce our panel of witnesses: Gary Frazer, Assistant Director, Endangered Species, U.S. Fish and Wildlife Service; Professor Jonathan Adler of Case Western Reserve University School of Law, the Honorable Craig Manson, General Counsel, Westlands Water District; Douglas Vincent-Lang, Special Assistant, Alaska Department of Game and Fish; Dr. Neal Wilkins, Director of Texas A&M Institute of Renewable Natural Resources; and Dr. Francesca T.—is it Grifo? Grifo, okay, Union of Concerned Scientists.

As our witnesses should know, spoken testimony is limited to five minutes each, after which the Members of the Committee will have five minutes each to ask questions. Your written testimony will be included in the record of the hearing. It is the practice of the Subcommittee on Investigations and Oversight to receive testimony under oath. Do any of you have an objection of taking an oath?

Everybody sits there staring at me. I like to see their heads either move from side to side or something. So everybody—no one has an objection to taking an oath, is that correct? Okay.

Let the reflect—record reflect that all witnesses are willing to take an oath as reflected by their shaking their head from side to side.

You also may be represented by counsel. Do any of you have counsel with you here today? Again, okay, Judge Manson, you have—okay, very good. Thank you.

Let the record reflect that none of the witnesses have counsel.

If all of you would please now stand and raise your right hand. Judge Manson, you don't have to do that. Please raise your right hand.

Do you solemnly swear to affirm to tell the whole truth, nothing but the truth, so help you God?

Let the record reflect that all the witnesses participating have taken the oath.

I now recognize our first witness, Mr. Frazer. You have five minutes.

**STATEMENT OF MR. GARY FRAZER,
ASSISTANT DIRECTOR, ENDANGERED SPECIES,
U.S. FISH AND WILDLIFE SERVICE,
DEPARTMENT OF THE INTERIOR**

Dr. FRAZER. Good morning, Chairman Broun, Ranking Member Edwards, and Members of the Subcommittee. I am Gary Frazer, Assistant Director for the Endangered Species Program within the

U.S. Fish and Wildlife Service. I appreciate this opportunity to discuss how the Service carries out its duties related to listing, delisting, consultation, and recovery of species under the Endangered Species Act.

This job has never been easy, and it grows more difficult every day. We are facing an extinction crisis. The nature of this work often results in strongly held views on all sides and frequent challenges to our decisions. In the face of all that, we believe that the Service does an excellent job of making decisions that are scientifically sound, legally correct, transparent, and capable of withstanding challenge.

The ESA provides a critical safety net for America's native fish, wildlife, and plants. And we know it can deliver remarkable successes. Since Congress passed this landmark conservation law in 1973, the ESA has prevented the extinction of hundreds of imperiled species across the Nation and promoted the recovery of many others.

Our Nation's rich diversity of fish, wildlife, and plants symbolizes America's wealth and promise. The ESA represents a firm commitment to protect and preserve our natural heritage out of a deeply held understanding of the direct link between the health of our ecosystems, the services they provide, and our own well-being.

The ESA directs that determinations on whether to list any species as endangered or threatened must be made solely on the basis of the best scientific and commercial data available. The term "best scientific and commercial data available" means those data that are available at the time the Service makes a listing determination, and the Act also establishes a schedule under which the Service must make those determinations. We do not have the luxury of waiting for all the information we might want. Rather, we have to make timely decisions based on the information that is available.

A full description of the procedures used for identifying candidate species, responding to petitions to lists, and making listing and delisting decisions is provided in my written statement.

The workload associated with carrying out our listing activities has for many years exceeded the resources available to the Service. Therefore, a substantial backlog of listing actions has accumulated.

The Service recently developed a six-year work plan for the Listing Program through mediated settlement agreements with two of the Service's most frequent plaintiffs. The Service will systematically review and address the needs of more than 250 species that are currently candidates for protection under the ESA to determine if they should be listed as threatened or endangered species. The Service will make listing determinations for each species, carefully reviewing scientific information and public comments before deciding whether listing is still warranted and, if so, whether to designate the species as threatened or endangered. Each and every listing proposal will be subject to independent peer review and public comment.

Service decisions under the Endangered Species Act are sometimes controversial, and there have been cases in the recent past where the scientific underpinning of the Service's decisions has been subject to high-level independent scientific review. My written

statement describes several such reviews, but I will note one in particular.

In 2008, the Service issued a jeopardy biological opinion to the Bureau of Reclamation regarding the Continued Long-Term Operation of the Central Valley Project and State Water Project and included a reasonable and prudent alternative to protect delta smelt and their habitat. The scientific information that the Service used in the 2008 Central Valley Project opinion has now been reviewed by five separate independent peer review processes, including a 2010 review by a National Research Council panel. While these reviews identified elements of the opinion that might have been handled differently or justified more thoroughly, they all largely affirmed that the Service used the best available scientific information and applied that information in a conceptually sound and scientifically justified manner.

The science underlying the Service's Central Valley Project opinion is also the subject of ongoing litigation. With regard to recent comments made by former U.S. District Judge Oliver Wanger, we fully believe that—we firmly believe that wise decisions about the future of the Bay Delta must be guided by our best available science. The Department stands behind the consistent and thorough work that our scientists from the Service and the Bureau of Reclamation have done on the Bay Delta over many years.

We also believe that when questions arise regarding the integrity of scientific work, it is important to resolve them swiftly, independently, and decisively. We disagree with Judge Wanger's comments last month, and we recognize and appreciate his effort to clarify those comments before his retirement. Still, we believe it is important that we follow the Department's standard procedures for reviewing questions of scientific integrity, so that we can resolve them definitively and provide the due process that our affected scientists deserve.

Therefore, the Department has instructed the Scientific Integrity Officers of the Service and the Bureau of Reclamation to retain independent experts to evaluate the allegations made by Judge Wanger.

In closing, Mr. Chairman, I would like to emphasize the importance the Service places upon having a science-driven, transparent decision-making process in which the affected public can participate effectively. Thank you for your interest in endangered species conservation and ESA implementation and for the opportunity to testify. I would be happy to answer any questions that you and other Members of the Subcommittee might have. Thank you.

[The prepared statement of Mr. Frazer follows:]

PREPARED STATEMENT OF MR. GARY FRAZER, ASSISTANT DIRECTOR,
ENDANGERED SPECIES, U.S. FISH AND WILDLIFE SERVICE

Good morning Chairman Broun, Ranking Member Edwards, and Members of the Subcommittee. I am Gary Frazer, Assistant Director for the Endangered Species program within the U.S. Fish and Wildlife Service (Service).

Mr. Chairman, I appreciate this opportunity to discuss how the Service carries out its duties related to listing, delisting, consultation on, and recovery of species under the Endangered Species Act (ESA). Our procedures, some prescribed by statute and others by agency regulations or policies, are all focused upon ensuring that our decisions are objective, based on the best available science, and made in the open with peer review and public participation throughout.

The Service is committed to making the ESA work in the eyes of the public, the Congress, and the courts so as to accomplish its purpose of conserving threatened and endangered species and protecting the ecosystems upon which they depend.

This job has never been easy, and it grows more difficult every day. We are facing an extinction crisis. With the pace and extent of environmental change threatening the continued existence of more and more of our Nation's biological wealth, we must manage limited resources to carry out our mission. The nature of this work often results in strongly held views on all sides and frequent challenges to our decisions through the administrative, judicial, and political process. In the face of all that, we believe that, overall, the Service does an excellent job of making decisions that are scientifically sound, legally correct, transparent, and capable of withstanding challenge.

In this context, the following principles provide the foundation for the administration of our listing and delisting activities: decisions based on the best available science; independent peer review of decisions; public participation throughout the decision-making process; and understandable and transparent decisions.

Success in the Endangered Species Act

The ESA provides a critical safety net for America's native fish, wildlife, and plants. And we know it can deliver remarkable successes. Since Congress passed this landmark conservation law in 1973, the ESA has prevented the extinction of hundreds of imperiled species across the nation and has promoted the recovery of many others—like the bald eagle, the very symbol of our Nation's strength. Well-known examples include the recovery of the American alligator and brown pelican. Likewise, in August of this year, the Service delisted the Tennessee purple coneflower, the culmination of another Service-facilitated alliance of multiple diverse partners coming together to achieve the unified goal of recovery for an endangered plant species.

Success under the ESA is not only defined by removal of species from the list of endangered and threatened species. The fact that relatively few observed extinctions have occurred in the United States during the last four decades represents a significant benchmark of success of the ESA. The ESA has been successful in stabilizing endangered and threatened species by promoting conservation programs that are designed for their recovery. For instance, the Service and Eglin Air Force Base have worked together to address threats to a small native streamfish on the base, the Okaloosa darter, and this year the Service was able to downlist the fish from endangered to threatened. Partnerships with the States, Tribes, and the agricultural community are supporting the spectacular ongoing recovery of the black-footed ferret, once believed to be extinct but re-discovered 30 years ago and now reestablished in 10 experimental populations. A less familiar but equally impressive example is that of the Kemp's ridley sea turtle, increasing from fewer than 300 females nesting in 1985 to more than 6,000 females nesting in recent years.

Our Nation's rich diversity of fish, wildlife, and plant resources symbolizes America's wealth and promise. The ESA represents a firm commitment to protect and preserve our natural heritage out of a deeply held understanding of the direct link between the health of our ecosystems, the services they provide and our own well-being.

Science, Peer Review, Public Participation and the 2011 Scientific Integrity Policy

Section 4(b)(1)(A) of the ESA directs that determinations as to whether any species is an endangered or threatened species must be made "solely on the basis of the best scientific and commercial data available." The term "best scientific and commercial data available" means those data that are available at the time the Service makes a listing determination, and the provisions of section 4 of the ESA establish the schedule under which the Service must make determinations. The careful evaluation of scientific evidence is fundamental to the assessment of species for listing or delisting under the ESA. We do not have the luxury of waiting for all the information we might want; rather, we have to make timely decisions based on the information that is available, and our scientists and managers have done an exceptional job under those circumstances. Maintaining and increasing the capacities of our employees to access and analyze scientific information is, and will be, a key to our success.

Our joint Fish and Wildlife Service/National Marine Fisheries Service (NMFS) "Policy on Information Standards Under the Endangered Species Act," published in the Federal Register on July 1, 1994 (59 FR 34271), provides criteria, establishes

procedures, and provides guidance to our field biologists and managers regarding the use of scientific information in our decision-making process.

This “Policy on Information Standards” requires our biologists and managers to ensure that the information we use is reliable and credible, and represents the best data available; to impartially evaluate information that conflicts with existing positions or decisions of the Service; to document their evaluation of the available scientific and commercial data; to use primary and original sources of information as the basis for recommendations, where consistent with the ESA and our obligation to use the best information available; and to conduct management-level reviews of the documents developed by staff biologists to verify and assure the quality of the science used in the decision-making process.

To further ensure that sound science underlies our decisions, the Service and NMFS established a joint “Policy for Peer Review in Endangered Species Act Activities,” published in the Federal Register on July 1, 1994 (59 FR 34270). This policy works to ensure that independent peer review is incorporated throughout our listing and recovery programs in a manner that complements, but does not circumvent or supersede, other established public participation processes.

In recognition of the unique capability of State fish and wildlife agencies to assist in implementing all aspects of the ESA, the Service and NMFS developed a joint “Policy Regarding the Role of State Agencies in Endangered Species Act Activities,” also published in the Federal Register on July 1, 1994 (59 FR 34275). This policy recognizes that States possess broad trustee authorities over fish, wildlife, and plants and their habitats within their borders, as well as scientific data and valuable expertise on the status and distribution of such species and habitats. The policy requires the Services to solicit State agency expertise and participation in a broad range of activities, including determining which species should be included on the list of candidate species; conducting population status inventories and geographical distribution surveys; responding to listing petitions, preparing proposed and final listing and delisting rules; and designing and implementing recovery efforts.

The Executive Order 13175 of November 6, 2000, on government-to-government relations with Native American tribal governments also requires us to consult with Tribes on matters that affect them. Consistent with this and our Federal trust responsibilities, we consult to the extent possible with Indian Tribes having tribal trust resources, tribally owned fee lands, or tribal rights that might be affected by ESA activities. State and Tribal capacity supported through programs like the State and Tribal wildlife grants, is a key ingredient in longterm effectiveness.

In addition to our own policies, the Service follows the Administrative Procedure Act (APA) (5 U.S.C. 551 et seq.) rulemaking process for listing actions. All the information we rely upon in making our listing decisions is available for public review and comment. Under section 553 of the APA, Federal agencies must publish proposed rules in the Federal Register; give interested parties an opportunity to participate in the rulemaking by allowing them to submit written data, views, or arguments, with or without opportunity for oral presentation; after considering all comments received, publish final rules in the Federal Register and include a concise general statement of their purpose; and allow at least 30 days following publication of a final rule before it becomes effective, except in certain cases.

In December 2000, Congress required Federal agencies to publish their own guidelines for ensuring and maximizing the quality, objectivity, utility, and integrity of information that they disseminate to the public (44 U.S.C. 3502). The statutory language containing this requirement is included in the Information Quality Act (IQA) (section 515 of the Treasury and General Government Appropriations Act for Fiscal Year 2001 (Pub. L. 106-554; HR 5658)). The Office of Management and Budget (OMB) published guidelines pursuant to the IQA in the Federal Register on February 22, 2002 (67 FR 8452), directing agencies to address the requirements of the law. In a May 24, 2002, Federal Register notice (67 FR 36642), the Department of the Interior issued Department-wide guidelines and instructed bureaus to prepare specific guidelines for implementing the IQA within the context of their individual missions. The Service issued its initial Information Quality Guidelines in October, 2002 and updated guidelines were put into effect in August 2007. The Service’s Information Quality Guidelines provide criteria, establish procedures, and provide guidance to ensure that our decisions are based on the best scientific data available. The Information Quality Guidelines establish Service policy and procedures for reviewing, substantiating, and correcting the quality of information it disseminates to the public.

In February 2011, Interior Secretary Ken Salazar announced the establishment of a new policy to ensure and maintain the integrity of scientific and scholarly activities used in Departmental decision-making. This policy is based on the principles found in Secretarial Order 3305, which called for the development of the policy and

was guided by the Office of Science and Technology Policy memo issued in December 2010, and was in response to the politicization of science during the last Administration. As part of the implementation of the new policy, Secretary Salazar appointed Dr. Ralph Morgenweck, the U.S. Fish and Wildlife Service's Senior Science Advisor, to serve as the Department's first Scientific Integrity Officer.

The ESA, the APA, and the policies and regulations governing our listing and delisting activities ensure that States, Tribes, other agencies, and the public have ample opportunity to participate in our listing and delisting actions. These established processes ensure that the public can participate fully in listing and delisting decisions. In addition, the requirement that the Service maintain and make available the administrative record in support of its decisions brings to bear an open and transparent decision-making process.

The Listing Process

Listing under the ESA becomes necessary when a species declines, or threats to it increase, to the point where it is in danger of extinction throughout all or a significant portion of its range (an "endangered species") or it is likely to become endangered in the foreseeable future (a "threatened species"). The Secretary is required to list or reclassify a species if, after reviewing the species' status using the best scientific and commercial data available, it is found that the species is endangered or threatened because of any one or a combination of the following factors:

- the present or threatened destruction, modification, or curtailment of its habitat or range;
- overutilization for commercial, recreational, scientific, or educational purposes;
- disease or predation;
- the inadequacy of existing regulatory mechanisms; and
- other natural or manmade factors affecting its continued existence.

There are two processes the Service follows to identify species in need of listing. The first is the candidate assessment process, which is initiated by the Service. The second is a petition process, which is available to the public.

Part of the Service's Candidate Conservation program is the candidate assessment process, through which the Service identifies species of fish, wildlife, and plants that may be at risk and in need of protection under the ESA. To identify candidate species, we use our own biological surveys, including status surveys conducted for the purpose of candidate assessment. We also use information from State Natural Heritage Programs, other Federal and State agencies, knowledgeable scientists, and public and private natural resources organizations.

Each year, the Service publishes in the Federal Register the Candidate Notice of Review (CNOR). The CNOR identifies the species that we believe are candidates for listing under the ESA. The CNOR lists those species previously identified as candidates, species for which petitions have resulted in "warranted but precluded" findings, as discussed below, during the prior year, and other species that appear to warrant listing under the ESA. When we identify a species as a candidate for listing, we have sufficient scientific information available to support a proposed rule to list the species as a threatened or endangered species. However, preparation of the proposed rule is precluded by higher-priority listing actions.

We publish the CNOR, make individual candidate assessment forms available to the public, and solicit additional information about the status of candidate species, the threats they face, and conservation actions that are being implemented that may benefit the species. We accept information from the public about candidate species at any time. We use the public's comments in the preparation of listing rules for the highest priority candidates, in determining the listing priority of candidate species, and in determining whether species continue to warrant candidate status. In addition, publication of the list of candidate species provides important information about potential listings that can be used by planners and developers.

The CNOR also serves to explain to the public our long-standing science-based priority system for adding species to the list, which was published in the Federal Register on September 1, 1983 (48 FR 43098–43105). Each candidate species is assigned a listing priority number (LPN), based on the immediacy and magnitude of the threats faced by the species and on its taxonomic distinctiveness. The candidate assessment forms, which are available to the public upon request, document our reasons for assigning a particular LPN to each candidate species. We use the LPN to prioritize listing actions. Species with lower LPNs are given a higher priority for action.

The second process for identifying species that may warrant listing is the petition process. Section 4 of the ESA allows any interested person to petition the Secretary of the Interior either to add a species to, or remove a species from, the lists of threatened and endangered species.

Upon receipt of a petition, the Service must respond, within 90 days when practicable, with a finding as to whether the petition provides substantial scientific or commercial information indicating that the petitioned action may be warranted. If the Service determines that the petition did not provide such substantial information, the 90-day finding concludes the petition review process. However, if the Service determines that the petition does provide substantial information, the Service initiates a status review and issues an additional finding within 12 months of the receipt of the petition.

There are three possible outcomes of the “12-month finding”: 1) listing is not warranted, and no further action is taken; 2) listing is warranted, and a listing proposal is promptly prepared; or 3) listing is warranted, but immediate action is precluded by higher priority actions. A “warranted but precluded” finding is made on the basis of the species’ listing priority number and the listing workload. In such cases, preparation of a listing proposal is delayed until higher priority actions are completed, and the species is added to the list of candidate species and included in the next CNOR.

Our listing and delisting actions are rule-makings, published in proposed and final rule form in the Federal Register, and leading to revisions to Title 50, Part 17 of the Code of Federal Regulations. Once a proposal is published, the Service must allow for a public comment period on the proposal; provide actual notice of the proposed regulation to appropriate State, tribal, and local government agencies; publish a summary of the proposal in a newspaper of general circulation in areas where the species occurs; and hold a public hearing, if requested (see 16 U.S.C. § 1533(b)(5)). The Service’s implementing regulations require that the public comment period on a listing proposal be at least 60 days long (see 50 C.F.R. § 424.16(c)(2)). Since public participation is so important to effective conservation efforts, the Service will often hold multiple public hearings and extend the comment period beyond the minimum required by the law and regulation.

We always solicit independent peer review of our listing proposals, and incorporate comments and recommendations that we receive. We have found such peer review to be a valuable element of the decision-making process.

The Service reviews petitions, adds species to the list, reclassifies species from threatened to endangered, and designates critical habitat using funds appropriated specifically to our Listing Program for these purposes. (Delisting and reclassification from endangered to threatened are part of the recovery process and are funded through the Recovery program.) The workload associated with these listing activities has for many years exceeded the resources available to the Service for listing actions. Therefore, a substantial backlog of listing actions has accumulated.

Multi-District Litigation Settlements for the Listing Program

The Service recently developed a six year work plan for the Listing Program through mediated settlement agreements with two of the Service’s most frequent plaintiffs, and we now expect to be able to address the backlog of species awaiting final determinations for protection under the Act. For the first time in years, the wildlife professionals at the Service will have the opportunity to use our objective listing priority system to extend the safety net to those species most in need of protection, rather than having our work priorities driven by the courts.

The Service will systematically, over a period of six years, review and address the needs of more than 250 species now on the list of candidates for protection under the ESA, to determine if they should be added to the Federal Lists of Endangered and Threatened Wildlife and Plants. All of these species were previously determined by the Service to warrant being proposed for listing, but action was deferred because of the need to allocate resources for other work. The Service will make listing determinations for each species, carefully reviewing scientific information and public comments before deciding whether listing is still warranted and, if so, whether to designate the species as threatened or endangered. Each and every listing proposal will be subject to public review and comment.

The listing work plan will also provide predictability and certainty to landowners and State and local governments, providing time for States and landowners to engage in conservation programs and for agencies to develop management plans. The Service has developed a variety of tools and programs to encourage conservation efforts for listed and candidate species that are compatible with the objectives and needs of landowners with listed and candidate species on their lands. These tools

include Habitat Conservation Plans, Safe Harbor Agreements, and Candidate Conservation Agreements that provide regulatory assurance; technical assistance; and a grants program that funds conservation projects by private landowners, states, and territories.

Science Information Standards for Consultation and Recovery

The best available scientific information is also the foundation of our consultation and recovery activities under the Act.

One of the most important and effective tools available to recover endangered and threatened species is the consultation process prescribed by section 7 of the ESA. We engage in consultation with other federal agencies to assist them in meeting their obligation to avoid taking any action that would be likely to jeopardize the continued existence of a listed species or that would destroy or adversely modify designated critical habitat for a listed species. Similar to section 4, section 7 requires that the best scientific data available be employed in conducting consultations. This requirement was reinforced, made more specific, and extended to cover preparation and implementation of recovery plans in the joint policy issued on July 1, 1994 (59 FR 34271). The requirement is extremely important in these contexts because consultations and recovery plans often determine how action agencies will contribute to recovery and avoid unacceptable risk to listed species.

The conduct of consultation under section 7 of the ESA is prescribed in regulations (50 CFR part 402) and further guided by a Consultation Handbook developed in partnership with the National Marine Fisheries Service. The Service is a field-based organization, and most local consultations are conducted by field offices with geographic responsibility for the area in which an action is to occur. However, the field offices operate under the oversight of our regional offices, and the authority to issue draft or final biological opinions that find that an action is likely to jeopardize the continued existence of a listed species or destroy or adversely modify its designated critical habitat is delegated no lower than the Regional Directors, our senior career managers in the field. In addition, our established procedures require that the Director be notified in advance of issuance of a jeopardy or adverse modification opinion.

Recovery of threatened and endangered species is the process by which their decline is reversed, and the threats to their survival are removed, so that their long-term survival in the wild can be ensured. The goal of the recovery process is to restore listed species to a point where they are secure, self-sustaining components of their ecosystems, no longer require the protections of the ESA, and can be delisted.

For almost all species, a recovery plan is essential as a road map for the recovery process. A first step in the process is to identify the participants of a recovery team that will work to craft the recovery plan for a listed species. To guide our actions during the recovery process, the Service uses our May 1990 "Policy and Guidelines for Planning and Coordinating Recovery of Endangered and Threatened Species" and the following 1994 joint FWS/NMFS policies:

- Policy for Peer Review of ESA Activities – incorporates independent peer review into recovery actions, including the writing of recovery plans;
- Policy on Information Standards – directs that the best available scientific and commercial information be used when determining what actions are needed to recover species; and
- Policy on Recovery Plan Participation and Implementation (published in the Federal Register on July 1, 1994 (59 FR 34272) – directs the Service to solicit the participation of State, Tribal, and Federal agencies, academic institutions, private individuals, and economic interests when determining the recovery actions needed to recover species.

The last policy directs the Service to diversify the areas of expertise represented on a recovery team, develop multiple species plans when possible, minimize the social and economic impacts of implementing recovery actions, and involve representatives of affected groups and provide stakeholders the opportunity to participate in recovery plan development.

Because the Service bases our recovery decisions on the best available scientific information, we seek to involve experts in these decisions and include them on recovery teams. Therefore, when we initiate the recovery planning process for a listed species, we endeavor to identify experts on the species and its habitat, as well as the most knowledgeable individuals on land use and land management within the range of the species.

Once a draft recovery plan is prepared, a notice of availability is published and comments are solicited from the public. Today, it is not unusual for the Service to

receive hundreds, sometimes thousands, of comments on a single plan. These comments come from a wide range of interests: from advocates for the environment to private citizens who are worried about what effects the recovery of the species may have on their livelihoods.

The Service uses the recovery team to consider each comment on a recovery plan, and, where needed, incorporate the comments into the final recovery plan. A record of how comments on a recovery plan are considered is kept and made available for public review. When a final recovery plan has been completed and approved by the Service's appropriate Regional Director, it is made available to all interested parties. A Notice of Availability is published in the Federal Register and the Service ensures that all of the identified concerned public is aware of the completion of the plan. In addition, notices are often placed in newspapers throughout the range of the species.

The Delisting Process

The process of delisting species uses the same scientific rigor and full public participation process as the process for listing species. The Service regularly assesses the criteria listed in the recovery plan that are used as a target to estimate when a species may have sufficiently recovered to be reclassified as either a threatened species (recovered from being endangered) or as a fully recovered species and removed from the list of species protected by the ESA. Likewise, the most recent scientific and commercial data, after undergoing peer review, are used to assess the current status of the species. Often, the factors used to determine whether a species has recovered include the species' population size, recruitment, stability of habitat in terms of habitat quality and quantity, the degree to which habitat areas are connected to one another, and the control or elimination of the threats that led to the need to list the species.

As already mentioned during the previous review of the listing process, the public has the opportunity to petition the Service to delist a species at any time. Likewise, as already discussed, the petition will trigger a process where the petition is first reviewed for presenting substantial information, and, if it passes that test, within 12 months the action requested in the petition will be assessed, using the best available scientific and commercial data. If it is judged that the petitioned action is warranted, the Service will move to propose delisting the species, unless that rule-making is precluded by other higher priority actions.

Outside of the petition process, as recovery of a species progresses, the recovery team is often requested to assess the evidence that the species may no longer meet the definition of an endangered species or threatened species, including consideration of evidence that it has reached the goals identified for its recovery. Again, the best available scientific and commercial data are used, along with the opinions of experts on the species, its habitat, and land management practices. If the species no longer meets the definition of a threatened species or an endangered species, then a proposal to downlist or delist the species will be prepared.

As is the case for the process of listing a species, a proposal to delist or reclassify a species is published in the Federal Register and announced in selected newspapers throughout the range of the species. The Service schedules public meetings during the comment period so that all of the concerned public will have the opportunity to provide comments on the proposed action. All comments are carefully considered and a record, available to the public, is kept on the decisions made with respect to the comments.

If, after this process, it is determined that a species has recovered sufficiently to merit delisting or reclassification, then a final decision is made and published. A determination that a species has fully recovered will result in the species being removed from the list of species protected by the ESA.

Independent Scientific Review of Service Decisions

Service decisions under the Endangered Species Act are sometimes controversial, and there have been several cases in the recent past where the scientific underpinning of the Service's decisions has been subject to independent scientific review.

The U.S. Fish and Wildlife Service and the National Marine Fisheries Services listed wild Atlantic salmon in eight Maine rivers under the ESA as endangered in November 2000. Critics of the decision argued that a distinct "wild" genetic identity for salmon no longer existed because of artificial stocking and the resultant interbreeding. The controversy in Maine that accompanied the ESA listing led Congress to request the National Research Council's (Council) advice on the science relevant to understanding and reversing the declines in Maine salmon populations. The

charge to Council's Committee on Atlantic salmon in Maine included an interim report that focused on the genetic makeup of Maine Atlantic salmon populations, which was published in January 2002. The report validated the science behind the Services' listing action in Maine and the need for recovery, stating strong evidence of genetic distinctiveness. The charge for the final report, published in December 2003, included a broader look at factors that have caused Maine's salmon populations to decline and the options for helping them to recover. The U.S. Fish and Wildlife Service and the National Marine Fisheries Service are actively working with partners to alleviate threats to salmon recovery in Maine.

In 2001, the Departments of the Interior and Commerce enlisted the National Research Council for evaluation of the scientific analysis leading to the jeopardy biological opinions written by the Service and the National Marine Fisheries Service on operations of the Klamath Water Project. The Council found strong scientific support for all components of the Service's biological opinion, except for one measure relating water quality to water levels in Klamath Lake, which was based on professional judgment. The Council recognized that agencies charged with ESA responsibilities must sometimes use expert professional judgment when the scientific information needed to inform a decision is lacking or inconclusive.

In 2008, the Service issued a jeopardy biological opinion to the Bureau of Reclamation regarding the Continued Long-Term Operation of the Central Valley Project and State Water Project (CVP/SWP opinion) and included a reasonable and prudent alternative that required what is called a "fall action" to protect delta smelt and their habitat. The scientific information that the Service used in the 2008 CVP/SWP opinion has now been reviewed by five separate independent peer review processes, including a 2010 review by a National Research Council panel. While these reviews identified elements of the opinion that might have been handled differently or justified more thoroughly, they all largely affirmed that the Service used the best available scientific information and applied that information in a conceptually sound and scientifically justified manner within the biological opinion.

Litigation Challenging the Service's Central Valley Project and State Water Project Biological Opinion

The science underlying the Service's CVP/SWP opinion is also the subject of ongoing litigation. With regard to recent comments made by former U.S. District Judge Oliver Wanger, we firmly believe that wise decisions about the future of the Bay Delta must be guided by the best available science. The Department stands behind the consistent and thorough work that our scientists, in this case from the Service and Bureau of Reclamation, have done on the Bay Delta over many years. Their expertise and professionalism remain vital to the success of our efforts to meet the co-equal goals of improving water reliability and restoring the health of the Bay Delta.

We also believe that, when questions arise regarding the integrity of scientific work, it is important to resolve them swiftly, independently, and decisively. We disagree with Judge Wanger's comments last month, and we recognize and appreciate his effort to clarify those comments before his retirement. Still, we believe it is important that we follow the Department's standard procedures for reviewing questions of scientific integrity, so that we can resolve them definitively. Therefore, the Department has instructed the scientific integrity officers of the Service and the Bureau of Reclamation to retain independent experts to evaluate the allegations made by Judge Wanger.

Conclusion

In closing, Mr. Chairman, I would like to emphasize the importance the Service places upon having a science-driven, transparent decision-making process in which the affected public can participate effectively. The Service remains committed to conserving America's fish and wildlife by relying upon the best available science and working in partnership to achieve recovery. Our scientists and managers continue to do an exceptional job, under increasingly difficult circumstances, of using the best available scientific information to make decisions that comply with the law, can withstand challenge and thus can be trusted by the public we serve.

Thank you for your interest in endangered species conservation and ESA implementation, and for the opportunity to testify. I would be pleased to respond to any questions you and other Members of the Subcommittee might have.

Mr. BROWN. Thank you, Mr. Frazer, and I appreciate you staying within your five minutes.

Judge Manson, I now recognize you for five minutes.

**STATEMENT OF HON. CRAIG MANSON, GENERAL COUNSEL,
WESTLANDS WATER DISTRICT**

Mr. MANSON. Thank you, Mr. Chairman.

Mr. Chairman, Congresswoman Edwards, Members of the Committee, I appreciate the opportunity to appear here before you today on this most important subject. I will note that most of my biography is in my written statement. I would like to add to that, however, that I grew up in a community of scientists and I have the greatest respect for scientists. I took pride in the work of the people at the Fish and Wildlife Service and the National Park Service whom I oversaw during my tenure as Assistant Secretary.

I am also pleased that Professor Jonathan Adler is here because he is one of the most cogent and organized voices on issues of science and policy in academia today. So if you don't want to believe me, believe him, because as I note in my written testimony, my writings which are meager compared to his and my testimony has been criticized or critiqued in hundreds of law review and scholarly articles, and his has been largely praised. So please pay attention to his testimony.

Now, the issue of science and policy in the ESA I compare in my written testimony to the push-me, pull-you that was the fictional species that Dr. Doolittle discovered in the first book written about Dr. Doolittle. It is described as having no tail but two heads that pulled in opposite directions, and sometimes that is the way science and policy are with respect to the ESA.

I want to summarize my written testimony in about five points, but I will depart from those points to comment since I was named specifically in Congresswoman Edwards' opening statement to address that issue as a matter of fact. I found it curious that the Inspector General of the Department of the Interior took two years after I had left the Department to come ask me anything about any of those cases. I found it interesting that during the time that any of these things were happening, no one approached me and asked me any questions about any of those things. And so it made me suspect of their motives and calls into question—in my mind at least—their integrity.

Now, I want to talk about the incident with Gary Frazer. Gary was the one who brought to my attention a flaw in a rule that we were issuing, and I appreciated that very much. The problem was one of litigation. I was faced with one of two choices: either not publish the rule and be found in contempt of Federal Court, or publish the rule with the inaccurate information and then republish an amended rule, which is what we did. We published an amended rule with the correct information. So we made the deadline imposed by the Federal Judge, were not held in contempt, and got the accurate information out there in any event.

But let me go back to my five points. First, there are distinct rules for science and policy in the ESA and some scientists, lawyers, and policymakers misunderstand the relationship between policy and science in ESA decision-making. We make not scientific decisions but science-informed decisions in the ESA and our science must be of the highest quality in order to do that.

My second point is that we have to stop pretending that the ESA is not a politicized statute. It is. If it were not, this Committee would not be holding this hearing. It obviously is because it deals with the economics and the property rights of individuals and these are constitutional rights protected by our great charter.

The third point I want to make is that there has to be some accountability for everyone involved in the system from political appointees through scientists, and it is the job of the executive branch to oversee the work of its employees, and that is what happens in most cases that some have misconstrued as political interference.

Finally, the ESA decision context presents a poor fit between science and policy, according to Professor J.B. Rule, and one reason for that is the imposition of the regulatory scheme immediately upon the making of a scientific finding. In my written testimony I describe how that might be fixed, and I would be glad to answer questions about that or any other matter that comes before the Committee while I am here today.

[The prepared statement of Mr. Manson follows:]

PREPARED STATEMENT OF THE HONORABLE CRAIG MANSON, GENERAL COUNSEL,
WESTLANDS WATER DISTRICT

Chairman Broun, Congresswoman Edwards, and Members of the Subcommittee:

My name is Craig Manson. I am a specialist in law and public policy, currently serving as General Counsel to the Westlands Water District in California's Central Valley. Westlands is the largest agricultural water agency in the United States. Prior to my present appointment in May 2010, I was a professor at the Capital Center for Public Law and Policy at University of the Pacific, McGeorge School of Law in Sacramento, California. I taught administrative law, natural resources law, and public policy development, among other things. I held that position from January 1, 2006 to April 30, 2010.

From February 19, 2002, until December 31, 2005, I served as Assistant Secretary for Fish and Wildlife and Parks in the United States Department of the Interior. I oversaw the National Park Service and the United States Fish and Wildlife Service. I had responsibility for policy oversight of a number statutory programs, including the Endangered Species Act (ESA).

Immediately prior to my service as Assistant Secretary of the Interior, I was a Judge of the Superior Court of California in the County of Sacramento.

From 1993 to 1998, I was the General Counsel of the California Department of Fish and Game. The department implements the California Endangered Species Act and coordinates with the federal government concerning the state's responsibilities under the federal Endangered Species Act.

I have published articles in a number of journals, including *Environmental Law* (published by Lewis & Clark Law School, Portland, Oregon), the *Texas International Law Journal*, the *Duke University Environmental Law & Policy Forum*, the *Environmental Law Institute's Environmental Law Forum* and others.

As Assistant Secretary of the Interior, I testified before congressional committees on numerous occasions and spoke to professional groups many times about the Endangered Species Act. My writing and testimony has been cited, quoted, or criticized, for better or for worse, in hundreds of scholarly publications.

Today the committee reviews the nexus between science and policy in the Endangered Species Act. This is an issue of overriding importance for both the conservation of species and for the property rights of individuals across the nation. Unfortunately, it is a question that is neither new nor unique. Since the beginning of the age of federalized environmental activity in the late 1960s and early 1970s, science and policy have seemingly behaved like that rarest of all species, the Pushmi-pullyu, discovered by the multi-lingual fictional naturalist, Dr. Doolittle.¹

¹"They had no tail, but a head at each end, and sharp horns on each head. They were very shy and terribly hard to catch. The [Africans] get most of their animals by sneaking up behind them while they are not looking. But you could not do this with the pushmi-pullyu-because, no matter which way you came towards him, he was always facing you." H. Lofting, *The Story of*

The Pushmi-pullyu science-policy approach to the ESA and other environmental statutes raises fundamental issues for resolution. In the last six months, Members of both apolitical parties in both the House and the Senate have strongly criticized the Fish and Wildlife Service and the National Marine Fisheries Service for using “bad science” in important decisions. Most recently, a federal judge excoriated not just an agency, but two individual scientists by name for misleading the court. The judge said that the scientists were engaged in an attempt to mislead and to deceive the court into accepting what is not only not the best available science, it’s not science.” He went on to say that “There can be no acceptance bay court of the United States of the conduct that has been engaged in in this case by these witnesses.”

Clearly there is a problem with the manner in which science is being applied in significant matters involving the ESA. I now offer my view of the issues and a scheme for resolution.

1. *Some scientists, lawyers, and policymakers misunderstand the relationship between science and policy in ESA decision-making.* A good amount of this misunderstanding springs from certain statutory language itself. In describing the process of determining whether a species is “threatened” or “endangered,” section 4 of the statute says:

The Secretary shall make determinations required by subsection (a)(1) of this section solely on the basis of the best scientific and commercial data available
...

16 U.S.C. § 1533(b)(1)(A).

The use of the term “solely” has led to the belief that there is no room for anything but a scientific basis for listing decisions. There is, under this belief, no space to be given over to policy decisions. Indeed, perhaps this interpretation of this part of the statute is correct.

But this interpretation has over time been exaggerated into two other “beliefs” that are demonstrably incorrect. The first fallacy is that all listing decisions are purely the purview of field scientists, the closer to the bottom of the organization, the better. The second fallacy is that all decisions having to do with the ESA are safeguarded against so-called “political interference.”

The wrong-headedness of the first fallacy is apparent in the statute itself. The statute does not commit listing decisions to the primary investigating biologist in the field. The statute commits those decisions to the Secretary. While some degree of delegation is expected, as long as the Secretary or the Secretary’s designee has made a listing decision based on the best available science, the decision is valid. The Secretary has the power to determine in the first instance what constitutes the best science available to the Secretary. And in doing so, the Secretary or the Secretary’s designee may disagree with scientists in the field. Science managers may direct science staff to go back and “do it over” if those managers believe the “best science” has not been used. They have not only the power, but the obligation to do so.

The second fallacy is also belied by that statute itself. Not all ESA decisions are off-limits to considerations of policy. For example, section 4(b)(2) of the ESA deals with the designation of critical habitat, said by some to be one of the most important features of the act. However, section 4(b)(2) requires that the Secretary in designating critical habitat

tak[e] into consideration the economic impact, the impact on national security, and any other relevant impact, of specifying any particular area as critical habitat. The Secretary may exclude any area from critical habitat if he determines that the benefits of such exclusion outweigh the benefits of specifying such area as part of the critical habitat, unless he determines, based on the best scientific and commercial data available, that the failure to designate such area as critical habitat will result in the extinction of the species concerned.

16 U.S.C § 1533(b)(2).

Even the listing portion of section 4 requires that the decision-maker

tak[e] into account those efforts, if any, being made by any State or foreign nation, or any political subdivision of a State or foreign nation, to protect such species, whether by predator control, protection of habitat and food sup-

Doctor Dolittle—Being the History of His Peculiar Life at Home and Astonishing Adventures in Foreign Parts, Never Before Printed, p. 81 (New York: Frederick A. Stokes & Co., 1920 [Tenth Printing Nov. 1922])

ply, or other conservation practices, within any area under its jurisdiction; or on the high seas.

