

**THE DANGER OF DECEPTION:
DO ENDANGERED SPECIES
HAVE A CHANCE?**

OVERSIGHT HEARING

BEFORE THE

COMMITTEE ON NATURAL RESOURCES
U.S. HOUSE OF REPRESENTATIVES

ONE HUNDRED TENTH CONGRESS

SECOND SESSION

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**OVERSIGHT HEARING ON “THE DANGER OF
DECEPTION: DO ENDANGERED SPECIES
HAVE A CHANCE?”**

**Wednesday, May 21, 2008
U.S. House of Representatives
Subcommittee on National Parks, Forests and Public Lands
Committee on Natural Resources
Washington, D.C.**

The Committee met, pursuant to call, at 10:06 a.m. in Room 1324, Longworth House Office Building, Hon. Nick J. Rahall, II [Chairman of the Committee] presiding.

Present: Representatives Rahall, Smith, Grijalva, Sarbanes, DeFazio, Scalise, Inslee, Baca, Duncan, Gohmert, Wittman, Young, Bordallo, Napolitano, Costa and Holt.

**STATEMENT OF THE HONORABLE NICK J. RAHALL, II, A
REPRESENTATIVE IN CONGRESS FROM THE STATE OF WEST
VIRGINIA**

The CHAIRMAN. The Committee is meeting today to continue our strong oversight hearings on the implementation of the Endangered Species Act.

One year ago, we convened to examine the mess created by former Deputy Assistant Secretary for Fish, Wildlife and Parks, Julie MacDonald. At the time, I, along with many Members of this Committee, had high hopes that the Interior Department would take a serious look at how that poorly-placed political appointee was allowed to tinker with the work of Agency scientists to the detriment of the Endangered Species Program.

As a result of that hearing, the Agency undertook a review of the decisions that fell under MacDonald's purview and pledged to work to correct any wrongdoing it uncovered. That was a good thing. Now, one year later, after MacDonald's demise, we find that instead of cleaning up its mess, the Agency has merely swept it under the rug.

Today, much to my chagrin, we are about to hear that the Agency's well-published post MacDonald review, ostensibly designed to correct listing and critical habitat decisions, decisions tainted by politics, was a boondoggle. It is fixing nothing. It was too narrow, too fast and too sloppy.

Among other things, our Government Accountability Office witness today will tell us that Agency reviewers automatically dis-

counted from scrutiny any decisions that could not be directly linked to tampering by Ms. MacDonald, yet her fingerprints may have been all over countless decisions that were given automatic immunity from the Fish and Wildlife Service's review. Among them were decisions that scientists crafted not based purely on the science, but rather according to what they anticipated might gain Julie MacDonald's political seal of approval.

Worse still, GAO now reveals to us that there are other Interior officials who influenced ESA decisions, and those folks are still roaming the halls of the Interior Department unchecked. As a result, we can have no confidence that political tinkering with the ESA program is being addressed any better now than it was under MacDonald's reign.

Today, we will also hear testimony about the untenable delay of a rule designed to protect the severely depleted North Atlantic right whale from ship strikes, the latest public example of covert White House interference with endangered species. It has become abundantly clear that this Administration does not give one whit about the ESA.

The strong-arming of Federal scientists, the slow walking of listing decisions, and the stonewalling of new rules has convinced me that every attempt to fix the management of the Endangered Species Program under this Administration is a lost cause. No matter how deeply this Committee looks or how hard we push to conduct real, valid oversight, we are hamstrung by secrecy and by deception.

For example, I, along with Representatives Peter DeFazio and Jay Inslee, requested documents relating to the northern spotted owl, but of the boxes of documents sent to us in response to that request, we find barely any mention of the names of Agriculture Secretary Mark Ray, Deputy Under Secretary of Agriculture Dave Tenney, or Interior Deputy Secretary Lynn Scarlett, who all served on the "Washington Oversight Committee".

Though it may be a bad pun, my true reaction is something smells fishy here. As Chairman of this Committee and as one who undertakes oversight responsibility seriously, I am forced to conclude that not only has the Endangered Species program been sorely politicized, but effort after effort supposedly designed to correct the mishandling of the program by this Administration and this Agency has also been badly bungled.

At this point, in my opinion, the best hope for endangered species may simply be to cling to life until after next January, when this President and his cronies at long last will be on the unemployment lines.

With that, I conclude my testimony and yield to the Ranking Minority Member.

[The prepared statement of Chairman Rahall follows:]

**Statement of The Honorable Nick J. Rahall, II, Chairman,
Committee on Natural Resources**

One year ago, this Committee convened to examine the mess created by former Deputy Assistant Secretary for Fish, Wildlife and Parks Julie MacDonald. At the time, I had high hopes that the Interior Department would take a serious look at how that poorly placed political appointee was allowed to tinker with the work of agency scientists to the detriment of the Endangered Species program.

As a result of that hearing, the agency undertook a review of the decisions that fell under MacDonald's purview and pledged to work to correct any wrongdoing it uncovered.

Now, one year after MacDonald's demise, we find that instead of cleaning up its mess, the agency has merely swept it under a rug.

Today, much to my chagrin, we are about to hear that the agency's well-publicized post-MacDonald review, ostensibly designed to correct listing and critical habitat decisions—decisions tainted by politics—was a boondoggle; it is fixing nothing. It was too narrow, too fast, and too sloppy.

Among other things, our Government Accountability Office witness will tell us that agency reviewers automatically discounted from scrutiny any decisions that could not be directly linked to tampering by MacDonald. Yet her fingerprints may have been all over countless decisions that were given automatic immunity from the Fish and Wildlife Service's review. Among them were decisions that scientists crafted not based purely on the science but, rather, according to what they anticipated might gain MacDonald's political seal of approval.

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No matter how deeply this Committee looks or how hard we push to conduct real, valid oversight, we are hamstrung by secrecy and deception. For example, I, along with Representatives Peter DeFazio and Jay Inslee requested documents related to the northern spotted owl. But of the boxes of documents sent to us in response to that request, we find barely any that mention the names of Agriculture Undersecretary Mark Rey, Deputy Undersecretary of Agriculture Dave Tenney, or Interior Deputy Secretary Lynn Scarlett, who all served on the "Washington Oversight Committee." Though it may be a bad pun, my reaction is: something smells fishy here.