16 U.S.C. § 1533(b)(1)(A).

So what is the lesson here? It is that the ESA requires science-informed decisions and not merely scientific decisions.

2. *Some scientists, lawyers and policy-makers do not understand the different functions of science and policy.* As I and Professor Adler and others have said, science is observational and thus seeks to tell us “what is,” “what was,” and occasionally “what might be.” Policy is the determination of the body politic as to how it desires to act, given the observed conditions. The infinite political options in the face of certain conditions are not to be dictated by scientists but by those given such authority by law.
3. *Some scientists, lawyers and policymakers fail to comprehend Renault’s Other Surprise:² The ESA is a Politicized Statute.*

That the ESA is a politicized statute is no surprise to any but the most naïve. In fact, the ESA did not involve politics, this committee would not be holding this hearing.

The ESA is necessarily politicized because it involves the protection of certain natural resources at the expense of private property, economic activity, and other natural resources. Although not intended by the drafters, implementation of the ESA has become a win-lose adversarial process. The politicization of the ESA began at its inception and has carried on through every Administration and Congress since then.

To say that the ESA is politicized is really to make no more than the point that there are competing policy decisions to be made, whether we recognize that or not. In fact, all sides need to stop pretending that the ESA can be administered in a politically neutral fashion. later in this testimony, I suggest a solution that will serve to put the political decisions in proper context. There are several types of political influence that are involved in ESA implementation; some are proper and others are improper.

“Political Interference” Generally

Shortly after I became Assistant Secretary, a Member of Congress summoned me and the then-director of the Fish and Wildlife Service to his office. In his district was a large military base that had been closed under the BRAC process. Businesses and local governments were interested in seeing the reuse process move quickly. The Congressman (who to my knowledge had no biological training)³ complained that the Fish and Wildlife Service was “holding up the process” by demanding “too many studies” and “too much mitigation” for potential impacts to threatened and endangered species. The Congressman asked us to get the Service to “cooperate” with the other parties.

We left having promised the Member no more than that we would “look into” the matter.

Such contacts by Members of Congress with the Secretary, the Deputy Secretary, the Assistant Secretary, and the Service Director are quite common. I regard such contacts as “political contacts” since they involve a Member of Congress and appointees of the President. Such contacts generally are not improper. Members of Congress have a legitimate role in seeing that the Executive Branch is doing its job in a general sense and more specifically in not disadvantaging the Member’s constituents.⁴

What would make this type of contact improper? In this case, the Member essentially asked that we review the science and the application of the science in the particular case. If the Member had asked us to change the Service’s science based solely on political considerations, that would be improper. If we in fact ordered the Service

²**Rick:** How can you close me up? On what grounds?. **Captain Renault:** I’m shocked, shocked to find that gambling is going on in here. [A croupier hands Renault a pile of money]. **Croupier:** Your winnings, sir. **Captain Renault [sotto voce]:** Oh, thank you very much. [aloud] Everybody out, at once! Casablanca (1942)

³I believe he sold automobiles before being elected to public office.

⁴Curiously, this particular Member, endorsed by the Sierra Club, and with a 100% rating from the League of Conservation Voters, believed that what he was doing might be improper. As we left his office, he said “You know, if I heard of any other Member having this conversation, I’d be all over them. But, hey, it’s my district, you understand?”

to change its science solely on political considerations, that would be improper. Neither occurred in this case.

Political Interference—the Executive Branch

An issue that receives much attention in the press is the alleged political interference by Executive Branch political appointees. The story usually alleges that an appointee “with no scientific training” edited a scientific document or changed a scientific conclusion produced by the career staff. These stories are usually wrong on several counts.

First, the appointees in the Executive Branch have the right and the duty to oversee the work of the career staff. This means more than simply rubber-stamping the work product of the career staff.⁵ Since the decisions under the ESA have regulatory effect, these decisions must be supported by substantial evidence. It is important that before any document is given effect by the signature of the Secretary, the Assistant Secretary or the Director, that it be reviewed at all levels to ensure that its conclusions are supported by the evidence. If a conclusion is not supported by the evidence presented, that conclusion cannot and should not be stated. It is completely appropriate for appointees to review documents in this manner. One need not be a biologist to conduct that sort of review. In fact, judges do this all of the time in a variety of fields. This does not constitute political interference.

Furthermore, “many ESA decisions involve questions of biological science for which the available scientific database is either sparse or inconclusive.” J.B. Ruhl, *The Battle Over ESA Methodology*, *Env't L.* (Mar 2004). In such cases, it is not improper for an appointee to challenge the gap-filling by agency scientists. The struggle in this respect between scientists and agency policymakers is nothing improper or nefarious, but rather expected, as Professor Ruhl explains.

In fact, the Constitution of the United States demands protection of private property from arbitrary, capricious, and otherwise unlawful actions by agents of the government. The Executive Branch’s officials have an oath-taken duty to ensure that private property and other liberties are preserved.

Second, it is alleged that appointees impose the policy views of the administration. This by itself is not improper.

[A]n agency to which Congress has delegated policy-making responsibilities may, within the limits of that delegation, properly rely upon the incumbent administration’s views of wise policy to inform its judgments. While agencies are not directly accountable to the people, the Chief Executive is, and it is entirely appropriate for this political branch of the Government to make such policy choices—resolving the competing interests which Congress itself either inadvertently did not resolve, or intentionally left to be resolved by the agency charged with the administration of the statute in light of everyday realities.

Chevron USA Inc. v. Natural Resources Defense Council, 467 U.S. 837, 865–66 (1984), per Stevens, J.

Furthermore, it is not improper for an appointee to inquire whether there exists science which supports the Administration’s view of a particular problem or issue. Where competing scientific views exist, it is not improper for an appointee who oversees an agency to select or direct that science be used which more nearly aligns with the administration’s policy views.

Finally, it is not improper for an appointee to state the Administration’s policy view and direct that science which supports that view be found.

It would be improper, having been told that no science exists to support the Administration’s policy view, for an appointee to nonetheless implement that view when that statute requires “the best available science” as the basis for the decision.

Science, Law and Policy

What about science? What of the complaints of scientists that their work is edited or disregarded? There are several answers to this. First, there has been no scientifically valid study of this issue. The studies that have been done rely on recycled anecdotal data. But assuming that there are valid complaints in this area, the following should be noted.

⁵ Within days of becoming Assistant Secretary, I held a staff meeting of both appointees and career staff. I told them, among other things, paraphrasing a well-known Washington lawyer, “I’m the Assistant Secretary here. I’m not a potted plant.” I didn’t expect any member of the staff to be a “potted plant” either.

First, no organization in the world takes as its final position a “first draft” produced at its lowest level. There’s a reason that there are levels of review-recall, no potted plants. This may difficult for some to accept.

Second, what passes for science in the ESA context frequently consists of little more than literature search, especially with respect to listing of species. That’s because the Fish and Wildlife Service has virtually no research capacity and few Ph.d. scientists in the field. As a result, many “scientific” documents rely on the interpretation and policy leanings of their authors. In that event, policymakers are entitled to use their judgment about how the document will be presented.

Third, as Professor Ruhl has noted, ESA decision contexts present a poor fit between science and policy. Ruhl says that the law often requires scientists to answer questions that don’t make sense to them. When scientists and policymakers don’t understand each other, then chaos and strife will reign in their relationships.

The ESA exists at the confluence of science, law, and policy. It is not a purely scientific decision scheme. Nonetheless, its decision contexts must be science-informed. They also may be policy-informed and this must not be mistaken for improper or unlawful political influence.

4. *In the present Administration, political apathy rules.* As I have previously explained, there is an obligation for the Executive Branch to supervise the work of its employees. And as I have explained, this can be done within the law. In the present Administration, political apathy, rather than political interference, reigns. This attitude is just as bad as and perhaps worse than alleged political interference. Leaving the policy decisions to the foot-soldiers with no direction can only lead to catastrophe. That’s what has happened in one of the most important and sensitive issues of the day—the San Francisco Bay Estuary. No effective policy oversight led the federal judge to castigate the two government scientists. And time and time again, the accountable officials in Washington have sought to duck their responsibilities, even when taken to task by Members of Congress.
5. *The ESA Contains a Structural Flaw Which Exacerbates Hostility Toward Science.* The ESA imposes its regulatory scheme immediately upon the listing of a species or the designation of critical habitat. That’s why all the major fights are about the science and why scientist-advocates are so strident in their views even if their science is poor. The statute, in an effort to minimize strife over science, has in fact significantly heightened it. The view that neutrally applied science is an effective method to solve political issues is a relic of the nineteenth century which was thoroughly discredited in the twentieth century.

We need to return to the notion that science can tell us what is, while policy determines what ought to be done. To do that, the listing decisions should be decoupled from the automatic, discretion-less application of regulation. That would require Congressional action. Additionally, the quality of science would be vastly improved and court litigation sharply reduced if the Secretary was required to make listing determinations by formal-rulemaking under the Administrative Procedure Act.

Thank you for inviting me on this important topic. I am available for any questions the committee may have.

Chairman BROWN. Thank you, Judge.

I now recognize our next witness, Mr. Vincent-Lang, for five minutes.

**STATEMENT OF MR. DOUGLAS VINCENT-LANG,
SENIOR BIOLOGIST, ALASKA DEPARTMENT
OF FISH AND GAME**

Mr. VINCENT-LANG. Good morning, Mr. Chair, Ms. Edwards, Committee Members. Thank you for the invitation to speak with you today.

Species in Alaska have increasingly become targeted for listing based solely on speculated risks such as climate change despite their currently healthy status. This is best exemplified by the decision of the U.S. Fish and Wildlife Service to list polar bears as threatened species worldwide. Polar bears are listed based on models that hypothesize that climate change will result in a decline of

sea ice habitats and a speculation that lost sea ice habitat will threaten currently healthy populations with extinction by midcentury. This listing was made despite the fact that the worldwide polar bear population remains at all-time record numbers. Furthermore, many underlying critical assumptions and hypotheses in the models went untested.

Alaska disagrees that the Act should be used as a precautionary tool to list currently healthy species based solely on model results of future threats such as climate change. The State is challenging this listing and the precedent it is setting. The National Marine Fisheries Service recently proposed to list ringed seals, which number between three to seven million based on the same modeling approach, an action we are also opposing. Ultimately, what species could not be listed?

It is apparent to us that the Act is being used by federal agencies to gain control over landscapes and seascapes rather than to arrest species extinction. We do not believe Congress intended the Act to be used in this manner, nor do we believe Congress intended the Act to be used by federal agencies to wrest control of currently healthy populations from state management authority.

Another issue is a threshold question regarding when it is necessary to list a species. In the past, species were listed based on relatively high risk of extinction within the near-term future. Recently, however, federal agencies have begun extending the period of foreseeable future into the more distant future, yet retaining low risk of extinction probability. This raises the question as to whether species that have low risk of extinction within the immediate future should be precautionarily listed. It also raises the question as to how far into the future can population trends be reasonably predicted. Finally, what is a reasonable level of extinction risk?

We are concerned with how recovery goals are being established and used in Section 7 consultations also. For example, the recovery goal for delisting Steller sea lions in western Alaska numbers over 100,000 animals. This is far higher than simply needed to remove the risk of extinction in our opinion. However, despite the fact that the population currently is numbering over 73,000 animals and growing overall across its range, the National Marine Fisheries Service has released a new Biological Opinion that found that fishing in some areas of the western Aleutians is jeopardizing the stock and adversely modifying its habitat and has adopted new closures and restrictions to fishing. These closures are economically devastating to local economies and raise environmental justice concerns.

The State raised serious questions regarding the foundational science associated with this decision. The National Marine Fisheries Service did not conduct an independent review of their work, which would have highlighted the analytical shortcomings the State identified. In fact, a subsequent independent analysis substantiated many of the scientific concerns identified by the States and affected users.

This raises a question as to whether recovery goals are being set too high. Should recovery goals reflect the number required to remove the risk of extinction or to a number higher that represents some level of historical abundance? Should recovery plans contain

non-population objectives that must be achieved—for example, greenhouse gas emission targets?

Another concern is the manner in which the two Services identify subspecies or Distinct Population Segments for listing under the Endangered Species Act. In 1973, Congress had no way to predict the genome of several plants and animals could actually be mapped. We know now enough about genetics to detect even the most subtle differences not just between species but individuals within given species. Couple this knowledge with the ability to use the Endangered Species Act to list “subspecies” and “distinct population segments” and every local population with slight geographic or genetic differences or population at the edge of species’ range become candidates for ESA listings, regardless of their overall abundance of the species.

Alaska is also concerned with how critical habitat is being designated. Following its decision to list the polar bear as a threatened species, the U.S. Fish and Wildlife Service listed—designated a vast area of Alaska and its offshore areas as critical habitat. The area designated is the largest ever designated for a species and encompasses an area larger than the size of California. The designated habitat includes any place a polar bear might roam during its life. This is a dramatic deviation from previous critical habitat designations where specific areas of critical importance were only designated. The State and others are challenging this designation as well as what we believed were serious underestimation of the economic impacts associated with this designation.

Finally, when Congress—when passing the Act, Congress clearly identified a unique role for States and all Endangered Species Act decisions. This role is contained in Section 4(i) of the Act. This section clearly grants States a place at the table in all ESA decisions, including the application of science in these decisions. Unfortunately, States are not being given equal deference on science during implementation of the Act. Instead, the Services are increasingly using their deference to discount valid questions raised by States on federal interpretation of science. They are also using their deference as a basis for their defense of flawed science. We believe States should have equal deference in science in all ESA decisions.

Thank you for the opportunity to testify and I look forward to any questions you may have.

[The prepared statement of Mr. Vincent-Lang follows:]

PREPARED STATEMENT OF MR. DOUGLAS VINCENT-LANG,
SENIOR BIOLOGIST, ALASKA DEPARTMENT OF FISH AND GAME

Thank you for the invitation to speak with you today. My name is Doug Vincent-Lang. I am a Special Assistant to the Commissioner of the Alaska Department of Fish and Game (ADF&G).

Today I would like to address concerns the State of Alaska has with the application of science in several recent Endangered Species Act (ESA) decisions in Alaska. Congress passed the ESA as a tool to ensure that species would not become extinct. The act was meant as the ultimate safeguard and has been used successfully to prevent species extinctions where species were in significant decline and facing immediate risk of extinction, and when the threats to the species’ survival were imminent and easily identifiable and manageable. It is a goal we all should support. It is one Alaska supports.

An example of the successful application of the ESA in Alaska was the Aleutian Canada (Cackling) Goose. These geese were in precipitous decline. The main threats

were identified to be predation by foxes and loss of overwintering habitat. The threats were addressed and the species recovered and was removed from the ESA, notably without designation of critical habitat.

Recent ESA actions, however, have caused concern about how the ESA is being applied in Alaska. Species in Alaska have increasingly been targeted for listing based solely on speculated risks such as climate change, despite currently healthy and stable numbers. This is best exemplified by the decision by the U.S. Fish and Wildlife Service (USFWS) to list the polar bear as a threatened species worldwide. The polar bear was listed as a threatened species based on habitat envelope models that hypothesized that climate change will result in a decline of sea-ice habitats, and on speculation that lost habitat will threaten currently healthy populations with extinction by mid-century. This listing was made despite the fact that the polar bear population remains at all-time record numbers, despite past sea ice loss which should have caused population declines if the models are right, and despite that many underlying hypotheses and assumptions in the models were and remain untested.

The decision to list polar bears was based largely on “habitat envelope models”. These models use present-day species-habitat relationships to speculate on the potential distributions and viability of species under future climate conditions. The utility of these models, however, to assess species viability is questionable. Predictions of species responses based solely on projected changes in the quantity and quality of suitable habitat are likely to be inaccurate because they fail to account for important ecological processes that influence extinction. Furthermore, shifts and contractions of suitable habitats do not easily translate into viability assessments or extinction risks. Consequently, these models have increasingly come under question by a wide range of experts, especially when they are applied into the distant future (those beyond about 15 years).

In the case of the polar bear, the USFWS used a habitat envelope model to assess the future viability of polar bears based on changing habitat and its carrying capacity related to changing ice conditions. In short, the model predicted the amount of sea ice habitat that would be lost due to a warming climate and used this to speculate upon the future viability of polar bear populations into the distant future (in this case 45 years) based on potential loss in habitat.

In our review of this model we raised several concerns including, but not limited to:

1. A declining trend in habitat may not correlate to a decrease in numbers unless polar bears are at carrying capacity throughout their range. If bears are not at their carrying capacity, they could lose a significant portion of their habitat and not suffer any loss in numbers or viability. This critical assumption was not tested or verified by the USFWS. In fact, recent data has shown that it is not likely valid. Polar bears sampled in the Chukchi Sea, an area that has experienced the greatest amount of sea ice loss in the Arctic, have demonstrated they are not under nutritional stress and do not have reduced survival.
2. The model assumed that polar bear numbers would decrease in response to lower observed survival rates in recent years associated with increased loss of sea ice. However, in their analysis the USFWS only used five years of recent data despite historic data being available dating back to the 1980s. These data showed that about one-third of the years between 1986 and 2006 had survival less than those required to sustain the population, yet the population over this period actually grew or remained stable, strongly suggesting that the assumption about ice loss and survival is not valid. Simple hind-casting of the model to verify this assumption should have been performed.

Despite the fact that the USFWS candidly acknowledged the weaknesses in their models, the District Court for the District of Columbia stated in its upholding of the USFWS’s decision to list the polar bear that it is “*bound to uphold the agency’s determination that the polar bear is a threatened species as long as it is reasonable, regardless of whether there may be other reasonable, or even more reasonable, views*”. The State believes this grants too much deference to a federal agency’s interpretation of fundamentally flawed analyses. The State continues to believe that the science does not justify the listing of polar bears and is appealing this decision. There is little evidence that polar bears are threatened with extinction now or within the near term foreseeable future.

Alaska disagrees that the ESA should be used as a precautionary tool to list currently healthy species based solely on model results of future threats such as climate change. The State is challenging this listing and seeking to overturn it and

the precedent it is setting. The National Marine Fisheries Service (NMFS) recently proposed to list ringed seals, which number between 3–7 million, based on this same modeling approach, an action we are also opposing. Ultimately, what species could not be listed?

It is apparent to us that the ESA is being used by federal agencies to gain control over landscapes and seascapes, rather than to arrest species extinction. We do not believe Congress intended the act to be used in this manner. Nor do we believe Congress intended the Act to be used by federal agencies to wrest control of currently healthy populations from state management authority. We also believe it is imperative that underlying assumptions within models be tested before they are used to list a species.

Another issue is a threshold question regarding when it is necessary to list a species. In the past, species were listed based on relatively high risks of extinction within the near term future (10–20 years). Recently, however, federal agencies have begun extending the period of “foreseeable future” into the more distant future, yet retaining low risks of extinction probability. An example is the beluga whale in Cook Inlet. The NMFS listed the beluga whale as an endangered species based on modeling that showed that the population had a greater than 1% chance of going extinct beyond 50 years. Put another way, the models predicted that the population had more than a 99% of NOT becoming extinct within the next half century. Their decision to list was partially based on modeled extinction probabilities. The NMFS actually modeled, and used as a basis for their decision, extinction probabilities for these whales out to 300 years based on a 12-year data base. Alaska is challenging the decision to list beluga whales in Cook Inlet as endangered. We feel the decision is unjustified given the low risk of immediate extinction and questions related to the validity of modeling extinction risks out to 300 years based on 12-year data sets.

This raises the question as to whether species that have low risks of extinction within the immediate future should be listed at all. It also raises the questions as to how far into the future can population trends be reasonably predicted— ten years, 50 years, 100 years, or 300 years? Finally, what is a reasonable level of extinction risk— 1%, 10%, 20%, or 25%?

We are also concerned with how recovery goals are being established and used in Section 7 consultations. For example, the recovery goal for delisting Steller sea lions in western Alaska numbers over 100,000 animals. This is far higher than needed simply to remove the risk of extinction. However, despite the population currently numbering over 73,000 animals and growing overall across its range, the NMFS has released a new Biological Opinion (BiOp) that found that fishing in some areas of the western Aleutians is jeopardizing the stock and adversely modify its habitat, and has adopted new closures and restrictions to fishing in the western Aleutians. These closures are economically devastating to local economies and raise environmental justice concerns.

The conclusion that fishing is affecting the western stock of Steller sea lions was based on speculation, not hard facts. Let’s look at the scientific data upon which the NMFS based their jeopardy and adverse modification:

1. The western stock of Steller sea lions as a whole is recovering and is not in jeopardy at this time. This stock is growing at a rate of 1.4% per year and now numbers over 73,000 animals. As noted in the BiOp itself “Since 2000, the decline has ceased and in most sub-regions the wSSL population is increasing.”
2. Recovery objectives established by the 2008 Steller Sea Lion Recovery Plan are not being violated; rather the current status of the stock achieves the criteria established by the Recovery Plan. To achieve recovery, the plan criteria dictate that the population trend in any two adjacent sub-regions cannot be significantly declining. In fact, the data show that no two adjacent sub-regions are significantly declining: one area does show a decline, but it is not possible to determine if this decline is significant. The plan also dictates that the population trend in any one sub-area cannot have declined by more than 50%. The data show that the population in one sub-region, the Western Aleutians, has declined, but at a rate less than 50%.
3. The primary rationale for the positive jeopardy and adverse modification finding is that the Atka mackerel and Pacific cod fisheries are causing “nutritional stress” to Steller sea lions. There is little sound evidence, however, that nutritional stress is causing the slower-than-desired rate of recovery in the western Aleutians, and the scant available evidence is extremely weak. For example, of the 17 possible life history indicators identified to assess nutritional stress for which the NMFS has data to evaluate, only one indicator showed a positive relationship: reduced birth rate. The remaining 16 biological indicators showed a negative relationship. These negative findings included emaciated pups, re-

duced pup body size, reduced pup weight, reduced growth rate, reduced pup survival, reduced juvenile survival, reduced adult survival, reduced overall survival, reduced pup counts, reduced non-pup counts, changes in blood chemistry, and increased incidence of disease. And even the reduced birth rate relationship should be viewed with caution given the lack of life history data for sea lions in the western Aleutians. Low birth rates could be attributed to factors other than nutritional stress, for example, predation. Other recent data, collected by the ADF&G and funded by cooperative research monies from the NMFS, confirms that first-year Steller sea lions pups in the western stock show no evidence of poor body condition. This is yet another source of data that calls into question the Service's unproven and untested nutritional stress theory, on which their onerous Reasonable and Prudent Alternative is based. In addition, other NMFS funded research demonstrates out-migration of branded Steller sea lions that move between the western and eastern Steller sea lion stock boundaries, which calls into question the assertion in the BiOp that there is no cross-migration between the two stocks.

4. The case for restrictions for Pacific cod as an important prey species for Steller sea lions in the western Aleutians is tenuous at best and the basis for its inclusion in the Reasonable and Prudent Alternatives and interim final rule is unjustified. Information available to assess sea lion diets in the western Aleutians is extremely limited. Only 46 total scat (feces) samples are available, and within that limited sample, 94% of the scat samples collected contained no cod at all. Information to assess the extent of sea lion feeding ranges is also extremely limited. The primary justification for the expansive closures in the western Aleutians is the foraging behavior of 3 juvenile males, which may not be representative of all Steller sea lions, particularly adult females, the population component most critical for determining population trends.
5. While it may be theoretically possible for commercial fisheries to adversely impact the prey field of Steller sea lions, the data are very inconclusive. Studies funded by the NMFS, but largely ignored in the BiOp, reveal that correlations between Steller sea lion population growth and fishing intensity over time and space indicate no significant relationship, much less a negative relationship.
6. The biomass of both Pacific cod and Atka mackerel were increasing under the prior management regime, thus negating the need for the drastic changes implemented by the NMFS. As a result, the management measures imposed by the final Reasonable and Prudent Alternatives are not consistent with the most recent 2010 biomass estimates for either Pacific cod or Atka mackerel, which were not considered in the BiOp and Reasonable and Prudent Alternative analysis even though they were available before the final BiOp was signed. These most recent (November 2010) biomass surveys for these two species show increasing biomass in the western Aleutians, even to levels sought as targets in the Reasonable and Prudent Alternative.
7. Finally, even accepting as true the false conclusion that fishing is negatively affecting Steller sea lions in the western Aleutians, the BiOp presented no information demonstrating that this effect is adversely modifying critical habitat as a whole for the western stock, as required under the ESA.

In summary, there is simply insufficient scientific evidence to conclude that fishing is causing any nutritional stress and thus jeopardy to western Steller sea lions and adverse modification of their critical habitat, much less any level of effect that would require immediate implementation of corrective actions at this time.

Alaska submitted extensive comments identifying these foundational science issues, as well as regarding issues with the process used by the NMFS to reach their decision. We do not believe that the NMFS adequately considered the State's concerns. Instead, they strongly relied on their deference to justify their conclusions.

In reaching their conclusion, the Service failed to conduct an independent review of their work, as is normally undertaken and which we believe would have highlighted these shortcomings. In fact, a subsequent independent analysis contracted by the States of Alaska and Washington substantiated many of the scientific concerns identified by affected users.

Another example is the northern sea otter. In this case, the USFWS recommended threshold for delisting is 103,417 otters. We question whether a population of over 100,000 sea otters is really necessary before delisting can occur. We note that the recovery objective for the southern sea otter is much lower (the average population must exceed 3,090 for three years) and appears aimed at removing the risk of near term extinction rather than attainment of long term recovery to some historic level of abundance or supportable carrying capacity.

This plan also includes an ecosystem based criteria. This criterion states that “*sea otters must be sufficiently abundant to either maintain, or bring about, a phase shift to the kelp-dominated state.*” So not only must sea otter number over 100,000, but kelp must be also be restored, before delisting could occur. We believe it is inappropriate to establish criteria which stipulate that listed species (in this case sea otters) could not be delisted, despite the fact that they had attained a desired population goal, unless an ecosystem goal (in this case a target level of kelp forests) is also restored. This is beyond the scope of species recovery.

Finally, the criterion which states that “*All known threats are being adequately mitigated*” is problematic. All populations face a multitude of threats that potentially impact their growth rate in varying degrees throughout time. The key question is whether the overall impact of the threats in combination is negatively impacting over species viability. If the population is meeting its desired growth rate, the influence individual threats have is somewhat irrelevant. Inclusion of criteria for single threats allows such criteria to be used as de facto vetoes on down- or delisting decisions regardless of overall population health. As such, it is inappropriate to include specific criteria for each known threat that could prevent down- or delisting if overall the population is meeting stated growth rate objectives.

In total, these recovery goals and their application raise the question as to whether recovery objectives are being set too high. Should recovery measures reflect the required number required to remove the risk of extinction, or be set to a number that represents some level of historic abundance or full recovery? Can threats ever be completely removed? Should recovery plans contain non-population objectives that must be achieved (e.g., greenhouse gas emission targets)? We believe that ESA recovery goals and objectives should appropriately be designed to remove the risk of extinction in the near future, not fully recover the population to some level of past abundance or supportable carrying capacity. Once the threat of extinction in the near term foreseeable future is removed, the species should be delisted and ESA protections should be removed.

Another concern is the manner in which the two Services identify subspecies or Distinct Population Segments for listing under the ESA. In 1973, Congress had no way to predict that the genome of a several plants and animals could actually be mapped. We now know enough about genetics to detect even the most subtle differences between not just species, but individuals within a given species. Couple this knowledge with the ability to use the ESA to list “subspecies” and “distinct population segments”, and every local population with slight geographic or genetic differences, or populations on the edge of the species’ range become candidates for ESA listing, regardless of the overall abundance of the species.

Alaska is also concerned with how critical habitat is being designated. Following its decision to list the polar bear as a threatened species, the USFWS designated a vast area of Alaska and its offshore areas as critical habitat. The area designated is the largest ever designated for a species, and encompasses an area larger than the State of California. The habitat designated includes any place a polar bear might roam during its life. This is a dramatic deviation from previous critical habitat designations where specific areas of critical importance to recovery were designated. The State and others are challenging this designation as well as to what we believed was a serious underestimation of the economic impacts associated with the designation.

With respect to the economic impacts, the USFWS’s Final Economic Impact Analysis for the critical habitat designation did not adequately consider the relevant factors as required under the ESA. Among other things, the Service specifically failed to adequately consider:

- The economic impacts of the additional ESA Section 7 consultations or portions of consultations and project requirements and modifications that the adverse modification of critical habitat standard imposes;
- The economic impact of the additional costs of litigation, project delay, project slippage, deferred production or closure, uncertainty and risk (The Service stated that “potential for indirect impacts, such as litigation, uncertainty, and project delays is real” but failed to analyze such impacts); and,
- The economic impact to the oil and gas industry, construction and development, and commercial shipping and marine transportation. Specifically, the Final Economic Impact Analysis did not include a regional economic impact analysis of reduced oil and gas activity or an assessment of the economic impacts of critical habitat designation on commercial shipping and marine transportation.

The area designated includes the largest areas of potential oil and gas deposits in the United States and are of economic importance to the State as well as of stra-

tegic importance to the Nation. The designation puts the area under federal control and opens all permit decisions to potential litigation and delay.

Finally, when passing the Act Congress clearly identified a unique role for states in all Endangered Species Act decisions. This role is contained in Section 4(i) of the Act. This section clearly grants states a place at the table in all Endangered Species Act decisions, including the application of science in these decisions. Unfortunately, states are not being given equal deference on science during the implementation of the Act. Instead, the Services are increasingly using their deference to discount valid questions raised by states on federal science. They are also using their deference as a basis of their defense of flawed science. We believe that states should have equal deference on science during all ESA decisions.

In closing, these examples point to how recent application of the ESA has stretched the original intent of this well intentioned Act. We are challenging what we believe is unsound science application as well as unwarranted applications of the Act hoping to bring it back to its original intent. We believe there needs to be increased scientific rigor applied in ESA decisions. We also believe that there needs to be limits placed on the amount of deference granted to federal agencies in ESA decisions. States should have equal deference. We welcome legislation to fix the act. We believe reform is needed and the time is now.

Thank you for the opportunity to speak with you.

Chairman BROUN. Thank you, Mr. Vincent-Lang. I appreciate your testimony. I love your State, too. I have had the opportunity to visit there and hunted brown bear, sheep, moose and caribou. It is a wonderful place.

I now recognize our next witness, Dr. Wilkins. You are recognized for five minutes, sir.

**STATEMENT OF DR. NEAL WILKINS, DIRECTOR,
TEXAS A&M INSTITUTE OF RENEWABLE
NATURAL RESOURCES**

Mr. WILKINS. Mr. Chairman, Members of the Committee, thank you for putting attention to this important issue.

I work as a Professor of Wildlife Science at Texas A&M University where I also direct two research institutes that are part of AgriLife Research and Extension, part of our Land Grant University System. I have spent much of the last 20 years dealing with endangered species science and endangered species conservation.

Science and its application to conservation has progressed substantially since the Endangered Species Act first passed, which was in the Nixon Administration, but the Act has not had any substantial change since the Reagan Administration. Around that time, the Service began using science-specific information to guide the process for considering candidates to the Endangered Species List, but this approach was never added to the law. Therefore, the Service is still required to review every new listing petition within 12 months, regardless of what we really know about the species.

The result is the well known backlog of pending decisions, litigation, and court orders. The Service has made some strides in implementing ESA through development of habitat conservation plans, mitigation banking, safe harbors, and some newer market-based incentives like recovery credit systems. These innovations have helped advance the science for implementing the Act, but these are not enough.

There are still significant barriers to the use of reliable science in guiding endangered species policy and decision-making. By not deferring to States' efforts, we miss some important opportunities for more effective conservation actions than the one-size-fits-all protections under ESA.

The case of the dunes sagebrush lizard provides some good lessons. In December of 2010, the Service released a proposal to list this species which had previously been a candidate for listing starting in 1982. The lizard's listing proposal caught many off guard and created a lot of attention as the listing threatened to impact oil and gas development in the Permian Basin of West Texas. Our research group at Texas A&M quickly fielded a large team that in 1 month collected more information on the species range in Texas than had been collected in the previous 40 years. Such swings in attention and activity occur when the program is driven by lawsuits.

On a high note, the Endangered Species Taskforce in Texas, a group that was recently put together by our state legislature, quickly developed a conservation plan for the lizard that is now in the federal register for review. It shows that some of the options

for deferring ESA recovery actions to the States can make some sense.

The golden-cheeked warbler is another good example of how ESA policy can drift unmoored from science. This songbird was believed to number less than 32,000 birds when it was listed as endangered in 1992. Our recent surveys across private ranchlands in 35 counties in Texas demonstrated that there were likely greater than 200,000 males of this species in its breeding range. This new information differs widely with what is currently in the official record, so there is some real resistance to making decisions on this new information as it could pose a risk for a lawsuit.

The deadline-driven process often requires the Service to use some unreliable information that is presented in a petition as best-available science. And once that information is on the official record, it is tough to counter when scientists finally generate better information on the species.

As we have seen in the case of Rocky Mountain wolves and other species, it is possible to recover species biologically and fail to acknowledge this bureaucratically because the law is in the way. There are at least four things we can do about this.

Number one, we need to require a standardized, independent peer review of scientific information used in the listing process. Current peer reviews are inconsistent and really not independent. With adequate peer review, we might avoid locking in on whatever information is available at the time as persistent truth regardless of its quality or subsequent discoveries.

Second, we can clear the backlog of listing petitions by authorizing the ESA listing process to work according to a science-based priority system instead of a 12-month deadline. Twelve-month deadline means the Service will often accept speculation and other unreliable information as best science. A science-based priority system would return these decisions to field science and an open public process.

As a third recommendation, we can separate the listing and recovery functions of the ESA by delegating recovery planning to the States as an option.

Finally, you can incentivize species recovery by linking the delisting process to reaching recovery goals. Recovery goals mean something and they ought to be acted upon.

This remains an important topic and deserves some action. I thank you again for giving it your attention.

[The prepared statement of Mr. Wilkins follows:]

PREPARED STATEMENT OF DR. NEAL WILKINS, DIRECTOR,
TEXAS A&M INSTITUTE OF RENEWABLE NATURAL RESOURCES

Chairman Broun, Ranking Member Edwards, and Members of the Subcommittee, my name is Neal Wilkins. I am director of the Texas A&M Institute of Renewable Natural Resources and the Texas Water Resources Institute. I am also a Professor of Wildlife Science at Texas A&M University. Thank you for the opportunity to appear before you today to emphasize the importance of using more reliable science in the implementation of the Endangered Species Act. Before joining the faculty of Texas A&M in 1998, I spent six years directing the endangered species and environmental compliance programs for a large private forest landowner in the Pacific Northwest. For much of my career—and specifically in the past two decades—I have worked to apply science to endangered species issues.

Working through Texas AgriLife Research, our Texas A&M scientists are deeply engaged in research and monitoring of ESA-listed species and the candidates for such listing. Under contract from the U.S. Fish & Wildlife Service, my team has performed the science assessments for rangewide status reviews for golden-cheeked warblers and black-capped vireos. Our scientists have long-term research projects on species ranging from endangered Key deer in Florida to willow-flycatchers in the desert Southwest. We lead large multi-stakeholder efforts to provide for the conservation and recovery of species that depend upon the Edwards Aquifer for their survival while simultaneously providing reliable water supplies for San Antonio, Texas. Over the past year, our science group expanded ranks to include a team of freshwater mussel specialists that is already doing groundbreaking science on several species that are proposed for listing throughout the streams and river systems of Texas. We also have a research team that leads the research and monitoring efforts for the dunes sagebrush lizard—a species whose proposed listing as endangered and its potential implications for oil and gas development, became a subject of widespread national media coverage throughout this summer. This work keeps me constantly engaged in the space between science, policy and decision-making for managing related to the ESA.

Using science to conserve species has become more difficult over the last 20 years because although science and management have improved, the Endangered Species Act has not been updated. The last major change to ESA was the addition of the experimental population designation, which allowed the specific science for a species to guide its reintroduction. Around that same time, the Service began using species-specific science to guide the process for considering adding new species to list, but this approach has never been added to the law. Therefore, the Service is still required to review every potential new listing within 12 months regardless of the specifics of what we know about the species. The result is the well-known backlog of pending decisions, litigation, and court orders.

During the last 20 years, the Service has made great strides in considering the specific science of land management by entering into Habitat Conservation Plans. But, for lack of changes to ESA, the Service has not been able to apply this same approach to evaluating the conservation efforts of states, even when those state efforts are more effective and less costly than one-size-fits-all protections under ESA.

Applying good science to endangered species issues has always been tough, but it seems to be getting tougher. The U.S. Fish & Wildlife Service faces some steep challenges in its lead role in administering the Endangered Species Act. Lawsuits and threats of lawsuits cause agency staff to be constantly on-guard, and this affects the administration of the ESA at all levels. For managing endangered species issues, the Service is now forced to focus so much on process and procedure that the use of reliable science has suffer. In my testimony today, I want to focus briefly on three interrelated topics:

- Barriers to collecting reliable information on species status
- Inadequate scientific information used for listing decisions
- Inconsistent use of peer-reviewed science for ESA decision-making

I will conclude with some recommendations for a fresh look at some reforms that would improve the use of science in guiding ESA policy and decision-making.

Barriers to collecting reliable information on species status.

In its annual report to Congress, the Service describes the status of species listed under ESA as stable, declining, or improving. For the reports from 1988 to 2002, it did not have information to assess status for about 40% of the species listed. Much of this information could be collected, but is not, because of denied access of scientists to private lands. Many private landowners simply fear that allowing scientists to access their property for endangered species surveys could create a regulatory burden and constrain their economic land use. And they have a good point—the threat.¹

How do we get beyond this? With some of our work, we have created data confidentiality agreements so that site-specific information we collect is not made public. These data confidentiality agreements have created some disputes with individual Service biologists and groups that would like to know about site-specific endangered species information—but by protecting this information we have been able to access millions of acres of private lands for scientific information that would have

¹For a discussion, see Wilkins, N. 2011. “Improving the ESA’s Performance on Private Lands” in *Rebuilding the Ark: New Perspectives on Endangered Species Act Reform*, ed. J.H. Adler. The AEI Press, Washington, D.C., 56–80.

otherwise not been collected. We are able to report the overall results of our work—it is only the detailed locations of site-specific information that remains confidential.

The dunes sagebrush lizard. In December, 2010 the Service issued a proposed rule to list the dunes sagebrush lizard as endangered. This lizard is a habitat specialist that lives only in sand dune outcrops dominated by shinny oak (a low-growing species of oak). For the lizard's four county range in West Texas, it was known to recently occur at only three locations. After the proposed listing, we conducted an intensive three to four week systematic survey of available habitats in Texas, resulting in an additional 28 locations for the species—most of which were previously undocumented. The collection of these data required our research crew of 14 wildlife biologists to get access to numerous private ownerships. Very few of those property owners would have allowed access if, in fact, we had not been able to provide them with some confidence that we would not release site-specific information from their property to the U.S. Fish & Wildlife Service.

This lizard has been considered a candidate for ESA listing since 1982. The fact that more scientific information was collected in a 3–4 week period than in the previous 39 years speaks volumes about the barriers to encourage the collection and use of good science.

The Texas surveys were actually funded by members of the Texas Oil & Gas Association once they realized that scientific information could drive the development of a Texas Conservation Plan for the species. The Texas Conservation Plan for the dunes sagebrush lizard, prepared by an *Interagency Task Force on Economic Growth and Endangered Species*, is a serious conservation effort that conserves important habitats while allowing for greater regulatory certainty for oil and gas development as well as agricultural land use. Participants in the plan hope that it will either help avoid the species' listing or support an incidental take permit if the species is eventually listed. While the dune sagebrush lizard is not yet listed, the plan nevertheless provides for contributions to species recovery throughout the species' range in Texas. This is an excellent example of a state-level action that is likely to result in a net conservation benefit to the species and provide some tangible benefits to the plan's participants should the species actually become listed.

There are two additional lessons illustrated here:

1. By instituting some simple reforms that allow separation of site-specific data from regulatory oversight, we could make huge long-term gains in collecting the scientific information needed to adequately assess species status.
2. When given the incentive, the state-based groups can work directly with affected property owners, industry, conservation groups and other public agencies to create conservation plans that get buy-in from a wide range of stakeholders.

Inadequate scientific information used for listing decisions.

A determination that a species is warranted for threatened or endangered status under ESA—a “listing” decision—is supposed to be based entirely on scientific merit. There are times when the bright line of scientific merit is not as clear as it sounds. This stems from two main reasons. First, when it comes to gaining reliable knowledge about rare species, the science does not always lead to consensus. In other words, real science and real scientists can legitimately disagree. Over time, the scientific process tends to solve these disagreements. The second reason is that decisions can be made on material that is selective or intentionally slanted to make a case for a particular decision—this can be the case when special interest groups submit information.

Treating pre-existing information as authoritative science. Once a decision for listing a species is made, there is enormous resistance to reconsidering any of the “best available science” used to make the original decision. For many species, the information presented in the original status review is more influential than information later gathered, even if the later information is of higher quality. There are several reasons for this, one being that any new scientific evidence that might challenge or question the existing status of a species may require a large bureaucratic response. Information published as part of the original listing petition tends to have a strong incumbent advantage over any new information that might challenge the basis for a prior decision—this is not how science is supposed to work.

The golden-cheeked warbler. When it was listed as endangered in 1992, the golden-cheeked warbler was thought to have been reduced to a population size of less than 32,000 individuals. Most of the species' potential breeding habitat

is on private lands across 35 counties in central Texas. Until recently, there had been no systematic surveys to determine species status across private ranchland. Beginning in 2008, researchers from Texas A&M began a systematic survey to estimate the species' population. Using confidentiality agreements with private ranchers, this research team accessed hundreds of private ranches. The surveys of suitable habitat and succeeding analyses demonstrated that there were likely more than 200,000 male golden-cheeked warblers across the species' breeding range.

This effort demonstrated the flaws in the original information used to support listing of the golden-cheeked warbler. As you might expect, the results were controversial. Even though some of the results had already been accepted for peer-review publication, the U.S. Fish & Wildlife Service required an independent peer-review process to determine if the work could be considered "best available science." Our researchers involved in this work are well-published and serious scientists who focus their efforts on experimental design, survey methodology, statistical analyses, and interpretation of results to gain more reliable knowledge of species status, ecology, and management implications—so they welcomed the peer review.

Even following a largely positive peer review, there continues to be some resistance by the Service to using the new information on golden-cheeked warblers. There is external pressure on the Service to discredit the new information, and it is likely that any decision to reconsider the endangered status of golden-cheeked warblers would result in a lawsuit. Status reviews, compliance, consultation and recovery programs for individual species are generally managed by a small group of staff biologists who work closely together. The threat of controversy, increased scrutiny, and lawsuits can put a chill of resistance to accepting new scientific evidence that challenges the basis for previous decisions.²

Decoupling some of the functions under ESA administration would likely result in less entrenchment and more reliable use of new science for endangered species management.

Incumbent information in an overburdened system. The listing process has recently been driven by large multi-species petitions and legal action from advocacy groups seeking multiple listings. This flood of listing petitions eliminates efforts by the Service to conduct a rational science-driven process for prioritizing listing decisions. In evaluating the scientific evidence for these listings, the Service tends to simply accept the information as presented, particularly when evaluating the petitions for little-known and cryptic species. Consider this example from a recent 90-day finding from the petition seeking a listing decision on over 400 species in the southeastern US.

"Due to the large number of species reviewed, we were only able to conduct cursory reviews of the information in our files and the literature cited in the petition. For many of the narrowly endemic species included in the 374 species, we had no additional information in our files and relied solely on the information provided in the petition and provided through NatureServe."³

When information like this is published in a 90-day finding, it is more likely to find its way into a 12-month status review and ultimately become part of the foundation for a listing proposal. This is another case of pre-existing information gaining undeserved authority simply because it was all that could be used at the time, not because it was reliable.

Using speculation as best available science. At times, what is presented as "best available science" is not always good enough for decision-making. This is certainly the case when speculation is mistaken for good science. When listing decisions are driven by the petition process, the speculations of scientists are often used to support the petition.

The recent 12-month finding for five species of freshwater mussels that live in the rivers and streams of central Texas provides a good example of the use of speculation as best available science. The bulk of the information used to support the petition—and ultimately used to support the finding—originated from a collection of un-reviewed agency reports. While these reports did contain some valuable information, they lacked standard detail on methods for data collection and they reported mainly on opportunistic surveys at bridge sites and

²For a discussion see McCleery, R.A., R.R. Lopez, N.J. Silvy. 2007. Transferring research to endangered species management. *Journal of Wildlife Management*. 71(7):2134–2141.

³Federal Register Vol. 76, No. 187:59836–59862

reservoirs. The reports made observations and offered speculation on why certain species might be absent from a site—these speculations, once cited in the petition, were then interpreted as fact in the 12-month finding. These species of freshwater mussels may have indeed suffered reductions and might actually deserve a determination of endangered—but the current record relies on speculation that may turn out to be unreliable. Scientists speculate about cause and effect all the time—this is part of the scientific process. Speculation is how hypotheses are posed; and those hypotheses are then tested by collecting data. But treating speculation as science is a mistake—and it weakens the credibility of ESA determinations.

Inconsistent use of peer-reviewed science for ESA decision-making

By subjecting their methods, results and conclusions to the scrutiny of other experts in the field, scientists maintain standards and ultimately improve the reliability of their findings. Reliable information for many species is often scarce, lacking, contradictory and/or not easily interpreted. The only remedy is subjecting status reviews to an independent, more consistent, and transparent expert peer-review. Status reviews that support listings and other ESA decisions should be developed using reliable information—some of which may be from peer-reviewed science.

Too often, the “science” included in citizen listing petitions is directly relied upon in the 90-day findings and is then codified as “fact” by the time the 12-month review is completed. The 12-month reviews are sometimes subjected to ad hoc and informal peer reviews that may amount to no more than an email distribution of the document with informal comments received. This would not pass as an independent peer-review process in any other situation.

Conclusions

In conclusion, the effectiveness of the ESA could be improved through improving the use of science. Specific reforms that could insure better use of science include:

- *Require a standardized independent peer-review of scientific information used in the listing process.* The science for inclusion in the 12-month status review deserves the greatest scrutiny; and it is that information that tends to gain a special status once published in the federal register. There has been recent action by the Service to conduct peer-review. The current peer reviews are not independently administered; and they tend to ignore the biggest question of all: Is the available science substantial enough to support a decision?
- *Clear the backlog of multi-species listing petitions by authorizing the ESA listing process to work according to science-based priority system instead of a 12-month deadline.* The requirement to decide on each petition within 12 months often forces the Service to accept substandard scientific information or disregard species that are a higher priority. Such a deadline also forces listing decisions into the courts. A science-based priority system would return these decisions to field science and an open public process.
- *Separate the listing and recovery functions of the ESA by delegating recovery planning to the states as an option.* This separation would create an incentive to drive recovery programs with the most reliable science and policy innovations, supporting a more effective recovery effort. This would also remove some barriers blocking access to private lands thus increasing the amount of information available for informing recovery actions
- *Incentivize species recovery by linking the delisting process to reaching recovery goals.* This would accelerate the recovery process and provide additional incentives for research and monitoring efforts that could contribute to the science-base for listed species.

In the end, if the ESA is to meet its goals there will need to be reforms that result in more appropriate use of reliable science to inform policy.

Thank you for the opportunity to speak with the Committee about this important topic.

Chairman BROUN. Thank you, Dr. Wilkins. As a Georgia Bulldog, I want to welcome you and Texas A&M to the SEC.

Mr. WILKINS. We hope to do well in there.

Chairman BROUN. Welcome. Join the toughest football league in the country.

Mr. WILKINS. Yes, sir.

Chairman BROUN. Mr. Adler, you are recognized for five minutes.

**STATEMENT OF MR. JONATHAN ADLER, PROFESSOR,
CASE WESTERN RESERVE UNIVERSITY SCHOOL OF LAW**

Mr. ADLER. Thank you, Mr. Chairman, Congresswoman Edwards, and Members of the Subcommittee, for the invitation to testify this morning regarding the nexus of science and policy under the Endangered Species Act.

I have submitted a longer written statement for the record and I want to stress two key points in my oral remarks. First, it is important to distinguish between questions of science and questions of policy. And second, the Act itself puts undue pressure on scientific inquiry. If we are concerned about scientific integrity in conservation decision-making, we have to do something about the structure of the Act and the pressures it puts upon scientific decision-making.

As to the first point, the political debate over the use of science under the Endangered Species Act tends to obscure the dividing line between science and policy, and as a consequence, undermines the development of more effective and equitable conservation strategies. Species conservation efforts are heavily dependent upon science. Biological research is necessary to inform species conservation decisions, but species conservation is not and indeed cannot be a purely scientific exercise. Whether a given species is at risk of extinction may be a scientific question but what to do about it is not. The likelihood that habitat loss or the introduction of an invasive species will compromise a species' chance of survival in the wild is a question that can be answered by science.

On the other hand, how we should interpret incomplete or ambiguous data, what conservation measures to adopt to address threats to a given species, and at what cost, are policy questions. Science can and indeed must inform all such inquiries, but science alone does not tell us what to do and we don't serve the goals of species conservation when we pretend otherwise. Debates over conservation policy are often dressed up as debates over conservation science, and this hampers our ability to reach policy consensus and obscures what is really at stake.

Where science is used, it is important to ferret out instances of real scientific misconduct and science politicization. Agency personnel and others should not be permitted to distort or misrepresent scientific findings, whatever the purpose. And when true science abuse occurs, it should be exposed and corrected and those responsible should be disciplined, but it is also important to understand that not all disputes over science-related questions are truly disputes about science. And further, it is important to understand how the structure of the Act itself contributes to the politicization and manipulation of science and how it creates incentives that compromise the scientific integrity of conservation decisions.

It is now widely recognized and well documented that the Endangered Species Act itself creates perverse incentives that discourage species conservation, particularly on private land. What is less well understood is that these same provisions in the Act, the same regulatory structures places pressure on science and can discourage the discovery and collection of needed scientific information about potentially imperiled species, again, particularly on private land.

Just as the threat of land-use regulation discourages the creation or maintenance of species habitat, the threat of such regulation discourages private landowners from disclosing information and cooperating with scientific research on their land. Landowners are increasingly reluctant to allow biologists and other researchers onto their land to survey species populations and conduct other research out of fear of regulatory constraints that could follow the discovery of a rare animal or plant.

Yet information about the location and status of species populations is essential to the development of effective species recovery plans. The lack of more complete data on endangered species and their habitat greatly complicates species conservation efforts. Yet the Act itself compromises our ability to know which species are in most need of help and where they may be most endangered, and the Act itself often causes us to know far less about a species than we should before adopting regulatory measures or other constraints on productive economic activity.

And this is a particularly severe problem because we know that the vast majority of species that are listed rely upon private land for habitat. And so the Act is discouraging our ability to know what species are on private land and what condition they are in. The Act itself is tying one hand behind our back in dealing with the majority of species that we are concerned about. And this is particularly important because we have what economists refer to as an information asymmetry. Private landowners are in a much better position to know what is on their land and what condition it is in than biologists, the Fish and Wildlife Service, or research universities. If they can't work together and if the Act discourages them from working together, we will have a hard time developing conservation plans and environmental strategies that will actually work.

It is the structure of the Act that does this, just as it is the structure of the Act that makes scientific judgments such as the decision to list a species extremely consequential. When you list a species, certain regulatory measures kick in automatically and can form the basis of private citizen suits to force additional regulatory controls, and as a consequence, warring factions devote substantial resources to influencing scientific outcomes. This makes science abuse and politicization all but inevitable.

Safeguarding science requires statutory reforms that will insulate scientific judgments from policy decisions and lower the stakes of listing decisions. More broadly, we need to make saving endangered species more important than saving the Endangered Species Act as it is currently written.

Thank you again for the opportunity to present my views on this important subject, and I am willing to answer any questions this Committee may have. Thank you.

[The prepared statement of Mr. Adler follows:]

PREPARED STATEMENT OF MR. JONATHAN ADLER,
 PROFESSOR, CASE WESTERN RESERVE UNIVERSITY SCHOOL OF LAW

Thank you, Mr. Chairman and Members of this Subcommittee, for the invitation to testify regarding the nexus of science and policy under the Endangered Species Act. My name is Jonathan H. Adler, and I am the Johan Verheij Professor of Law and Director of the Center for Business Law and Regulation at the Case Western Reserve University School of Law, where I teach several courses in environmental, administrative, and constitutional law.

I particularly appreciate the opportunity to testify today about the Endangered Species Act (ESA). I have researched and written on environmental law and policy for over twenty years, and have conducted a significant amount of research on the ESA and species conservation generally. My work on the ESA includes an award-winning article, *Money or Nothing: The Adverse Environmental Consequences of Uncompensated Land-Use Controls*, 49 BOSTON COLLEGE LAW REVIEW 301 (2008), and a recently published book, *Rebuilding the Ark: New Perspectives on Endangered Species Act Reform* (AEI Press, 2011). I've drawn upon this work in preparing this testimony.

The ESA is among the nation's most important and powerful environmental laws. It is also a source of great conflict and controversy. There is little question that species conservation is an important and worthwhile endeavor. Regrettably, there are many reasons to question whether the ESA effectively serves that goal. The Act has likely helped prevent some species from going extinct, but the Act endeavors to do more. There is very little evidence the Act helps species recover from the brink of extinction and increasing evidence that the ESA itself creates incentives that undermine sound environmental stewardship and politicize scientific inquiry.

The listing of individual species, the designation of critical habitat and the implementation of conservation measures often prompt fierce legal and political battles. Sound science is often a casualty in these conflicts as the combatants twist and manipulate the available scientific evidence to support predetermined policy preferences. Activists on all sides claim that "sound science" supports their respective positions, and scoff at the "junk science" relied upon by the other side. In actual fact, what often divides the respective camps is not a devotion to science, but sharply divergent policy preferences dressed up in scientific garb. The political debate over the use of science under the ESA tends to obscure the dividing line between science and policy and undermines the development of more effective and equitable conservation strategies.

Species conservation efforts are heavily dependent upon science. Biological research is necessary to inform species conservation decisions. But species conservation is not—and cannot be—a wholly scientific exercise. Whether a given species is at risk of extinction may be a scientific question, but what to do about it is not. The likelihood that habitat loss or the introduction of an invasive species will compromise a species chance of survival in the wild is a question that can be answered by science. On the other hand, what conservation measures should be adopted to address such threats, and at what cost, are policy questions. Whether reducing the chance that given species of fish will go extinct is worth limiting water use or imposing other regulatory controls is not a question science can answer. Science can—indeed, must—inform such inquiries, but science alone does not tell us what to do. Nonetheless, debates over conservation policy are often dressed up as debates over conservation science, hampering our ability to reach policy consensus and obscuring what is really at stake.

The addition of an imperiled species to the list of endangered and threatened species should be a relatively routine matter driven by scientific considerations. Unfortunately it is not. A proposal to list a species often signals the onset of fierce political and administrative battles in which true scientific concerns are subordinated to policy objectives. One reason for this is that the scientific determination that a given species is threatened or endangered triggers non-discretionary regulatory requirements. Therefore, the surest way to control a policy outcome is to control the science. Activists on all sides recognize this fact, which is why activists spend so much time trying to influence the scientific conclusions.

It is important to ferret out instances of scientific misconduct and science politicization. Agency personnel should not be permitted to distort or misrepresent scientific findings, whatever the purpose. The ends of species conservation and environmental protection do not justify distorting scientific inquiry. Nor does a desire to alleviate the regulatory burdens faced by landowners, businesses, and workers in resource-dependent industries. When science abuse occurs, it should be exposed and corrected, and those responsible should be disciplined. But it is also important to understand how the structure of the Act contributes to the politicization and manip-

ulation of science and creates incentives that compromise the scientific integrity of conservation decisions.

It is now widely recognized that the ESA creates perverse incentives that can discourage species conservation on private land. What is less well understood is that the same regulatory provisions of the act can discourage the discovery and collection of needed scientific information about potentially imperiled species, particularly on private land.

The reason the ESA creates perverse incentives against species conservation is that the Act effectively penalizes the owners of land upon which endangered species depend. Under Section 9 of the act, it is illegal for a private landowner to engage in activities that could “harm” an endangered species, including habitat modification, without first obtaining a federal permit. Knowing violations can lead to fines of up to \$25,000 and even jail time. As a practical matter, the law requires private landowners to obtain permission from the FWS before modifying endangered species habitat on their own land.

Such regulations can reduce private land values and antagonize private landowners who might otherwise cooperate with conservation efforts. Writing in *Conservation Biology*, a group of wildlife biologists observed that “the regulatory approach to conserving endangered species and diminishing habitats has created anti-conservation sentiment among many private landowners who view endangered species as economic liabilities.”¹ They further explained:

Landowners fear a decline in the value of their properties because the ESA restricts future land-use options where threatened or endangered species are found by makes no provisions for compensation. Consequently, endangered species are perceived by many landowners as a financial liability, resulting in anticonservation incentives because maintaining high-quality habitats that harbor or attract endangered species would represent a gamble against loss of future opportunities.²

As the late Sam Hamilton, former Director of the Fish & Wildlife Service, observed in 1993, when he oversaw FWS efforts in Texas: “The incentives are wrong here. If I have a rare metal on my property, its value goes up. But if a rare bird occupies the land, its value disappears.”³

The effect of the ESA on private landowners, and the incentives it creates, are important because a majority of listed species rely upon private land for some or all of their habitat. In some cases, such regulations may even encourage landowners to destroy or degrade potential habitat on their land. It is not illegal to modify land that might become endangered species habitat some day in the future, nor are landowners required to take affirmative steps to maintain endangered species habitat.

There is increasing empirical evidence that the perverse incentives created by the ESA are undermining species conservation efforts and compromising scientific inquiry. Several recent empirical studies document how the ESA undermines effective conservation on private land. One study found that private landowners engage in preemptive habitat destruction when the presence of endangered red-cockaded woodpeckers places landowners at risk of federal regulation and a loss of their timber investment.⁴ Providing habitat for a single woodpecker colony could cost up to \$200,000 in foregone timber harvests. To avoid the loss, those landowners at greatest risk of restrictions were most likely to harvest their forestlands prematurely and reduce the length of their timber harvesting rotations. The ultimate consequences of this behavior were potentially significant in that it resulted in a loss of several thousand acres of woodpecker habitat, a major habitat loss for a species dependent upon private land for its survival.

A second study involving the red-cockaded woodpecker similarly found that “regulatory uncertainty and lack of positive economic incentives alter landowner timber harvesting behavior and hinder endangered species conservation on private lands.”⁵ This study further found that “a landowner is 25% more likely to cut forests when he or she knows or perceives that a red-cockaded woodpecker cluster is within a mile of the land than otherwise.” This study concluded that “the ESA has a strong

¹ Martin B. Main, Fritz M. Roka, and Reed F. Noss, *Evaluating Costs of Conservation*, 13 CONSERVATION BIOLOGY 1263 (1999).

²*Id.* at 1265.

³ Betsy Carpenter, “The Best-Laid Plans,” *U.S. News & World Report* (Oct. 4, 1993), at 89.

⁴ See Dean Lueck and Jeffrey Michael, *Preemptive Habitat Destruction under the Endangered Species Act*, 46 JOURNAL OF LAW AND ECONOMICS 27 (2003).

⁵ See Daowei Zhang, *Endangered Species and Timber Harvesting: The Case of Red-Cockaded Woodpeckers*, 32 ECONOMIC INQUIRY 150 (2004).

negative effect on the habitat” of the red-cockaded woodpecker and the effect appears to be substantial.

The perverse incentives of the ESA unfortunately do not only affect the woodpeckers and other species dependent upon private timberland. A third study published in *Conservation Biology* found that listing a species could discourage landowners from participating in conservation efforts.⁶ Based on surveys of private owners of habitat for the Preble’s Meadow jumping mouse, this study found that a substantial percentage of landowners would respond to a species listing by making their land less hospitable for it, and that “the efforts of landowners who acted to help the Preble’s were cancelled by those who sought to harm it.” This led the study’s authors to conclude that “as more landowners become aware that their land contains Preble’s habitat, it is likely that the impact on the species may be negative.”

These studies, combined with numerous anecdotal accounts, taken together, provide powerful evidence that the ESA has the potential to discourage species conservation on private land. Worse, they suggest that the net effect of the ESA on private land could be negative. Recent administrations have sought to offset these effects through various cooperative conservation programs designed to encourage voluntary conservation efforts and provide landowners with greater regulatory certainty. Insofar as these initiatives have been effective, however, they have effectively deactivated the ESA’s regulatory provisions.

The punitive nature of the ESA’s restrictions on private land not only undermine conservation, they also appear to be undermining the science upon which successful species conservation efforts depend. This occurs in two ways. First, landowners are increasingly resistant to allowing biologists and others onto their land to conduct research, survey species populations and the like out of fear that regulatory constraints could follow the discovery of a rare animal or plant. Second, because the listing of a species as endangered automatically triggers regulatory consequences, there are substantial stakes up for grabs when a listing decision is made, leading to efforts to control the outcome, without regard for the science.

Just as the threat of land-use regulation discourages the creation or maintenance of species habitat, the threat of regulation discourages private landowners from disclosing information and cooperating with scientific research on their land.⁷ The aforementioned *Conservation Biology* study of the effect of listing the Preble’s Meadow jumping mouse on landowner behavior found that more landowners would refuse to give biologists permission to conduct research on their land to assess mouse populations, out of fear that land-use restrictions would follow the discovery of a mouse on their land, than would allow such research.⁸ Yet information about the location and status of species populations is essential to the development of effective species recovery plans. The lack of more complete data on endangered species and their habitat greatly complicates species conservation efforts.⁹ This, again, is a particularly severe problem because so many endangered and threatened species rely upon private land. Due to information asymmetries, if private landowners do not allow researchers on their land, important scientific information about potentially imperiled species may never be discovered.

The structure of the ESA also creates tremendous pressure to twist or distort scientific research. The decision to list a species can have substantial regulatory consequences. The ESA may require that decisions to list endangered and threatened species are determined by the “best available” scientific evidence. Yet there is ample empirical evidence that political and other non-scientific factors influence listing decisions. Species that were more “charismatic”—that is that are more “warm and fuzzy” and those more politically popular—were more likely to be listed and to receive funding.¹⁰ Other recent studies have found that the political and environmental attitudes of legislators on relevant congressional committees appear to influ-

⁶See Amara Brook et al., *Landowners’ Responses to an Endangered Species Act Listing and Implications for Encouraging Conservation*, 17 CONSERVATION BIOLOGY 1638 (2003).

⁷Stephen Polasky & Holly Doremus, *When the Truth Hurts: Endangered Species Policy on Private Land with Imperfect Information*, 35 JOURNAL OF ENVIRONMENTAL ECONOMICS AND MANAGEMENT 41 (1998).

⁸Brook, et al.

⁹See Jason F. Shogren, Rodney B. W. Smith, & John Tschirhart, “The Role of Private Information in Designing Conservation Incentives for Property Owners,” in *Species at Risk: Using Economic Incentives to Shelter Endangered Species on Private Lands* 217 (Jason F. Shogren ed., 2005) (noting that “imperfect information” complicates conservation efforts).

¹⁰See, e.g., Deborah Dawson & Jason Shogren, *An Update on Priorities and Expenditures under the Endangered Species Act*, 77 LAND ECONOMICS 527 (2001); Andrew Metrick & Martin L. Weitzman, *Conflicts and Choices in Biodiversity Preservation*, 12 JOURNAL OF ECONOMIC PERSPECTIVES 21 (1998).

ence listing decisions as well.¹¹ These findings should not surprise. Listing decisions can force the federal government to adopt various regulatory measures with significant economic consequences. With so much at stake, it would be surprising if political and other factors did not influence listing decisions.

Given the structure of the ESA, various interest groups seek to manipulate the listing process so as to trigger or preempt the imposition of land-use restrictions. Property owners who own potential habitat for a given species are likely to oppose listing of the species so as to prevent regulation of their land.¹² Opponents of development are likely to take the opposite view. Interest group activity also appears to influence how quickly species move through the ESA listing process.¹³ Interest group opposition to species listing proposals increases as listings threaten development.¹⁴ At the extreme, this has produced incentives to manipulate the scientific evidence supporting species listing.

Delay in the listing of a species can benefit those landowners and economic interests would have borne the costs of the ESA's regulatory limitations. At the same time, it can be harmful to conservation.¹⁵ Delay in listing a species increases the opportunity for landowners to respond to the perverse incentives created by the Act. It also deprives biologists, environmental groups, conservation-minded landowners, and others of the information that a given species is in need of assistance if it is to survive.

Groups opposing development or resource extractive industries also have an incentive to manipulate the listing process and identify potentially endangered species that can serve as a proxy for their other goals. Environmentalist groups have acknowledged that some species listings are sought out of a desire to control land use. For example, Andy Stahl of the Sierra Club Legal Defense Fund acknowledged that "the ultimate goal" of litigation to list the northern spotted owl was "to delay the harvest of old growth forests so as to give Congress a chance to provide specific statutory protection for those forests." According to Stahl, the owl was a "surrogate" that could ensure "protection for the forests" under the ESA.¹⁶ The spotted owl litigation was not without its environmental costs, however. In order to respond to environmentalist lawsuits, the FWS was forced to divert resources from more pressing needs, compromising overall recovery efforts.¹⁷ This does not appear to be an isolated instance, as the pattern of environmentalist litigation challenging FWS listing decisions does not appear to align with species conservation priorities.

Insofar as such litigation sets listing priorities, it threatens to divert resources away from those species most in need. According to the FWS, it has spent "essentially all" of its listing appropriations on litigation-related and administrative costs.¹⁸ As Professor Katrina Wyman of NYU has explained, "the FWS has lost control over the listing process as decisions about whether to list species are largely made in response to citizen petitions for listing and litigation."¹⁹ Both environmentalist groups and development interests wage legal wars over the listing and delisting of individual species as a proxy for fights over policy and regulatory priorities.

The ESA's current regulatory structure both discourages conservation and compromises conservation science. One possible remedy for this problem, suggested by Professor Wyman is "decoupling" the listing decision from mandatory conservation

¹¹ See, Bonnie Harllee, Myungsup Kim, and Michael Nieswiadomy, *Political Influence on Historical ESA Listings by State: A Count Data Analysis*, 140 *Public Choice* 21 (2009).

¹² See Barton H. Thompson, Jr., *The Endangered Species Act: A Case Study in Takings and Incentives*, 49 *STANFORD LAW REVIEW* 315, 350 (1997).

¹³ See Amy Whritenour Ando, *Waiting to Be Protected under the Endangered Species Act: The Political Economy of Regulatory Delay*, 42 *JOURNAL OF LAW AND ECONOMICS* 52 (1999).

¹⁴ See Amy Whritenour Ando, *Economies of Scope in Endangered-Species Protection: Evidence from Interest Group Behavior*, 41 *Journal of Environmental Economics and Management* 312 (2001); see also Amy Whritenour Ando, *Do Interest Groups Compete? An Application to Endangered Species*, 114 *PUBLIC CHOICE* 137 (2003) (finding interest group involvement in species listings increases with the expected costs and benefits of such listings).

¹⁵ See Ando, *Waiting*, at 34 ("Long delay in the addition of a species to the endangered species list can reduce the likelihood that the species will escape extinction; species have even been thought to have become extinct while waiting for final action from the agency. Thus, delay diminishes the benefits of a listing. It also reduces the costs.")

¹⁶ Quoted in Ike C. Sugg, *Caught in the Act: Evaluating the Endangered Species Act, Its Effects on Man and Prospects for Reform*, 24 *CUMBERLAND LAW REVIEW* 1, 53, n335 (1993).

¹⁷ See Marco Restain and John M. Marzluff, *Funding Extinction? Biological Needs and Political Realities in the Allocation of Resources to Endangered Species Recovery*, *BIOSCIENCE* (Feb. 2002), at 175.

¹⁸ Katrina Miriam Wyman, *Rethinking the ESA to Reflect Human Dominion Over Nature*, 17 *NYU ENVIRONMENTAL LAW JOURNAL* 490, 497 (2008).

¹⁹ *Id.* at 496.

measures.²⁰ This would release the pressure to manipulate listing decisions and enable federal agencies “to develop protections tailored to the needs of each species and its circumstances.” At present, however, the ESA’s “protections” are triggered once a species is listed, irrespective of their value for that particular species. Decoupling would also make species listing decisions less contentious and monumental, and reduce the time and expense it takes for such decisions to be made. FWS biologists would be able to focus on getting the science right, and devote less time responding to litigation. While it would still make sense for listing to trigger a legal obligation for the FWS to develop a conservation strategy and recovery plan, it would not force the imposition of specific regulatory controls. This would mean that outside organizations would no longer be able to use endangered species as a proxy for other battles. As Professor Wyman explains, “One of the advantages of decoupling the listing of a species from decisions about how it should be protected is that there should be greater room for developing creative measures tailored to species’ needs and circumstances.”²¹

Finally, I think it is worth stepping back and looking at the overall record of the ESA. Congress enacted the ESA in 1973. Since that time, approximately 2,000 species of plants and animals, foreign and domestic, have been listed as “endangered” or “threatened.”²² The express goal of the ESA is to recover listed species so that they no longer need the Act’s extraordinary protections. Yet in nearly forty years, this goal has been reached with scarcely over one percent of listed species. As of this month, the U.S. Fish & Wildlife Service reports that only 48 species have been removed from the list of endangered and threatened species.²³ Of these, only 22 are deemed to have recovered. Of the remaining 26 species, 17 were delisted due to data errors of one sort another, such as a mistaken taxonomic classification or undercounting of a species’ population, and nine were delisted because they are believed to have gone extinct. In other words, fewer listed species have been recovered than have been delisted because they went extinct or never should have been listed in the first place.

The above statistics may actually *overstate* the Act’s relative effectiveness at recovering species. In addition to the nine species that were delisted because the FWS believes they went extinct, there are another 28 listed species believed to have gone extinct that have yet to be delisted.²⁴ In addition, at least 42 additional species have gone extinct awaiting listing under the Act.²⁵ Looking at FWS recoveries, some recovered species saw their status improve for reasons wholly unrelated to the ESA. In other cases, as the GAO has reported, species have been delisted before their respective recovery criteria have been met.²⁶

As I stated at the outset of my testimony, species conservation is an important goal. Serious efforts are necessary to stem the loss of biological diversity and to reconcile our nation’s environmental aspirations with other social goals. Whether or not this committee accepts my policy recommendations, I hope all Members recognize that substantial reform is necessary, both to insulate scientific research from political pressures, as well as to advance the cause of species conservation more generally. Saving endangered species should be more important than saving the Endangered Species Act.

Thank you again for the opportunity to present my views on this important subject, Mr. Chairman. I hope that my perspective has been helpful to you, and will seek to answer any additional you might have.

²⁰ *Id.* at 516.

²¹ *Id.* at 519.

²² See U.S. Fish & Wildlife Service, Threatened/Endangered Species ‘Box Score,’ available at http://ecos.fws.gov/tess_public/pub/Boxscore.do (accessed Oct. 11, 2011).

²³ See U.S. Fish & Wildlife Service, Delisting Report, available at http://ecos.fws.gov/tess_public/pub/delistingReport.jsp (accessed Oct. 11, 2011).

²⁴ Martin Miller, “Three Decades of Recovery,” *Endangered Species Bulletin*, vol. 28, no. 4 (July/Dec. 2003), 4.

²⁵ D. Noah Greenwald, Kieran F. Suckling, and Martin Taylor, “The Listing Record,” in *The Endangered Species Act at Thirty, Volume 1: Renewing the Conservation Promise*, Dale D. Goble, J. Michael Scott, & Frank W. Davis eds. (Washington, D.C.: Island Press, 2006), 51.

²⁶ See U.S. Government Accountability Office, *Endangered Species Act Decision Making*, GAO-08-688T (May 21, 2008), at 20–22.

Chairman BROWN. Thank you, Mr. Adler.
Dr. Grifo, you are recognized for five minutes.

**STATEMENT OF DR. FRANCESCA T. GRIFO, SENIOR SCIENTIST
AND DIRECTOR, SCIENTIFIC INTEGRITY PROGRAM, UNION OF
CONCERNED SCIENTISTS**

Dr. GRIFO. Chairman Broun, Ranking Member Edwards, and Members of the Committee, thank you for the invitation to participate in this hearing. My name is Francesca Grifo, and I am a Senior Scientist and Director of the Scientific Integrity Program at the Union of Concerned Scientists, a leading science-based non-profit working for a healthy environment and a safer world.

I come here today with 30 years of training, research, teaching, and policy experience, a passion for the natural world, and a mother's concerns about her children's future. One of the great strengths of the Endangered Species Act is its foundation in robust scientific principles. Objective scientific information and methods should be used in protecting species. The habitat needs of endangered species should be scientifically well informed and the standard of best-available science must rely on impartial scientific experts. Actions have consequences with wide-ranging implications and we need to understand that and that means science—making observations, asking questions, analyzing results.

Unfortunately, under the previous Administration, the science of the Endangered Species Act was attacked and it happened at every stage of the process—90-day findings to listing to recovery plans to the designation of critical habitat and even delisting, affecting more than 80 species. One might say so what? Except an emerging body of research is now uncovering a hugely important range of benefits of biodiversity for human health. In a broad sense, most ecosystem services such as water purification and food provision have a direct or indirect impact on our health. But ecosystems also provide more specific benefits. Plants and bacteria are well recognized key sources of new medicines and other important links include benefits for mental health and the complex influence of the natural environment on the spread of infectious diseases.

Many links between biodiversity and health remain unknown, but there is a growing body of evidence that disturbances to ecosystems may have large consequences for human well being. Thus, protecting biodiversity, both the number of species and the structure of communities helps minimize undesirable or expensive or unintended impacts on our health.

Furthermore, three-quarters of Americans participate in active outdoor recreation each year and spend money, create jobs, and support the local—support the economies of local communities when they do. The number of New Englanders who participate in trail-based recreation annually is greater than the combined attendance for all 81 Boston Red Sox games—home games. An active outdoor recreation—and the outdoor active recreation economy employs five times more Americans than Wal-Mart, the world's largest private employer.

The ESA works. Less than one percent of listed species have gone extinct since 1973, while ten percent of candidate species still waiting to be listed are gone. In addition to the hundreds of species

that the Act has protected from extinction, listing has contributed to population increases or the stabilization of populations for at least 35 percent of listed species, and perhaps significantly more, as well as the recovery of such signature species as the Peregrine falcon.

While complete recovery has been realized for just two percent of the species listed, given the precarious state of most species when listed, this represents significant progress. Arguably, the most notable success of the Endangered Species Act is that listed species improve in status through time. More species are down-listed than the converse. More species transition from stable to improving than the converse.

The science advisor asked agencies to tackle the issue of scientific integrity, and the Department of the Interior was the first out of the box to do so. While they are well on their way to creating a culture of accountability and scientific integrity, we look forward to learning more about their ambitious plans for training, the progress of the Scientific Integrity Officers, and their forthcoming revised peer review and communications policies, and we expect them to be good.

Science cannot be a mask behind which decision-makers can do anything that special interests or ideology might dictate. The rightful place for science is as the basis of broad participatory and transparent conversations about how to solve the challenges we face. It is not okay to say the science made me do it while changing the science to justify policy decisions.

Thank you for your interest in endangered species conservation and for the opportunity to testify. I am happy to respond to questions you or other Members of the Committee may have.

[The prepared statement of Dr. Grifo follows:]

PREPARED STATEMENT OF DR. FRANCESCA T. GRIFO, SENIOR SCIENTIST AND
DIRECTOR, SCIENTIFIC INTEGRITY PROGRAM, UNION OF CONCERNED SCIENTISTS

Chairman Broun, Ranking Member Edwards, and members of the committee, thank you for the invitation to participate in this hearing. My name is Francesca Grifo. I am a Senior Scientist and the Director of the Scientific Integrity Program at the Union of Concerned Scientists, a leading science-based nonprofit working for a healthy environment and a safer world. I am pleased to have the opportunity to discuss ecologic and economic issues surrounding the Endangered Species Act (ESA) and the policy implications of strengthening scientific integrity. This testimony contains an overview of why endangered species matter, how protecting endangered species also protects jobs and our economy, the effectiveness of the ESA, an overview of the problem of political interference in science, and updated summary of documented abuses of science in ESA decisions, and progress to date made by the formation of a scientific integrity policy at the Department of the Interior.

The Endangered Species Act, with its foundation in science, and its worthy goal of protecting our nation's valuable and fragile biodiversity, should be preserved. The ESA has worked well if not perfectly. But the law itself has been threatened by political interference and a lack of accountability and transparency. Only when these problems are vigorously addressed, can the ESA fulfill its mission and serve the American public.

I. Introduction

The Endangered Species Act is a strong and significant environmental law, but its implementation is wearing thin under the assault of political pressures from all three branches of the federal government and the states. This failure to insulate science-based decision making from political considerations frequently lands the Fish and Wildlife Service (FWS) and the National Marine Fisheries Service (NMFS) in court, as is manifest in the multiple recent legislative attacks on the Act, and it frustrates efforts by agency scientists to do their jobs.

In the last administration, politicization of the science surrounding the Endangered Species Act undermined its implementation and enforcement. The pervasive manipulation and suppression of this science was not limited to one aspect of the execution of the Act; rather it was rampant from the first steps of the listing process to the creation of recovery plans of critically endangered species. In addition, the FWS and NMFS failed to establish a transparent means of implementing the Act to impose a clear code of ethics. Instead, the agencies allowed political appointees within and without the conservation agencies to interfere with individual species decisions and promulgate policies that reduced the role of science in endangered species decision-making.

Recovering for so many years of political interference has not been easy, but there are signs of hope.

Currently, the Department of the Interior is struggling to implement and expand its precedent setting scientific integrity policy. If this new policy takes hold, the next few years will bring a renewed commitment to transparent decision making, and a working environment free of interference and intimidation from high level political appointees so that the career scientists and managers of the conservation agencies will be able to identify and correct the processes that led to the abysmal situation in the last administration.

We know that Americans care about the protection of endangered species. Many polls over many years document that most Americans agree on the importance of preserving our nation's rich and unique natural heritage. A recent poll conducted by the Endangered Species Coalition found that 92 percent agree that decisions about wildlife management and which animals need protection should be made by scientists, not

politicians; 90 percent agree that the ESA has helped hundreds of species recover from the brink of extinction; and 87 percent agree that the ESA is a successful safety net for protecting wildlife, plants and fish from extinction.¹ The goal of the ESA is to conserve endangered and threatened species and the ecosystems on which they depend. For species that have been listed and provided protection under the ESA, some of that purpose has been achieved.

2. Why We Need to Protect Endangered Species

The ESA is our best and strongest tool to conserve biodiversity at the species and ecosystem levels. That biodiversity conveys significant benefits, providing food, fiber, medicines, clean water, and myriad other ecosystem products and services on which we depend every day. Consider, for example, the impact of biodiversity on ecosystems. . Ecosystem variety provides vital regulating functions. Forests and wetlands play an important role in determining levels of rainfall, the ability of land to absorb or retain that water and its quality when used. Without healthy forests, grasslands, rivers, oceans and other ecosystems, we will not have clean air, water, or land. If we allow our environment to become contaminated, we risk our own health. Healthy ecosystems mean healthy people.