As Chairman of this Committee, I am forced to conclude that not only has the endangered species program been sorely politicized, but effort after effort supposedly designed to correct the mishandling of the program by this Administration and its agencies has also been badly bungled.

At this point, the best hope for endangered species may simply be to cling to life until after January when this President and his cronies, at long last, hit the unemployment line.

STATEMENT OF THE HONORABLE ADRIAN SMITH, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF NEBRASKA

Mr. SMITH. Thank you, Mr. Chairman.

Today, we are holding an annual oversight hearing on the Endangered Species Act. This year it is entitled, "The Danger of Deception: Do Endangered Species Have a Chance?" While it certainly is an interesting title, under current law I believe the chance of recovery is almost zero.

For 12 years the Republican House Majority not only reviewed the effectiveness of this Act, but we tried to improve this law for both wildlife and humans. While ultimately we were unsuccessful in gaining the concurrence of the other body, at least we tried to do something positive.

It has been over 7,000 days since the last ESA bill was signed into law, 5,709 days since the last authorization expired, and 504 days with the new Majority controlling Congress, and apparently

the Act is perceived to be working well. I find that a stunning conclusion, especially in light of the fact that the Director of the Fish and Wildlife Service has testified that they have not made a single listing or critical habitat designation on their own in over a decade.

The Fish and Wildlife Service doesn't run this program. It seems to be run by narrow special interests enriching themselves on taxpayer dollars by filing endless lawsuits. I can tell you that no one wins with litigation of this nature.

This hearing will address a number of species. Let me comment on just a few. I am sure we will have an interesting discussion on the so-called recovery of the northern spotted owl. We know now that the population of this threatened species is declining by about three percent each year. This is remarkable because all of the so-called experts told us that if you shut down all the timber mills, destroyed the lives and futures of thousands of loggers and their families, then the northern spotted owl would thrive in the Northwest forest.

Now the Fish and Wildlife Service has identified the barred owl as the single greatest threat to the continued existence of the spotted owl. In fact, their recovery plan states that the best action to protect spotted owls is to remove thousands of barred owls currently occupying its habitat. This may be difficult since barred owls are strictly protected under the Migratory Bird Treaty Act.

While barred owls may now outnumber spotted owls, the fundamental threat to all wildlife in the Northwest forest is a failure to effectively address wildfires. They will sadly occur, and this Congress will do nothing to remove the fuel that makes these fires almost inevitable. In terms of spotted owls, apparently there is little chance of recovery, and the residents of the Northwest were clearly deceived.

Second, we are likely to hear complaints that the Fish and Wildlife Service has failed to adequately protect the reintroduced Mexican gray wolf in Arizona and New Mexico. In this case, it is hard to believe that anyone was deceived because as a "nonessential experimental population" ranchers have a legal right to protect their lives and livestock from these wolves. The law is clear. If a gray wolf attacks a steer or a horse they may be killed.

Finally, let me say to the Assistant Secretary of the Interior that we provided 39 months to review the listing petition for the polar bear, and still the wrong decision was made. It is the wrong decision because the worldwide population of polar bears is healthy. In fact, the population has almost doubled in the last 50 years.

It is the wrong decision because there is no practical way to improve or retain the habitat for these species, and, most importantly, it is the wrong decision because it is an assault on sound science and commonsense. By listing the polar bear, the Fish and Wildlife Service has deceived the American people into thinking that this species is on the brink of extinction and that it can maintain or even increase its sea ice habitat.

Mr. Chairman, after 20 years it is way past due to modernize the Endangered Species Act because the current one percent recovery rate simply perpetuates a cruel deception on the American people. Let us give these species a real chance to survive in the future.

Thank you, Mr. Chairman.

The CHAIRMAN. The Chair thanks the acting Ranking Member. Mr. DeFazio? Before recognizing other Members, let me take a moment to recognize and welcome a new Member of our Committee, Mr. Scalise of Louisiana. We welcome you and congratulate you on your victory. Glad to have you a Member of the Natural Resources Committee.

Mr. SCALISE. It is a pleasure.

The CHAIRMAN. The gentleman from Oregon, Mr. DeFazio?

STATEMENT OF THE HONORABLE PETER A. DeFAZIO, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF OREGON

Mr. DEFAZIO. Thank you, Mr. Chairman.

I know that the focus of this hearing is greater than the issues surrounding the northern spotted owl growth force and the Pacific Northwest, but since the gentleman just spoke who clearly knows nothing of my region or my forests—to tell the truth, I don't even know where you are from, but I have to respond.

We are back where we were in the Bush I Administration where you are trying to resolve incredibly complicated and difficult environmental problems with political science. It defies the law. It defies commonsense, and the losers are the environment and the people I represent.

I represent a lot of those rural communities that have been devastated because of changes in forest policy in this country. I have tried to provide a commonsense direction, different than the Clinton forest plan, and way different than what this Administration—this Administration actually has kind of dialed back and dug out something called the “Jameson Plan.”

Now, I like Sy Jameson. He was a fun guy, but as head of the BLM, he cooked up a plan to deal with what was then the entire closure of our forests to timber harvesting that had no support from any legitimate scientists. It was laughed out of court and brought an injunction on all timber harvesting, and this Administration has taken us right back to that spot under the guise of doing a favor for the people of the Pacific Northwest. For the people who live in rural communities and the timber industry, they are cruising us right toward a disaster again.

It doesn't have to happen, and I hope there will be some result from this hearing today to redirect this Administration in a more productive direction because if they follow through with their flawed science we are going to end up with another court injunction, and we will get even less timber harvest than we are getting today.

I am working on a credible plan that could double the Federal timber harvest. Part of it is reflecting a little bit of what they propose on the east side, but on the west side they are just going after the habitat, the last vestiges of old growth. That is what started the whole controversy, and until you protect that old growth, you are not going to protect adequately the species, the environment, and you are not going to end the forest wars in the Pacific Northwest.

Thank you, Mr. Chairman.

The CHAIRMAN. Do other Members wish recognition? Let me see. The gentleman from Arizona, Mr. Grijalva? The gentleman from Washington, Mr. Inslee?