Biodiversity also is crucial to the development of new drugs. Delving into the area of pharmaceuticals from biodiversity, Newman and Crag have documented that of the 1184 new chemical entities covering all diseases, countries, and sources from 1981 to 2006, 70% were either from a natural product or mimicked a natural product.² Potent cancer-fighting drugs have largely depended on natural products. Even those products that include man-made chemicals rely on one or more ingredients from nature. In the area of cancer, over the time frame from around the 1940s to date, of the 155 small molecules, 47% are either natural products or directly derived therefrom.³ Although combinatorial chemistry techniques have succeeded as methods of optimizing structures, and have, in fact, been used in the optimization of many recently approved agents, Newman and Cragg were able to identify only one *de novo* combinatorial compound approved as a

¹ Endangered Species Coalition Poll. Conducted by Harris Poll Interactive. Conducted February 2011. Available at: http://stopextinction.org/media/endangered_species_act_poll.pdf

² Newman, D. and Cragg, G. 2007. Natural products as sources of new drugs over the last 25 years, *Journal of Natural Products* 70(3): 461-477.

³ *Id.*

drug in this 25 plus year time frame.⁴ If we do not preserve these life-giving species, we will not get a second chance. Extinction is truly irreversible - once gone, individual species and all of the services that they provide us cannot be brought back.

Biodiversity also has other proven economic benefits. A recent analysis by the Outdoor Industry Foundation titled “The Active Outdoor Recreation Economy” concludes that three quarters of Americans participate in active outdoor recreation each year and spend money, create jobs, and support local communities when they do.⁵ Hiking, biking, camping, or wildlife viewing generate enormous economic power and create a far-reaching ripple effect that touches many of the nation’s major economic sectors. The study found that this activity supports nearly 6.5 million jobs across the U.S., generates \$88 billion in annual state and national tax revenue, and generates \$289 billion annually in retail sales and services across the U.S.⁶ The study found that more Americans camp than play basketball, More Americans paddle (kayak, canoe, raft) than play soccer, the number of New Englanders who participate in trail-based recreation annually is greater than the combined attendance for all 81 Boston Red Sox home games and the Active Outdoor Recreation Economy employs five times more Americans than Wal-Mart, the world’s largest private employer.⁷

According to a 2006 survey conducted by the United States Fish and Wildlife Services, 71.1 million Americans participated in wildlife watching.⁸ Wildlife watching is limited to those activities where wildlife watching is the primary objective. Secondary and incidental participation while doing something else (e.g. observing dolphins while taking a cruise) were not included in the survey done by U.S. Fish and Wildlife Service. The bottom line: those 71.1 million individuals made total wildlife watching expenditures of \$45.7 billion (\$47,000,000,000) dollars.⁹ Of that \$45.7 billion, Americans spent \$23.2 billion on equipment,¹⁰ from cameras

⁴ *Id.*

⁵ Outdoor Industry Foundation. 2006. *The Active Outdoor Recreation Economy*. Available online at <http://www.outdoorindustry.org/images/researchfiles/RecEconomypublic.pdf?26>

⁶ *Id.*

⁷ *Id.*

⁸ U.S. Fish and Wildlife Service. 2006. *2006 National Survey of Fishing, Hunting, and Wildlife-Associated Recreation*, 36. Available online at <http://www.census.gov/prod/2008pubs/thw06-nat.pdf>

⁹ *Id.* at 37.

¹⁰ *Id.*

and binoculars to tents and off-road vehicles. Birders were the most notable wildlife watchers, as there are 48 million birdwatchers—approximately 20% of the American population.¹¹ Birders alone are estimated to have spent \$35,727,724,000 and created 671,000 jobs!¹²

3. While not perfect, the Endangered Species Act Has Protected Many Vulnerable Species

The Endangered Species Act was passed nearly 40 years ago with strong bipartisan support, and was signed into law by President Nixon. In the decades since, we've witnessed animals that were once on the verge of disappearing forever, thriving again. Because of the act, bald eagles, California condors and peregrine falcons are with us. Florida panthers, gray wolves and grizzly bears are keeping prey species in check. American alligators, Florida manatees and gray whales continue to grace our swamps, rivers and oceans. More fundamentally, only a handful of the species receiving protection under the act have gone extinct.¹³

According to an article in the September 30, 2005, issue of *Science*, less than one percent of listed species have gone extinct since 1973, while 10 percent of candidate species still waiting to be listed have suffered that fate.¹⁴ In addition to the hundreds of species that the Act has protected from extinction, listing has contributed to population increases or the stabilization of populations for at least 35 percent of listed species, and perhaps significantly more, as well as the recovery of such signature species as the peregrine falcon. While complete recovery has been realized for just two percent of species listed, given the precarious state of most species when listed, this represents significant progress. Arguably the most notable success of the Endangered Species Act

¹¹ U.S. Fish and Wildlife Service. 2009. *Birding in the United States: A Demographic and Economic Analysis*, 4 (2009). Available online at http://library.fws.gov/Pubs/birding_natsurvey06.pdf

¹² *Id.* at 13

¹³ Defenders of Wildlife. 2011. *Assault on Wildlife: The Endangered Species Act Under Attack*. Available online at http://www.defenders.org/resources/publications/policy_and_legislation/esa/assault_on_wildlife_the_endangered_species_act_under_attack.pdf

¹⁴ Stokstad, Eric. 2005. "What's Wrong with the Endangered Species Act?" *Science*. Vol 305.

(ESA) is that listed species improve in status through time.¹⁵

More species are down-listed than the converse; more species transition from stable to improving status than the converse. Given modest recovery funding, the fraction of listed species responding positively is remarkable. The inability of government to fully empower the agencies to implement the law has been the most notable failure of the ESA.¹⁶ Listing of species has not matched need, recovery expenditures do not match need or agency-set priorities, and critical habitat determinations have lagged. Only about 15% of the known species in the United States have been studied in sufficient detail to determine whether or not they would warrant listing under the ESA.¹⁷ Wilcove and Master reviewed the best available data on the status of plants, animals, and fungi in the US and concluded that the actual number of known species threatened with extinction is at least ten times greater than the number protected under the Endangered Species Act (ESA).¹⁸

Given the extremely small population sizes and few remaining habitats of many species by the time they are listed, a non-decreasing population may be the best outcome for many listed taxa. For many listed species, the lag time between applying conservation tools and recovery is likely to be slow. We do not expect dramatic recovery of recoverable species in one or few generations of the listed taxa.¹⁹ Fewer species have gone extinct than expected without protection. More species have gone extinct waiting to be listed than have gone extinct once listed. Changes in species status are more likely to be improving than deteriorating. Application of the fundamental species protection tools is linked with improving status. However, just as there may be time lags for recovery progress, there may be time lags in species collapse. Species with chronically low

¹⁵ Mark W Schwartz. 2008. *The Performance of the Endangered Species Act*. Annual Review of Ecology, Evolution, and Systematics. Vol. 39: 279-299. Available online at http://scb.ucdavis.edu/documents/Schwartz_ESA.pdf

¹⁶ Mark W Schwartz. 2008. *The Performance of the Endangered Species Act*. Annual Review of Ecology, Evolution, and Systematics. Vol. 39: 279-299. Available online at http://scb.ucdavis.edu/documents/Schwartz_ESA.pdf

¹⁷ Wilcove, David S. and Lawrence L. Master. 2005. How many endangered species are there in the United States? *Frontiers in Ecology and the Environment* 3: 414-420.

¹⁸ *Id.*

¹⁹ Hayward, D, Shogren, JF, and J Tschirhart. 2001. The Nature of Endangered Species Recovery. In *Protecting Endangered Species in the United States: Biological Needs, Political Realities, and Economic Choices*, ed. JF Shogren, J Tschirhard, pp.1-20. Cambridge, UK: Cambridge Univ. Press

population size, little habitat, and a low chance of recovery may still take a long time to reach extinction. Some of the most desperate species, with little remaining habitat, were listed rather late in the process. We might find that in the future these species might not improve as well as those listed earlier.

In 2006, nearly 6,000 biologists throughout the country wrote to the U.S. Senate concerning science in the ESA. One of the great strengths of the Endangered Species Act is its foundation in sound scientific principles and its reliance on the best available science, the letter notes.²⁰ The National Research Council in 1995 observed: "...there has been a good match between science and the ESA ...[and] the ESA is based on sound scientific principles."²¹ While this makes for an effective piece of legislation, it also means that if the protections created by the act are unpalatable to certain actors, they are hard to remove without manipulating or attacking the science.

The Endangered Species Act Does Not Work When Subject to Political Interference, Displacing the Role of Science in the Process

Individual Examples of Political Interference in Listing Decisions

In species after species, scientific data has been minimized, edited, or overruled to deny ESA protections to imperiled species. Among the species whose listing decisions have been subject to political interference are the greater sage grouse, Gunnison sage grouse, Gunnison's prairie dog, white tailed prairie dog, Mexican garter snake, southwestern bald eagle, Preble's meadow jumping mouse, Sacramento splittail, California tiger salamander, roundtail chub, *Tabernaemontana rotensis* (a rare island tree), fluvial arctic grayling, and the Pierson's milkvetch. Most of these are now under investigation by either FWS, the Department of Interior Inspector General, the Government Accountability Office, or the courts. We will highlight a few cases²²:

²⁰ Letter from Biologists to U.S. Senate concerning the Endangered Species Act. January 2006. Available online at: http://www.ucsusa.org/scientific_integrity/solutions/big_picture_solutions/biologists-letter-concerning.html

²¹ The National Academy of Science's National Research Council. 1995. Science and the Endangered Species Act. Available online at: <http://www.nap.edu/openbook.php?isbn=0309052912>

²² For more examples, please visit the UCS A to Z Guide for Political Interference in Science:

Gunnison's prairie dog – This species was on track for a positive 90-day finding as of Jan 19, 2006. But a short email saying “Per Julie please make the pd [prairie dog] finding negative” overruled the scientists at FWS and the best available science on this species. When FWS announced it would review eight species decisions influenced by Deputy Assistant Interior Secretary Julie MacDonald, it did not include this species in the list that they would revisit. Senator Wyden has since request an IG investigation including this prairie dog.²³

Political interference in other species protections

We will highlight two of these cases – the spotted owl shows high level interference in a recovery plan, and the bull trout shows a common practice of manipulating a cost-benefit analysis to significantly reduce critical habitat.

Florida Panther – In 2003, Fish and Wildlife Service (FWS) officials knowingly used flawed science in the agency's assessment of the endangered Florida panther's habitat and viability in order to facilitate proposed real estate development in southwest Florida.²⁵ A biologist who worked at the FWS for 18 years, charged that agency officials knowingly inflated data about panther population viability, and minimized assessments of the panthers' habitat needs.²⁶ The FWS used the flawed data as a basis for several documents, including its Multi-species Recovery Plan and at least 19 biological opinions, which were used to approve development applications.²⁷

Bull trout - Officials at the FWS censored an analysis of the economics of protecting the bull trout, a threatened trout species in the Pacific Northwest, publishing only the costs associated with protecting the species and deleting the report's section analyzing the economic benefits. Furthermore, while the benefits of protecting the bull trout were

http://www.ucsusa.org/scientific_integrity/abuses_of_science/a-to-z-guide-to-political.html

²³ Union of Concerned Scientists. Systematic Interference with Science at Interior Department Exposed: Gunnison's Prairie Dog. Available online at

http://www.ucsusa.org/scientific_integrity/interference/endangered-species-act-interference.html

²⁵ U.S. Fish and Wildlife Service. Regulatory profile: Florida panther (*Puma concolor coryi*).

²⁶ Public Employees for Environmental Responsibility (PEER). 2004. Andrew J. Eller and Public Employees for Environmental Responsibility v. Department of Interior. May 4, 2004.

²⁷ U.S. Fish and Wildlife Service. 2007. South Florida Multi-Species Recovery Plan.

deleted from the economic analysis, the costs associated with this species' protection were inflated.³¹ An exaggerated cost analysis and a deleted benefits analysis essentially give the FWS the economic justification, under the ESA, to disregard scientific information when designating critical habitat for the endangered bull trout.

Greater sage grouse – Julie MacDonald criticized scientific studies showing widespread threats to this species. MacDonald heavily edited the biologist's findings and the species received a 12-month not-warranted finding. This finding has since been struck down in court due to the direct political interference overriding the use of best available science.³²

Many other species also have suffered from political interference reducing their chances at recovery. Among them are the arroyo toad, California red-legged frog, Canada lynx, three invertebrates living in Comal Springs, the gulf sturgeon, loach minnow, Northern spotted owl, Preble's meadow jumping mouse, Santa Ana sucker, southwestern willow flycatcher, spikedace, and the Topeka shiner.³³ Many of these are under investigation (Appendix I).

Years of inaction on species protection

Two full years and a handful of days, from May 9 2006 to May 14, 2008, passed in which Department of Interior Secretary Dirk Kempthorne failed to list a single domestic species.³⁴ This was not due to a lack of species – 280 species awaited protections on the candidate list,³⁵ and documents provided through our FOIA request revealed that 52 90-day petitions and 34 12-month reviews were denied between 2002 and 2007.³⁶ With over 80 species decisions from a similar time period under various public, court, congressional, IG, or GAO reviews because of inappropriate interference

³¹ Fish and Wildlife Service. "Draft Economic Analysis of Critical Habitat Proposal for Bull Trout in the Columbia and Klamath River Basins Released for Public Comment," April 5, 2004. Available online at <http://news.fws.gov/newsreleases/r6/E6CD3A83-F8FD-484C-8523CF328EC43D93.html>.

³² Union of Concerned Scientists. Systematic Interference with Science at Interior Department Exposed: Greater Sage Grouse. Available online at http://www.ucsusa.org/scientific_integrity/interference/endangered-species-act-interference.html#

³³ Appendix I.

³⁴ Center for Biological Diversity. Bush Sets New Record in Refusing to Protect Endangered Species. May 9, 2008. Available online at http://www.biologicaldiversity.org/news/press_releases/2008/esa-listing-05-09-2008.html

³⁵ Department of the Interior. 72 FR 69034.

³⁶ Union of Concerned Scientists. FOIA into use of the 90-day table. Available upon request.

for political or economic reasons,³⁷ our faith that those petition denials were done in a fair and scientifically accurate process is greatly eroded.

For the ESA to truly respond to science-based assessments, the Department of the Interior must create a new agency culture based on scientific integrity. That requires extensive protections for scientists who speak out when science is manipulated, distorted and suppressed, more freedom for scientists to speak freely about their work to the media, and much more transparency for the process underlying ESA decision making. The Department of the Interior scientific integrity policy is a work in progress and they are currently working on more specifics, including strengthening the Agency media policy.³⁸ We look forward to following their progress.

³⁷ Appendix I

³⁸ Department of the Interior Scientific Integrity Policy:
http://elips.doi.gov/app_dm/act_getfiles.cfm?relnum=3889

UCS Scientific Integrity Recommendations

DOI scientists and researchers need certain rights and protections to fulfill their responsibility to the U.S. public. One frontline defense against political interference in science is to specifically affirm that scientists who report such abuses are protected from retaliation.

A.1. The DOI scientific integrity policy should protect whistle blowers who expose waste, fraud, and abuse. Improved whistle-blower policy should:

1. Make clear that whistle-blower protections from retaliation apply to federal employees who report efforts to alter or suppress research or technical information
2. Give federal employees the same access to jury trials that Congress has given to millions of private sector workers

A.2. The DOI should issue a statement that encourages staff to speak out internally about concerns—especially those involving an abuse of science—and state that the agency values their input.

A.3. The DOI should proactively educate government scientists and researchers regarding their rights and protections.

B. Making Government More Transparent

The integrity of DOI science is threatened in no small part by decisions made behind closed doors. Opening up agency science and decision making to scrutiny from Congress and the public is an important and inexpensive means of exposing and ending political interference in science. The public needs greater access to DOI science through better disclosure of regulatory decision making, wider use of information technology, and the reform of agency communication policies to allow scientists and researchers to freely share their expertise.

The DOI should improve upon the proposed policy by implementing the following recommendations.

B.1. The DOI should adopt policies that ensure free and open communication between scientists and researchers, and the media, policy makers, and the public.

These guidelines should incorporate the following principles: **Scientists and researchers may freely express their personal views.** Scientists and researchers, as any federal employees, have a right to express their personal views outside of a few narrow restrictions (such as releasing classified or proprietary information). Provided that a scientist makes an explicit disclaimer that he or she is speaking as a private citizen and is not seeking to represent official DOI policy, he or she should be allowed to speak freely about his or her research and to offer his or her **scientific** opinions—even in situations where the research may be controversial or have implications for agency policy. DOI policies governing communication with the media should make this option clear and explicit to employees.

1. **Scientists and researchers have the right to review, amend, and comment**

document has been completed by DOI technical staff yet held up in the policy or interagency review process for longer than six months.

B.2.4. Scientific work done on an employee's personal time should not be required to be submitted to an internal review process, even if the employee identifies his or her employer, provided that the work includes an appropriate disclaimer.

B.3. The DOI should institute a transparency policy for meetings with outside entities. This policy should require that the DOI post on its website a complete record of all meetings with outside entities including for-profit and not-for-profit organizations, other agencies, and individuals (with the exception of meetings related to national security). Such a policy need not be burdensome, as participants could enter the required information directly into a database before the start of any meeting. The database should include the names and affiliations of meeting attendees as well as the date, time, location, and subject of the meeting.

B.4. When a rule moves from a DOI agency to the Office of Management and Budget or another agency, the scientific underpinnings of the regulatory decisions should be made public.

C. Scientific Information and Advice

The DOI cannot make fully informed decisions about our health, safety, and environment without access to the best available scientific information and advice. The DOI should restore regulatory integrity, improve the federal scientific advisory committee system, and improve conflict-of-interest policies for government employees.

C.1. The DOI policy should contain concrete steps to review tainted decisions and reverse policies that weaken scientific input. Regulatory changes and formal and informal guidance limiting the role of scientific advice should be identified, suspended, reviewed, and replaced. Where inappropriate misuse or manipulation of science has been identified, the decisions should be systematically reexamined and modified.

C.2. The DOI should strengthen their scientific advisory committee system. While the proposed policy does address the scientific review process it fails to improve upon the existing advisory committees system, a key component of science-based policy.

C.2.1. The process for selecting DOI advisory committee members should be made more transparent through the following reforms. The DOI should :

1. Publicly announce their intent to form a new scientific advisory committee, or to select a new member for an existing committee.
2. Publish criteria for selecting committee members and should solicit nominations for committee membership.
3. Call for public comment on the charge to the committee.
4. Make basic information on committee members easily available to the public.
5. This information should describe each member's qualifications and background, and disclose past employers and funding sources.

C.2.2. The DOI should establish new standards of transparency and participation for all advisory committees. Such standards should include the following requirements:

- a. All advisory meetings should be open to the public, entirely or in part. When meetings or portions of meetings are closed, there should be a public record of the reason for excluding the public.
2. Committees should actively encourage public input and should advertise upcoming meetings with adequate notice.
3. Technology should be used, to the extent possible, to broadcast public meetings online for members of the public unable to attend in person.
4. Materials from committee meetings should be posted online in a timely fashion, including agendas, minutes, transcripts, recordings, and other documents.

C.2.3. The DOI should provide clear guidelines for conflicts of interest on federal advisory committees. These guidelines should address the following issues:

1. The DOI should specify which advisory committees are expressly scientific and which are designed to gather stakeholder input.
2. The DOI should clarify their criteria for appointing advisory committee members as “special government employees” (SGEs) or “representatives,” and ensure that the proper level of scrutiny of conflicts of interest occurs. (SGEs are subject to greater scrutiny than representatives, who are assumed to be stakeholders with special interests.)
3. For committees whose mission is purely to provide objective scientific advice (as opposed to committees designed to gather input from stakeholders), committee members should be appointed as SGEs and should be entirely free of financial conflicts of interest.
4. Scientists and researchers with conflicts of interest may provide their expertise to scientific advisory committees, but agencies should take steps to ensure that they do not have decision-making roles on those committees, and that their participation is limited to making presentations and responding to questions.
5. Scientists who have taken public positions on issues should not be excluded from an advisory committee because of concerns about bias. Having a point of view does not preclude an objective assessment of the information presented to a committee. A scientist’s membership in a scientific association should not be considered evidence of bias, even if that association has a stated policy agenda.

C.2.4. The DOI should track the work of their scientific advisory committees and respond to their findings and recommendations.

1. The DOI should clearly state what product they require of each advisory committee, and set a timeline and work plan for creating that product.
2. The DOI should establish and enforce clear policies for how to incorporate committee findings and recommendations into agency decision making. Agencies should also publicly document any decision to overrule the recommendations of a scientific advisory committee, and provide a legitimate explanation of the decision.

3. The DOI should review which scientific research and peer review work is being handled by outside contractors, with the goal of institutionalizing the input of independent advisory committees whenever feasible.

C.3. The DOI should improve conflict-of-interest policies for employees. While drafts have been issued for various bureaus, an agency-wide conflict of interest policy is necessary to consistent standards for agency employees

C.3.1. The DOI should establish clear conflict-of-interest guidelines for federal employees.

C.3.2. DOI employees involved in the writing or enforcement of regulations should disclose all conflicts of interest and any previous employment ties that might affect or be perceived as affecting their ability to do their job in an independent manner. These disclosures should be made in writing, publicly available, and required in all cases.

C.3.3. DOI employees with significant conflicts of interest may still contribute to a project, but agencies should bar them from holding decision-making authority or other positions where they can influence policy outcomes. Any conflict-of-interest waivers should stipulate the parameters of permitted participation.

C.3.5. DOI employees should be required to recuse themselves from decisions involving a former employer, whether or not they have current financial ties to that employer.

Chairman BROUN. Thank you, Dr. Grifo.

And I thank the panel for you all's testimony. Reminding Members that the Committee rules limit questioning to five minutes, the Chair at this point will open the round of questions. The Chair recognizes himself for five minutes.

Mr. Frazer, in your testimony you state that the joint Fish and Wildlife Service and National Marine Fisheries Service policy on information standards under the Endangered Species Act issued in 1994 requires your biologists and managers to "ensure that the information that we use is reliable and credible and represents the best data available." Do you believe the work of federal scientists on the Central Valley Project and the State Water Project Biological Opinion in California adhere to the standards outlined in this policy? And if so, how do you respond to a Federal Judge stating that the testimony of these two employees were so contradictory and inconsistent that it amounted to deliberate deception and bad faith on the Department—on the part of the Department of Interior?

Dr. FRAZER. Mr. Chairman, we do believe that our Biological Opinion was based on the best available scientific information. As I stated in my opening statement, it has been through five separate independent peer reviews, one by a National Research Council panel. We disagree with Judge Wanger's characterizations, but we are taking it as a serious allegation and we are using our scientific integrity policy to thoroughly investigate that and determine whether there is any basis for his statements. We do note and appreciate that he sought to clarify those statements in a following hearing that he held the week after.

Chairman BROUN. Okay. Your testimony states, "the Department is seeking independent experts to evaluate the allegations." Will these experts be independent of the Service and the Bureau of Reclamation, independent of the Department, or independent of the Administration?

Dr. FRAZER. We have an existing contract to go to an outside party to enlist independent experts to be able to conduct this review, and they will provide a report to the Scientific Integrity Officers of the Fish and Wildlife Service and the Bureau of Reclamation.

Chairman BROUN. How will you ensure that the experts have sufficient independent scientific expertise and investigative backgrounds?

Dr. FRAZER. Through—our scientific integrity policy of the Department lays out the process for conducting such reviews and we will be—we have developed a statement of work that lays out the qualifications and requirements of the parties that will be involved.

Chairman BROUN. Do you believe the Inspector General should be involved in this inquiry?

Dr. FRAZER. The Department's science integrity policy and the Services' procedures don't have a role for the Inspector General in these sorts of things. This is part of our management structure within the Department and the Fish and Wildlife Service.

Chairman BROUN. Will the final report be made public?

Dr. FRAZER. The report will be provided to the Science Integrity Officers of the two bureaus and they will determine whether there

is any basis for any sort of action. If there is an action, it would be a conduct issue and it would be the personnel and human resources policies of the agencies that would be brought into play, and that would be the basis of determining whether that report would be made public.

Chairman BROUN. Well, I hope it is made public. Have you all seen Judges in—utilize their own political philosophy and bend and try—in making decisions on ESA determinations?

Dr. FRAZER. There are many different Judges and many different opinions, and I am not one that spends much time trying to analyze any philosophy behind those rules so—

Chairman BROUN. Well, I think we have seen in many instances where Judges have used their own political philosophies have bent to affect how they judge things and not entirely independent and I wonder in this case whether that might be so.

Dr. Wilkins, the Endangered Species Act requires listing determinations to be made purely based on best available science. Are policy decisions ever made while conducting science and do scientists make choices and decisions in the course of their work?

Mr. WILKINS. That is a great question and there is a lot of nuances there. So I am in the business of training scientists, and that means we teach them to think. And in addition to research methodologies and statistical methods and interpretations of scientific data, we teach them how to test policy, how to develop policy innovations, how to determine the implications of policy. So there are policy questions and there are policy implications that intentionally become part of scientific work. I think that is appropriate and it is mostly appropriate because that is the only way to know the difference between objectivity and when you are using a particular policy preference to shade or distort your scientific findings. And so that ends up being the only way to maintain objectivity and integrity I believe is to know the difference and to know the difference of when you are presenting science versus when you are presenting policy implications. We just simply need to ask questions in such a way as to best inform management through our science, and management is a form of policy.

Chairman BROUN. Thank you, Dr. Wilkins. My time has expired. I now recognize Ms. Edwards for five minutes.

Ms. EDWARDS. Thank you, Mr. Chairman. And again thank you to the witnesses.

Dr. Grifo, I would like to turn to you. I wonder if you have some assessment of—during Mr. Manson's tenure at the Interior Department that one of the most egregious examples of politicization of science occurred, could you provide the Committee a thumbnail account of what happened during his tenure and in the years immediately after he left service in 2005?

Dr. GRIFO. Sure. I mean I think, you know, there were many, many, many species that were interfered with. I think what was going on was the modus operandi—if you will forgive that expression—was really—there were three things, and it was really Ms. McDonald who was at the core of these issues. She consistently called field biologists in the field, used foul language, bullied them, was incredibly abusive. You don't have to believe me; it is in the IG report. That was one thing. I think the second was that she sent

internal Department of the Interior documents out to various places, to an online gaming friend and to the Farm Bureau in California and other places. But the third which I think is the most incredible is that she changed scientific results. If we look at Gunnison sage-grouse, Gunnison's prairie dog, white-tailed prairie dog, roundtail chub, bull trout, marbled murrelet, Arizona bald eagle, tabernaemontana, delta smelt, I could go on and on. It is a very long list. But what I find the most remarkable are the times that she did it and tracked changes in a Word document and we were able to obtain through FOIA requests and other means those documents with her changes that were clearly, you know, scientific edits in those documents. So I don't know how much more, but I could obviously talk for a while.

Ms. EDWARDS. Thank you. I appreciate that, Dr. Grifo. And I just wonder if you know how many ESA listings had to be withdrawn in the wake of the IG's finding on Ms. McDonald's misconduct?

Dr. GRIFO. There were investigations into a number of species. You know, some were revised but not all.

Ms. EDWARDS. Thank you.

Mr. Frazer, I wonder if you can add any insight into how much work had to be redone at Interior after Mrs.—Ms. McDonald resigned?

Dr. FRAZER. At the request of the Deputy Secretary at the time, the Service reviewed determinations that had been made and concluded that there were eight listing determinations, either petition findings or listing determinations or critical habitat designations that warranted revisiting and the Service revisited all of those and revised those determinations.

There were other cases in which there have been merits challenges that were filed and we either lost those cases or we determined that we didn't have a defense and had to take them back and redo those. And I don't have a comprehensive list of all of those right now.

Ms. EDWARDS. Thank you, Mr. Frazer.

And now I would like to turn to Judge Manson. I noticed in your opening statement that you actually challenge the integrity of the IG, which strikes me because if that is—you know, if that is in question, then I think we have some other questions.

But I would like to know whether the actions that you supported ended up costing the government a significant amount of money in having to redo studies and legal findings due to Ms. McDonald's direct interference. She was your employee.

Mr. MANSON. First of all, I did not challenge the integrity of the IG. I meant to challenge the integrity of those who brought into question some of those activities during the time that I was there and the time that I subsequently was a law professor for 4 years.

Ms. EDWARDS. But Judge Manson, you are aware of the rework that had to be done at the—within the Department because of—

Mr. MANSON. I am aware of some of—

Ms. EDWARDS. Let me finish—because of Ms. McDonald's conduct, and it is estimated that it may have cost at least hundreds of thousands of dollars. That is taxpayer money that that cost. Do you have a disagreement with that estimate? Is it too low? Is it too

high? Is it just about right? Can you put a price on what that mismanagement under your tenure cost the American taxpayer?

Mr. MANSON. I have no way of putting a price on something that I don't regard as mismanagement.

Ms. EDWARDS. Well, the IG—I mean whether you regard it that way or not, I mean the Inspector General certainly regarded it as mismanagement enough to question the integrity of dozens and dozens of scientific-based—what we thought was scientific-based research at the Department. And so I would urge you if you have some other estimate of that cost that you would please submit for our record because we would like to stack it up against the IG's conclusions.

Mr. MANSON. I am not—

Ms. EDWARDS. And with that, I—my time has expired. Thank you.

Chairman BROUN. Thank you, Ms. Edwards.

I now recognize Dr. Benishek for five minutes.

Dr. BENISHEK. Thank you, Mr. Chairman.

Like all my other colleagues in this room today, I routinely hold town hall meetings throughout my district, and a few months ago I was approached by one of my constituents as I left the town hall and he was holding a very large garbage bag and asked if I would like to take a look. This was Mr. John Koske of Bessemer, Michigan. And Mr. Chairman, the bag held the carcass of a cat from his farm that had been killed by a grey wolf. And he confronted me with this picture that came out of it. The town hall was pretty shocking. I would like to submit a copy of this photo for the record.

Chairman BROUN. So ordered.

[The information appears in Appendix II.]

Dr. BENISHEK. Unfortunately, farmers are not the only—pardon me?

Chairman BROUN. So ordered.

Dr. BENISHEK. Thank you.

Unfortunately, farmers are not the only constituents with grey wolf problems. I receive letters from families with family pets who have been killed by wolves in their own backyards. Hunters in my district feel threatened by the wolf as they have no recourse against the animal. It worries me that many of my constituents feel that they can no longer enjoy the outdoors due to an out-of-whack wolf population.

The most recent study completed by the Michigan DNR early this year indicated a minimum of 687 wolves in Northern Michigan. The goal for recovery in Michigan was 200 wolves. The Fish and Wildlife Service, Michigan DNR, and my constituents all agree that the wolf should be delisted in Michigan.

Mr. Frazer, can you speak to the science that impacted the Service's decision to begin this process?

Dr. FRAZER. Wolves are originally listed under the Endangered Species Act back in the '70s after they had been persecuted in the lower 48 States by elements of the former Fish and Wildlife Service at—when times and societal values were different. At that point, wolves existed in the lower 48 only in Northern Minnesota. We have we believe successfully recovered wolves. We have a proposal to delist wolves. In the western Great Lakes out right now we in-

tend and expect to make a final determination on that by the end of this calendar year. We believe in the wolves in the western Great Lakes have recovered and it is appropriate to have them again managed by the States.

Dr. BENISHEK. Have there been any political issues that have impacted this process?

Dr. FRAZER. No, sir.

Dr. BENISHEK. Mr. Frazer, would your agency ever consider giving a partial or a state waiver to the ESA?

Dr. FRAZER. I am not sure what you mean by a state waiver.

Dr. BENISHEK. Well, to allow the States to manage the population without—I mean at this point in time.

Dr. FRAZER. We work within the authorities we have under the Act and there are certainly ways in which States can assume management lead for listed species. In the northern Rocky Mountains, the States of Idaho and Montana had approved management plans for wolves that allowed them under our experimental population rules to essentially be the lead management agency—

Dr. BENISHEK. Thank you.

Dr. FRAZER. —to administer the Act.

Dr. BENISHEK. Mr. Manson, the political fight over the delta smelt has been wrapped up in environmental terms but what about the impact of these rules on your users? I mean how are California farmers and other water users impacted by the restrictions that have been contemplated?

Mr. MANSON. Well, the Court found in 2009 that there were severe economic and social dislocations as a result of the application of the 2008 Biological Opinion. That included unemployment, it included a loss of crops, it included even things that go so far as foreclosures of homes in the Central Valley, so the impact has been quite severe.

And I would like to say with respect to Judge Wanger, he is a neutral Judge who has ruled against water users and ruled in favor of environmental interests at times and ruled against environmental interests at other times and in favor of water users. And I sat in the courtroom at each of the hearings at which the witnesses testified and as a former litigator and a former Judge myself, I was appalled at the testimony that was given and I believe that his characterization of that testimony was correct.

Dr. BENISHEK. Thank you very much.

Mr. Chairman, I yield back my time.

Chairman BROWN. Thank you, Dr. Benishek.

I now recognize Mr. Miller for five minutes.

Mr. MILLER. Thank you, Mr. Chairman.

The reason we have these hearings is to build a factual record for conduct—for decisions before Congress, whether they be about legislation or about funding. And the Chairman is correct in his opening statement—there can be honest disagreements between honest people but frequently the question comes down to what to believe and that comes down to who to believe. So questions about the credibility of the people who testify before us is entirely proper just as it is in court. I have raised questions before about the financial interests that have been undisclosed by witnesses at other hearings before this Subcommittee and others. There has been ve-

hement criticism of those questions by Members of the majority, but we just heard today in the Chairman's opening statement questions about the credibility of environmentalists, of environmental group because their income came in part from litigation that they pursued over ESA decisions.

Again, going to credibility of witnesses or credibility of scientists, the Chairman questioned in his opening statement or quoted some District Court Judge in California I have never heard of as saying that a scientist's testimony was the testimony of a zealot, that the Agency had acted in bad faith and attempted to mislead and deceive the Court. I don't know anything about that Judge at all. The Chairman's testimony suggested that that must be the gospel truth if it was a Judge saying it, but then he went on in questions and said that Judges use their own political philosophies instead of fact-finding. So it appears that it is—I mean I think we should properly consider the credibility of witnesses, whether they have an interest, whether they—you know, that is not to say that everybody—anybody who is consciously lying but where we—what our financial interests are has a tendency to color what we think. And that is something we should properly ask.

And also instances of conduct. Judge Manson, there have already been questions about the Inspector General's report. I think, Mr. Chairman, that report should properly be part of the record today and I would like to move it into evidence of the hearing as part of the record.

Chairman BROUN. Without objection, so ordered.

[The information appears in Appendix II]

Mr. MILLER. Mr. Manson, Ms. Grifo said that most of the conduct was by Julie McDonald. The findings—not allegations—findings of the Inspector General are pretty striking, that she did in fact consciously edit findings of the—about the—under the ESA, that many were set aside, two were apparently set aside by courts as arbitrary and capricious, and that she had improperly disclosed confidential information within the agency, outside of the agency, and on and on, and found that you had—when you were interviewed, there were no—you had no criticisms at all of her conduct. Do you still have no criticisms at all of her conduct?

Mr. MANSON. I have no criticisms of her conduct.

Mr. MILLER. Have you kept in touch with her? Do you know what she is doing now?

Mr. MANSON. I do.

Mr. MILLER. What is she doing now?

Mr. MANSON. She is a consultant.

Mr. MILLER. And do you continue to have professional relationships with her?

Mr. MANSON. From time to time.

Mr. MILLER. Has she done any work for Westlands?

Mr. MANSON. She has.

Mr. MILLER. Okay. Has she done any work recently for Westlands?

Mr. MANSON. I don't know that.

Mr. MILLER. You are counsel for Westlands, right?

Mr. MANSON. Yes, but I—she doesn't do legal consulting.

Mr. MILLER. Okay.

Mr. MANSON. I don't know the last time she did anything specifically for Westlands.

Mr. MILLER. All right. Can you tell me what the Center for Environmental Science Advocacy and Reliability is?

Mr. MANSON. Yes, that is a nonprofit organization that I began while I was a law professor at McGeorge School of Law.

Mr. MILLER. Okay. And are you the Executive Director of that now?

Mr. MANSON. I am.

Mr. MILLER. Are you compensated for that?

Mr. MANSON. No, I am not.

Mr. MILLER. You are—okay. You act entirely as a volunteer in that?

Mr. MANSON. Yes.

Mr. MILLER. All right. What is the funding for CESAR?

Mr. MANSON. It comes from donors of all sorts, and as I understand the law, the donors' lists may remain confidential.

Mr. MILLER. All right.

Mr. Chairman, I will yield back my last 30 seconds.

Chairman BROUN. Okay. Thank you, Mr. Miller.

The—now, I will yield the Chairman of the whole committee, Mr. Ralph Hall. Chairman Hall, you are recognized for five minutes.

Chairman HALL. I will not use my five minutes.

I want to inquire of Mr. Vincent-Lang. The Fish and Wildlife Service's testimony mentions that the Policy Regarding the Role of State Agencies in Endangered Species Act Activities. This policy recognizes that States possess broad trustee authority over fish, wildlife, plants, and their habitats within their border as well as scientific data and valuable expertise on the status and the distribution of such species and habitats. Can you tell us a little about your experience with this policy?

Mr. VINCENT-LANG. Well, the policy I think is well intentioned. However, it has been—

Chairman HALL. I don't know that I agree with you to start with, but go ahead.

Mr. VINCENT-LANG. Well, I think it is well intentioned because it is trying to define a role of States into the ESA process. However, it has been applied very inconsistently. Our experience in Alaska is that we are being treated really no differently than any other stakeholder in the ESA decision processes. We find this kind of out of the compliance with the policy. This said, there is an effort underway to reevaluate this policy and we welcome this and look forward to having the value and roles of States recognizes in the ESA processes in a formalized and consistent process for getting the States' management programs put into place.

I might add that States are well positioned to manage currently healthy populations and the threats facing them. We have an excellent history and the tools necessary to manage species and the threats facing them under our jurisdiction. This ranges from sustainable harvest programs to habitat protections for habitats that are under threat. In Alaska we have an excellent history in our short 50-year statehood no species have gone extinct underneath our trust responsibilities.

Chairman HALL. I thank you. We read your testimony. I admired it, thought it was—maybe my offhand remark to you at the beginning I would have to withdraw that. I thank you.

I have to withdraw a lot of things I say nowadays.

Dr. Wilkins, your testimony indicates that the State efforts are more effective and less costly than one-size-fits-all protections under ESA. I surely agree with that. Would you like to explain that for the record and what efforts are more effective and cost-efficient?

Mr. WILKINS. Certainly. It is good to see you, Representative Hall.

We know the state agencies and state government, at least in my experience and in the experience of several others has a set of science resources that simply aren't available to our federal agencies, not the least of which are the research extension and outreach components of our State Land Grant University Systems, our ability for state government to mobilize forces and mobilize taskforces. We saw an example of that in Texas just this last year. In fact, if recovery goals were optionally deferred to the States, I am sure that in many instances, we would find state-level recovery plans that would be scientifically reliable, science-based, and actually deliver greater performance on the Act at a lesser cost than the way recovery plans are administered at present, sir.

Chairman HALL. I thank you, sir.

And I yield back my time, Mr. Chairman, and I thank you. And thank you for having the hearing.

Chairman BROWN. Thank you, Mr. Chairman.

I now recognize Mr. McNerney for five minutes.

Mr. MCNERNEY. Thank you, Mr. Chairman.

I want to thank the witnesses for your testimony this morning.

My first question goes to Honorable Manson. As you may know, I represent a large portion of the San Joaquin Delta, which is the most important estuary on the West Coast. A healthy Delta supports jobs for thousands of farmers and fisherman, small businessmen, and last week I met with senior officials from the Bay Delta Conservation Plan, which included a representative from the Westlands District. And I have to say what I heard was absolutely unacceptable. I cannot accept a massive canal or tunnel that would severely degrade the water quality for the entire Delta.