Mr. INSLEE. Thank you. I assume we are doing opening statements, I assume.

The CHAIRMAN. Yes, we are.

STATEMENT OF THE HONORABLE JAY INSLEE, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF WASHINGTON

Mr. INSLEE. Thank you, Mr. Chair. I appreciate the Chair's work on this issue.

I think the Chair knows there are many of us who have been very concerned about this Administration's failure to follow the best available science, which is required under the ESA and, in effect, they have followed the best available excuses time after time for inaction. It is most disturbing.

Out in Washington State, it is not just one species that my grandkids may not get to enjoy as I did growing up in Washington State, but it is several. This has been something that has caused a lot of anger in the State of Washington that back in D.C. our grandkids are not getting the protection they deserve to enjoy nature's bounty.

I just want to mention a couple of them, most recently of concern. This alleged polar bear listing was not a listing of an endangered species. It was a listing of the things the Administration refuses to do to save that species. On that list is, number one, the refusal by the Administration to do anything to stop global warming, which is the existential threat to the continuation of the polar bears. That is number one.

Number two, they have essentially, the second thing on the list, insisted on a business-as-usual approach on oil and gas development. Again, a refusal to act.

Number three on that list of inaction is, they refuse to designate critical habitat for the polar bear, as far as I can tell, so what we have is a listing on the polar bear. It is just a list of what your Federal government refuses to do when this iconic creature of the Arctic is going to go extinct. I think people have a right to be very angry about that.

On the spotted owl issue, we are going backwards in the State of Washington with this alleged draft recovery plan. It goes backwards in protection of old growth. It goes backwards in protection of habitat. It is not a recovery plan. It is just we haven't had a chance to recover from multiple years of this Administration's multiple failures on listing.

I just hope that the next Administration, because I have just about given up on this one, will finally start following science. We don't have a lot of time for these species, and I appreciate the Chair's willingness to expose these multiple failures. Thank you.

The CHAIRMAN. Any other Members wish to make opening statements? The gentleman from Maryland, Mr. Sarbanes?

Yes? The gentleman from Nebraska?

Mr. SMITH. I would submit for the record an opening statement by Mr. Lamborn.

The CHAIRMAN. Without objection. It will be made part of the record.

[The prepared statement of Mr. Lamborn follows:]

Statement of The Honorable Doug Lamborn, a Representative in Congress from the State of Colorado

Thank you, Mr. Chairman, for scheduling this hearing today.

Continuing difficulties surrounding implementation of the Endangered Species Act remain a clear problem for many in Colorado. From politicizing research to stopping property owners in their tracks, one ESA listing in my area has become very contentious.

The Preble's Meadow Jumping Mouse. This and similar mice are located throughout half of the North American continent.

The scientist who originally classified the Preble's mouse as a subspecies, Dr. Krutzsch, has since recanted his original work and no longer supports the original classification. Numerous recent scientific studies have concluded that the Preble's mouse is both physically and genetically indistinguishable from other similar mice. It should never have been listed.

With scientific evidence to the species' abundance and with the negative economic impacts on Colorado's economy, this listing is a classic example of environmental activists' abuse of federal ESA law to stop growth and development.

I support delisting of the Preble's mouse from Colorado's Threatened and Endangered Species List. The Fish and Wildlife Service has already removed its listing in Wyoming, and rightfully so. But in defiance of common sense, the mouse is suddenly threatened when you cross the state line going south.

The history of the ESA reveals an abysmal record of species recovery, less than one percent, at the great cost of loss of property rights, restricted access to public lands, and lawsuit abuse.

To our colleagues joining us today and their constituents, I sympathize with all those who've been caught in the middle of the ESA's crosshairs. It's time for Congress to make serious reform of the Endangered Species Act a reality.

Thank you, Mr. Chairman.

The CHAIRMAN. We will now proceed to our first panel composed of the following members: Robin Nazzaro, the Director of the Natural Resources and Environment, U.S. Government Accountability Office; R. Lyle Laverty, the Assistant Secretary for Fish and Wildlife and Parks, U.S. Department of the Interior, accompanied by Ren Lohofener of the Fish and Wildlife Service, U.S. Department of Interior, and Ed Shepard, Bureau of Land Management, U.S. Department of Interior; and our third panelist is Jane Luxton, the General Counsel, National Oceanic and Atmospheric Administration, U.S. Department of Commerce.

Ladies and gentlemen, we welcome you to our Committee. We have your prepared testimony, and it will be made part of the record as if actually read. You are encouraged to summarize within five minutes, and may proceed as you desire.

Ms. NAZZARO. I will go first.

The CHAIRMAN. We will go with Ms. Nazzaro first then.

STATEMENT OF ROBIN NAZZARO, DIRECTOR, NATURAL RESOURCES AND ENVIRONMENT, U.S. GOVERNMENT ACCOUNTABILITY OFFICE

Ms. NAZZARO. Thank you, Mr. Chairman and Members of the Committee. I am pleased to be here today to discuss the Endangered Species Act decision making at the Department of the Interior's U.S. Fish and Wildlife Service.

As has been noted, recent controversy has surrounded decisions specifically over whether the Service bases its decisions on sci-

entific data or on political considerations. Generally, Interior and the Service are required to use the best available scientific information when making key decisions under ESA.

Given this recent controversy, Interior directed the Service to review ESA decisions to determine which decisions may have been unduly influenced. In this action, the Service identified eight decisions for potential revision.

My statement today will address three issues: What types of decisions, if any, were excluded from the Service's review that may have been inappropriately influenced; to what extent the Service's May 2005 informal guidance affected the processing of petitions to list a species, which we refer to as the 90-day petition; and to what extent the Service has, before delisting species, met recovery criteria.

In summary, we found that several types of decisions were excluded from the Service's review of decisions that may have been inappropriately influenced. First, while the Service focused solely on whether former Deputy Assistant Secretary Julie MacDonald influenced the decision directly, we found that other Interior officials also influenced some ESA decisions.

For example, after reviewing a petition to list the Miami blue butterfly on an emergency basis, officials at all levels supported a recommendation for listing the species. Citing a Florida state management plan and the existence of a captive bred population, however, an Interior official besides Ms. MacDonald determined that emergency listing was not warranted.

The second criterion was that the scientific basis of the decision had been compromised. This criterion excluded policy decisions that limited the application of science. Under Ms. MacDonald, several informal policies were established that influenced how science was to be used when making ESA decisions. For example, a practice was developed that Service staff should generally not use site recovery plans, which contain important information when developing critical habitat designations.

Third, the Service excluded decisions that were changed, but not significantly or to the point of negative impact on the species. For example, under Ms. MacDonald's influence, subterranean waters were removed from the critical habitat designation for the Comal Springs invertebrates because the Service believed aboveground waters were more important habitat.

Finally, we identified several other categories of decisions that were excluded, including decisions that could not be reserved, such as decisions that had already been addressed by the courts or where development had already occurred and the habitats had been destroyed.

Regarding the May 2005 informal guidance on the processing of 90-day petitions, concerns were raised that this guidance would bias petition findings against listing species. In our survey of 54 petitioned findings issued by the Service from 2005 to 2007, we found that biologists used information in addition to that cited by the petitioner for both support and to refute listing petitions. Thus, this guidance had no substantive effect on petition findings.

The Service recognizes the need for guidance to eliminate confusion and inconsistency in the processing of 90-day petitions, but we

note that the need to finalize this guidance is more urgent than ever with the Service's recent receipt of two petitions to list 681 species since we found that none of the petitioned findings we reviewed were issued within the desired 90-day timeframe.

During 2005 through 2007, the median processing time was 900 days, or about two and a half years, with a range of 100 days to over 15 years. Additionally, this Service faces several challenges responding to court decisions issued since 2004 in the processing of these 90-day petitions.

Finally, of the eight species listed because of recovery from 2000 to 2007, the Service determined that recovery criteria were completely met for five species and partially met for the remaining three species. Although the ESA does not explicitly require the Service to follow recovery plans when delisting species, the courts have held that ESA's listing and delisting threat factors must be addressed to the maximum extent practicable when developing recovery criteria.

In 2006, we found that only five of 107 recovery plans contained either recovery criteria to demonstrate consideration of these threat factors, or a statement about why it was not practicable to include such criteria. In January of this year the Director of the Service issued a memorandum requiring all new and revised recovery plans to include criteria addressing each of the five threat factors. Assuming successful implementation of this directive, we believe that future delistings will more likely meet recovery criteria and address ESA's factors.

Mr. Chairman, this concludes my prepared statement. I would be happy to respond to any questions you or other Members of the Committee may have at this time.

[The prepared statement of Ms. Nazzaro follows:]

Statement of Robin M. Nazzaro, Director, Natural Resources and Environment, United States Government Accountability Office

Mr. Chairman and Members of the Committee:

I am pleased to be here today to discuss our work related to Endangered Species Act (ESA) decision making and allegations that implementation of the act has been tainted by political interference.¹ Recent controversy has surrounded decisions by the Department of the Interior's (Interior) U.S. Fish and Wildlife Service (Service), specifically, over the role that "sound science" plays in decisions made under the ESA—that is, whether the Service bases its decisions on scientific data or on political considerations. Generally, Interior and the Service are required to use the best available scientific information when making key ESA decisions. At Interior some of the controversy centered on whether a former Deputy Assistant Secretary, Julie MacDonald, improperly influenced ESA decisions so as to limit protections for threatened and endangered species. On the basis of an anonymous complaint in April 2006, Interior's Office of Inspector General began investigating Ms. MacDonald's activities and whether her involvement in ESA implementation had undermined species protection.² Ms. MacDonald resigned on May 1, 2007, and little over

¹The ESA requires that the law be implemented by the Secretaries of the Interior and Commerce, who have delegated implementation authority to the U.S. Fish and Wildlife Service and the National Oceanic and Atmospheric Administration's Fisheries Service, (formerly the National Marine Fisheries Service) respectively. The U.S. Fish and Wildlife Service is responsible for implementing the ESA for freshwater and terrestrial species. The National Oceanic and Atmospheric Administration's Fisheries Service is responsible for implementing the ESA for most marine species and anadromous fishes (which spend portions of their lifecycle in both fresh and salt water).

²Department of the Interior, Office of Inspector General, Investigative Report on Allegations against Julie MacDonald, Deputy Assistant Secretary, Fish, Wildlife and Parks (Washington,

a week later, the House Committee on Natural Resources held a hearing on political influence in ESA decision making.³ After the hearing, Interior asked the Service to determine which of its ESA decisions may have been inappropriately influenced by Ms. MacDonald.

In response to this directive, the Service identified eight decisions for further review, generally according to the following three criteria: (1) whether Ms. MacDonald influenced the decision directly, (2) was the scientific basis of the decision compromised, and (3) did the decision significantly change and result in a potentially negative impact on the species. The eight decisions selected for further review were out of a universe of more than 200 ESA decisions reviewed by Ms. MacDonald during her almost 5 years of employment at Interior. Upon further review, the Service concluded that seven of the eight selected decisions warranted revision. The Service has proposed revisions for three of the decisions and intends to revise the remaining decisions, as appropriate, in the coming years.

On December 17, 2007, we briefed your staff on our findings related to our work on the Service's review of ESA decisions that may have been inappropriately influenced. This testimony formally conveys the information provided during that briefing, as updated to reflect the most recent developments (see appendix III). In addition, this testimony presents the results of our work conducted since the December 2007 briefing on two other ESA issues.