So in your opening statement you mentioned the constitutional rights, including property rights, and I believe that we all agree with that. So I have a simple question for you. Do you think it is okay to use people's lands, to steal their water, and destroy their livelihoods without their consent?

Mr. MANSON. Well, certainly not.

Mr. MCNERNEY. Thank you.

Mr. MANSON. But I think the issue of Bay Delta is one that is going to require a lot of cooperation from a lot of different entities. The water users have funded a great deal of the planning and the habitat conservation aspects of the Bay Delta plan and have not invaded and stealing anyone's land or water.

Mr. MCNERNEY. So then by building massive tunnels in the Delta where people who live there are adamantly opposed and are not included in the discussion and have been excluded from the

process, is that okay? And that is what has happened. Those are the facts.

Mr. MANSON. Well, I can't speak to the larger Bay Delta process. There are many moving parts to it, many of which we don't participate in. We are looking for a stable, reliable water supply from the Delta and along with that we have funded investigation—scientific investigations into conservation efforts in the Bay Delta region.

Mr. MCNERNEY. So you are looking for a stable water supply, for example, with 15,000 CFS tunnel that would cause tens of millions of dollars in agricultural losses in the Delta.

Mr. MANSON. There is no specific plan at this time.

Mr. MCNERNEY. That is one of the proposals that has been advocated by Westlands and do you think it is appropriate for the federal, state, and local agencies to sign agreements to fund the BDCP without any input from the Delta residents, which has happened?

Mr. MANSON. Well, I don't know that that has happened, but I will take your word for it.

Mr. MCNERNEY. Okay, thank you.

My next question is for Gary Frazer. The decline of the Delta ecosystem has important human implications, as you may know. Poor water quality is a severe threat to local farmers, and following record water diversions in the 2008 and 2009 periods, the California Salmon Fishery collapsed costing thousands of jobs. The Central Valley Project Improvement Act required the Interior to double wild salmon populations by 2002, but unfortunately, we saw the opposite happen; salmon declined. Doesn't the federal law require us to do more not less to protect the Delta ecosystem and the jobs that it supports?

Dr. FRAZER. Congressman, I am afraid that I am not an expert on that particular authority and that program, but I would be very happy to get back to that specific question in—for the record.

Mr. MCNERNEY. Okay, thank you.

Dr. Wilkins, I appreciate your thoughtful testimony actually. You are actually proposing things that might make sense. Under scrutiny, I don't know yet. But you have been involved for a number of years with the projects at Ft. Hood, Texas, which is a major Army installation. This program has been reported as having very—been very successful in protecting habitat for the golden-cheeked warblers while also allowing flexibility to the Army to conduct the exercises they require.

Mr. WILKINS. Yes.

Mr. MCNERNEY. I believe this is known as a recovery credit system. Can you talk a little bit about what you have been doing at Ft. Hood and is that a model that could be used in other locations?

Mr. WILKINS. Yes, sir, I can. And it is a model that could be used in other locations. The recovery credit system at Ft. Hood was a proof of concept. Essentially, we demonstrated that we could get flexibility for training on a major defense installation through those actions that might disturb or take endangered species habitat on the installation. There was contracts that were let with private landowners who had habitat on their properties to maintain and enhance that habitat to more than offset any degradation to habitat that might occur on a defense installation. Therefore, there was a net benefit to recovery for that species in that exchange so that

we had a better set of progress towards the recovery efforts on private lands with private ranchers in Central Texas which, 20 years ago, would have been unheard of, sir.

Mr. MCNERNEY. All right, thank you. I yield back.

Chairman BROUN. Thank you, Mr. McNerney.

The Chair now recognizes Ms. Adams for five minutes.

Mrs. ADAMS. Thank you, Mr. Chair.

Mr. Frazer, in the view of the Administration, does the USFWS consider state-run wildlife management plans an important component of the ESA and species recovery?

Dr. FRAZER. We do. We view the State Fish and Wildlife Agencies as special partners in endangered species conservation while—before species are listed, they are the agencies that in almost all cases have the management authority Fish and Wildlife implants. We recognize the partnership as so important that under the leadership of former Director Sam Hamilton and current Director Dan Ashe, we are participating in a specific task force—Fish and Wildlife Service, National Marine Fisheries Service, and State Fish and Wildlife agencies to grow and strengthen the collaborative partnership, and that can certainly include working together on recovery planning, more importantly, on conservation of species before they actually decline to the point—

Mrs. ADAMS. So it is an important component?

Dr. FRAZER. Very important.

Mrs. ADAMS. If a State specifically incorporates hunting as a part of their management plan, what is the Administration's position on the use of hunting as a management tool for species recovery?

Dr. FRAZER. The Act lays out a very narrow exception for the use—or for the allowance of regulated taking in the concept of conservation. So to the extent that we have had case law on application of hunting or trapping programs, it is not one that gives us a whole lot of latitude, but it is something we continue to explore in appropriate circumstances.

Mrs. ADAMS. Can you please provide what scientific criteria USFWS uses to determine the likelihood of a species being at risk of extinction over a 50-year period or a 300-year period? Please provide the specific criteria to justify such lengthy timelines. Do you have that with you?

Dr. FRAZER. We don't have specific criteria—

Mrs. ADAMS. Can you provide that?

Dr. FRAZER. You are referring I believe to what and how we determine what is foreseeable future in determining whether a species is a threatened species?

Mrs. ADAMS. Do you have specific criteria for that?

Dr. FRAZER. No, we do not.

Mrs. ADAMS. So how do you determine?

Dr. FRAZER. On the basis of the best available scientific information at the time of the listing determination.

Mrs. ADAMS. Mr. Chair, I would like to have them for the record bring forth that kind of information to the Committee.

Chairman BROUN. Ms. Adams, we are going to allow them to answer any written questions—or ask them to answer any written questions, so you should be able to get that information.

Dr. FRAZER. Congresswoman, we certainly lay that out in detail every time we interpret that phrase in the context of a listing determination, so we could certainly—

Mrs. ADAMS. So it is different for each time as you go along?

Dr. FRAZER. It is.

Mrs. ADAMS. Okay. USFWS recently settled lawsuits with litigants WildEarth Guardians and Centers for Biological Diversity to make the decisions on hundreds of species within an agreed-upon timeline. Can you please explain how this settlement comports with the ESA as written given that it appears to remove any opportunity for public input or comment, including that of outside scientists and experts in the study of species under consideration?

Dr. FRAZER. The settlement simply resolved outstanding deadline litigation that was facing the Service. We were not meeting the deadlines that were laid out in the Act.

Mrs. ADAMS. So does it stop—because it appears to stop any input from the public, any comments from the public, experts?

Dr. FRAZER. Absolutely not. As I said in my written statement, we will be making listing determinations through the rulemaking process with public notice and comment on all of our proposals, independent peer review. They will go through the standard process that has extensive opportunity to public engagement.

Mrs. ADAMS. Well, the two settlements recently in Alaska, the USFWS agreed to dates after which the Service will no longer be able to consider certain species to—in Alaska to be candidate species. Were the State of Alaska and its wildlife biologists consulted in the decision on how to prioritize these species for these settlements' imposed deadlines?

Dr. FRAZER. I am not—I don't know what circumstances you are referring to.

Mrs. ADAMS. Okay. Well, we will have to submit that so you can give us the answer to that.

Dr. FRAZER. We would be happy to respond for the record.

Mrs. ADAMS. Because I would like to know if the State was considered.

You state in your testimony that we are facing an extinction crisis, yet later on in your testimony you say that ESA is a success because “relatively few observed extinctions have occurred in the United States during the last 4 decades.” If that is the case, where is the crisis you are talking about?

Dr. FRAZER. The Endangered Species Act was set up as a safety net. We extend the provisions of the Act to—

Mrs. ADAMS. I am asking where the crisis is.

Dr. FRAZER. It is on the number of species that are at risk of being lost from our Nation's biodiversity.

Mrs. ADAMS. Would you not agree that your statements kind of contradict each other?

Dr. FRAZER. I don't believe that they do contradict.

Chairman BROUN. Thank you, Ms. Adams.

The Chair now recognizes Mr. Tonko for five minutes.

Mr. TONKO. Thank you, Chairman Broun.

Welcome to our panelists. I appreciate your input.

I have here an Anchorage Daily News article from May 25 of I believe 2008 entitled, “Email Reveals State Dispute over Polar

Bear Listing.” And I ask that it be made part of the record, Mr. Chair.

Chairman BROWN. Without objection, so ordered.

[The information appears in Appendix II]

Mr. TONKO. Thank you.

The articles reports allegations that State scientists were not all in agreement over then-Governor Palin’s decision to have the State oppose listing the polar bear as endangered. This story is interesting to me because of a new policy of your new Governor, Governor Parnell. That policy states, “Once a department position or policy is established, employees must present or adhere to such a position or policy when representing the Alaska Department of Fish and Game whether directly or through use of its affiliation or resources.” In plain English, this indicates that once the State denies that a species is endangered, as the State has with the polar bear and beluga whale, State employees including scientists cannot be involved in any program or study that is built on an assumption that they are endangered. All a scientist can do, in my opinion, is repeat the State’s position regardless of facts.

I would like to enter, Mr. Chair, an Anchorage Daily News article from June 6 of this year on this policy at this point in the record.

Chairman BROWN. Without objection, so ordered.

[The information appears in Appendix II]

Mr. TONKO. Thank you.

This policy has had immediate consequences. The National Marine Fisheries Service, NMFS, has removed two Alaska State scientists from the Cook Inlet Beluga Whale Recovery Team because the state policy directly conflicts with the purpose of the scientific panel.

Now, Mr. Vincent-Lang, you have been quoted in the Alaska press as supporting this new policy. Is that accurate? Do you support this policy?

Mr. VINCENT-LANG. Through the Chair, Mr. Tonko, yes, I do support the policy. I think the policy is meant to encourage frank and open discussion regarding how the state position is set up, but once we have that state position defined, I think it is our responsibility then as an agency to have a single position so that the public isn’t confused about that position and we are clearly articulating it. Nothing in that policy though prohibits an honest and open debate about how we are going to reach a position.

Mr. TONKO. But I could lead to non-scientists making that policy where there was suggestion that there was not—there wasn’t scientific support for some of the administrative decisions.

Mr. VINCENT-LANG. Well, as you can probably understand even in your own staff there is probably a wide range of views on any single issue. I think it is the responsibility of the leadership of the Department to take all those divergent views and come up with a single position that best reflects our agency’s position. We did that, and in the case of the polar bear article, there was a single individual that had a different perspective than the entire leadership of the Department.

Mr. TONKO. Um-hum.

Mr. VINCENT-LANG. In the case of the Cook and the beluga whale, we asked our biologists to simply represent those views when they were participating in the recovery panel. And we offered them the opportunity if they didn't want to do that to participate in that panel on their own separate from the Department.

Mr. TONKO. Now, Mr. Vincent-Lang, given that the policy requires state employees to articulate no position but the State's position, could even tell us here today under oath if you disagreed with that policy without potentially facing employment consequences back home?

Mr. VINCENT-LANG. If I disagreed with that policy?

Mr. TONKO. Um-hum.

Mr. VINCENT-LANG. Well, I don't. I agree with the policy so—

Mr. TONKO. To Dr. Grifo, you have been following scientific integrity issues for many years and head up UCS's project on this subject. Do you have any comment that you would share with this panel as to—that you would want to make about the State of Alaska's policy regarding its state scientists on scientific panels?

Dr. GRIFO. Yes, thank you. I mean I find this policy to be extremely troubling. I am not aware that when you become a scientist and gain state employment that you give up your First Amendment rights. I mean I think the Federal Government and the scientific integrity policies and the communication policies that we are working on within those call for a personal views exception where a scientist may stand up and be very clear that they are now expressing their own personal view and not the view of the agency. I also believe that it is incredibly important in these conversations to capture dissenting opinions. Everyone isn't going to agree and I think sometimes we think, oh, that confuses the public and it is hard, but I think it is okay to have those dissenting opinions represented in the record.

Mr. TONKO. Um-hum. Now, with dissenting opinions—

Chairman BROWN. The gentleman's time has expired.

Mr. TONKO. Okay.

Chairman BROWN. I thank the witnesses for you all's valuable testimony and the Members for their questions.

The Members of the subcommittee may have additional questions for the witnesses and you can ask those and Ms. Adams can, too. And we ask all of you to please respond to those in writing. The record will remain open for two weeks for additional comments from Members.

The witnesses are excused and the hearing is now adjourned. And thank you all.

[Whereupon, at 11:35 a.m., the Subcommittee was adjourned.]

Appendix I:

ANSWERS TO POST-HEARING QUESTIONS

ANSWERS TO POST-HEARING QUESTIONS

*Responses by Mr. Gary Frazer, Assistant Director,
Endangered Species, U.S. Fish and Wildlife Service*

Questions submitted by Chairman Broun

Q1. How often is the precautionary principle the basis of a listing decision? If two competing scientific views exist, does the U.S. Fish and Wildlife Service (USFWS) determine that the “best available science” is the one that allows for greater protection?

A1. We never use the precautionary principle as the basis of a listing decision unless ordered to do so by a court. In our view, the precautionary principle has no applicability on the preliminary question as to whether a species is in fact threatened or endangered. Instead, as the Act requires, we make listing determinations according to the statutory definitions of “threatened species” and “endangered species,” considering the factors and standards found in section 4(a)(1) and (b)(1). Likewise, we also do not use section 4(b)(1)’s requirement that listing determinations be based solely on the best scientific and commercial data available as a justification for picking whichever of competing view allows for greater protection. There is often limited or conflicting data available when we make decisions. We use our professional judgment and expertise to review the data to come to what we conclude is the most accurate, not necessarily the most protective, outcome.

Q2. USFWS’s testimony alludes that when the Service makes a “warranted, but precluded” finding to a listing petition, it is based on a prioritization of resources. What scientific information is used to make these prioritizations? How do you determine that one species deserves protection now, but another is precluded from protection?

A2. In determining whether a proposal will be developed for a species that warrants listing under the ESA or if the development of that proposal is precluded by other higher priority listing actions, the Service considers primarily two factors: (1) the listing priority of the species based on the Service’s 1983 “Endangered and Threatened Species Listing and Recovery Priority Guidelines” (LPN guidelines) and (2) budgetary and staff resources available to work on the action. The LPN guidelines established a priority ranking system from one to 12 that takes into consideration scientific information related to the taxonomic classification of a species, the magnitude of threats to the species, and the immediacy of threats to the species. Species most at risk (LPN of 1) are considered by the Service to be the top priority species for which a proposal to list will be developed once budgetary and staff resources are available. Species for which a warranted-but-precluded determination has been made are considered “Candidate Species.” The statuses of Candidate Species are reviewed on an annual basis and their priority rankings are updated as appropriate.

Q3. What science was used in the Service’s settlement agreement for the six year work plan? Is it feasible to make an informed, scientific decision about the protection status of 250 species in six years?

A3. The scientific information used in developing the work plan was related to the status of each of the Candidate Species and their priority ranking per the LPN guidelines (discussed in response to question 2) when the species were initially determined to be candidates and as part of the annual review of Candidate Species. The Service carefully considered the workload associated with making informed, science-based decisions about the species outlined in the workplan, ensuring that robust peer review and public comment will take place before any decision is made. We are confident that we can complete the workplan, assuming that we are able to maintain the level of funding and staffing we have had available in recent years.

Q4. What does the term “best available science” mean to USFWS? Does the Service ensure that all science used is peer-reviewed? Can the Service use “gray” data, or unconfirmed information, as “best available science” if nothing else exists?

A4. The phrase “best available science” means a consideration of all relevant known scientific and commercial information available when making a determination. The Service considers a wide range of information in its decision-making process including peer-reviewed published literature, “gray” data, traditional ecological knowledge, empirical information, and other types of information. It is the responsibility of the Service to consider all of this information, assess its scientific reliability, and use it appropriately and transparently in making its decision. The weight we give infor-

mation in making listing determinations takes into account indications of reliability, such as peer review.

Q5. In your opinion, what percentage of listings is initiated from Federal scientists and what percentage of listings are initiated due to petitions? What is the difference in the quality of the science generated by Federal scientists versus outside groups?

A5. Over the last ten years the Endangered Species Listing Program has been driven, in a large part, by litigation and petitions. Greater than 90 percent of listing determinations during that timeframe were initiated through the public petition process. The quality of petitions varies greatly—some are wholly inadequate, while some are every bit as impressive as the work conducted by our own biologists. However, the same data standards and rigorous process of evaluating the best scientific information available are used when determining whether a species warrants listing regardless of whether the action was initiated through a petition or by Service scientists.

Q6. Would the Service support reforming the petition process to prohibit the mass listing petitions that have become commonplace in recent years? Has the Service evaluated the quality of science used in those listing determinations?

A6. The Service does not have a position on reforming the petition process to prohibit mass listing petitions. The Service evaluates the science provided in large listing petitions, such as the one related to 404 aquatic species in the Southeastern United States, as it would any other petition. In addition, the Service reviews the information in its files about the petitioned species to complete its 90-day finding. Ultimately, the Service makes individual findings for each species as it would with individually-petitioned species.

The same data standards and rigorous process of evaluating the best scientific information available, conducting peer review, and soliciting public comment are used when determining whether a species warrants listing regardless of whether the action was initiated through a petition or by Service scientists.

In the recent multi-district litigation, the Service and two of the most frequent plaintiff groups (WildEarth Guardians and the Center for Biological Diversity) entered into two separate but complementary settlement agreements. One settlement agreement limits the number of species that can be petitioned by the Guardians during the six year workplan. The other settlement agreement provides for various consequences that will be triggered if the Center exceeds a specified number of deadline-related lawsuits in any given year. Together, these two plaintiffs have submitted the majority of petitions in recent years. As a result, we expect the number of petitions will decrease notably. Furthermore, in accordance with the President's Executive Order to review and evaluate government regulations and to provide for a more balanced listing program that still allows for public participation, the Service is considering a variety of ideas for increasing the effectiveness and efficiency of many programs, including the petition process.

Q7. What percentage of the Service's Endangered Species Act listing budget is expected to be used on completing the work required by the settlement agreements? Will this preclude the Service from working on other species that might have a higher priority?

A7. The multi-district settlement agreements allow some flexibility in our rule-making commitments. The percentage of our budget that is expected to be used on completing work required by the settlement agreements is contingent on our appropriation level. While our highest priority is to fulfill our commitments under these settlement agreements, which will comprise the majority of our work, these commitments will not preclude us from addressing emergency listing actions that may arise during that time. In addition, if we determine that compliance for the settlements would prevent us from working on crucial, high-priority listing actions, we could seek modification of the settlement, either with the agreement of the plaintiffs or from the court.

Q8. What is the Service planning to do with any new listing petitions filed during the process of complying with the settlement agreements? Would they be placed on the candidate species list until the settlement work is completed?

A8. Because the multi-district litigation settlement agreements limit the number of species that can be petitioned by or incentivizes restraint on the part of the plaintiffs during the six year workplan, as these plaintiffs represent a large contingent of all our listing requests we expect the number of petitions will decrease notably. We intend to complete 90-day findings for those petitions that we receive over the

course of the six year workplan. However, the degree to which we are able to make additional 12-month findings on new petitions will depend on our progress in implementing our workplan and funding and staffing available. To the extent that we identify additional species that warrant listing during the six year workplan, but are not emergency listing actions, we anticipate that in most cases they would be added to the candidate list at least until completion of the workplan.

Q9. USFWS's testimony highlights that the Endangered Species Act requires decisions to be made "solely on the basis of the best scientific and commercial data available" under deadlines imposed by the Endangered Species Act. However, these deadlines are policy choices, not scientific ones. How would science be impacted if your agency was given more time to review available data? What if it had six months to make an initial determination instead of only 90 days?

A9. No matter the time frame allotted for an initial determination for a petition finding, there is always the potential for workload to overwhelm the resources available. If resources were kept consistent with funding and staffing in recent years, we have forecasted an ability to handle our existing workload (as outlined by the six year workplan) within the existing statutory 90-days for initial determination on petitions and 12-months for a species status review in a thorough and scientifically defensible manner.

Q10. USFWS's testimony notes that the reason for the deferral of action related to "warranted but precluded" listings was "because of the need to allocate resources for other work." To what other work is the testimony referring? Did species protection suffer as a result of this diversion of resources?

A10. The other work to which the testimony is referring is work that was court-ordered or related to other settlement agreements, in addition to work on other higher priority candidate species with lower LPNs. These activities are not a result of a diversion of resources, but rather a direction of limited resources to the highest priority activities. Furthermore, the high volume of deadline-related litigation required the Service to work on initial 90-day and 12-month petition findings to the exclusion of listing determinations for existing candidate species. These factors were a motivation behind the multi-district litigation settlement agreements, which outline a plan for making listing decisions on the current list of candidates, and will also reduce new deadline litigation cases and the number of new petitions. These factors were also the motivation for the petition subcap language the Administration requested and the Congress included in the Interior appropriations bill.

Q11. How much in legal fees does the U.S. government expect to pay in the two recent settlements with WildEarth Guardians and the Center for Biological Diversity? How is this amount determined?

A11. The amount of any fees awards is subject to ongoing and confidential settlement negotiations between the Department of Justice (DOJ) and both plaintiffs. The two settlement agreements resolved thirteen separate lawsuits that were consolidated in these MDL proceedings, and the parties are currently attempting to settle the fees-related claims for all of these lawsuits. Because the parties' fees-related negotiations are complex and ongoing, it is not possible to estimate the amount of any fees awarded at this time. If the parties are unable to agree on the amount of any fees awards, the court will determine the appropriate amount. As you are aware, in such cases, the prevailing party is entitled to recover its additional costs for litigating the amount of the award, should the parties be unable to reach agreement.

Q12. The USFWS has a practice of denying ESA "enhancement of survival permits" for the importation of endangered species trophies, regardless of the fact that the Service has admitted that hunting of certain foreign species and importation by U.S. hunters of the trophies of those species enhances the survival of those species. [68 Fed.Reg. 49512 (Aug. 18, 2003)]

- How does the Service scientifically justify the denial of such permits, and how does the Service reconcile the denial with its statutory obligation to encourage foreign governments to conserve their species? [Endangered Species Act, 16 U.S.C. Section 1537]

A12. The Service believes that a properly managed, scientifically based hunting program can provide benefits to certain species in the wild. The Service is supportive of hunting programs that stimulate stronger conservation for both game and non-game species. Consequently, we issue hundreds of import permits every year for trophies of species that are listed as threatened. However, not all hunting programs are identical, nor do they all provide a benefit to the hunted species, particularly endangered species.

All applications received by the Service are reviewed on a case-by-case basis using the best available scientific and commercial information. Requests to import endangered species, whether a hunting trophy or scientific specimen, are evaluated based on the issuance criteria established in our regulations (50 CFR 17.22(a)(2)) to determine whether the importation of the specimen would enhance the propagation or survival of the species. For hunting trophies, we are particularly interested in determining if the species is being managed according to sound scientific principles and professionally accepted management practices, including whether legal hunting is effectively controlled at sustainable levels and illegal hunting is being effectively controlled or eliminated, and whether the hunting program provides a benefit to the species. Benefits can be direct—by generating funds that support the management program—as well as indirect, such as by providing economic benefits to local communities so that they support the protection and maintenance of the species.

To date, with the exception of bontebok, which are successfully managed on South African ranches and game reserves, we have not been able to find that the killing of an animal listed as an endangered species through sport hunting provides sufficient enhancement to overcome the loss of the animal from a population that, by definition, is currently in danger of extinction. However, species with a listing status of threatened would not have so high a threshold for enhancement, thus increasing the likelihood we could allow the import of trophies obtained through well-managed sport hunting program.

The Service's statutory obligation to encourage foreign governments to conserve their species is accomplished through various measures and is not limited to authorizing the import of hunting trophies. For example, the Service may provide grants that support the development of management programs for species, including anti-poaching measures, which may eventually lead to the improvement of the status of the species and the possibility that we could then allow the import of trophies. Permit denials often result in consultations between the Service and the foreign government to provide them guidance on where improvements are needed to allow trophies to be imported into the United States. This generally means achieving a consistent level of protection and management across countries and across species, often within the same geographic region (e.g., southern Africa).

Q13. Listing Decisions and Recovery Plans are required to undergo peer review. Are Consultations and Biological Opinions also required to undergo peer review?

- If they are not required to undergo peer review, should assessments and BiOps that have such a significant impact on land-use be required to undergo peer review?
- If they are required to undergo peer review, is that peer review conducted by an external body, or by other agency staff?
- If they sometimes undergo peer review, how does the agency determine when to seek peer review, and how does the agency determine whether the peer review will be internal or external?

A13. The Service generally does not incorporate independent peer review in section 7 activities, including biological opinions. All Service biological opinions undergo internal management review before they are distributed to the action agency. The extent of internal review varies and depends largely on the degree of complexity or controversy of the proposed Federal action as well as the extent of any scientific uncertainty. Biological opinions that conclude the proposed action is likely to jeopardize the continued existence of any listed species must be reviewed and approved by a Regional Director. Biological opinions that conclude the proposed action is not likely to jeopardize the continued existence of any listed species must be reviewed and approved by Field Office supervisors.

The statute and our implementing regulations focus our efforts on providing timely consultation and biological opinions to Federal action agencies to help them satisfy their obligations under the ESA without unnecessarily delaying their decisions. The statute specifies that consultation is to be concluded within 90 days of initiation, and that the Federal agencies (the action agency and the Service) may extend this timeline by mutual agreement. However, the statute further specifies that when an applicant is involved, the Federal agencies may not extend the consultation for more than 60 days without the consent of the applicant. The implementing regulations further specify that the Service is to deliver its biological opinion within 45 days of the conclusion of consultation, which means that consultations are expected to be completed in 135 days, unless extended. Such a timeline does not lend itself to conducting external peer reviews.

In unusual situations, the Service and the Federal action agency may choose to conduct a peer review of a biological opinion. The decision to undertake such a re-

view is generally based on the complexity and level of controversy as well as the extent of any scientific uncertainty regarding the effects of the action and is only implemented with the mutual agreement of the Service and the Federal action agency. The decision to undertake such a review requires the Federal action agency to accommodate the additional time commitment and to handle the expense and logistics of the peer review.

Q14. What efforts will you and your agency undertake to investigate the actions of USFWS employee Jennifer Norris, accused of providing false or misleading testimony before Judge Wanger? How long is this investigation expected to take? Will outside individuals be brought in to undertake this investigation or will it only be conducted by agency personnel? If so, please list the individuals that will be involved in the investigation along with their affiliations and titles. Will the investigation results be made public?

A14. We firmly believe that wise decisions about the future of the Bay Delta must be guided by the best available science. The Service stands behind the consistent and thorough work that our scientists have done on the Bay Delta over many years. Their expertise and professionalism remain vital to the success of our efforts to meet the co-equal goals of improving water reliability and restoring the health of the Bay Delta.

A14. We also believe that, when questions arise regarding the integrity of scientific work, it is important to resolve them swiftly, independently, and decisively. The Service has taken the comments by Judge Wanger very seriously and treated as allegations of scientific misconduct under the Department of the Interior Manual 305 DM 3 Integrity of Scientific and Scholarly Activities. The Service retained a contractor, Atkins North America, to engage a panel of independent reviewers who are external to both the Service and Bureau of Reclamation to evaluate the testimony and declarations made to the court by Dr. Norris. The panel was asked to determine whether the testimony and declarations made to the court were appropriately based upon the extensive scientific record on this issue. The panel produced a report which has been evaluated by the Service's Scientific Integrity Officer. The panel found that, although certain of the judge's questions could have been answered more clearly, Dr. Norris committed no wrongdoing or misconduct, and her testimony fell within the well-established norms and standards of acceptable scientific conduct. The Service's Scientific Integrity Officer, therefore, found that there is no indication that Dr. Norris violated the Department's Scientific and Scholarly Integrity Policy. The same is true with respect to a Bureau of Reclamation scientist, Frederick Feyrer, who was also criticized by Judge Wanger.

Questions submitted by Representative Sandy Adams

Q1. The two recent ESA Settlements with WildEarth Guardians and Center for Biological Diversity commit the USFWS to various deadlines over the next six years for the 251 species currently on the candidate species list and other species. For each of these species, the Service has agreed either to (1) decide a listing is not warranted or (2) propose a rule to list the species. [CBD Settlement, para. B.3; WEG Settlement, para. 2] The settlement agreements therefore prohibit the Service from making "warranted but precluded" findings for any of the existing candidate species and other species subject to the settlements.

- How can the Service deprive itself of the authority Congress gave it to make a "warranted but precluded" finding, including for the 251 species currently on the candidate species list?
- How can the Service know now, scientifically speaking, that at the time it reaches each of the settlement-imposed deadlines, it will not be faced with species with higher listing priorities that would necessitate a continued "warranted but precluded" finding for the species that are the subject of the settlement agreements?

A1. The Service has already determined that the 251 species on the candidate list, many of which have been candidates for a decade or more, warrant a listing proposal under the ESA. However, until such time as we propose listing each of these species, we will be re-certifying our "warranted but precluded" finding for each relevant species each year in the Candidate Notice of Review. The six year work plan and the negotiated settlement agreements will reduce the amount of deadline litigation and the number of petitions filed. This will allow the Service to reclaim a greater measure of control over our listing activities, to resolve our backlog of listing actions in a timely and cost-effective manner, and to focus our limited resources on

the species most in need of ESA protection. With relatively few exceptions, the settlement agreements allow the Service to use our biologically based listing priorities to schedule our work, so that the highest priority species will proceed to listing determinations first. We also purposely reserved the discretion and capability to handle emergency listing needs during the course of this workplan.

Questions submitted by Representative Randy Neugebauer

Q1. What percentage of the dunes sagebrush lizard's potential habitat has the USFWS studied in the process of analyzing Federal protection status of the species? How can you be sure of the science behind the lizard's status without studying the entire land area that will be affected by the regulation?

A1. The best available scientific information at the time of our listing proposal indicated that the lizard is found only in the shinnery oak sand dunes in southeastern New Mexico and west Texas. While a majority of the lizard's habitat has been surveyed, portions of suitable habitat on private lands have not been surveyed due to access issues. Note that the best-available-science standard of the ESA requires us to make determinations in the absence of perfect information. The best available science indicates that the shinnery oak sand dunes habitat has suffered significant losses over recent years, which contributed to our decision to propose the lizard for listing.

On December 5, 2011, the Service published in the Federal Register a six month extension of the final determination of whether to provide protection under the ESA for the lizard. The Service is taking this action in order to solicit additional scientific information and public comment before making any final listing determinations regarding the agency's proposal. Publication of this announcement will reopen the comment period on the proposed rule to list the species (published on December 14, 2010) for 45 days. In addition to the original comment period associated with the publication of the proposed rule, we held two public meetings in April 2011 and reopened the comment period to accept additional public comments. That comment period closed on May 9, 2011.

Public comments received since the publication of the proposed rule have expressed concerns regarding the sufficiency and accuracy of the data related to the lizard's status and trends in New Mexico and Texas. The Service has received new survey information for the lizard in New Mexico and Texas and an unsolicited peer review study on our proposed rule. During the 45-day comment period, the Service is soliciting input from concerned governmental agencies, the scientific community, industry, or any other interested party concerning the proposed rule in light of the concerns raised to date and the additional information the Service has received.

Q2. Do you have baseline population estimates for the dunes sagebrush lizard? Just because a lizard is no longer found at a specific site where it once lived, does that mean that that particular lizard has died, or could it have migrated to a different location? What does the USFWS consider to be a viable population number for the lizard, and how do you come to that conclusion?

A2. Populations of lizards vary over time due to a number of factors such as the abundance of invertebrates (prey), drought, or the availability of mates. It is true that the absence of lizards does not mean that lizards have died, but it does mean that they are no longer found at a given site, or are at such low numbers that they are undetected. The Sias and Snell study, which determined that lizards were less abundant adjacent to oil and gas development, was completed in areas where lizards were still present. Areas within oil fields where lizards were not present were excluded from the study. It is reasonable to expect that lizards will be found in areas where habitat remains, and not be found in areas where suitable habitat no longer exists. The proposed rule does not define a viable population for the lizard, but makes a direct connection to the availability of habitat and the lizard's persistence.

As previously noted, comments received since the publication of the proposed rule have expressed concerns regarding the sufficiency and accuracy of the data related to the lizard's status and trends in New Mexico and Texas. Therefore, in consideration of the disagreements surrounding the lizard's status, the Service is extending the final determination for six months in order to solicit scientific information that will help to clarify these issues. The Service has also opened another 45-day comment period on the proposed rule that began on December 5, 2011. The Service welcomes any scientific information available that is relevant to the question.

Q3. The petition filed by the Center for Biological Diversity and the Chihuahuan Desert Conservation Alliance in May 2002 to list the sand dune lizard as threatened or endangered relied upon studies performed by the University of New

Mexico's Department of Biology in the mid-1990s. That petition clearly ignored parts of the studies that conflict with the petition's goals. For example, the population of the lizard in areas where oil wells were present was found to have increased by a factor of 2.4 from 1996 to 1997, compared to an increase by a factor of 1.6 where wells were absent. The reports also conceded that the lizard continues to live in areas where there have been oil fields in existence for over 40 years. If we are talking about threats to the lizard, how can you justify moving forward with this listing in the face of scientific evidence that contradicts the popular view that human activity such as oil drilling is responsible for killing off the species? Do you have a response to the data and studies referenced above?

A3. As mentioned previously, populations of lizards vary over time due to a number of factors such as the abundance of invertebrates (prey), drought, or the availability of mates. For this reason, the authors (Sias and Snell) compared surveys each year independently. There were periods during the study where lizards were more abundant at a developed site, but throughout the five year study, the researchers found statistically significant differences between the developed and undeveloped sites. The statistical evidence allowed the authors to conclude the relationship between the abundance of lizards at developed and undeveloped sites could not be explained by chance.

As previously noted, comments received since the publication of the proposed rule have expressed concerns regarding the sufficiency and accuracy of the data related to the lizard's status and trends in New Mexico and Texas. Therefore, in consideration of the disagreements surrounding the lizard's status, the Service is extending the final determination for 6 months in order to solicit scientific information that will help to clarify these issues. The Service has also opened another 45-day comment period on the proposed rule that began on December 5, 2011. The Service welcomes any scientific information available that is relevant to the question.

Q4. Do you have baseline population estimates for the lesser prairie chicken? What percentage of the lesser prairie chicken's potential habitat has USFWS studied?

A4. Scientifically sound historical baseline population estimates are not available. Instead the Service has relied on the best scientific knowledge of species experts as reported in the scientific literature. From these accounts we can determine, with some confidence, the historically occupied range and estimated abundance of lesser prairie-chickens. Knowledgeable sources considered the lesser prairie-chicken to be abundant to common in the late 1800s. One source estimated that as many as two million lesser prairie-chickens may have existed in Texas alone at that time. By the 1930s, the species had begun to disappear from areas where it had been considered abundant—populations were nearly extirpated from Colorado, Kansas, and New Mexico, and were markedly reduced in Oklahoma and Texas. In the mid-1960s, the total rangewide population was estimated to be between 36,000 to 43,000 individuals.

The fish and game agencies in each of the five States where the lesser prairie-chicken occurs conduct surveys for the lesser prairie-chicken. In all five States, survey routes are established throughout much if not all of the known range of the lesser prairie-chicken. While the actual amount of known range sampled by each route is small, the surveys provide an index of the status of the lesser prairie-chicken, by State, over the entire range. The methodology is useful in documenting long-term trends but is limited in its ability to reliably estimate population numbers. Recently, the States received funding to implement aerial surveys for lesser prairie-chickens, which may provide more reliable indicators of population status, but these surveys have not yet been completed rangewide.

Q5. How effective have volunteer conservation agreements with private land owners and industries been in protecting the habitats of the dunes sagebrush lizard and the lesser prairie chicken? Does USFWS take these options into account when conducting scientific studies of mitigation strategies?

A5. Conservation agreements are in place in three of the five lesser prairie-chicken States. In Texas, there are currently 17 enrolled ranches in a Candidate Conservation Agreement with Assurances (CCAA), representing 199,781 acres in 8 counties. In New Mexico, there are currently 34 oil-gas companies enrolled in the Candidate Conservation Agreements (CCA) for a total of 574,763 mineral acres enrolled. In addition, 34 New Mexico ranchers have enrolled in the CCA and CCAA, representing 1,353,924 enrolled acres. An approved CCAA has been developed with a single landowner in the State of Kansas. Oklahoma, under the leadership of the Oklahoma Department of Wildlife Conservation, is currently developing a CCAA. As in all species, the Service does consider the agreements when conducting research, or imple-

menting conservation measures for the lesser prairie-chicken or dunes sagebrush lizard.

*Responses by The Honorable Craig Manson,
General Counsel, Westlands Water District*

Questions submitted by Chairman Paul Broun

Q1. In your professional opinion, what percentage of listings are science-based and what percentage of listings are policy or politically driven?

A1. In my experience, each listing decision has a varying degree of science supporting that decision. Generally, it is often the perceived sufficiency, or lack thereof, of objective scientific support for a particular decision that leads to controversy. In addition, each listing decision requires the decision-maker to:

tak[e] into account those efforts, if any, being made by any State or foreign nation, or any political subdivision of a State or foreign nation, to protect such species, whether by predator control, protection of habitat and food supply, or other conservation practices, within any area under its jurisdiction; or on the high seas.

16 U.S.C. § 1533(b)(1)(A).

Q2. There seems to be a concern that a balance needs to be struck when designating critical habitat for protected species. What type of science is used to determine the critical habitat?

A2. Under the Endangered Species Act, “the best scientific and commercial data available” is required to be used for determining critical habitat. 16 U.S.C. §1536(a)(2). As I indicated in my testimony before this Committee, section 4(b)(2) requires that the Secretary in designating critical habitat:

tak[e] into consideration the economic impact, the impact on national security, and any other relevant impact, of specifying any particular area as critical habitat. The Secretary may exclude any area from critical habitat if he determines that the benefits of such exclusion outweigh the benefits of specifying such area as part of the critical habitat, unless he determines, based on the best scientific and commercial data available, that the failure to designate such area as critical habitat will result in the extinction of the species concerned.

16 U.S.C § 1533(b)(2).

Congress provided this power of exclusion to allow the Secretary to make informed decisions regarding the comparative value of designating critical habitat with the consequences of doing so, precisely to ensure a balance was struck between a wide variety of policy values and species protection.

Q2. Would ending the outside petition process better allow the U.S. Fish and Wildlife Service to focus its attention on species that need the most help instead of species that may be more “charismatic” than others?

A2. No, I believe that when used appropriately, the outside petition process is an important tool in protecting endangered species. In the past, Congress amended the ESA as a reaction to the failure of the Service to promptly make key decisions by including mandatory time limits for making decisions. In some instances, the Service has been unable, or unwilling, to meet the time limits that are in current law. Congress may choose to evaluate the merits or adequacy of the existing time limits contained within the ESA.

Q4. Given your unique experience dealing with all sides of the Endangered Species Act, how would you improve the Act?

A4. As an initial matter, any changes to the ESA should be in relatively small bite-size pieces in order to make them manageable. Moreover, as I mentioned in my testimony before this Committee, we need to return to the notion that science can tell us what is, while policy determines what ought to be done. To do that, the listing decisions should be de-coupled from the automatic, discretion-less application of regulation. That would require congressional action. Additionally, the quality of science would be vastly improved and court litigation sharply reduced if the Secretary was required to make listing determinations by formal-rulemaking under the Administrative Procedure Act.

Q5. Please define and explain Consultations and Biological Opinions, or “BiOps?” How do Consultations and BiOps impact proposed federal projects and activities? Can they have a significant impact?