The purpose of the ESA is to conserve threatened and endangered species and the ecosystems on which they depend. The act requires listing a species as endangered if it faces extinction throughout all or a significant portion of its range and as threatened if it is likely to become endangered in the foreseeable future.⁴ Specifically, in determining whether to list or delist a species, the Service evaluates the following five threat factors contained in the act:

1. whether a species' habitat or range is under a present or potential threat of destruction, modification, or curtailment;
2. whether the species is subject to overuse for commercial, recreational, scientific, or educational purposes;
3. the risk of existing disease or predation;
4. whether existing regulatory mechanisms are adequate; and
5. whether other natural or manmade factors affect a species' continued existence.⁵

The process to list a species begins either through the Service's own initiative or through a petition (referred to as a 90-day petition) from an "interested person," and it is governed by the ESA, federal regulations, and other guidance that the Service may issue. The Service may initiate a review of species without a petition by conducting a candidate assessment to determine whether a species ought to be listed.⁶ A species may also be listed through the petition process. The ESA directs the Service to make a finding within 90 days (to the maximum extent practicable) after receiving a petition "as to whether the petition presents substantial scientific or commercial information indicating that the petitioned action may be warranted."⁷ Federal regulations define "substantial information" as the amount of information that would lead a reasonable person to believe that the petitioned action may be warranted.⁸ If the Service determines that the listing process should proceed, it issues a "substantial" 90-day finding, then conducts an in-depth 12-month review of the

D.C.: Mar. 23, 2007). The Inspector General concluded that Ms. MacDonald had violated federal rules by sending internal agency documents to industry lobbyists. The Office of Inspector General issued a second investigative report on Ms. MacDonald's involvement in an ESA decision about the Sacramento splittail fish on November 27, 2007. This investigation concluded that Ms. MacDonald stood to gain financially from the decision and she should therefore have recused herself. Additionally, as of March 31, 2008, the Office of Inspector General was conducting a third investigation, concerning potential inappropriate political interference in ESA decisions for 20 species.

³ Endangered Species Act Implementation: Science or Politics? Oversight Hearing before the House Committee on Natural Resources, 110th Cong. (2007).

⁴ 16 U.S.C. §§ 1532(6), (20); 1533(a).

⁵ 16 U.S.C. § 1533(a)(1).

⁶ The Service's candidate conservation program maintains a list of species for which listing is warranted but precluded by other higher-priority actions. According to Service officials, the candidate conservation program can support actions to reduce or remove threats so that listing may become unnecessary. Candidate species may be identified through assessments initiated by the Service or through a 12-month finding on a petition to list a species when the finding concludes that listing is warranted but precluded by higher-priority listing actions. Candidate assessments use the same "best available science" standard as used for a 12-month finding on a petition to list a species.

⁷ 16 U.S.C. § 1533(b)(3)(A).

⁸ 50 C.F.R. § 424.14(b).

status of the species to determine if, according to the best available scientific and commercial information, the petitioned action is warranted. If the Service determines that the petition does not present credible evidence supporting plausible claims, it issues a negative, “not substantial” 90-day finding. A negative 90-day finding can be challenged in court.

In May 2005, the Service distributed a guidance document via e-mail to its endangered-species biologists that could have been interpreted as instructing them to use additional information collected to evaluate a 90-day petition only to refute statements made in the petition. Concerns then arose that this informal guidance would bias petition findings against listing species, thereby reducing the number of species that could have a chance at protection under the ESA.⁹

Environmental groups and the courts have also raised concern about the implementation of recovery plans for delisted species, specifically, that the Service has delisted species without fulfilling recovery criteria outlined in recovery plans. The ESA generally requires the Service to develop and implement recovery plans for the conservation of listed species.¹⁰ Since the act was amended in 1988, the Service has been required to incorporate, to the maximum extent practicable, several key elements in each recovery plan, including objective, measurable recovery criteria that, when met, would enable the species to be removed from the list of threatened or endangered species.¹¹ Recovery plans are not regulatory documents. Rather, they provide guidance on methods to minimize threats to listed species and on criteria that may be used to determine when recovery is achieved. To develop and implement a recovery plan, the Service may appoint a recovery team consisting of “appropriate public and private agencies and institutions, and other qualified persons.” After a recovery plan has been drafted or revised, the Service is required to provide public notice and an opportunity for public review and comment. Although the ESA does not explicitly require the Service to follow recovery plans when delisting species,¹² the possible high level of public involvement in the development of recovery plans creates the expectation that the Service will adhere to them.

In this context, from our December 2007 briefing, we are reporting on the types of ESA decisions, if any, excluded from the Service’s selection process of ESA decisions that had potentially been inappropriately influenced. Additionally, we are reporting on the extent to which the Service’s May 2005 informal guidance affected the Service’s decisions published from 2005 through 2007 on petitions to list or delist species and the extent to which the Service determined, before delisting, whether species met recovery criteria outlined in recovery plans.

To determine what types of ESA decisions, if any, were excluded from the Service’s selection process for decisions to review, we interviewed the Director of the Service and all eight regional directors, and we conducted site visits, phone interviews, or both with staff from ten field offices in five regions that were actively engaged in ESA decision making. We also reviewed Service policies and procedures for making ESA decisions, as well as documentation on the Service’s process for selecting decisions to review and on the status of the review. To evaluate the extent to which the May 2005 informal guidance affected 90-day petition findings, we surveyed 44 current and former Service biologists responsible for drafting 54 90-day petition findings issued from 2005 through 2007. We included only listing and delisting petitions for U.S. species; for this reason and others, we excluded 13 petition findings between 2005 and 2007 from our sample.¹³ To determine the extent

⁹Seventy-two percent of the 90-day petition findings published in the Federal Register from calendar years 2005 through 2007 were on petitions to list species as threatened or endangered. According to federal regulations (50 C.F.R. § 424.14), petitioned actions may include (1) petitions to list, delist, or reclassify species (reclassification would involve “up-listing” a species from threatened to endangered or “down-listing” a species from endangered to threatened); (2) petitions to revise critical habitat; and (3) petitions to designate critical habitat or adopt special rules. The remaining 28 percent of the 90-day petition findings published in the Federal Register from calendar years 2005 through 2007 were on petitions to delist species, reclassify species, or revise critical habitat designations.

¹⁰16 U.S.C. §§ 1533(f)(1)-(5). Recovery plans are not required if the Service determines that a plan will not promote the species’ conservation.

¹¹16 U.S.C. § 1533(f)(1)(B). As originally enacted in 1973, the ESA did not contain a requirement for recovery plans, see Pub. L. No. 93-305, 87 Stat. 884 (1973). A general provision on recovery plans was first added in 1978 by Pub. L. No. 95-632, § 11(5), 92 Stat. 3751, 3766 (1978). The general provision was amended in 1982 by Pub. L. No. 97-304, §§ 2(a)(4)(B)-(D), 96 Stat. 1411, 1415 (1982). The detailed provisions that exist today on recovery plans were largely added in 1988 by Pub. L. No. 100-478, title I, § 1003, 102 Stat. 2306-7 (1988).