A5. Section 7(a)(2) of the ESA requires Federal agencies to ensure, in consultation with, and with the guidance of either the Secretary of the Interior or the Secretary

of Commerce, based on "the best scientific and commercial data available," that their proposed actions will not be "likely to jeopardize the continued existence of any [listed] species or result in the destruction or adverse modification of the critical habitat of such species." 16 U.S.C. § 1536(a)(2) (2010).

In general, once an action agency has made the determination that a proposed action "may effect" a listed species or its critical habitat, the formal consultation requirement is triggered, and the federal action agency provides a biological assessment to the consulting agency (U.S. Fish and Wildlife (FWS) or National Marine Fisheries Service (NMFS)) and then looks to the consulting agency for advice and guidance. Section 7(b)(3)(A) of the ESA requires that the consulting agency provide the action agency with a "written statement . . . detailing how the agency action affects the species or its critical habitat. If jeopardy or adverse modification is found, the Secretary shall suggest those reasonable and prudent alternatives which he believes would not violate subsection (a)(2) and can be taken by the Federal agency or applicant in implementing the agency action." 16 U.S. C. § 1536(b)(3)(A). Once the action agency receives the written statement, commonly referred to as a "biological opinion", consultation is complete and, "it remains the responsibility of each Federal agency to insure that it is in compliance with section 7(a)(2) and that it has established an administrative record for a given activity which demonstrates such compliance." Interagency Cooperation— Endangered Species Act of 1973, 51 Fed. Reg. 19,926, 19,956 (June, 1986).

As seen in the instance of a small fish in the Sacramento-San Joaquin Delta in California, the delta smelt, a biological opinion can have a significant impact on the human environment. On December 15, 2008, FWS issued and Reclamation conditionally accepted a biological opinion concerning the effects of the operations of the Central Valley Project and the State Water Project (collectively the "Projects ") on the delta smelt. The biological opinion called for a drastic reduction in the amount of water that the Projects could deliver to its customers. In May 2010, a Federal District Court in California found that implementation of the 2008 biological opinion caused rampant unemployment, increased poverty and hunger, and damage to prime agricultural land. *The Consolidated Smelt Cases*, 717 F.Supp.2d 1021 (E.D. Cal. 2010).

Q6. *How does science inform a Consultation or BiOp? Does the agency conduct new science, or simply review existing literature?*

A6. The ESA exists at the confluence of science, law, and policy. It is not a purely scientific decision scheme. The ESA requires science-informed decisions, not merely scientific decisions. Science can tell us what is, while policy determines what ought to be done.

Under the ESA, a federal agency's action must be based on "the best available scientific and commercial data available." 16 U.S.C. § 1536(a)(2).

Questions submitted by Ranking Member Donna Edwards

Q1. *You stated at the hearing that, "I found it curious that the Inspector General of the Department of the Interior took two years after I had left the Department to come ask me anything about any of those cases. I found it interesting that during the time that any of these things were happening, no one approached me and asked me any questions about any of those things. And so it made me suspect of their motives and calls into question—in my mind at least—their integrity."*

In response to a later question you clarified that you were not suggesting that the IG lacked integrity, but that you "meant to challenge the integrity of those who brought into question some of those activities during the time that I was there and the time that I subsequently was a law professor for 4 years."

On November 22, 2005, Secretary Norton announced that you had submitted your resignation as Assistant Secretary for Fish and Wildlife and Parks. According to a Department of Interior release, that resignation was to be effective December 31, 2005. Staff have checked with the Department of Interior Inspector General's office. They indicate that they received allegations about the misconduct of your Deputy, Julie MacDonald, on April 11, 2006. You were interviewed in the course of that investigation within a few months of its opening. In short, it was a matter of months after you left your position before you were swept up into the first investigation of Julie MacDonald.

Do you wish to clarify your claims to the Subcommittee regarding how long it took for the Interior staff to complain to the IG about misconduct and for IG investigators to approach you regarding Ms. MacDonald's activities?

A1. No.

Q2. *In your oral testimony you stated, "Now, I want to talk about the incident with Gary Frazer. Gary was the one who brought to my attention a flaw in a rule that we were issuing, and I appreciated that very much . . ." Your comments then went on to explain why you ordered an erroneous rule to be published in the Federal Register. However, you did not address the other element of this incident that had been referenced in my opening statement. You did not discuss your role in having Gary Frazer sent to USGS as a liaison, removing him from his post at Fish and Wildlife where he had been trying to stop some of Ms. MacDonald's more egregious conduct. The Inspector General's report documents this incident with some care.*

- *Did Julie MacDonald ever communicate to you that Gary Frazer (either by name or title) was trying to interfere or oppose some of her efforts at the Department?*
- *Did Julie MacDonald ever communicate with you in any way about having Frazer removed from his post at the Fish and Wildlife Service?*
- *If you appreciated Mr. Frazer's bringing Ms. MacDonald's error to your attention "very much," why did you participate in removing Gary Frazer from the Fish and Wildlife Service?*
- *Do you believe that a high-profile removal and reassignment of a Fish and Wildlife staffer widely known to have been a roadblock to Ms. MacDonald's conduct on ESA issues would have no impact on staff perceptions of the probability of retaliation if they complain about Ms. MacDonald's misconduct so long as you were the Assistant Secretary?*

A2. Mr. Frazer was reassigned, not removed. It is my understanding that by entering the Senior Executive Service Mr. Frazer decided he wanted to be within a class of employees that could be appropriately reassigned based upon the needs of the agency, subject to certain procedural requirements.

Ms. MacDonald, as Deputy Assistant Secretary for Fish, Wildlife, and Parks, had no line authority to make personnel decisions over Fish and Wildlife Service employees.

Q3. *Your testimony regarding internal complaints at Interior and the Inspector General's investigation is somewhat ambiguous. You seem to suggest that no employee or staff member of the Department of the Interior ever approached you to bring any complaints regarding Ms. MacDonald's conduct on Endangered Species Act issues to your attention. Did no one ever complain about Ms. MacDonald's conduct?*

- *Did you ever receive complaints or information that would lead you to believe the Pacific Legal Foundation or any other private party had received internal Departmental documents from Ms. MacDonald that would be considered pre-decisional or deliberative?*
- *Did you ever approve Ms. MacDonald providing internal Departmental documents that would be considered deliberative or pre-decisional to an outside party?*
- *Did you ever provide internal Departmental documents that would be considered deliberative or pre-decisional to an outside party?*
- *Did you ever receive complaints or information about Ms. MacDonald's personal conduct, often described as abusive, with other members of the staff?*
- *Did you ever receive complaints or information about Ms. MacDonald's communicating with science staff in the field challenging their findings or ordering them to change their findings?*

A3. I do not recall receiving complaints regarding Ms. MacDonald's conduct, except that she set high expectations of staff. The remainder of the question is vague and ambiguous in that no definition of "predecisional" or "deliberative" is set forth. I would note that the Assistant Secretary for Fish and Wildlife and Parks "is authorized to exercise all of the authority of the Secretary . . ." 209 DM 6 [DOI Departmental Manual, Part 209, section 6]. Thus, it was up to me to determine what was "predecisional" or "deliberative." Furthermore, to the extent that these terms, "predecisional" or "deliberative," are intended by the questioner to refer to documents covered under what is known as "Exemption 5" of the Freedom of Information Act, 5 USC §552 (b) (5), it must be understood that Exemption 5 exempts documents from mandatory disclosure and does not prevent an authorized official to dis-

close such documents in an exercise of the official's discretion. This interpretation is fully compatible with President Obama's 2009 Memorandum for Heads of Agencies, Subject: Freedom of Information Act.

Q4. Between the time Ms. MacDonald was hired by you in 2002 and the time you left the Department you promoted her—ultimately she became Deputy Assistant Secretary—and participated in awarding her at least one significant bonus. The Department's Inspector General documented Ms. MacDonald's misconduct in painful detail based on multiple witnesses in three reports. How is it possible that you could not have known of any element of the misconduct by the Deputy Assistant Secretary—a member of your staff who was personally close to you?

A4. While there have been many statements made concerning Ms. MacDonald, it is important to note that Ms. MacDonald brought a defamation action against the Center for Biological Diversity (CBD) regarding certain allegations it made concerning her conduct at Interior. It is my understanding that CBD settled this lawsuit and posted an apology to Ms. MacDonald on its website.

Q5. I asked you about the costs of setting right the consequences of mismanagement that occurred during your time at the Department and due to subsequent activity by Ms. MacDonald. You seemed to suggest you did not agree with the Inspector General's conclusions about mismanagement or the IG conclusions regarding the minimal costs of that mismanagement, which they place in the hundreds of thousands of dollars—at a minimum. Please explain why you do not accept those conclusions and why you believe the cost estimate is inaccurate.

A5. I have no way of knowing what the purported costs are and have no personal insight into the costs after I left the Department of the Interior.

Questions submitted by Representative Brad Miller

Q1. In your testimony to the Committee you admitted that Ms. MacDonald has done work as a consultant to Westlands. Please provide to the Committee information regarding when Ms. MacDonald has worked for Westlands, what issues she has worked on and the amount of remuneration that Westlands has provided for those services. Response: Ms. MacDonald does not have a consulting contract with Westlands. It is my understanding that Westlands has a consulting contract with National Environmental Strategies (NES). It is also my understanding that Ms. MacDonald has worked with NES.

Q2. Did Ms. MacDonald provide any assistance to you in preparing your written testimony for the Subcommittee's hearing? Did she compose any or all of it in draft or final form; edit the testimony, review the testimony, provide comment on the testimony or any other service associated with the testimony? Response: No.

Q3. You indicated to the Committee that you established the Center for Environmental Science Advocacy and Reliability. Can you please specify when you established the Center? Response: I established CESAR in 2008 while I was a law professor at University of the Pacific, McGeorge School of Law. It was intended to be an ancillary resource for my scholarly research.

Q4. Has Ms. MacDonald done any work for CESAR, either paid or unpaid? If the answer is yes, please indicate the time frame of her work and the issues or products she has provided to CESAR. Response: CESAR benefits from a wide range of volunteer work from a number of members of the community. Ms. MacDonald has not been paid for any work associated with CESAR.

Q5. The Pacific Legal Foundation (PLF) is identified as representing CESAR in at least one legal action that the staff could find. Please provide a record of the history of the Pacific Legal Foundation acting to represent or support the work of CESAR. Identify all cases, either current or past, in which PLF has provided representational services to CESAR.

A1–5. PLF represented CESAR concerning a petition before the U.S. Fish and Wildlife Service under 16 U.S.C. §1533(b)(3)(D), *In the Matter of the Petition to Rescind Critical Habitat for the Perdido Key beach mouse under the Endangered Species Act.*

*Responses by Mr. Douglas Vincent-Lang,
Senior Biologist, Alaska Department of Fish and Game*

Questions submitted by Chairman Paul Broun

Q1. Your testimony highlighted the role states can and should have in Endangered Species Act (ESA) decisions. Please provide some examples of how a greater state role could impact the ESA process and properly protect endangered species without burdening American jobs?

A1. States have the primary trustee responsibility for fish and wildlife and their habitats. As such, states hold significant expertise on their trust resources and their conservation. Given this, states are in an excellent position to inform all ESA process decisions, from listing decisions to biological opinions to recovery planning to delisting/uplisting/down-listing decisions.

Recognizing this, when passing the Endangered Species Act Congress clearly identified a unique role for states in all Endangered Species Act decisions. This role is contained in Section 4(i) of the Act. This section clearly grants states a place at the table in all Endangered Species Act decisions. Congress' intent is recognized by the Services in their Interagency cooperative policy regarding the role of State agencies in Endangered Species Act initiatives, which was recently re-affirmed by the Services.

Despite these recognitions, states are not being given equal deference in the implementation of the ESA. Instead, the Services are increasingly using their deference to discount valid questions raised by states on ESA decisions. They are also using their deference as a basis of their defense of flawed science. *It is imperative that states be granted equal deference during all Endangered Species Act decisions.*

These actions would conserve and recover listed species without burdening American jobs.

Q1. Alaska is viewed as a state with unique economic development challenges. How will the broad scale of the recently imposed polar bear habitat protection area hurt the economy of your state and put jobs at risk? In addition, how will these protections impact our nation's ability to reduce the use of imported oil from volatile regions of the world?

A2. The United States Fish and Wildlife Service's (the "Service") designation of 187,157 square miles of polar bear critical habitat, an area larger than California, the third largest state in the United States, is unprecedented. Nine percent of the final critical habitat designation covers lands owned by the State of Alaska. The State's legal title and regulatory interests extend to its offshore submerged lands and waters, which include significant portions of the designated polar bear critical habitat. The area designated includes the largest areas of potential oil and gas deposits in the United States and are of economic importance to the State as well as of strategic importance to the Nation. The designation puts the area under federal control and opens all permit decisions to potential litigation and delay.

The designation of polar bear critical habitat interferes with Alaska's management of its own oil and gas resource lease sales and the development of mitigation measures for those lease sales. Specific activities affected by the polar bear critical habitat designation include oil and gas leasing in and adjacent to Alaska including the proposed Beaufort Sea Area-wide 2009 Oil and Gas Lease Sale and the North Slope Area-wide 2008 Oil and Gas Lease Sale. These dates refer to the original date of the final best interest finding for the area-wide sales issued by the Director of the Division of Oil and Gas. These are geographic and site-specific examples of oil and gas leasing in the Beaufort Sea and North Slope planning areas that will be affected by the Service's polar bear critical habitat designation, as well as more generally areas that are the subject of the Alaska Department of Natural Resources' current five-year plan for area-wide oil and gas lease sales for the Beaufort Sea and North Slope planning areas scheduled for 2011, 2012, 2013, 2014, and 2015. Additionally, State activities concerning existing pipelines (including the TransAlaska Pipeline); roads; other industry and local infrastructure projects are similarly affected by the polar bear critical habitat designation. The State's own oil and gas leasing activities, together with the federal offshore oil and gas leasing activities, are important to the State's operations, management, and income—both for wildlife management (including the polar bear) and other purposes—due to the royalty and tax revenue the activities generate and because throughput from the TransAlaska Pipeline system provides income and economic benefit to the State of Alaska and its citizens as well as being strategically important to the nation.

The Service's continuous imposition of overlapping critical habitat designations on the map of Alaska makes it increasingly difficult for Alaska's native entities, economic interests, and the State itself to delineate permissible activities and act in the best interests of Alaska. Of notable concern is the contiguous band of critical habitat along the entire Alaskan coastline from the Canadian border to Kuskokwim Bay, which includes an area from 0–3 miles of state waters. This inserts a federal overlay that will require mitigation and conservation protections and conditions developed and approved by the federal government in State waters. This could significantly impact oil and gas development within the area of critical habitat designation.

The polar bear critical habitat designation is especially detrimental to Alaska's interests because the designation imposes additional injury through ESA requirements, especially in the Section 7 consultation process, that constrain the destruction or adverse modification of critical habitat. These are requirements that have no analog under the MMPA or pre-ESA listing programs to which polar bear management and conservation may have been subject, and are in addition to the requirement in the Section 7 consultation process for federal agencies to ensure that their actions are not likely to jeopardize the continued existence of the polar bear. The critical habitat considerations in the Section 7 consultation process will hinder and increase costs associated with projects of significant potential economic value to the State of Alaska and the nation.

Q3. The U.S. Fish and Wildlife Service (USFWS) testimony states that the ESA has been a success? Do you agree or disagree? Why?

A3. Let there be no doubt that we should do everything in our power to prevent the extinction of species facing imminent and addressable threats in the near future. It would be irresponsible to not take the necessary actions to prevent extinction.

While the extinction of a small number of species have been prevented by their listing, the ACT has a dismal record in terms of preventing species extinction and recovering species to the point that they can be removed from protection under the Act. Less than 1% of the species listed have been removed as recovered. Given this record, it is hard to agree that the Act has been a success.

We believe reform is needed to improve the Act. Specifically, we recommend the following:

- Make designation of critical habitat discretionary.
- Only allow a species to be listed if the factor can be addressed by the ESA
- Define foreseeable future and acceptable level of risk.
- Provide specific guidance on when and how the Services can designate Distinct Population Segments and/or subspecies.
- Relax requirements for 90-day findings and 12 month status reviews.
- Define recovery as the number necessary to remove extinction, not to fully recover the species and its habitat.
- Disallow recovery goals aimed at ecosystem restoration—keep the goals focused on species recovery.

Questions submitted by Ranking Member Paul Tonko,

Q1. Mr. Vincent-Lang, in response to a question from Mr. Tonko, you testified that:

‘[I]n the case of the Polar bear article, there was a single individual that had a different perspective than the entire leadership of the department.’

However, the attached email indicates that at least three individuals from within the Division of Wildlife Conservation agreed with the conclusions of the USGS studies relied upon by the Federal Government to list the Polar bear as threatened. This email also seems to suggest that these individuals were the primary individuals within your department responsible for reviewing the science behind the USGS studies.

Can you please explain this apparent discrepancy with your sworn testimony in front of the Committee? In addition, can you also please confirm that due to the State of Alaska's communications policy, the three individuals noted in this email would be prohibited, under threat of dismissal, from publically airing their findings that the science behind listing the Polar bear was sound.

A1. I misunderstood the question being asked, my apologies. Mr. Tonko is correct that three individuals performed cursory reviews of the USGS reports. They did not, however, as acknowledged in the aforementioned email perform “in-depth reviews” of the reports.

Upon further discussion with these staff, it became evident that because the reviews were not in-depth, their reviews may have not been thorough enough to assess methods and analytical approaches in the depth required to ascertain the validity of the primary conclusions and inferences made in the reports.

To provide additional insights into the reports, other professional scientists in the Department were asked to perform in-depth reviews. These reviews identified significant methodology and analytical issues that raised concern over the validity of the report conclusions. The final comments represented the combined review of the Department. As such it represents the combined expertise of the entire Department, rather than that of a select few individuals.

Individuals are free to provide all opinions in the development of a state position. However, once that position is developed and finalized, all employees are expected to portray the state position when acting in their official capacity. Talking with other state and federal agencies, this is commonplace practice.

I note that the Service in their Court filings on litigation over this listing decision acknowledged many of the science issues raised by the state.

Questions submitted by Representative Sandy Adams

Q1. The USFWS recently settled lawsuits with the Wild Earth Guardians and the Center for Biological Diversity. In the two settlements, the Service agreed to dates after which the Service will no longer be able to consider certain species in Alaska to be candidate species. Were the State of Alaska and its wildlife biologists consulted in the decision on how to prioritize these species for these settlement imposed deadlines?

A1. No, states, including Alaska, were excluded from the settlement talks with Wild Earth Guardians and the Center for Biological Diversity on the candidate species list. States had much to inform these discussions in terms of ongoing work and conservation efforts. This knowledge was not brought forward to inform these talks because states were prohibited from entering into the talks.

Specifically for Alaska, we were planning to conduct research on Kittlitz's murrelets that would have provided key information to inform a status review on this species. However, because the State was excluded from these talks we were not able to bring this information into the talks. The settlement agreement scheduled this review for 2013. As a result, the State has cancelled its research as the data analysis would not be complete before the start of the status review. If we had been involved in the settlement talks, this information could have informed the talks.

It is imperative that states be granted automatic intervenor status for all lawsuit involving species within their jurisdictions.

Cunning, Tina (DFG)

From: Small, Robert J (DFG)
Sent: Tuesday, October 09, 2007 2:16 PM
To: Vincent-Lang, Douglas S (DFG)
Cc: Larsen, Douglas N (DFG); Taylor, Kenton P (DFG); Titus, Kimberly (DFG); Quakenbush, Lori (DFG); Shideler, Richard T (DFG); Cunning, Tina (DFG)
Subject: RE: Comments on new polar bear reports

Doug...

From within the Division of Wildlife Conservation, Lori Quakenbush, Dick Shideler, and I have reviewed the 9 USGS reports on polar bears relevant to the final determination being made by the USFWS on the proposed ESA listing. During previous discussions, we were informed that an in-depth review of each of the 9 reports was not being requested. Thus, among the three of us the depth of our reviews has varied. Overall, we believe that the methods and analytical approaches used to examine the currently available information supports the primary conclusions and inferences stated in these 9 reports.

I'll give you a call to discuss the other questions I included in my previous email.

I look forward to working with you and others in preparing the final comments.

Thanks

Bob

From: Vincent-Lang, Douglas S (DFG)
Sent: Friday, October 05, 2007 7:29 PM
To: Small, Robert J (DFG)
Cc: Taylor, Kenton P (DFG); Larsen, Douglas N (DFG); Titus, Kimberly (DFG)
Subject: RE: Comments on new polar bear reports

Bob --

Sorry it took me so long to respond. I have been at a North Pacific Fishery Management Council meeting all week.

Thank you for your willingness to ensure that our comments regarding the science accurately reflect the current state of knowledge, given the inherent uncertainty; i.e., maintain the division's and department's commitment to be a source of scientifically credible information. As I am sure you understand, I too share that goal and will strive to assure it occurs. Anything less would not be professional.

I am putting together comments according to the schedule outlined. You and others will have an opportunity to review documents. Ken will be the final arbiter over potential

3/3/2008

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*Responses by Dr. Neal Wilkins, Director,
Texas A&M Institute of Renewable Natural Resources*

Questions submitted by Chairman Paul Broun

Q1. You stated in your testimony that although science and management approaches have improved over the last 20 years, the Endangered Species Act (ESA) has not been updated to reflect these improvements. What improvements have been made in the past two decades that the ESA in its current format hinders from use?

A1. The science of wildlife conservation and management has advanced considerably over the past two decades. One of the most notable science advancements is the ability to develop accurate models for predicting species occurrence, abundance and changes over time. This is aided considerably by the technological progress in remote sensing and image processing. Models and our ability to use them with computer processing are more site-specific, accurate and meaningful than could have been imagined 20 years ago. So, for many species we can predict the overall outcome of a combination of habitat change and human activities. These modeling approaches have stimulated real advancements in habitat conservation planning—but they have also allowed us to more easily grasp the relationships between incentives and trade-offs that can benefit species conservation. The potential applications of wildlife science & management are now at the point where we can more readily account for trade-offs and efficiently apply market-based approaches for achieving species recovery. But we first need some changes in policy.

The incidental take prohibition of ESA (Section 9)—which is the tip of the spear for implementing the Act on private lands—is focused on the take of individuals, and this focus on protecting individuals is often at the expense of conserving an entire population. This is an antiquated approach. Section 9 of the ESA could be revised to give more specific guidance for allowing broad exemptions from incidental take prohibition. Modifications to the ESA could allow exemptions for combined actions that demonstrate a net benefit to a species' population, even if this might cause harm to one or more individual organisms. This action alone would further stimulate the application of science and technology to achieve recovery benefit for many of those species that are currently listed under ESA.

Q2. You also stated that pre-existing information is viewed as the “best available” science, even if new information is collected. Is there a provision in the ESA that creates a hurdle for new scientific evidence being weighed as much as the existing information? How are competing scientific views resolved?

A2. By the ESA not requiring independent peer review for establishing the “best available science” individual service personnel are allowed to make their own determinations. As a result, when those same personnel are challenged for prior decisions, they have no well-established procedure for inclusion of new information. In other words, by not requiring a standardized independent peer review process, the ESA indirectly creates a hurdle for new scientific evidence being consistently weighed as much as existing information. In the end, competing scientific views are resolved through collecting information to test both views. A standardized peer-review process would guard against selective use of information.

Q3. Your testimony indicated that there is a disincentive for private landowners to provide access to scientists. The rationale is that if a species were found, their land would be severely impacted. Would a requirement that all such populations census be anonymous help better identify populations that have been overlooked?

A3. Yes. Like any other information, we have found that private landowners are more likely to allow access for scientific work if they have the option to have their identity and location held confidential. Until the disincentive of the incidental take prohibition of Section 9 is resolved, it makes sense for individual states to allow information collected for scientific purposes to be shielded from public information requests.

Q4. What is your view of the quality of scientific work submitted through listing petitions filed by outside groups? How does the quality of science submitted by outside groups seeking a listing compare to that developed by the U.S. Fish and Wildlife Service (USFWS) or state agencies?

A4. My views are based on the recent trend of activist organizations preparing most listing petitions. Overall, there seems to be a pattern of selective use of information in building a case for listing a species in many of the petitions prepared by outside groups. In some cases, the reliability of information is not revealed—and in other cases it is only opinion and anecdotal observations that are cited as scientific au-

thority. Given the glut of listing petitions, the Service is simply not able to do any of their own work in checking the scientific validity of many of these petitions.

I cannot comment on the comparison of outside petitions to those prepared by the Service or state agencies as recently there are very few proposals from the Service that have not been petitioned by an outside group. However, the oversight of professional wildlife biologists—i.e., those Certified by The Wildlife Society—would provide an additional safeguard on the reliability and completeness of science included in listing petition process. The Service, and most state agencies, do have professional wildlife biologists on staff or available to them.

Q5. Would mandatory outside peer review help improve the quality of the science used by federal agencies? Would it be practical? What types of scientific work should be peer reviewed?

A5. Yes. In my view, mandatory peer review should be used to review the science used in listing, de-listing, and other critical ESA decisions. Yes it would be practical—especially if the Service sought the aid of The Wildlife Society or other professional organizations in the design and implementation of the process.

Q6. In your professional opinion, what percentage of listings are science-based and what percentage of listings are policy or politically driven?

A6. I am sorry, but I am not able to directly speculate on the percentages. However, as there certainly are some politically driven listings—and many of these are of great impact—there should be some attention spent on minimizing these. And they impact not only local economies but they serve to discredit the ESA and its purpose.

Q7. There seems to be a concern that a balance needs to be struck when designating critical habitat for protected species. What type of science is used to determine the critical habitat?

A7. I do not have enough specific experience with designations of critical habitat to have recognized any pattern regarding the use of science.

Q8. Would you support ending the use of outside listing petitions? Would this benefit the ESA listing process?

A8. Outside listing petitions probably serves a purpose for engaging the public in the ESA. However, the artificial deadlines for decisions on outside petitions should be removed in favor of a science-based priority process. This would probably serve to greatly reduce the number of outside petitions, as it appears that the recent flood of outside petitions is contingent upon the ability to file lawsuits in response to the Service's inability to meet a deadline for considering the petition.

Q9. The USFWS testimony states that the ESA has been a success? Do you agree or disagree? Why?

A9. I disagree. The ESA was intended to promote the recovery of imperiled species. As I recently reviewed in detail¹, the listing of a species under ESA has not only proved to be largely ineffective, but it is often detrimental to the very species that is listed. The ESA has been successful in creating public dialogue on endangered species; it has perhaps been successful in creating a safety net that has kept a few species from becoming further imperiled. But it has not been successful in meeting its primary goals. We can do better.

Q10. How does science inform a Consultation or BiOp? Does the USFWS conduct new science, or simply review existing literature? If USFWS conducts new science, is it always peer-reviewed? If it is not, do you think it should be? Is this practicable?

A10. In my experience, the Service rarely conducts new science for informing a Biological Opinion. The research and monitoring for a BiOp is routinely conducted by a proponent in order to gain information to support their Biological Assessment. Also, the Service may require specific research and monitoring as part of the “reasonable and prudent measures” of the Biological Opinion. A Biological Assessment informs the Service's Biological Opinion (BA)—and new science is often presented in a BA, but it is mostly conducted by consultants or university researchers.

The science used to support a Biological Opinion should come mostly from the peer-reviewed body of science, but it may not be practical to require that the site-specific research and monitoring done to support a specific federal action be subject

¹Wilkins, N. 2011. “Improving the ESA's Performance on Private Lands” in *Rebuilding the Ark: New Perspectives on Endangered Species Act Reform*, ed. J.H. Adler. The AEI Press, Washington, D.C., 56–80.

to an independent peer-review process prior to its use for decision-making on all projects.

Again, it is the use and interpretation of science in status reviews, recovery plans, and listing decisions that is most important. For federal projects requiring a Biological Opinion, it may not be practical to require peer review in all cases. That said, for projects for which the decisions might have a significant impact—either economically or ecologically—it may be important to subject the Biological Opinion to an outside peer review process.

*Responses by Mr. Jonathan Adler, Professor,
Case Western Reserve University School of Law*

Questions submitted by Chairman Paul Broun,

Q1. Your testimony indicated that charismatic species are more likely to be listed and receive federal funding. Since the U.S. Fish and Wildlife Service (USFWS) has been inundated by hundreds of listing petitions filed by outside groups, would one solution be to either give priority to agency originated listed actions or to simply ban outside petitions all together?

A1. There are good reasons to allow outside groups and individuals to petition the FWS to list species as threatened or endangered. Among other things, researchers and conservationists who work in the field are more likely to discover or become aware of endangered and threatened species than government officials working within the agency. The petitioning process allows the FWS to take advantage of the dispersed ecological knowledge held by those engaged in species-related research or conservation efforts around the country.

The problem is that some groups and individuals have an incentive to list species for reasons other than environmental conservation. Because the listing of a species can trigger the imposition of regulatory controls under the ESA, there is an incentive for those opposed to land or resource development to seek to list species that can be used as a proxy for their anti-development goals. It also creates an incentive to skew the relevant science in favor of a listing decision, and increases conflict over listing decisions. Just as anti-development groups make seek to see species listed, pro-development groups have an incentive to oppose species listings. This places pressure on the listing decision, and often leads to litigation—litigation that is a further drain on FWS resources, which in turn causes further delays in future listing decisions.

The best way to address this problem is to insulate the listing process from the regulatory process. Decoupling the listing decision from the ESA's regulatory provisions would eliminate the incentive to use species listings as a weapon in fights over land and resource development, lessen the pressure on listing decisions, reduce interest-group involvement in (and litigation over) listing decisions, and make it easier for the FWS to focus on the underlying scientific questions.

Q2. Is it fair to say that the Endangered Species Act has been used to promote policy goals separate from species preservation? If so, what can Congress do to prevent this?

A2. Unfortunately, some activist groups have used the Endangered Species Act as a weapon against resource use and development. Specifically, some environmentalist groups sue to force the imposition of greater regulatory restrictions on land-use and other economic activities, preventing the FWS and other government agencies from basing their enforcement and implementation decisions on ecological concerns. The best way to address this would be to disarm the various regulatory triggers within the act through which outside groups can use federal courts to direct ESA implementation and enforcement. This can be done by decoupling the listing decision from the imposition of specific, mandatory regulatory measures and granting the FWS greater flexibility in developing recovery plans and greater ability to rely upon non-regulatory conservation strategies.

Q3. The USFWS testimony states that the ESA has been a success? Do you agree or disagree? Why?

A3. I do not believe the ESA has been a success. The express goal of the act is to “recover” species listed as “threatened” or “endangered,” and yet as of October 2011 fewer than 50 of the approximately 2,000 listed species have been delisted, and only 22 of these were classified as recoveries by the FWS. If anything, this overstates the Act's relative success, as the recovery of many of these species had little if anything to do with the Act. For example, several bird species listed as recoveries were helped by the banning of widespread DDT use, but this was done in 1972, one year before the ESA was enacted, let alone enforced.

As I discuss in my book, *Rebuilding the Ark*, the ESA may be credited with preventing the extinction of some species, but it is also responsible for creating incentives against species and habitat conservation on private land. This is significant because most listed species rely upon private land for some or all of their habitat. Further, as one recent study concluded, those species listed as endangered are less likely to be improving than those listed as threatened, despite the increased regulatory “protection” the former receive. While there is evidence that spending on re-

covery plans can help listed species, there is little evidence the Act's current regulatory structure does much to help those species in greatest need.

Q4. Your work on the ESA highlights some of the perverse incentives created by the restrictions that accompany a listing decision. Please describe ways to create positive incentives for species protection?

A4. Before the ESA, or any other statute, can create effective positive incentives for species conservation, the perverse incentives which discourage species conservation must be reduced, if not eliminated. The most effective ways to do this would be to reduce the economic consequences of listing decisions and habitat determinations for private landowners. This can be accomplished by decoupling the listing decision from the imposition of land-use restrictions under Section 9 and the application of Section 7 consultation requirements to programs that impose limitations on private land use. It can also be accomplished by creating greater flexibility within Section 9, so as to allow the FWS the ability to adopt other conservation measures in lieu of land-use controls, or by providing compensation to landowners for the imposition of land-use restrictions. In terms of developing effective incentive programs, I would recommend looking at the success of voluntary, incentive-based programs such as Partners for Wildlife and the North American Waterfowl Management Plan, as these programs have managed to conserve substantial acreage in a cost-effective manner.

Appendix II

ADDITIONAL MATERIALS SUBMITTED FOR THE RECORD

SUBMITTED STATEMENT FOR THE RECORD BY REPRESENTATIVE RANDY NEUGEBAUER

Thank you, Chairman Broun, for holding this important hearing to examine the science behind the Endangered Species Act and the protection of certain species under that law. Such listings have profound impacts on jobs, economic development, and industrial capabilities across the country. Two species that are being considered for an endangered listing, the dunes sagebrush lizard and the lesser prairie chicken (LPC), have habitats in my district. If protected under the Endangered Species Act, my district and other surrounding areas will see oil production, wind development, agricultural production, and transportation improvements severely limited. Decisions of this magnitude require the utmost consideration and sound scientific evidence, and I am not convinced the proper care has been taken to guarantee this.

In a May joint hearing before the House Agriculture Committee and Natural Resources Committee, I asked then acting-Director Gould of the U.S. Fish & Wildlife Service (USFWS) about how the science behind the potential listing of the dunes sagebrush lizard. In response, he said, "I am not familiar with the science behind the lizard you are referring to." To begin with, this lack of familiarity with a major listing is troubling. I am hoping that Mr. Frazer can provide greater insight into this particular case because I am concerned that the Fish & Wildlife Service is not making decisions based on accurate science, but rather to avoid lawsuits from environmental organizations. According to an Associated Press article from April 28, 2011, "Neither environmentalists nor federal wildlife managers have population estimates for the lizard but they point to distribution studies that show about a quarter of sites where the lizard was once found are no longer occupied." This lack of data and seemingly assumptive science is troublesome considering that roughly 20 percent of America's domestic oil production occurs in this region where the lizard may live. It is no small matter to list a species that could potentially halt that production, which would kill thousands of jobs and make our country even more dependent on foreign oil.

This issue is also important in the potential decision to classify the lesser prairie chicken an endangered. The projected habitat regions of the LPC in Texas alone contribute an estimated \$28 billion to our nation's economy and accounted for 350,000 jobs in 2009. Industries that would be affected by LPC being listed include wind energy, agriculture, oil and gas, and transportation. In an effort to prevent habitat loss for the LPC, Texas agreed to a Candidate Conservation Agreement with Assurances (CCAA) with USFWS in 2006. The CCAA encourages beneficial habitat management activities among private landowners on a voluntary basis. These efforts should be taken into consideration and should be studied as potential mitigation techniques for habitat loss. In the state of Oklahoma, about \$23.5 million has already been spent in the last five years to protect the lesser prairie chicken. These efforts should not be overlooked.

In general, I am concerned that we are disrupting enormous amounts of economic productivity for species we may know too little about. Attempting to list species without knowing even its very basic biological characteristics is absolutely unacceptable. This lack of sound evidence could result in killing thousands of jobs and billions of dollars in economic activity before anyone can even prove that harm is truly being done. I believe the standard of science here may not be good enough. If the "best available data" doesn't actually include population statistics or does not tell us if the numbers have increased or declined in the past ten years, I do not see how this "best available data" is sufficient to justify making such momentous decisions.

PHOTOGRAPH SUBMITTED FOR THE RECORD BY REPRESENTATIVE DAN BENISHEK



UNITED STATES DEPARTMENT OF THE INTERIOR, OFFICE OF INSPECTOR GENERAL'S
 "REPORT OF INVESTIGATION: THE ENDANGERED SPECIES ACT AND THE CONFLICT
 BETWEEN SCIENCE AND POLICY,"
 SUBMITTED FOR THE RECORD BY REPRESENTATIVE BRAD MILLER



United States Department of the Interior

OFFICE OF INSPECTOR GENERAL
 Washington, D.C. 20240

DEC 15 2002

Memorandum

To: Secretary Kempthorne

From: Earl E. Devaney
 Inspector General

Subject: Report of Investigation: The Endangered Species Act and the Conflict
 between Science and Policy

With this memorandum, I am transmitting the Report of Investigation on the Endangered Species Act (ESA) decisions influenced by the former Deputy Assistant Secretary for Fish and Wildlife and Parks (FW), Julie MacDonald. This investigation was initiated by request of Senator Ron Wyden who believed that 18 ESA decisions may have been improperly affected by MacDonald. Our investigation was expanded by requests from Chairman Nick J. Rahall, II, House Committee on Natural Resources, and Congressmen Jay Inslee and Peter DeFazio, who requested that we add two other decisions to those under our review.

As you know, in previous investigations we determined that MacDonald injected herself personally and profoundly in a number of ESA issues. We determined that MacDonald's management style was abrupt and abrasive, if not abusive, and that her conduct demoralized and frustrated her staff as well as her subordinate managers.

Our findings from this investigation are much the same, although we found that the nature and extent of MacDonald's influence varied dramatically from one decision to another. For example, in one instance we found that MacDonald went to extraordinary efforts to influence a particular decision, but her efforts ultimately had no effect on the outcome. In other instances, her involvement clearly caused a particular result. Ironically, in several instances, she played no role in the decision-making process, but because of her reputation, FW personnel believed that she had, in fact, been exerting influence, as did members of Congress and the public.

Overall, however, MacDonald's zeal to advance her agenda has caused considerable harm to the integrity of the ESA program and to the morale and reputation of the FW, as well as potential harm to individual species. Her heavy-handedness has cast doubt on nearly every ESA decision issued during her tenure; of the 20 decisions we reviewed, her influence potentially jeopardized 13 ESA decisions. MacDonald's conduct was backed by the seemingly blind support of former Assistant Secretary for

Fish and Wildlife and Parks, Judge Craig Manson. Judge Manson so thoroughly supported MacDonald that even when a known error in a *Federal Register* notice, which was caused by MacDonald's calculations, was brought to Manson's attention, he directed that the notice be published regardless of the error. MacDonald was also ably abetted in her attempts to interfere with the science by Special Assistant Randal Bowman, Office of the Assistant Secretary for Fish and Wildlife and Parks, who held the position and authority to advance the unwritten policy to exclude as many areas as practicable from Critical Habitat Determinations, as well as Attorney Thomas Graf, Office of the Solicitor, whose remarkable lack of recollection leaves one to speculate whether he was doing MacDonald's bidding or was a rogue actor simply emulating her policy style.

In the end, the cloud of MacDonald's overreaching, and the actions of those who enabled and assisted her, have caused the unnecessary expenditure of hundreds of thousands of dollars to re-issue decisions and litigation costs to defend decisions that, in at least two instances, the courts found to be arbitrary and capricious. (Ironically, in many of the decisions that ended up in litigation, advice from the Office of the Solicitor (SOL) had been ignored, yet the SOL subsequently had to suffer the indignity of defending decisions that it had deemed legally flawed.) These costs are in addition to the monies expended by the OIG on three separate investigations into MacDonald's influence over ESA decisions.

Perhaps most importantly, however, is that our investigation revealed an enormous policy void, which MacDonald was able to readily exploit. While the ESA affords the Secretary great discretion in several areas - exclusions of habitat being one example - the absence of policy in exercising that discretion has resulted, in MacDonald's case, a wholesale lack of consistency, a process built on guess-work, and decisions that could not pass legal muster. This dearth of policy and guidance seems less than coincidental. For many years, through several administrations, this appears to be an area of intentional failure to clarify, in order to maximize the agenda *du jour*.

The Department owes the public a fair and consistent application of rules in making its ESA decisions. When the career FW staff responsible for building the evidence for an administrative record does not know what the rules are - because they changed, sometimes on a daily basis - surely, the public cannot have confidence in the process.

As it stands, lawsuits are driving nearly everything FW does in the ESA arena. Lawsuits should not be driving regulatory decisions. As Fish and Wildlife Service (FWS) Director Dale Hall has explained, FWS has developed draft regulations that would purportedly address the most problematic areas in implementing the ESA. He also noted that the ESA implementing regulations have not been revised since 1986. Revised regulations, Hall said, would reflect over 20 years of working knowledge of the law and could clearly define what criteria would be evaluated in making ESA decisions.

Short of issuing regulations, FWS should develop policy to lend a sense of consistency, to guide ESA decisions where discretion is allowed, and to provide the

public the transparency that is fundamentally lacking in this high-profile program. Whether by regulation or policy, action is necessary to restore the integrity of the ESA program, and the morale and reputation of the FWS in the eyes of the public and of Congress. Seeking direction and support from Congress would certainly bolster the legitimacy of any such effort, and would ensure that FWS is in keeping with Congressional intent.

Recognizing that this comes late in your tenure as Secretary of the Interior, we are providing this report to you for whatever action you deem appropriate; however, it is also my intention to thoroughly brief and refer this report to your successor.

Attachment

cc: Assistant Secretary for Fish and Wildlife and Parks
Director, Fish and Wildlife Service
Solicitor



Investigative Report

*The Endangered Species Act and the Conflict
between Science and Policy*

Report Date: December 10, 2008
Date Posted to Web: December 15, 2008

This report contains information that has been redacted pursuant to 5 U.S.C. §§ 552(b)(2), (b)(6), and (b)(7)(C) of the Freedom of Information Act. Some references indicating gender were written in the masculine form to protect the identities of individuals and to facilitate the reading of the report. Supporting documentation for this report may be obtained by sending a written request to the OIG Freedom of Information Office.

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RESULTS IN BRIEF

On November 30, 2007, U.S. Senator Ron Wyden requested that the U.S. Department of the Interior's (DOI) Office of Inspector General (OIG) investigate 18 endangered species decisions undertaken by the U.S. Fish and Wildlife Service (FWS) because he believed the decisions may have been improperly affected by former Deputy Assistant Secretary for Fish, Wildlife and Parks Julie MacDonald.

Senator Wyden's request was followed by a request from U.S. House of Representatives Chairman Nick J. Rahall, II, Committee on Natural Resources, to "examine whether improper influence affected the proposal to delist the Virginia Northern Flying Squirrel." Further, on January 16, 2008, Congressmen Jay Inslee and Peter DeFazio requested that the OIG "investigate whether improper influence affected the decision to not afford protection to the Washington population of the western gray squirrel under the ESA [Endangered Species Act]."

As a result of these three requests, we reviewed a total of 20 FWS Endangered Species Act (ESA) decisions made by FWS.

In furtherance of this investigation, we gathered substantial information through a standardized questionnaire that we disseminated to all FWS regions. We also conducted 89 interviews and reviewed over 20,000 e-mails and other documents. Our investigation revealed that MacDonald potentially jeopardized the ESA decisional process in 13 of those 20 matters. We also determined that former Assistant Secretary for Fish, Wildlife and Parks Craig Manson enabled her behavior and that she was occasionally aided and abetted by Special Assistant Randal Bowman, Office of the Assistant Secretary for Fish, Wildlife and Parks (ASFWP), and Attorney Thomas Graf, Office of the Solicitor (SOL). In one decision, the U.S. District Court for the District of Arizona determined that statements made by high-level FWS career employees during the decision-making process appeared to "exemplify an arbitrary and capricious agency action."

The nature and extent of MacDonald's influence varied greatly. For example, in one instance we found that MacDonald went to extraordinary efforts to steer a particular decision, but ultimately her efforts had no effect on the outcome. In other instances, her involvement clearly caused a particular result to occur. Ironically, in several instances she played no role in the decision-making process, but because of her reputation FWS personnel believed she had, in fact, been exerting influence. One FWS employee told us that MacDonald's influence was so prevalent that "it became a verb for us – getting MacDonaldded."

We reaffirmed findings from previous OIG investigations which showed that MacDonald pursued her agenda by exerting political influence on the FWS Washington Office, regional offices, and field offices. She frequently contested the scientific findings of FWS biologists and often replaced their scientific conclusions with her own, even though she was not a biologist. MacDonald also acted as an economist – again without professional training – in her efforts to restrict critical habitat designations (CHD). In fact, her attempts to perform an analysis of the economic impact of one particular CHD resulted in "math errors" of "an order of magnitude" that led to the exclusion of critical habitat from the rule published in the *Federal Register*.

ARTICLE ENTITLED, "EMAIL REVEALS STATE DISPUTE OVER POLAR BEAR LISTING,"
SUBMITTED FOR THE RECORD BY REPRESENTATIVE PAUL TONKO

adn.com | E-mail reveals state dispute over polar bear listing

http://www.adn.com/2008/05/25/v-printer/416432/e-mail-reveals-sta...

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E-mail reveals state dispute over polar bear listing
POLAR BEAR LISTING: Biologists disagreed with administration.

By TOM KIZZIA
tkizzia@adn.com
(05/25/08 02:52:12)

The state's marine mammal scientists agreed last year with federal researchers who concluded polar bears are threatened with extinction because of a shrinking ice cap.

A newly released e-mail from last fall shows that the state's own biologists were at odds with the Palin administration, which has consistently opposed any new federal protections for polar bears under the Endangered Species Act.

The state's in-house dispute seems to refute later statements by Gov. Sarah Palin that a "comprehensive review" of the federal science by state wildlife officials found no reason to support an endangered-species listing for the northern bears. The governor invoked the state's own scientific work both in a cover letter to the state's official polar bear comments, and in an opinion piece published in the New York Times.

The e-mail was released this month to a University of Alaska scientist who had filed a public records request seeking information on the state's polar bear decision-making. Rick Steiner, the university Marine Advisory Program professor who obtained the memo, said it undermines the Palin administration's scientific defense as well as its claims to being an open government.

Legal jousting over polar bear science is growing more intense with each new lawsuit this month. The Endangered Species Act -- with its potential for imposing new regulations on industry here and in the Lower 48 -- is all hinged to what researchers say is likely to happen in the future to the bears and the polar ice cap.

The state has concentrated its critique of the federal science on long-range computer models of ice drawn up by international research teams. But the state Department of Fish and Game has also challenged federal polar bear biologists who predicted the loss of two-thirds of the world's bears -- and all of Alaska's -- by the year 2050.

Environmentalists accuse the state of ignoring a broad scientific consensus about the bears' prospects in a warming world. Even a reluctant Interior Secretary Dirk Kempthorne said earlier this month he was convinced by the federal studies and classified the bear as threatened under the Endangered Species Act.

"I read the letter from the governor," Kempthorne said of Palin at his May 14 announcement. "I read what her biologist had submitted, the official questions raised by Alaska. I wanted to be satisfied that we could answer every one of those questions, and I am satisfied."

PALIN PLANS TO FILE SUIT

The state continues to insist that researchers are divided over the fate of the bears. Too much scientific uncertainty remains to justify a listing, state officials say.

Palin announced Wednesday she plans to sue over Kempthorne's decision to list the bear, saying

it had been based on "the unproven long-term impact of any future climate change on the species." Meanwhile legislative leaders are promoting a state-funded conference and promotion campaign aimed at publicizing what they say are important differences of scientific opinion. A \$2 million appropriation for the conference survived Palin's veto pen on Friday.

"The key would be to invite the competing viewpoints and allow for a credible outcome," wrote Sen. Lyda Green and Rep. John Harris, the Republican leaders of the state Senate and House, in a newspaper op-ed column last week.

State officials have expressed particular concern that a threatened-species listing gives environmentalists more leverage to oppose oil and gas development in Arctic Alaska and poses risks to Native subsistence.

The state's efforts to raise contrary scientific arguments have been met with derision by some environmentalists, who liken it to efforts from the tobacco industry to raise questions about the dangers of smoking and delay regulatory action.

"The conference is like debating the theory of gravity while falling out of an airplane," said Kassie Siegel, the lead polar bear attorney for the Center for Biological Diversity, which has sued the federal government to protect the bears with limits on greenhouse gas emissions.

Steiner spent five months trying to get information about how the state reached its position, saying he suspected biologists were overruled for political considerations. He said last week it's ridiculous for the state to promote a conference on polar bear science while refusing to release its own experts' scientific opinions on the issue.

"Even the petroleum-loving Bush administration couldn't find a way around the science on this issue," Steiner said. "This perpetual denial of environmental harm posture is what gives Alaska a very bad image nationally and globally."

DIFFERENT OPINIONS

In its final response to Steiner this month, the state generally withheld all substantive in-house comments on the bears, saying these were private policy discussions among executive officials, a category exempt from release under state public records laws.

But the state did release, among nondescript cover- e-mails discussing deadlines and the state's scientific credibility, an Oct. 9 e-mail from Robert Small, head of the marine mammals program for the Alaska Department of Fish and Game.

Small named two other marine mammal biologists on staff and said the three of them had reviewed the nine new polar bear studies that the federal government was citing to justify a threatened-species listing for the bears.

"Overall, we believe that the methods and analytical approaches used to examine the currently available information supports the primary conclusions and inferences stated in these 9 reports," Small wrote.

None of the three is a polar bear specialist. The state has none, having relinquished its polar bear research to the federal government.

Ken Taylor, the deputy commissioner of Fish and Game, said on Friday that it's no secret that not everyone in his department agreed with the state's position. "We have a lot of different opinions out there," he said.

But the state's main concern was with global-warming computer models, and less with the

consequences for the bears, he said. That means critiques from climatologists and forecasters were more important than from marine mammal biologists, he said.

"The primary focus of the state comments has been on being able to reliably predict the extent of September sea ice 45 years from now," Taylor said Friday.

The state has argued that polar bear populations are currently at an all-time high and are well-managed. Even so, the state agrees that loss of sea ice is a concern, Taylor said. He said the state has offered to share its field researchers and facilities with federal biologists now seeking more information on the fate of the bears.

ARTICLE ENTITLED, "STATE POLICY LEADS BELUGA TEAM TO REMOVE ALASKA SCIENTISTS," SUBMITTED FOR THE RECORD BY REPRESENTATIVE PAUL TONKO

State policy leads beluga team to remove Alaska scientists: Beluga whalcs Alaska news ... Page 1 of 9

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State policy leads beluga team to remove Alaska scientists

INDEPENDENCE: Beluga recovery team must continue without two Alaska experts.

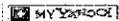
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A Parnell administration rule that requires state scientists to adhere to official policy and not the principles of independent science when they work outside their agencies continues to fuel debate more than a month after two biologists were removed from a federal beluga whale recovery team.

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The state biologists were kicked off the beluga panel because the rule compromised the scientific integrity of the team, federal officials said.

"The situation is unfortunate," said Leslie Cornick, an associate professor of marine biology and policy at Alaska Pacific University.

"What you have is the politicians silencing their state-employed biologists, and the politicians, who don't know anything about

interpreting scientific data, are interpreting scientific data in a way that fits their agenda."

The policy could have the long-term effect of chilling participation of state scientists in independent research and journal activity that scientists in academia have long enjoyed, said Cornick, who said she was speaking for herself and not her university.

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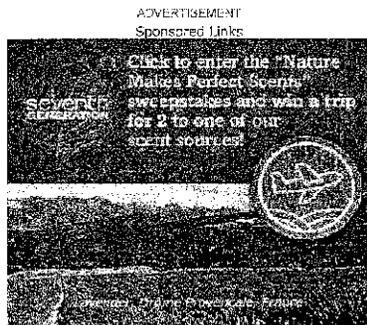
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Doug Vincent-Lang, the acting deputy commissioner of Fish and Game and an advocate of the new state rule, said in a recent interview that scientists are encouraged to engage in vigorous debate inside their agencies, but that once a position is established, the state has a right to demand adherence to it.

On April 25, as the issue simmered for months, the top official of the National Marine Fisheries Service in Alaska decided the state gag rule on its scientists was in direct conflict with federal policy.



James Balsiger, the Juneau-based NMFS regional administrator, said he had no choice but to remove two Alaska Department of Fish and Game biologists, Bob Small and Mark Willette, from the scientific panel of the Cook Inlet beluga whale recovery team, even though both are experts in their fields.

The 13-member panel of unpaid volunteers, now down to 11, is in the middle of drafting a plan designed to get Cook Inlet beluga whales, thought to number about 350, off the endangered species list. The panel is to determine how many belugas represent a sustainable population -- when victory can be declared -- and figure out a strategy to get there. The plan, due in rough form in about a year, would be subject to public comment and final approval by federal officials.

But the whole matter ran afoul of state policy because officially, Alaska's government says there's no distinct, isolated population of belugas in Cook Inlet, and in any event, they aren't facing extinction. The state sued the National Marine Fisheries Service last year in federal court in Washington, D.C., seeking to have belugas delisted. Motions for summary judgments are now being argued by the two sides and numerous intervenors.

EMPLOYEES MUST ADHERE TO STATE POLICY

NMFS listed the belugas as endangered in October 2008 and created the recovery team in March 2010 with two panels, both appointed by NMFS: the 13 scientists, who are expected to act independently; and 19 stakeholders who are supposed to represent development interests, environmental organizations, municipalities and Natives. Vincent-Lang represents the Fish and Game Department on the stakeholder panel.

In a seven-page "Terms of Reference" governing the panels, the federal fisheries service said the scientists "will not represent their agency or organization." The terms specify that the recovery team "is not a forum by which to discuss personal or institutional opinions regarding the listing of the species or its designated critical habitat."

Small, an expert in marine mammals who works out of Fish and Game's Juneau office, had served as team leader of a similar panel on Steller sea lions. Willette, who works out of Kenai, is an expert on the fish that belugas eat, like salmon and hooligan.

But on May 7, 2010, two months after the federal government produced its Terms of Reference, the Alaska Department of Fish and Game issued its new conflicting operating procedure.

Specifically citing participation in Endangered Species Act Recovery teams, the rule says that once a state policy is set, "employees must present or adhere to such a position or policy" when their service on the team is related to their employment.

The order also covers such outside scientific work as performing blind reviews of journal articles and public reviews of federal rule making.

The rule was published as a standard operating procedure for employees, not a formal regulation that would be subject to public comment. In its text, the department acknowledged that it had long been inconsistent in its directions to employee scientists who engage in such outside activities.

According to minutes of the December meeting of the scientific panel, which took place in Seattle, Small and Willette disclosed that their bosses were insisting "that they should not only represent, but advocate for the State's position on issues pertaining to Cook Inlet belugas, including that the State does not recognize that there are any threats to Cook Inlet belugas. Those two members felt a full disclaimer of their directive was necessary regarding their participation in the group and their ability to be objective and to speak as scientists," the minutes said.

"I just remember the silence as we all realized there was an impasse," said killer whale expert Craig Matkin, a member of the science panel. The confusion was heightened by the fact that neither Small nor Willette knew precisely what the state rules required, Matkin said.

'BEST SCIENCE' PRINCIPLE

After what the minutes described as a "lengthy discussion," the scientific panel decided unanimously to demand that NMFS assure that either "best science" remain an operating principle of the entire group, as mandated by federal law, or that the two state officials be removed.

There was no indication in the minutes whether Small and Willette abstained from that unanimous demand. Small declined to comment for this story and Willette couldn't be reached.

On Jan. 13, Tamara McGuire, the recovery team leader and a beluga expert employed as a private consultant, followed up with a letter to Balsiger, the regional NMFS administrator, praising Small and Willette for their knowledge but urging their removal from the panel.

"Best science can only be obtained by inquiry and frank discussions that are driven by the scientific method, not by policy advocacy," McGuire wrote.

Timothy Ragen, director of the U.S. Marine Mammal Commission in Bethesda, Md., also urged Balsiger to act.

"Allowing a state, or federal agency, or any other governmental body to impose its policy on a recovery team would set a misguided, unfortunate precedent," Ragen wrote. "The very essence of the scientific process is that it seeks to discover and understand the world as it is, not as we would like, choose, or dictate it to be."

In an telephone interview, Ragen said the issue in Alaska arose about the same time that John Holdren, the White House science adviser, issued a long-awaited memo on scientific integrity to the heads of federal agencies.

"Science, and public trust in science, thrives in an environment that shields scientific data and analysis from inappropriate political influence; political officials should not suppress or alter scientific or technological findings," the memo said.

As a result of Holdren's memo, "we were all pretty finely tuned to the notion that we need to make sure that scientists are able to act independently and they are not limited by policy," Ragen said. "That doesn't mean that policy has to follow science, but it does mean that you can't change the way the science comes out just because you don't like it."

STATE WON'T BACK DOWN

On Jan. 24, Fish and Game Commissioner Cora Campbell urged Balsiger to keep the state scientists on the panel, though she wasn't backing down on the state rules.

"We believe that having ADF&G staff participate and articulate state's scientific data and positions is important and necessary towards the development of the scientific sound and credible Recovery Plan," Campbell wrote. "The state has much to offer towards the development of this plan."

Balsiger responded on March 23 that he would keep the two state scientists on the panel. He flip-flopped a month later, saying the state and federal policies were in dead conflict and removed Small and Willette. In response to a request by the state, Balsiger at the same time directed that meetings of the scientific panel would be open to the public, rather than closed as its first two meetings were.

Balsiger wasn't available for comment, but his deputy, Robert Mecum, said the reversal was based on "further review" and "conversations with the leadership back East."

"We certainly respect the state's authority to require their employees to follow established procedures," Mecum said.

Vincent-Lang, the state's acting deputy commissioner of Fish and Game, said he was disappointed that Small and Willette were removed from the panel, but said the state's voice will be represented through the stakeholder panel.

"We'll still bring our science there," he said.

Vincent-Lang disputed the notion that the state is injecting politics into science. Rather, he said, it's just that the state is interpreting scientific data differently than the National Marine Fisheries Service. And that data shows that belugas are recovering from overhunting in the 1990s and will be fine without resorting to protections under the Endangered Species Act.

Jason Brune, a stakeholder panel member representing the Resource Development Council and a biologist himself, said he fears the stakeholders are just window dressing on the recovery panel and won't play a role in developing the plan. It was even worse when the scientific panel meetings were closed and the recovery plan was being developed in secret, he said.

"There are differences of opinion in the scientific community," Brune said. They should be aired, he added.

Nancy Lord, a writer and stakeholder panel member from Homer representing the environmental group Cook Inletkeeper, said she believed the Parnell administration was trying to disrupt the

recovery process because of its hostility to the Endangered Species Act -- not just involving belugas but also sea lions and polar bears, which are also listed species.

"If your goal is to have a good recovery plan for the belugas, which is my goal, you would want the best expertise on that panel to develop a really good science-based recovery plan," Lord said.

But if recovery is thwarted, she said, the consequences could be far-reaching. "If you don't have a good process and you don't have a good result, it's going to be open to litigation from any number of sides, and it's going to inhibit the recovery. That's going to mean longer time and maybe more restrictions -- maybe the very thing that they fear, restrictions on development," Lord said.

THE DELTA SMELT CASES, SAN LUIS & DELTA-MENDOTA WATER AUTHORITY,
ET AL. V. KENNETH LEE SALAZAR, ET AL., 09-CV-407, REPORTER'S TRANSCRIPT
OF PROCEEDINGS, SEPTEMBER 16, 2011

UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF CALIFORNIA
HON. OLIVER W. WANGER, JUDGE

THE DELTA SMELT CASES,
SAN LUIS & DELTA-MENDOTA
WATER AUTHORITY, et al.,

Plaintiff,

vs.

KENNETH LEE SALAZAR, et al.,

Defendant.

No. 09-CV-407-OWW

MOTION TO STAY PENDING APPEAL

AND CONSOLIDATED CASES.

Fresno, California

Friday, September 16, 2011

REPORTER'S TRANSCRIPT OF PROCEEDINGS

Reported by Karen Hooven, RMR-CRR
Official Court Reporter

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1 9-16-11. Delta smelt cases. Motion to stay.

2 ROUGH DRAFT

3

4 THE CLERK: Court calls item number one. 09-CV-407.
5 The delta smelt consolidated cases. Motion to stay pending
6 appeal.

7 THE COURT: Will the parties who are appearing in the
8 courtroom please state their appearances.

9 MR. SIMS: Good afternoon, Your Honor. Steve Sims
10 for Westlands Water District.

11 MR. O'HANLON: Good afternoon, Your Honor, Daniel
12 O'Hanlon appearing on behalf of the San Luis and Delta-Mendota
13 Water Authority and the Westlands Water District.

14 MR. MARZ: Good afternoon, Your Honor, Jonathan Marz
15 appearing for Westlands Water District and San Luis and
16 Delta-Mendota Water Authority.

17 MR. ANDERSON: Good afternoon, Your Honor, Steven
18 Anderson on behalf of the State Water Contractors.

19 MR. WEILAND: Good afternoon, Your Honor. Paul
20 Weiland on behalf of the Coalition for a Sustainable Delta and
21 Kern County Water Agency.

22 MR. LEE: Good afternoon, Your Honor. Clifford Lee
23 with the California Attorney General's Office on behalf of
24 plaintiff intervenor California Department of Water Resources.

25 THE COURT: We're now ready to hear the appearances

1 of counsel who are appearing telephonically.

2 MR. SLOAN: Good afternoon, Your Honor, this is
3 William Sloan for the Metropolitan Water District of Southern
4 California. Also on the line is Chief Deputy General Counsel
5 for Metropolitan, Linus Masouredis.

6 MR. MIDDLETON: Good afternoon, Your Honor, this is
7 Brandon Middleton on behalf of Stewart Jasper Orchard, Arroyo
8 Farms and King Pistachio Grove.

9 THE COURT: I think we're ready for the federal
10 defendants.

11 MR. EDDY: Thank you, Your Honor. Ethan Eddy for the
12 federal defendants.

13 MR. SHAPIRO: Good afternoon, Your Honor, William
14 Shapiro, federal defendants.

15 MS. STIMMEL: Good afternoon, Your Honor, Ann
16 Stimmel, federal defendants.

17 MS. POOLE: Good afternoon, Your Honor, this is Kate
18 Poole on behalf of defendant intervenors.

19 MR. ORR: Good afternoon, Your Honor, this is Trent
20 Orr, also on behalf of defendant intervenors. And Mr. George
21 Torgun is also on the line.

22 THE COURT: It appears that all parties have now
23 entered their appearances. We are convened to consider the
24 application that the federal defendants and defendant
25 intervenors have made to stay the preliminary injunction

1 directed to the RPA component 3, Action 4, what we are going
2 to refer to, for convenience of reference in these
3 proceedings, as the fall X2 action.

4 The Court has received the applications, supporting
5 declarations from the federal defendants. The Court has
6 received the oppositions to the stay filed on behalf of
7 plaintiffs. Has received also the intervenor Department of
8 Water Resources opposition to the motion for stay. There are
9 also supporting declarations by expert witnesses on both
10 sides. We have Mr. Feyrer and Dr. Norris for the federal
11 defendants. And we have declarations on behalf of plaintiffs
12 from Mr. Erlewine, Dr. Burnham, Dr. Deriso, and from Dr.
13 Hanson.

14 The Court has read, fully considered all the
15 arguments, submissions, evidence and, of course, refers to and
16 incorporates its prior findings of fact and conclusions of law
17 relative to the issuance and justification for the preliminary
18 injunction.

19 From the Court's perspective, I'm ready to state my
20 decision for the record. You have discussed and treated, in
21 voluminous and minute detail, I think, every conceivable issue
22 that could relate to what is before the Court. And so I will
23 ask if there is anybody who thinks that there is anything left
24 to be said, otherwise I'm ready to state my decision. So I
25 will now ask the plaintiffs what their position on that

1 question is.

2 MR. SIMS: Your Honor, we would only make argument if
3 the federal defendants or the defendant intervenors choose to
4 make oral argument.

5 THE COURT: Thank you. Federal defendants?

6 MR. EDDY: Thank you, Your Honor. And thank you for
7 accommodating our telephonic appearances. I think we'd be
8 interested to have the Court's ruling. And perhaps thereafter
9 an opportunity to respond to it, or maybe not. But I don't
10 have any preliminary remarks at this time.

11 THE COURT: Mr. Lee.

12 MR. LEE: Your Honor, just, I didn't recall you
13 mentioning that the defendant -- that the plaintiff
14 intervenors, Department of Water Resources had submitted a
15 third supplemental declaration of John Leahigh.

16 THE COURT: I certainly should have.

17 MR. LEE: And so --

18 THE COURT: And Mr. Leahigh's declaration has been
19 read and fully considered. Thank you, Mr. Lee, for completing
20 the record.

21 What's the defendant intervenor's --

22 MS. POOLE: Your Honor, this is Kate Poole on behalf
23 of defendant intervenors, and we are willing to waive argument
24 if the Court is prepared to rule.

25 THE COURT: Thank you very much. And as to the

1 suggestion of the government that there would be some comment
2 post announcement of the statement of decision, I'm going to
3 respectfully suggest that that can be directed to the Court of
4 Appeal rather than here. After the jury goes out to
5 deliberate, we don't usually have argument. Or after the
6 Court announces its decision in a bench trial through findings
7 of conclusions of fact and law, we don't usually have
8 argument.

9 So I will -- the plaintiffs have waived oral
10 argument. The defendant intervenors have waived oral
11 argument. And the federal defendants only requested oral
12 argument if the Court thought, as I understand it your
13 position, Mr. Eddy, and I want to be clear I understand it.
14 If the Court thought it would be helpful. And I don't think
15 it would be helpful. I'm ready to rule.

16 Do you want to be further heard?

17 MR. EDDY: No, Your Honor. I appreciate that. I'm
18 sorry, I thought I had understood the Court to suggest that
19 Your Honor would be making a tentative ruling.

20 THE COURT: No.

21 MR. EDDY: I know that's happened a couple of times
22 previously in this case, where Your Honor announces a
23 tentative decision and --

24 THE COURT: Yes. When I make a tentative ruling, I
25 make it clear that I am making a tentative ruling inviting the

1 input from the parties. Here, I have said that I am ready to
2 announce my decision. And I am prepared to do that.

3 MR. EDDY: In that case, Your Honor, and I apologize.
4 In that case, Your Honor, the federal defendants will also
5 waive argument.

6 THE COURT: All right. Thank you very much.

7 As previously indicated, I am incorporating all of
8 the findings of fact and conclusions of law that have been
9 made. Also findings made with respect to the jurisdictional
10 posture of the case in a post-judgment yet provisional remedy
11 status, where continuing operations of the joint projects are
12 at issue and implementation of reasonable prudent alternatives
13 of what has been found to be an unlawful biological opinion
14 and unlawful reasonable prudent alternatives are now before
15 the Court to determine whether or not the fall X2 action, as I
16 have previously defined it, meaning Reasonable Prudent
17 Alternative 3, Action 4, to locate the isohaline line, if you
18 will, at 74 kilometers east of the San Francisco Bay should *
19 be implemented.

20 It has been preliminarily enjoined so that the fall
21 X2 action would be limited to a distance of 79 kilometers east
22 of the San Francisco Bay. In other respects, particularly
23 information gathering, studying and other aspects of the RPA
24 have not been affected and are not being enjoined.

25 The Court then will start with the applicable

1 standard that applies to our consideration of this request for
2 stay. There is argument among the parties as to what the
3 standard is. And the Court starts with the recognition that a
4 stay is not a matter of right, even if irreparable injury
5 might result. Rather, it is addressed to the sound discretion
6 of the Court. And it is a decision made on the unique and
7 specific circumstances of the case at bar.

8 The factors that are considered in determining
9 whether or not to stay an action include the applicants'
10 showing, and the strength of that showing may be debatable, of
11 likelihood of success on the merits; whether and to what
12 extent irreparable injury will accrue if the action sought to
13 be stayed is not stayed; whether issuance of the stay will
14 substantially injure the adverse parties, thereby, if you
15 will, inviting the balancing of hardships; and where the
16 public interest lies.

17 And I will note that the defendants have invoked
18 *Alliance for Wild Rockies versus Cottrell*, C-0-T-T-R-E-L-L,
19 632 Fed 3d 1127, to say that, in effect, if a serious question
20 is presented that this is, if you will, a surrogate for
21 success on the merits or the establishment of the first
22 element.

23 More recently in *Leiva Perez*, L-E-I-V-A, Perez, 60
24 Fed 3d, *versus Holder*, 962 at 965. The party requesting a
25 stay must show irreparable harm. And the serious questions on

1 the merits is not a stand alone standard, it is not the right
2 standard by which a stay should be judged. It may be part of
3 an overall standard, but the irreparable harm standard
4 likelihood of success on the merits is not diminished or
5 abrogated by that case, which is decided before Leiva Perez.
6 And maybe different panels decided the two cases in the Ninth
7 Circuit, but they're both 2011 cases that address the issue of
8 stay.

9 And so the Court believes that it has accurately
10 stated, from a legal standpoint, the standard. That is the
11 standard that will be applied. We'll analyze the four
12 factors.

13 And in my statement of decision, I intend the facts
14 stated to be statements of fact to the extent they can be
15 interpreted as conclusions of law, they're intended to be
16 conclusions of law and reciprocally to the extent that I state
17 what are hybrids that could be interpreted as statements of
18 fact, although they are conclusions of law, they're intended
19 to be either so that we don't have any technical insufficiency
20 in the statement of the decision.

21 The Court now turns to the first factor, which is
22 irreparability of harm on either side and the extent to which
23 serious questions are raised by the defendants, applicants for
24 the stay, and/or they are showing a likely success on the
25 merits.

1 And it is important to the Court in this proceeding
2 to note that the federal defendants and the defendant
3 intervenors have very, very specifically and minutely focused
4 on what they believe are -- and assert are errors in analysis,
5 analytic errors by the Court in considering the underlying
6 science and the evidence.

7 They accuse the Court of using the wrong legal
8 standards, not, in effect, knowing the law, misapplying it,
9 not understanding it. And they suggest that there is no
10 impact because we are in what everybody agrees, I'll use the
11 vernacular, a good water year or a wet year, using the more
12 technical term, it's recognized * check up * by the Bureau
13 of Reclamation as it conducts the joint operations of the
14 projects, which is its eco responsibility and which is the
15 purpose, the long-term operations for which the BiOp was
16 originally created, formulated and published.

17 And so what we have on the applicants' side is their
18 position that, in effect, no water is going to be lost and
19 even if water is lost, it will be diminimus.

20 On the other hand, Mr. Leahigh states that in a wet
21 year -- and nobody knows yet what 2011/2012 water year is
22 going to be. We'll be getting into the inception of that year
23 on October 1st, which is approximately two weeks away.

24 But what Mr. Leahigh, on the State side, and there's
25 no question in this case that federal contractors are not

1 going to be impacted. The impact here and the harm is to the
2 State Water Contractors and to the state project, which will
3 be losing water. And Mr. Milligan defers to Mr. Leahigh, but
4 has previously analyzed that the 300,000 acre feet is a fair
5 and reasonable estimate.

6 The applicants have also suggested that this would be
7 an exercise in futility because there is no storage capacity,
8 nor is there any basis for use of the water that would be
9 stayed by the injunction that the Court has issued, where the
10 Court has used both aspects of the law that has been violated
11 here by the federal defendants. They haven't just violated
12 the Endangered Species Act in producing an unlawful BiOp and
13 unlawful and reasonable and prudent alternatives, they've also
14 violated NEPA, which, in effect, prevented any rational, any
15 what the Court would believe to be informed, competent and
16 considerate reflective analysis of the human health and safety
17 impacts, impacts on the State of California water supply and
18 related impacts by not performing a NEPA analysis, not
19 preparing an EIS and not following the law in any regard to
20 that extent.

21 And so the Court is satisfied, based on Mr.
22 Erlewine's prior declarations and his most recent
23 declarations, that Metropolitan Water District of Southern
24 California and the Kern County Water Agency, as State Water
25 Contractors both have capacity, they have uses and that for

1 the purposes of recharge, to protect against land subsidence,
2 overdraft on the groundwater supply, to conserve energy, to
3 provide other benefits that the storage of water produces,
4 that there is, the evidence preponderates, a substantial
5 likelihood that the loss of this water will create those
6 injuries, which are protectable. The Court has found that
7 they are protectable before. And that the location of the
8 isohaline line, if you will, at 79 kilometers, which is the
9 modified and prohibitory limit that is effected by the Court's
10 preliminary injunction, that a stay of the injunction, and so
11 that it doesn't operate in any but a wet year, will produce
12 that irreparable injury.

13 Now, there is one aspect of the evidence that's
14 before the Court factually that needs to be stated for the
15 record. The Court accepts and believes the testimony of Mr.
16 Leahigh that X2 isn't going anywhere in September. It's
17 either at 73, it's not more than 74, it's not going to be more
18 than 74. And that is something, to use the vernacular, again,
19 we can take to the bank. There is absolutely no evidence,
20 there isn't a scintilla, there isn't a suggestion, there isn't
21 a gleam in anybody's eye of an expectancy that X2 is not going
22 to be at or below, meaning closer to the west, to the San
23 Francisco Bay, through the month of September.

24 In October, there's an indication that there could be
25 a two to three kilometer movement east, where it could be in

1 the 75 to 77 kilometer range. And there is not a
2 specification as to when and to what extent that will occur.
3 And so since that is more than the 74 that the reasonable
4 prudent alternative in dispute commands, we're going to
5 analyze what the effect is based on what the federal
6 defendants have given us by way of science, by way of analysis
7 and by way of testimony. So that we can determine to what
8 extent the harm that is sought to be prevented by this stay
9 is.

10 The Court also rhetorically wonders, and it doesn't
11 appear to be capable of definition with more precision as to
12 when this movement eastward would occur in October. There is
13 some suggestion, as the Court has read it, that at least up to
14 the 15th of October, there may be no impact and there may be
15 no need to do anything. And if we could establish that with
16 certainty, then, of course, we wouldn't need an injunction
17 through the 15th of October because there isn't any need for
18 an X2 action.

19 Now, let us go to the evidence that has been placed
20 before the Court and the analysis and critique of the Court's
21 decision to show that there would be likely success on the
22 part of all defendants on their appeal.

23 We will start with the -- having made the irreparable
24 injury finding, we will start with the position, I believe, of
25 the defendants that there will be no water cost for foregone

1 pumping or storage opportunities until at least October 15th
2 of 2011. And that, as I've already find, I made a finding of
3 fact, is at least affected by the likelihood that until
4 sometime in October, there's no need for the fall X2 action,
5 at least in terms of its water loss effects to be implemented.

6 What the Court is now, having reviewed the parties'
7 papers, definitively satisfied is that there will be no
8 irreparable injury by maintaining fall X2 at 79 kilometers.
9 And there are a number of reasons. And for the record, I'm
10 going to identify and analyze every one of them. So that
11 there is no issue and no question about the basis for the
12 decision.

13 The Court believes that the testimony of Mr. Feyrer,
14 Bureau of Reclamation's expert, and Dr. Norris, the Fish &
15 Wildlife Service's expert, are -- and I'm going to be making
16 findings that are going to be justified by specific factual
17 instances. Their testimony is riddled with inconsistency.

18 The Court finds that Dr. Norris' testimony, as it has
19 been presented in this courtroom and now in her subsequent
20 declaration, she may be a very reasonable person and she may
21 be a good scientist, she may be honest, but she has not been
22 honest with this Court. I find her to be incredible as a
23 witness. I find her testimony to be that of a zealot. And
24 I'm not overstating the case, I'm not being histrionic, I'm
25 not being dramatic. I've never seen anything like it. And

1 I've seen a few witnesses testify.

2 Mr. Feyrer is equally inconsistent. Self and
3 internally contradictory. I -- and most of you, some of you
4 have been in these cases for 20 years. I have never seen
5 anything like what has been placed before this Court by these
6 two witnesses. And the suggestion by Dr. Norris that the
7 failure to implement X2 at 74 kilometers, that that's going to
8 end the delta smelt existence on the face of our planet is
9 false, it is outrageous, it is contradicted by her own
10 testimony, it is contradicted by Mr. Feyrer's testimony, it's
11 contradicted by the most recent adaptive management plan
12 review, it's contradicted by the prior studies, it is --
13 candidly, I've never seen anything like it.

14 I'm going to start with Mr. Feyrer, and I'm going to
15 go issue by issue, point by point. Because, candidly, I'm
16 going to be making a finding in this case of agency bad faith.
17 There is simply no justification. There can be no acceptance
18 by a court of the United States of the conduct that has been
19 engaged in in this case by these witnesses. And I am going to
20 make a very clear and explicit record to support that finding
21 of agency bad faith because, candidly, the only inference that
22 the Court can draw is that it is an attempt to mislead and to
23 deceive the Court into accepting what is not only not the best
24 science, it's not science. There is speculation. There is
25 primarily, mostly contradicted opinions that are presented

1 that the Court not only finds no basis for, but they can't be
2 anything but false because a witness can't testify under oath
3 on a witness stand and then, within approximately a month,
4 make statements that are so contradictory that they're
5 absolutely irreconcilable with what has been stated earlier.
6 And the Court draws the inferences of knowledge and draws the
7 inference of intent. Because those are intentional
8 misstatements, they can't be anything else. And they're made
9 for only one purpose, they're made for the purpose of
10 attempting to influence the Court to decide in a way that is
11 misleading, confusing and the detail and the factual
12 complexity of this case obviously requires close scrutiny and
13 great effort. And if anybody had been just, quite frankly, a
14 little bit inattentive or a little bit less diligent than
15 digging into and trying to get to the bottom of every one of
16 these assertions, it would be very easy to simply accept these
17 opinions with these record citations. And when the record
18 says the opposite of what you cite the record for, or when the
19 record doesn't say what you cite the record for, there's
20 simply an absence of the data, then that is a further
21 misleading of the Court. That is a further, if you will,
22 distortion of the truth.

23 Now, we are going to start with the overview that at
24 79, which is now in Mr. Feyrer's declaration that there's
25 going to be no benefit, there's going to be no expansion of

1 the habitat, that the smelt are going to be imperiled, that
2 they're going to be jeopardized because they won't have the
3 range, the turbid water, meaning less clear, cloudy, that they
4 won't have the water quality in terms of its lower salinity
5 that they need.

6 But every piece of evidence in Feyrer's testimony,
7 before we get to this last declaration, is that either at 80
8 or 81 kilometers east of San Francisco Bay, that you're going
9 to have an improvement in habitat, that you're going to access
10 Cache Slough, the Ship Channel, the related areas. That
11 you're going to have that expansion. And suddenly, Grizzly
12 Bay, Honker Bay. And suddenly, we now have the opinion from
13 Mr. Feyrer that, oh, no, if you're at 79, they're not going to
14 have any -- access to any of those areas. They're not going
15 to have that habitat.

16 So this contradicts his sworn testimony that west of
17 the confluence -- and the confluence of the Sacramento and San
18 Joaquin rivers is at 80 kilometers. 79 kilometers is west of
19 that confluence. And he testified that when X2 is west of
20 that confluence, that opens up the low salinity zone and delta
21 smelt habitat to the broad shoals in Suisun Bay and other
22 areas. And I'm quoting, "So there's just a lot more, a lot
23 more suitable habitat for smelt."

24 And he also testified that Grizzly and Suisun Bays
25 would be available habitat and used by the delta smelt when X2

1 is at 79 kilometers or above the confluence of the Sacramento
2 and San Joaquin Rivers. And there's a transcript reference on
3 July 28th, starting at page 122, lines 9 to 16, page 213,
4 lines 8 to 19. And so it simply -- this isn't an explainable
5 inconsistency, this isn't a resolvable, if you will, conflict
6 in the witness' own testimony. This is impossible. You can't
7 have it both ways. It's as simple as that.

8 And, in terms of deciding the credibility of the
9 statement, when for the first time do we hear, oh, no, there's
10 going to be no habitat? After the Court has decided and ruled
11 against the X2 standard. All of this testimony, all of the
12 interpretations of the studies, all the it will work at 80, it
13 works west of the confluence, all of that was before, quite
14 frankly, the Court made any decision.