¹²See 16 U.S.C. § 1533(a)(1); 50 C.F.R. § 424.11(c).

¹³We excluded 13 petition findings from our 2005-2007 sample for the following reasons: 5 had been overturned by the courts or were being redone as a result of a settlement agreement;

Continued

to which the Service met recovery criteria outlined in recovery plans before delisting a species, we developed a list of all U.S. species delisted because of recovery from 2000 through 2007 and reviewed recovery plans and Federal Register proposed and final delisting decisions (rules); this information indicated whether the Service believed that it had met the criteria laid out in the recovery plans for the eight delisted U.S. species we identified.

We conducted this performance audit from August 2007 to May 2008 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives. A more detailed discussion of our scope and methodology appears in Appendix I. Appendix II presents a table of the 90-day petition findings included and excluded from our sample.

Summary

Under the criteria the Service used to select decisions to review for possible inappropriate influence, several types of ESA decisions were excluded. First, while the Service focused solely on Ms. MacDonald, we found that other Interior officials also influenced some ESA decisions. For example, after reviewing a petition to list the Miami blue butterfly on an emergency basis, Service officials at all levels supported a recommendation for listing the species. Citing a Florida state management plan and existence of a captive-bred population, however, an Interior official besides Ms. MacDonald determined that emergency listing was not warranted, and the blue butterfly was designated as a candidate instead of a listed species. Second, the Service excluded policy decisions that limited the application of science, focusing instead only on those decisions where the scientific basis of the decision may have been compromised. Under Ms. MacDonald, several informal policies were established that influenced how science was to be used when making ESA decisions. Third, the Service excluded decisions that were changed but not significantly or to the point of negative impact on the species. Finally, we identified several other categories of decisions that in some or all cases were excluded from the Service's selection process. For example, decisions were excluded from the Service's selection process if it was determined that the decision could not be reversed or if it could not be conclusively determined that Ms. MacDonald changed the decision.

While the Service's May 2005 informal guidance had no substantive effect on the processing of 90-day petitions, the Service still faces other challenges in processing these petitions. Stakeholders have expressed concern that the May 2005 guidance was slanted more toward refuting petitioners' listing claims, rather than encouraging Service biologists to use information to both support and refute listing petitions; consequently, they feared that a greater number of negative 90-day petition findings would result. In our survey of 54 90-day petition findings issued by the Service from 2005 through 2007, we found that biologists used information in addition to that cited by the petitioner to both support and refute claims made in the petitions, as applicable, including during the 18-month period when the May 2005 informal guidance was being used. In November 2006, the Service distributed new draft guidance on the processing of 90-day petitions, which specified that additional information in Service files could be used to support and refute issues raised in the petition. Although the May 2005 informal guidance did not have a substantive effect on the Service's processing of 90-day petitions, the Service faces challenges in processing petitions in a timely manner and in responding to court decisions issued since 2004. None of the 90-day petition findings issued from 2005 through 2007 were issued within the desired 90-day time frame. During this period, the median processing time was 900 days, or about 2.5 years, with a range of 100 days to 5,545 days (more than 15 years). Additionally, the Service faces several challenges in responding to court decisions issued since 2004. For example, the Service has not developed new official guidance on how to process of 90-day petitions after a portion of the prior guidance was invalidated by the courts.

Of the eight U.S. species delisted from 2000 through 2007 because of recovery, the Service reported that recovery criteria were completely met for five species and partially met for the remaining three species because some recovery criteria were outdated or otherwise not achievable. When the delistings were first proposed, however, only two of the eight species had completely met all their respective recovery criteria. While the recovery criteria were not completely met in every case for each of

3 involved up-listing already protected species from threatened to endangered; 2 involved ongoing litigation; 2 involved species located outside the United States; and 1 involved a petition to revise a critical habitat designation for a species that was already protected.

the species we reviewed, the Service determined that the five threat factors listed in the ESA no longer posed a significant enough threat to the continued existence of the species to warrant continued listing as threatened or endangered. Since the ESA was amended in 1988, the Service has been required to incorporate in each recovery plan, to the maximum extent practicable, objective, measurable criteria that when met would result in a determination, in accordance with the provisions of the ESA, that the species should be removed from the list of threatened and endangered species (i.e., delisted). Courts have held that the Service must address the ESA's five threat factors for listing/delisting in developing recovery criteria, to the maximum extent practicable. In a 2006 report, we found that only 5 of the 107 recovery plans we reviewed included recovery criteria that addressed all five threat factors. We recommended that the Service include in recovery planning guidance direction that all new and revised recovery plans contain either recovery criteria to demonstrate consideration of all five threat factors or a statement about why it is not practicable to include such criteria. In January 2008, in response to our recommendation, the Director of the Service issued a memorandum requiring all new and revised recovery plans to include criteria addressing each of the five threat factors. Assuming successful implementation of this directive, future delistings should meet the criteria laid out in recovery plans, except in situations where new information indicates criteria are no longer valid.

Although we requested comments from Interior on our findings and conclusions, none were provided in time for them to be included as part of this testimony.

Background

In addition to 90-day petition findings, 12-month status reviews, listings, and delistings, other key categories of ESA decisions include critical habitat designations, recovery plans, section 7 consultations, and habitat conservation plans (see table 1).¹⁴

Table 1: Key Types of ESA Decisions

Decision	Description	Information used to make decision
Petition to list or delist (90-day petition finding)	Request for the Service to consider undertaking a 12-month review to determine whether listing or delisting a species is warranted	Information presented in the petition or information readily accessible in Service files
Listing, delisting	Analysis of whether a species warrants inclusion on or removal from the endangered or threatened list on the basis of its status	Best available scientific and commercial data
Critical habitat	Designation of habitat determined to be essential to a species' conservation	Best available scientific data, taking into consideration information on economic and other impacts
Recovery plan	Site-specific management plan for the conservation of listed species	Information from scientific experts, stakeholders, and others
Section 7 consultation	Determination of whether federal actions are likely to jeopardize the continued existence of listed species or result in the destruction or adverse modification of critical habitat	Best available scientific and commercial data
Habitat conservation plan	Development of a plan that allows landowners "incidental take" of listed species in conjunction with mitigating actions that protect the listed species on their land	Not specified

Source: GAO analysis of the ESA, federal regulations, and Service policies.