15 And so, in terms of who has the self-serving motive
16 now to change the game and to misrepresent the facts and to,
17 without explanation, contradict and destroy the prior opinion
18 given by the same witness, that is classic impeachment,
19 self-impeachment and contradiction.

20 And it's the first brick in having the wall come down
21 that the -- every witness steps on to the witness stand, not
22 with the presumption, but certainly with the Court's
23 open-minded evaluation and expectation of hearing truthful and
24 consistent testimony. So nobody comes in to this courtroom
25 having to do more or less to persuade or convince the Court.

1 The force, the effect, the competence, the consistency of
2 testimony is what gives it credit and makes it worthy of
3 belief.

4 The next subject is in his declaration now submitted,
5 where he says if X2 is set at 79 or 80 kilometers, most of the
6 delta smelt population will not align with the shallow
7 biologically productive turbid water of Suisun Bay, Grizzly
8 Bay and Honker Bay, thus positioning X2 at 79 or 80 kilometers
9 would provide far less of sufficient quality or habitat.

10 And Mr. Feyrer's testimony during the hearing, at
11 page 125, line 23 to 126, line 9, he testified under oath,
12 "When X2 is located downstream of approximately 80 -- he
13 didn't have the kilometers, downstream. Confluence of the
14 Sacramento-San Joaquin Rivers, X2 in low salinity zones are in
15 those vast shallow bays, those shoals of Suisun Bay, Grizzly
16 Bay and Honker Bay and so there's a lot of area there. That's
17 why the habitat index is bigger. And when you move upstream,
18 above 80 approximately, and up into river channels, those
19 river channels are obviously a lot smaller, a lot less area."

20 And going on, at page 27, starting at line 10 to 15,
21 page 29, lines 12 to 15, in respond to the Court's question,
22 Mr. Feyrer testified, when the Court asked, what if you were
23 to use a less water intensive application of this X2 model?
24 For instance, at 79 kilometers, where you would get areas that
25 we discussed yesterday within the scope of the ultimate

1 objective, but not require as much water to do it. Would the
2 same purpose be accomplished?

3 Mr. Feyrer said, "With the above normal year
4 standard, 81, 81 is pretty much near the bottom of the
5 ascending limb of the curve and that's the minimum point you
6 get out of that lower tier of habitat conditions."

7 He was then asked, at page 193, starting at line 4,
8 when Mr. Sims asked the question, "So when the -- what the
9 data demonstrates then is that when X2 is below the
10 confluence, that opens up Suisun and Grizzly, right?"

11 Mr. Feyrer said, "Yes. As depicted in those habitat
12 maps."

13 And he was asked "If X2 was maintained at 79
14 kilometers, would Grizzly and Suisun Bays still be available
15 habitat?"

16 He answer under oath, "Yes."

17 Next question: "If X2 is above 80 kilometers, smelt
18 still use Suisun Bay; don't they?"

19 "Answer: Yes."

20 There is no reconciling those answers. There's no
21 consistency. There is no explanation. And in his pre-hearing
22 declaration, Mr. Feyrer opined, taking his Feyrer 2011 study,
23 when X2 is located downstream of the confluence, there is a
24 larger area of suitable habitat because the low salinity zone
25 encompasses the expanse of Suisun and Grizzly Bay, which

1 result in a dramatic increase of the habitat index. In
2 contrast, when X2 is located upstream of the confluence,
3 habitat is restricted to the smaller river channels.

4 And in the adaptive management plan, Mr. Feyrer
5 authored that plan and states at page 10 of the plan, "This
6 range in X2 corresponds to a geographic area that straddles
7 the confluence of the Sacramento and San Joaquin Rivers, which
8 is located approximately 80 kilometers. When X2 is located
9 downstream of the confluence, there is a larger area of
10 suitable habitat because of the" -- I'm sorry -- "because the
11 low salinity zone encompasses the expanse of Suisun and
12 Grizzly Bays and Suisun Marsh, which results in a dramatic
13 increase."

14 And very simply, he was asked the questions. The
15 Court asked the question. Counsel asked the question. And if
16 it were true, and if the answers he gave weren't true, first
17 of all, he never should have given the answers under oath.
18 And secondly, he should have explained it.

19 And the one thing his new declaration does is it does
20 not in any way explain the mountain of contrary and
21 contradictory evidence that he's the author of in studies and
22 that he stated under oath. It's unacceptable.

23 Now -- and before the late surfacing declarations, we
24 did not hear that 79 is impossible, that fall X2 at 79 is
25 going to basically extinguish the existence of the delta

1 smelt. Now that's Dr. Norris' opinion, an opinion previously
2 unexpressed by any witness in this case ever or under any
3 circumstance.

4 And Dr. Burnham's analysis essentially is that when
5 Mr. Feyrer testified that the delta smelt were -- and then
6 there's a question of not or they were habitat limited, we
7 have the two factors of salinity and water transparency which
8 defined his habitat, meaning Feyrer's habitat index. Mr.
9 Feyrer did not believe that the smelt were currently habitat
10 limited. Mr. Nobriga, also a government expert, agreed the
11 delta smelt are not currently habitat limited from a two
12 variable perspective. But Mr. Feyrer's habitat only uses two
13 abiotic habitat variables. It was his methodology that he
14 chose. And so salinity and turbidity are what he used.

15 And so, as pointed out, what's the scientific basis,
16 then, if they're not habitat limited by salinity or turbidity,
17 for him to say that the vast areas of salinity and turbidity
18 conditions that he believes are necessary and important. It's
19 simply unexplained.

20 And the Figure 2 discussion that was in the
21 declaration now, the late surfacing declaration, saying that
22 at 79 kilometers the habitat index is approximately 5600, that
23 the habitat index values under the fall midwater trawl
24 abundance indices in earlier years were at 899, 864, 756,
25 those were in the years '95, '99 and 2000. And based on that,

1 Dr. Burnham opines that there will not be a constraint on the
2 habitat for delta smelt if X2 is located at 79.

3 Then we go through the criticisms of the Court's
4 decision by Mr. Feyrer. Starting with the extinction
5 scenarios, where the Court found he was inconsistent
6 concerning a flaw on his 2008 model which predicted, in almost
7 all cases, negative smelt abundance. And the Court did not
8 accept his testimony because of its apparent inconsistency.

9 And Dr. Deriso, now, in evaluating the latest
10 declaration by Mr. Feyrer, opines that Mr. Feyrer definitely
11 predicted negative smelt abundance as an extinction scenario
12 where he was asked when the model runs into a negative
13 abundance, that would be a potential extinction scenario. He
14 answered yes.

15 But in his 2008 study, Feyrer rejected that negative
16 abundance values were an extinction scenario. And rejected
17 -- when it tested whether that was possibly the case, after
18 the analysis, Feyrer said no in his 2008 study. Increasing
19 the initial number of adult fish in the fall, even to 1,000,
20 as opposed to 29, did not noticeably affect the probabilities.

21 The second issue was correlation of the fall midwater
22 trawl to the habitat index. And here, we said you're loading
23 comparable values on to the same axis. And so you're going to
24 have, in effect, built in bias and you're not going to get
25 either a statistically reliable nor a scientifically reliable,

1 using best available science, index and interpretive results
2 from this modeling. Mr. Feyrer says that the Court's
3 criticism isn't valid because the variables are constructed
4 with different data. One abundance data, the other water
5 quality.

6 And the variables, as Dr. Burnham analyzes, are not
7 constructed from two entirely separate and independent data
8 sources as Mr. Feyrer now suggests. Rather, the habitat
9 index, which is the X axis, uses a probability of occurrence
10 calculation using the same abundance data that the fall
11 midwater trawl abundance index uses on the Y axis. Therefore,
12 they are using similar or identical data.

13 And in his statement under oath, where Mr. Feyrer
14 says the two axes are derived from different water quality and
15 abundance data, the abundance data isn't different.

16 And so either Mr. Feyrer is, as suggested by the
17 defendants, not understanding his own indices that he is the
18 architect of, or he is, quite frankly, either misleading or
19 misstating anybody who would read his current criticism of the
20 analysis is that has been done.

21 The next statement by Mr. Feyrer is that regardless
22 of any criticisms of his plot, which was the graph of the fall
23 midwater trawl index against the habitat index, there's no
24 impact on reliability of the habitat index because this is
25 just one of the input variables in the plot and doesn't depend

1 on conclusions drawn from the plot. But Mr. Feyrer and the
2 Service premised their claim about the habitat index both as
3 to its usefulness and its significance, to explain delta smelt
4 abundance.

5 And Dr. Burnham opines that finding this correlation
6 between the habitat index and the fall midwater trawl
7 abundance index inevitably results from an induced correlation
8 derived from the data structure, which is essentially using
9 the same data on both axes. And it impacts the reliability of
10 the habitat index.

11 And again, nothing that Mr. Feyrer says changes or in
12 any way diminishes the analysis of the error in his
13 methodology and science that the Court found.

14 Next is that when the Court found that the critique
15 of scientific impropriety in Mr. Feyrer taking and linking the
16 results of multiple modeling without any statistical analysis
17 of the margin of error introduced as each link is added. Mr.
18 Feyrer says that he did in his 2011 study, and that he
19 provided several figures and tables to explicitly demonstrate
20 the statistical uncertainty associated with every analysis in
21 his paper.

22 Dr. Burnham opines that this is simply a false
23 statement because there's no page reference. There's no data
24 set. There is nothing that is either identified or referred
25 to where an accounting for statistical uncertainty was

1 performed. And the NRC report, which is cited when it helps
2 but ignored when it doesn't, didn't find any uncertainty
3 analysis by Mr. Feyrer because it concluded that the
4 examination of uncertainty in the derivation of the details of
5 this action lacks rigor. And that's at page 41.

6 Next, the turbidity index, the Court found that that
7 didn't provide a basis for calculating the amount of variation
8 in the delta smelt abundance index attributable to salinity as
9 a stand alone variable. Mr. Feyrer says the Court's wrong
10 because his 2007 and his 2011 studies did isolate salinity
11 from turbidity and, quoting the GAM, concluded that salinity
12 accounts for most of the -- for -- I don't know if he means
13 variability. It prints out V-A-R-I-A-I-L-I-T-Y. I didn't
14 have time to check a dictionary. And it's a word I don't
15 recognize. Maybe there is such a word. But it's new to the
16 Court. In the delta smelt catch rather than turbidity.

17 Again, Dr. Burnham finds this misleading. Because
18 although there is a separate analysis in the 2007 and 2011
19 Feyrer studies of the proportionate variation in absence or
20 presence of delta smelt related to turbidity and salinity, the
21 model that calculates the habitat index did no such separate
22 analysis. And that it is simply incorrect to say that
23 salinity accounts for most of the variability in the delta
24 smelt catch rather than turbidity. Rather, 2011, in that
25 study, before his declaration and testimony here, Feyrer

1 states that the specific conductance, which is a salinity
2 measure, and Secchi depth, which is the turbidity measure,
3 accounted for roughly the same amount of variability, ergo
4 include both the variables in the model. Neither accounted
5 for the most, in quotes, variability. Certainly it wasn't the
6 salinity as being the dominant principal.

7 So, again, the Court is untroubled by Mr. Feyrer's
8 criticisms of the Court's analysis.

9 Now, use of core stations and tidal mixing. And we
10 did go around with Mr. Feyrer on these issues. Where we have
11 undeniable findings of smelt populations in Cache Slough,
12 Liberty Island, the Sacramento Deep Water Ship Channel. And
13 the Court found that while he testified that the map depicting
14 the habitat index encompassed those areas, when he was
15 questioned about it under oath at the hearing, the evidentiary
16 hearing, he stated that the core stations he used to develop
17 the habitat index were downstream of all those sites. And the
18 Court said, well, that sure seems to be inconsistent, how can
19 you say that you're using other core stations for your
20 measurements rather than these areas which are not these core
21 stations.

22 The Court found that it's at the least inconsistent,
23 so it's inaccurate to state what the full extent of the
24 habitat of the smelt was relative and relevant to the
25 reliability of the justification to push X2 down to 74.

1 And Dr. Burnham did some calculations and opines that
2 if you had included those, if you will, separated populations
3 in those areas, it would have a significant effect on the
4 habitat index, the habitat variables related to smelt presence
5 or absence, and there, because those are in predominantly
6 fresh water area, there would be a much lower correlation
7 between salinity and smelt presence.

8 And so the next issue is the title of mixing
9 justification where Feyrer opined that water quality measures
10 at core sampling stations are accurate measurements of water
11 quality Cache Slough, Liberty Island and the Sacramento Deep
12 Water Channel. Yet Mr. Feyrer testified he made no such
13 definitive statements. He said that water quality
14 measurements at the core stations were probably really similar
15 to those areas. Obviously those areas hadn't been tested,
16 they hadn't been observed and there was no basis for such a
17 comparison.

18 Now, Dr. Burnham refers to it as hypocrisy, I'm not
19 going to use an editorial or even a pejorative potentially
20 word like that in tolerating extreme imprecision for what it
21 is. But what it is is testimonial inconsistency, it's
22 contradictory testimony, it's opining without a basis. So the
23 law calls that speculation. And it is unjustified.

24 Now, life cycle modeling. And Mr. Feyrer claimed
25 that the Maunder and Deriso, the Thompson and MacNally, refers

1 to 2008, Maunder and Deriso 2011, Thompson 2010, MacNally
2 2010. He comes back in his supplemental declaration, after the
3 hearing, after the Court's decision and says, none of those
4 studies contradict my papers. My studies, my opinions. But
5 rather, they're entirely consistent. His words. And
6 basically, what those studies, all of them found, contrary,
7 diametrically contrary to his finding that there was a
8 meaningful, significant and close relationship between the
9 fall X2 and delta smelt abundance. Rather, all of those
10 studies found no relationship that was scientifically
11 significant between the location of X2 and the presence and
12 abundance of the smelt.

13 And what is the justification for the difference Mr.
14 Feyrer offers is that, first of all, the models looked over
15 the entire history of the data set going back, I believe it
16 was 60 to 70 years, when only wet and above normal years
17 should have been looked at. And yet, in his 2007 study, his
18 2008 study and his 2011 study, Mr. Feyrer used all the data
19 sets. So he didn't limit them to the wet years that he now
20 says discredit all the other expert's studies.

21 And so, again, does the Court reasonably accept?
22 Does the Court reasonably rely on this kind of analysis? What
23 the Court uses as the term to describe it is it is
24 opportunistic. It is an answer searching for a question. It
25 is an ends/means equation, where the end justifies the means

1 no matter how you get there. Whether you use science, whether
2 you use statistics, whether you use anything that is objective
3 or not.

4 I'm going to tell you again. I have spent my life in
5 courtrooms. Trial is my life. I have never seen anything
6 like this.

7 Next, Mr. Feyrer claims that his 2008 study is the
8 only modeling effort that modeled the effects of implementing
9 Action 4. Again, Dr. Deriso says this is false. 2008 does
10 not model his Feyrer study, the effects of implementing Action
11 4. Rather, it evaluated four scenarios, none of which
12 purported to analyze or effect Action 4. Further, it did not
13 model the effect of implementing the action only during wet or
14 above normal years, it did not model the projected effects of
15 maintaining X2 at 74 kilometers or at 81 kilometers. And the
16 Court does not change its prior finding and it is adding, by
17 the record that is now being made to its findings of Mr.
18 Feyrer's absolute incredibility, his absolute unreliability,
19 and finally, the most significant finding, the Court finds him
20 to be untrustworthy as a witness.

21 And I will note that he is a government agent. He
22 represents the United States. And the United States, as a
23 sovereign, has a duty not only in dealing with the Court, but
24 in dealing with the public to always speak the truth, whether
25 it's good or bad. It's never about winning or losing, it's

1 always about doing justice. And in the final analysis,
2 protecting endangered species is crucially important. It's a
3 legislative priority. And even the plaintiffs don't dispute
4 that. But when it overwhelms us to the point that we lose
5 objectivity, we lose honesty, we're all in a lot of trouble.
6 Serious, serious trouble.

7 And so I am unaffected, in fact, I am sad. I feel
8 remorse for our justice system for what has been placed before
9 the Court. It's unacceptable. It's unprecedented.

10 Now let's go to Dr. Norris. As I said, I believe, in
11 my findings, Dr. Norris is that unique witness who no matter
12 how you change the facts hypothetically and ask her a
13 question, she never varies from her answer because she is a
14 true believer. And she never -- there is nothing that will
15 shake her belief. There is nothing that will move her to an
16 answer except that justifies the result and the end that is
17 sought to be achieved. And so although she never stated it in
18 her testimony under oath in trial, now we have X2 at 79
19 extinguishing the species. In other words, now we have the
20 opinion that, yes, if X2 is at 79, the species will be
21 irreparably injured. Although what I had heard in other
22 testimony was that this gave us a great opportunity in a wet
23 water year to expand the range, to give the species a good and
24 an optimistic opportunity to expand its abundance, to
25 reproduce. Although there's no direct correlation or data

1 that increasing the habitat in this time of the year will do
2 that. But let us now look at Dr. Norris' testimony so that we
3 have it clearly specified for the record.

4 Her testimony was that if we don't have X2 at 74,
5 this may represent, I'm quoting, the last opportunity to
6 prevent extinction of a species unique to California. X2 at
7 79 places the delta smelt at greater risk of extinction, will
8 worsen the jeopardy condition of the species.

9 And we start with the threat to the extinction of the
10 delta smelt. In the fall months, according to Dr. Hanson, the
11 location of X2 during September and October, don't have any
12 biological or scientific relation to productivity of the
13 species, its abundance or the availability of its preferred
14 food sources. When, at most, under the injunction as it is
15 currently in effect, you can't go more than five kilometers
16 east of the ideal, of the perfect standard at 74.

17 And based on the daily tidal cycle, X2 moves several
18 kilometers west and east in the natural ebb and flow that is
19 caused by tidal cycles. And the shift would have been, in
20 terms of the graphing and the charting of the data, evident.
21 It was not.

22 And I've already found that Mr. Leahigh has
23 testified -- nobody disputes it -- that in September, there's
24 going to be a zero effect on X2 under the current conditions.
25 And there is, therefore, going into October, to mid October,

1 and then you have 45 days that the action continues left until
2 the end of November.

3 The opinion is that a failure to limit will not
4 appreciably reduce abundance or adversely modify its habitat.
5 Well, we've already heard that opinion. That was the dispute
6 that was before the Court. And its extinction rate or effect
7 locating X2 at kilometer 79, if we go into October, there's no
8 prediction where X2 is going to be. But it's not going to be
9 far from kilometer 74, it won't be at kilometer 79 before
10 October 15th. And at that point, we're talking about a
11 maximum of six weeks, best case, drawing every inference in
12 favor of the defendants.

13 And the shift to the east of a three kilometer, if
14 you will, range or a five kilometer range in that six-week
15 period, there isn't one iota of evidence that has any
16 credibility to it, other than conclusions and dire predictions
17 of catastrophe that supports that there will be any injury to
18 the species.

19 But more than that, let's go back to Mr. Feyrer. Mr.
20 Feyrer was asked at -- this is on the 29th of July, at page
21 846, do you disagree with the authors of this plan? He's one
22 of them. The draft adaptive management plan, that the
23 expected effect of fall X2 at kilometer 81 is uncertain? He
24 says, "No."

25 He was then asked, "Can a biologist render an

1 reliable opinion as to whether locating fall X2 this year at
2 kilometer 81 will appreciably diminish delta smelt abundance
3 in the fall?"

4 His answer, "When all is said and done, I would say
5 no."

6 He and Dr. Norris apparently didn't communicate.
7 Because they're not on the same page.

8 Mr. Nobriga, the government scientist, based on three
9 published life cycle models, describes 40 years of historical
10 data as not supporting a correlation between the location of
11 fall X2 and delta smelt abundance. His opinion, at page 137
12 on July 29th, 6 to 9, 140, 11 to 13, 141, 5 to 15, was "I
13 think in terms of the historical data" -- I'm quoting Dr.
14 Nobriga -- "that the three models probably indicate that
15 you're not going to find a correlation out of the historical
16 data."

17 And we have Mr. Feyrer, at pages 125 and 126,
18 starting at lines 25, going over to line 5, line 25, about
19 when X2 is downstream of 80 kilometers, X2, the confluence of
20 the Sacramento San Joaquin Rivers, X2 in the low salinity
21 zones are those vast large shallow base, those shoals of
22 Suisun Bay, Grizzly Bay, Honker Bay, so there's a lot of area
23 there. That's why the habitat index is bigger."

24 He didn't say, he never said, not once, he still
25 hasn't said when it's west of 74 kilometers. He's never given

1 these opinions that he gave over and over at the hearing under
2 oath that this is what happens if X2 isn't at 74.

3 We have, essentially, the facts and the opinions and
4 the unwillingness of either federal scientist, even accepting
5 the facts and changing them, to give an opinion that is in any
6 way credible on this subject.

7 And to refute Dr. Norris' extinction scenario that we
8 now have before the Court, the revised adaptive management
9 plan that's filed with the Court August 10th, it's the most up
10 to date analysis by the Service through its scientists and its
11 experts. It states, at page 16, "The use of an 81 kilometer
12 target for fall after above normal years provides about 50
13 more -- 50 percent more of the abiotic habitat benefits than
14 maintaining X2 at 86 kilometers. And at present, represents a
15 reasonable intermediate action to restore late post reservoir
16 period salinity conditions in the fall."

17 Now, that came out after the hearing. But even if it
18 was written before the hearing, it was only published after
19 the hearing. That is in diametric opposition to both the
20 prior testimony that we can't be one inch east of 74 and Dr.
21 Norris telling us it's the end of the species, it's likely
22 extinction if you go one inch east of 74.

23 And the same study of August 10th at page 26 says,
24 some key questions will most efficiently -- will be most
25 efficiently answered by implementing the X2 action in very

1 different ways within the boundaries of prudence in otherwise
2 similar years and contrasting the results. The best choice
3 from a learning point of view would be an alternative in which
4 the action is not taken at all with X2 instead managed so that
5 it remains in the 84 to 86 kilometer range during the period
6 in which the RPA targets would otherwise be in force."

7 Respectfully, if it's going to be the end of the
8 species, how could such a suggestion be made by the managers
9 of this reasonable and prudent alternative? That not only
10 defies reason and logic, but, again, it is so fatally
11 inconsistent, so irreconcilable, and given the Court's
12 credibility findings about Dr. Norris, the Court rejects and
13 does not accept her testimony. It is unworthy of belief.

14 Then, Dr. Norris came back to the National Research
15 Council report of 2010 and claimed that this supported her
16 opinion about the necessity of implementing fall X2 at 74.
17 And took the statement, when the area of highly suitable
18 habitat is defined by the indicators is low, either high or
19 low, FMT indices can occur."

20 In other words, delta smelt can be successful even
21 when habitat is restricted. More important, however, is that
22 the lowest abundances all occurred when the habitat index was
23 less than 6,000 HA. This could mean that reduced habitat area
24 is a necessary condition for the worst population collapses,
25 but it is not the only cause of the collapse. The

1 relationship between the habitat and FMT indices is not strong
2 or simple. That's at page 40.

3 And that is a discussion of the scientific basis, if
4 you will, for the fall X2 axis -- action, I should say,
5 talking about can delta smelt survive when habitat restricted.
6 And they say habitat and abundance data, that relationship is
7 not clear, it's not strong, it's not simple.

8 And what Dr. Norris did not include was NRC's
9 criticism of the fall X2 action in a number of respects. And
10 in those respects, Dr. Norris simply was asked: "Do any of
11 these criticisms change your opinion?" And her answer, "It
12 did not change my opinion, no."

13 The next subject concerning what effect considering
14 the Cache Slough areas, the three areas, the ship channel and
15 the defendants call -- I'm sorry, the plaintiffs call it the
16 complex. The BiOp refers to about 13,000 hectares, which is
17 the equivalent of 30,000 acres of habitat in the preferred
18 salinity range of delta smelt available at 74. And the
19 Court's finding, based on Feyrer's testimony, was that adding
20 habitat units to represent delta smelt habitat in the complex,
21 the Cache Slough complex, would shift the curve. Well, that's
22 already been discussed.

23 But the Court noted that at that time, the exact
24 impact of the shift had not been calculated by any party. And
25 now Dr. Hanson has, and he provides this figure, Figure 2 from

1 Exhibit A to his current declaration on the relationship
2 between X2 and habitat area.

3 And it does shift the curve. And if the Cache Slough
4 complex is considered, the 13,000 acres that were originally
5 available, if you locate X2 at 74 kilometers, you still have
6 it. When X2 is located at 79 kilometers, and that's an
7 independent analysis separate from the Court's. And instead
8 of ignoring those areas of habitat, as the BiOp did, if you
9 locate X2 at 79, which was the Court's location based on all
10 the evidence before it, 79 is where the isohaline line is
11 fixed.

12 And so, then Dr. Norris' rationale, the defendants
13 argue and the Court agrees, that she just reiterates what's
14 already been provided in declaration or testimony by all the
15 other experts. Nothing new. Nothing that changes any finding
16 that the Court has made, nothing that contradicts or impeaches
17 the evidence on which those findings are based.

18 Dr. Norris says that recent scientific studies have
19 found a statistical association between fall X2 and the
20 production of young delta smelt during the following year.
21 And there is one study, not a recent scientific studies,
22 plural, that's the Feyrer 2007.

23 And her suggestion that the Service referenced
24 multiple scientific studies is inaccurate. The Court's
25 citation in detail in approval of Feyrer 2007, the Court will

1 accept the partisan or an advocate's spin on what the Court
2 said. But the Court's exact words were, "The reliance on
3 Feyrer 2007 was not per se unreasonable, however, the use of
4 that study to justify operational restrictions is more
5 questionable." And, of course, there's no reference to any of
6 the more recent findings.

7 And Dr. Norris, in her most recent declaration,
8 states the fall X2 action is the only component of the RPA
9 that expressly protects the delta smelt critical habitat, the
10 defendants point out that the RPA action 6 states its purpose
11 as to improve habitat conditions for delta smelt. So
12 obviously that statement is untrue. Whether it's
13 intentionally untrue or whether it is simply negligently
14 untrue, because she didn't bother to read the RPAs, the Court
15 can't discern. But what the Court can know is that it's
16 unreliable, it's testimony that simply cannot be accepted or
17 credited.

18 And she continued to insist that this is the
19 only -- fall X2 is the only RPA action to benefit the species'
20 critical habitat.

21 And then we get into her explanation of how 75
22 kilometers was initially picked based on a regression analysis
23 relative to net Delta outflow. And the Court didn't accept
24 that because the formula that was used didn't incorporate and
25 had nothing to do with inputs that relate to the biology of

1 the smelt and the impact of X2 on population dynamics.
2 Nothing changes the Court's finding.

3 Dr. Norris said there when three scientific reasons
4 to locate X2 at 74. And those were that there was a 1994
5 biological assessment indicating reduced abundance of the
6 species east of 74 kilometers. Variable, but increases in
7 some years when it is west of 74 kilometers. And the Court
8 considered and found unpersuasive those conclusions.

9 The second reason that Dr. Norris claimed X2 should
10 be at 74 was because it more closely approximates pre-POD fall
11 X2 conditions to return ecological conditions of the estuary,
12 which occurred in the late 1990s during times of larger smelt
13 populations. And also her observed, what she refers to as a
14 striking change in the position of fall low salinity zones in
15 all water years during Pelagic Organism Decline years and her
16 further assertion that X2 at 74 or less increases the expected
17 abiotic habitat index above values that were present during
18 POD years.

19 And her third and final reason on historical X2
20 location was that there are inner annual variabilities in fall
21 outflow, and that the variability is necessary to maintain and
22 recover the population. And that the projects eliminated that
23 variability so that the location of X2 in every year resembles
24 a dry year and favored the expansion of invasive species. As
25 noted in the Court's finding, every one of those positions

1 were addressed. They were analyzed. The time periods weren't
2 long enough to assess trends. There was only one wet year
3 after 2000. The Enright and Culbersome 2009 study recommended
4 evaluating variation in delta outflow salinity based on a 20
5 to 25 year time frame, not a 10 year time frame used by the
6 defendants * check up * to ensure that lower frequency
7 changes and climate conditions be considered. A September
8 through December, four-month average was used and the RPA only
9 operates three months. It doesn't operate in December.

10 And the Norris opinion that 74 kilometer X2
11 requirement is based on a tandem use of 1641, that's the water
12 board decision, X2 compliance locations for spring months.
13 However, that's just it. That's the point. 74 and 81
14 kilometer points correspond to existing monitoring stations
15 and those D-1641 compliance points in that time of the year
16 has nothing to do with establishing that keeping X2 at those
17 locations is necessary to the survival and recovery of the
18 species.

19 And that is found where she actually referred to the
20 Bennett, I believe it was Bennett 2008 study. I might be
21 wrong. It's found at Bates 017060 and Bates 017036. Where
22 Figure 19 describes days X2 in Suisun Bay and it's talking all
23 about spring. And then in looking at fresh water discharge to
24 the estuary by managing in an environmentally friendly manner
25 using the X2 standard to ensure maintaining the low salinity

1 zone in Suisun Bay, again, during spring, quoting Kimmerer
2 2002, 2004. She was using this to justify the fall X2 action.
3 I don't think that the fall is the spring.

4 The conclusion that the Court reaches is that this
5 testimony particularly with the contradictions, with the
6 revisionist and opportunistic opinions that are now offered
7 totally impeaching, it's self-impeaching and contradictory,
8 both Mr. Feyrer and Dr. Norris. They lack credibility. They
9 are the equivalent of bad faith.

10 The Court finds agency bad faith here. There simply
11 is no explanation. There is no justification. And again, the
12 government wins. The government is here to protect the United
13 States and to protect the people of the United States. And
14 it's here to protect the species. They're all equally
15 important. And somehow some way that mission and sight is
16 lost. When I see placed before the Court what has been
17 submitted.

18 The Court can only say that if there were credible
19 and reliable evidence, the Court has never hesitated, the
20 Court, quite frankly, even put an injunction in place, it
21 didn't deny the fall X2 action, it just found that there was
22 simply no reasonable scientific basis. There's still no
23 explanation that's understandable that isn't totally impeached
24 and contradicted, for where you locate fall X2. But
25 nonetheless, out of that potential, there are two objectives

1 here on the species side and in balancing, that the Court
2 still believes should be served. This is an important
3 opportunity to get more information and data. And that's one
4 thing we absolutely need in these cases. It's to everybody's
5 interest.

6 So I'm not going to just junk the fall X2 standard
7 and in a peak of disappointment with the government's, because
8 just your scientists can't be honest and can't be straight and
9 can't serve the public interest, that we'll just throw the
10 baby out with the bath water. That's not going to happen.
11 This species is in trouble. It still needs to be protected.

12 I'll let the parties give me any indication why,
13 quite frankly, we don't modify the injunction so that it
14 doesn't take effect until October 15th. I don't really see
15 any reason for it to take effect before October 15th.

16 But I will say this, in evaluating the public
17 interest. It is of crucial significance to the Court that the
18 Department of Water Resources is sitting in this Court. I've
19 already found this in many of these cases at earlier times.
20 Their scientists aren't better, they're not worse. They're as
21 good as the federal scientists. They are not less concerned
22 about the species. They are not less concerned about the
23 public interest. And they are here opposing in every way this
24 fall X2 action for very good reasons that are explained and
25 that are justified. Just as that paucity of justification *

1 check * check * and absence of explanation that makes the
2 action and BiOp unlawful exists on the federal side of this
3 equation. And that weighs heavily because the DWR is here to
4 protect the people of the State of California as well as the
5 national interests in the species and in all the issues that
6 are before the Court.

7 And so I'll let you tell me why, but my intent is I'm
8 going to deny the request for stay. I'm going to modify the
9 injunction to have it take effect October 16th of 2011. And
10 in other respects, the matter will be as it has been decided.
11 I'm not changing any of my findings. I'm not changing any
12 decisions that I have made, but I am adding now the findings
13 of agency bad faith. I am finding that these witnesses are
14 incredible, that they are disassembling, that they have
15 performed in a way that is unworthy of their public trust.
16 These are strong findings and strong words. They are
17 absolutely compelled on this record.

18 So let's hear from the parties briefly on my proposed
19 modification of the injunction. Otherwise, fall X2 RPA
20 for -- I'm sorry, RPA Action 4 stays in effect in all other
21 respects.

22 Mr. Lee.

23 MR. LEE: Your Honor, first of all, the Department of
24 Water Resources appreciates the trust you have shown in our
25 presentation in these proceedings. It is certainly welcome

1 given the amount of work we've had, chance to work on this
2 case. I would like to talk about the modification of the
3 injunction. I think, from the data that Mr. Leahigh has
4 presented, it's pretty clear for September that we're not
5 going to have a violation of the monthly average of 74
6 kilometers.

7 THE COURT: I've already made that finding.

8 MR. LEE: Yes.

9 THE COURT: So we don't need the injunction in
10 September.

11 MR. LEE: Now, the issue becomes whether we can go up
12 to the brink of October 15th or not. As you might guess, the
13 projections on where X2 will be without project operations as
14 you move farther along become, how shall I say, less precise,
15 less granular.

16 THE COURT: It's understood.

17 MR. LEE: All right.

18 THE COURT: I made that finding too, I said which
19 can't tell, when, quite frankly, X2 is going to move east.

20 MR. LEE: And Mr. Leahigh indicated that the best
21 estimate is that probably in the latter part of October, it
22 will move east. But he did not say with absolute certainty in
23 his declaration that for the first two weeks of October,
24 without project operations, X2 will, in fact, be at 74
25 kilometers on an average. And I think the concern here was

1 the less precision we have, as we move into October.

2 So we would probably be more comfortable, given that
3 less precision, if you want to modify that injunction to
4 modify it until the first of October. And allow September to
5 go forward. Because of the kind of lack of precision. I know
6 many of the parties have said, well, we're not going to have
7 any problems until the second half of October. And that may
8 very well be. All right? But that position was not expressly
9 said and stated in Mr. Leahigh's declaration. And because
10 it's another month out, there is some concern that the natural
11 state of affairs might not guarantee us the outcome that
12 you've suggested.

13 THE COURT: Thank you, Mr. Lee.

14 Any other plaintiff wish to be heard?

15 MR. WEILAND: Just briefly, Your Honor. I certainly
16 concur --

17 THE COURT: This is Mr. Weiland.

18 MR. WEILAND: Paul Weiland, thank you, Your Honor,
19 for Coalition of sustainable Delta. I concur with Mr. Lee.
20 Frankly, we saw this earlier in the salmon proceedings. There
21 was a question about San Joaquin flows and where they would be
22 maintained. They fell below the estimates given by the
23 federal defendants. And I think that was because, as you go
24 further out, those estimates become less certain.

25 And the Court has gone through a very careful

1 balancing in order to come up with 79 kilometers location.
2 And our view is that there's no benefit to the species, it's
3 certainly questionable, and in light of that balancing, for us
4 to bear the risk and for the Court to change the status quo
5 from the current injunction, we think would be inappropriate.

6 THE COURT: Any other plaintiff?

7 MR. SIMS: Westlands joins those comments.

8 THE COURT: All right. Let's hear from the federal
9 defendants.

10 MR. EDDY: Your Honor, this is Ethan eddy. I don't
11 think we're going to take any position on this selection of
12 the date in light of the fact that Your Honor is denying our
13 request for a stay.

14 THE COURT: Thank you very much. Defendant
15 intervenors?

16 MS. POOLE: Thank you, Your Honor. This is Kate
17 Poole. We do support your postponing the effective date of
18 the injunction until October 16th. As the Court found it is
19 August 31st ruling, until that time, wherever X2 is set, it
20 will be met by upstream reservoir depletion. And it's more
21 likely than not that those upstream reservoir depletions will
22 be fully recovered in the winter months, meaning the
23 plaintiffs will likely suffer no irreparable water supply
24 impact from that.

25 Mr. Leahigh again confirmed that in his September 8th

1 declaration, that both of his current model runs show, quote,
2 "little to no upstream impact associated with meeting X2 at
3 either kilometer 74 or 79 in September, October and November."
4 Unquote. And that's at paragraph 27.

5 So, in other words, as long as DWR is meeting the 74
6 kilometer X2 requirement with upstream reservoir releases, as
7 it will through October 15th, there are no irreparable water
8 supply impacts and we agree with your ruling.

9 THE COURT: Thank you very much, Ms. Poole.

10 Is the matter submitted?

11 MR. LEE: Yes, Your Honor.

12 THE COURT: All right. I'm going to modify the
13 injunction. It will take effect October the 16th.

14 Now, I want an order based on my findings. You don't
15 have to include the findings. My findings are stated for the
16 record. But let's have an order so we can get that entered.
17 I know that the defendants wish to urgently pursue the matter.
18 And so I don't want to have any impediment to that happening.

19 And I'm adopting the modification of the injunction
20 for the reasons that Ms. Poole just stated. I think I have
21 stated them in my long, if you will, recitation of findings of
22 fact, conclusions of law. But she stated them succinctly. If
23 you want to prepare that part of the order, Ms. Poole, maybe
24 you and Mr. Lee can coordinate.

25 MR. LEE: Your Honor, if I could have just one

1 clarification.

2 THE COURT: Yes.

3 MR. LEE: I assumed, when you say that the injunction
4 only goes into effect --

5 THE COURT: Well, I'm going to suspend the effect of
6 the injunction. It's been in effect up until today. I'm
7 going to suspend the injunction until October 16, in which it
8 will re-take effect.

9 MR. LEE: Would, then -- part of the concern is the
10 RPA requires that there be a monthly average of 74. All
11 right? I -- if, in fact, the injunction goes into effect on
12 the 16th and, of course, we have 74 kilometers on a daily
13 basis or an average basis in the first two weeks. Then I'm
14 assuming then no further action would be required.

15 THE COURT: I'm leaving that to the discretion of the
16 operators.

17 MR. LEE: I see.

18 THE COURT: Quite frankly. That's for them to
19 manage. They have manage the water supply. And I believe
20 that Ms. Poole also accurately stated that it's coming from
21 their storage, if you will, operations. And so -- and the way
22 in which the reservoirs are filling and how they're
23 transferring from reservoir to canal to where the other, if
24 you will, outlets for the flows either are held in storage or
25 are released for disposition by the system.

1 MR. LEE: I understand the means issue, it's the
2 metric that I'm concerned with. And I assume what we're
3 having here is there's been no alteration to the monthly.

4 THE COURT: Well, as I understand it.

5 MR. LEE: The monthly metric.

6 THE COURT: Right. The Bureau calculates the metric.
7 And so the metric is at 74 until October 16. Then it is 79.

8 MR. LEE: Thank you, Your Honor.

9 THE COURT: Did you get that, Ms. Poole?

10 MS. POOLE: Yes, Your Honor. And I'd be happy to
11 join Mr. Lee in drafting the proposed order.

12 THE COURT: All right. Is there anything further.
13 (Off the record.)

14 THE COURT: Did everybody here that? The court
15 reporter says I was quoting from the rough draft, the final
16 transcript has now been prepared, so she will coordinate the
17 accurate -- the official record pages now to this transcript
18 when she prepares it so that you'll have accurate citations to
19 what is now the official record of the July evidentiary
20 proceedings.

21 Anybody disagree?

22 From silence, we infer no disagreement.

23 Is there anything further?

24 MR. SIMS: One other --

25 THE COURT: Yes.

1 MR. SIMS: One other matter, Your Honor. And this is
2 actually beyond the case. This is probably the last time many
3 of us in this courtroom will be appearing before you. And we
4 just wanted to thank you for your service to all of us, and
5 particularly your hard work. And the professionalism of your
6 staff. We will miss you.

7 THE COURT: Thank you very much.

8 All right. That concludes our proceedings.
9 Everybody have a good weekend. We are in recess.

10 MS. POOLE: Thank you, Your Honor.

11 MR. ORR: Thank you, Your Honor.

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