Service staff at headquarters, eight regional offices, and 81 field offices are largely responsible for implementing the ESA. Field office staff generally draft ESA decisions; listing, delisting, and critical habitat decisions are forwarded to regional and headquarters offices for review. Service headquarters forwards listing decisions to Interior's Office of Assistant Secretary for Fish and Wildlife and Parks for review, although it is the Service Director who generally approves the final decisions. The Assistant Secretary of the Interior for Fish and Wildlife and Parks makes final critical habitat decisions, after considering the recommendation of the Service and considering economic, national security, and other factors. Although the Service is responsible for making science-based decisions, Interior takes responsibility for applying policy and other considerations to scientific recommendations.

In most cases, ESA decisions must be based at least in part on the best available scientific information (see table 1). To ensure that the agency is applying the best available scientific information, the Service consults with experts and considers information from federal and state agencies, academia, other stakeholders, and the general public; some ESA decisions are both "peer reviewed" and reviewed internally to help ensure that they are based on the best available science. Nevertheless,

¹⁴Under the ESA the term "species" includes any distinct population segment of any species of vertebrate fish or wildlife which interbreeds when mature. 16 U.S.C. § 1532(16).

because of differing interpretations of “best available scientific information” and other key concepts from the ESA, such as “substantial” and “may be warranted,” conservation advocacy groups have expressed concerns that ESA decisions are particularly vulnerable to political interference from officials within Interior.

While Ms. MacDonald was at Interior in two positions from July 7, 2002, through May 1, 2007, she reviewed more than 200 ESA decisions. After a May 9, 2007, congressional hearing, Interior’s Deputy Secretary directed the Service Director to examine all work products produced by the Service and reviewed by Ms. MacDonald that could require additional review because of her involvement. Service Director Hall said the selection process should include any type of ESA decision made during Ms. MacDonald’s time in office. He delegated the selection process to the regional directors and granted them considerable discretion in making their selections for potential revision.

The regions generally applied three criteria to identify decisions for potential revision: (1) Ms. MacDonald influenced the decision directly, (2) the scientific basis of the decision was compromised, and (3) the decision was significantly changed and resulted in a potentially negative impact on the species. Using these criteria, the Service ultimately selected eight decisions for further review to determine if the decision warranted revision.¹⁵ After further review, the Service concluded that seven of the eight decisions warranted revision (see table 2).

Table 2: Result of the Service’s Selection Process and the Status of the Decisions Selected for Potential Revision

Species	Decision	Description of Ms. MacDonald’s involvement	Service actions to address decision
Twelve species of Hawaiian picture-wing flies	Proposed critical habitat	Reduced acreage to about 1 percent of scientific recommendation	Published an amended proposed critical habitat on November 28, 2007 (72 Fed. Reg. 67428)
Arroyo toad	Final critical habitat	Reduced area by more than 85 percent	The Service and plaintiffs are negotiating a settlement agreement regarding a date for issuing proposed and final revisions of the critical habitat designation for this species
California red-legged frog	Final critical habitat	Directed the Service to use minimum range and disregard some scientific studies	Propose a revised critical habitat rule on or before August 29, 2008. Issue final revised critical habitat rule on or before August 31, 2009.
White-tailed prairie dog	90-day petition finding	Reversed finding to “not substantial”	Initiate a status review on or before May 1, 2008. Issue a 12-month finding on or before June 1, 2010.
Prebles’ meadow jumping mouse	12-month review finding: proposed delisting	Directed the Service to use minority scientific opinion to support delisting	Withdrawn proposed delisting and published an amended proposed listing rule on November 7, 2007 (72 Fed. Reg. 62992)
Prebles’ meadow jumping mouse	Final critical habitat	Excluded three counties from critical habitat on the basis of habitat conservation plans that were not finalized	Revisit critical habitat when listing is final and funds are available
Canada lynx	Final critical habitat	Excluded U.S. Forest Service lands and private lands	Published a proposed rule describing revised critical habitat on February 28, 2008 (73 Fed. Reg. 10866)
Southwestern willow flycatcher	Final critical habitat	Reduced range area by about half	No action. The Service did not recommend revision of the critical habitat because the reduced range was scientifically supportable

Source: GAO.

Several Types of Decisions Were Excluded from the Service’s Review of Potentially Inappropriately Influenced ESA Decisions

Several types of decisions were excluded from the Service’s review of decisions that may have been inappropriately influenced. First, while the Service focused solely on Ms. MacDonald, we found that other Interior officials also influenced some ESA decisions. Ms. MacDonald was the primary reviewer of most ESA decisions during her tenure, but other Interior officials were also involved. For example, in the Southeast, after reviewing a petition to list the Miami blue butterfly on an emergency basis, Service officials at all levels supported a recommendation for listing the species. Citing a Florida state management plan and existence of a captive-bred population, however, an Interior official other than Ms. MacDonald determined

¹⁵ Initially, the regional offices identified a total of 11 decisions for potential revision. One of these, on the Mexican garter snake, was subsequently withdrawn after further discussion determined that the decision was made internally by Service headquarters. Two additional decisions, regarding the bull trout and the marbled murrelet, were withdrawn by the region after it was determined that neither decision involved the inappropriate use of science but rather involved policy interpretations.

that emergency listing was not warranted, and the blue butterfly was instead designated as a candidate, not a listed species.

Second, the Service excluded policy decisions that limited the application of science, focusing instead only on those decisions where the scientific basis of the decision may have been compromised. Under Ms. MacDonald, several informal policies were established that influenced how science was to be used when making ESA decisions. For example, a practice was developed that Service staff should generally not use or cite recovery plans when developing critical habitat designations. Recovery plans can contain important scientific information that may aid in making a critical habitat designation. One Service headquarters official explained, however, that Ms. MacDonald believed that recovery plans were overly aspirational and included more land than was absolutely essential to the species' recovery. Under another informal policy, the ESA wording "occupied by the species at the time it is listed" was narrowly applied when designating critical habitat. Service biologists were restricted to interpreting occupied habitat as only that habitat for which they had records showing the species to be present within specified dates, such as within 10 years of when the species was listed. In the case of the proposed critical habitat for the bull trout, Ms. MacDonald questioned Service biologists' conclusions about the species' occupied habitat. As a result, some proposed critical habitat areas were removed, in part because occupancy by the species could not be ascertained.

Third, the Service excluded decisions that were changed but not significantly or to the point of negative impact on the species. For example, under Ms. MacDonald's influence, subterranean waters were removed from the critical habitat designation for Comal Springs invertebrates. Service staff said they believed that the exclusion of subterranean waters would not significantly affect the species because above-ground waters were more important habitat. They also acknowledged that not much is known about these species' use of subterranean waters.

Finally, we identified several other categories of decisions that, in some or all cases, were excluded from the Service's selection process. For example, in some cases that we identified, decisions that had already been addressed by the courts were excluded from the Service's selection process; decisions that could not be reversed were also excluded. In the case of the Palos Verdes blue butterfly, Navy-owned land that was critical habitat was exchanged after involvement by Ms. MacDonald in a section 7 consultation. As a result, the habitat of the species' last known wild population was destroyed by development, and therefore reversing the decision would not have been possible. Additionally, decisions were excluded from the Service's selection process if it was determined that review would not be an efficient use of resources or if it could not be conclusively determined that Ms. MacDonald altered the decision. Several Service staff cited instances where they believed that Ms. MacDonald had altered decisions, but because the documentation was not clear, they could not ascertain that she was responsible for the changes. Additionally, decisions that were implicitly attributed to Ms. MacDonald were excluded from the selection process. Service staff described a climate of "Julie-proofing" where, in response to continual questioning by Ms. MacDonald about their scientific reasoning, they eventually learned to anticipate what might be approved and wrote their decisions accordingly.

The Service's May 2005 Informal Guidance Had No Substantive Effect on 90-Day Petition Findings, Although Other Challenges Exist

While the Service's May 2005 informal guidance had no substantive effect on the processing of 90-day petition findings, the Service still faces several other challenges in processing these petitions. Stakeholders have expressed concern that the wording of the May 2005 guidance was slanted more toward refuting petitioners' listing claims, rather than encouraging Service biologists to use information to both support and refute listing petitions; consequently, they feared that a greater number of negative 90-day petition findings would result. According to a senior Service official, it was never the Service's position that information collected to evaluate a petition could be used to support only one side, specifically, only to refute the petition. Rather, according to a senior Service official, its position is and has been that additional collected information can be used to either support or refute information presented in the petition; any additional information is not, however, to be used to augment or supplement a "weak" petition by raising new issues not already presented. According to the ESA, the petition itself must present "substantial scientific or commercial information indicating that the petitioned action may be warranted."¹⁶ Our survey of Service biologists responsible for drafting the 90-day petition findings issued from 2005 through 2007 found that the biologists generally used additional

¹⁶ 16 U.S.C. § 1533(b)(3)(A).

information, as applicable, to support as well as refute information in the petitions.¹⁷ The Service is facing several challenges with regard to the processing of 90-day petition findings. In particular, the Service finds it difficult to issue decisions within the desired 90-day time frame and to adjust to various court decisions issued in the last 4 years.

Notwithstanding the Service's May 2005 Informal Guidance, Additional Information Collected by Service Biologists Was Used to Support and Refute 90-day Petitions

In our survey of 44 Service biologists who prepared 54 90-day petition findings from 2005 through 2007, we found that additional information collected to evaluate the petitions was generally used, as applicable, to both support and refute information in the petitions, including during the 18-month period when the May 2005 informal guidance was being used.¹⁸ The processing of 90-day petition findings is governed by the ESA, federal regulations, and various guidance documents distributed by the Service. To direct the implementation of the law and regulations, and to respond to court decisions, the Service issues guidance, which is implemented by Service staff in developing 90-day petition findings. This guidance can come in formal policies and memorandums signed by the Service Director, or informal guidance not signed by the Director but distributed by headquarters to clarify what information should be used and how it should be used in processing petitions. In July 1996, the Service issued a formal policy, called Petition Management Guidance, governing 90-day petition findings and 12-month status reviews.¹⁹ A component of this document was invalidated by the District of Columbia district court in June 2004.²⁰ According to senior Service officials, since 2004 the Service has distributed a series of instructions through e-mails, conference calls, and draft guidance documents to clarify the development of 90-day petition findings. For example, in May 2005, the Service distributed via e-mail an informal guidance document that directed its biologists to create an outline listing additional information—that is, information not cited or referred to in a petition—that refuted statements made in the petition; biologists were not to list in the outline any additional information that may have clarified or supported petition statements.²¹

We identified a universe of 67 90-day petition findings issued by the Service from 2005 through 2007. To focus on how the Service used information to list or delist U.S. species, we surveyed Service biologists responsible for drafting 54 of the 67 90-day petition findings. For the 54 90-day petitions included in our survey, 40 were listing petitions, and 14 were delisting petitions; 25 resulted in positive 90-day petition findings, and 29 resulted in negative 90-day petition findings (see table 3).

¹⁷In making a 90-day petition finding, the Service must consider whether the petition: (1) clearly indicates the administrative measure recommended and gives scientific and common names of the species involved; (2) contains detailed narrative justification for the recommended measure, describing, according to available information, past and present numbers and distribution of the species involved and any threats faced by the species; (3) provides information on the status of the species over all or a significant portion of its range; and (4) is accompanied by appropriate supporting documentation in the form of bibliographic references, reprints of pertinent publications, copies of reports or letters from authorities, and maps. 50 C.F.R. § 424.14(b)(2).

¹⁸A senior Service official stated that, according to memory, no other informal guidance documents were issued during this 18-month period. If specific questions were asked by a particular region or field office, however, informal guidance could have been given by officials at Service headquarters through e-mail.

¹⁹See 61 Fed. Reg. 36075 (July 9, 1996). This guidance was issued jointly by the Service and the National Oceanic and Atmospheric Administration's Fisheries Service.

²⁰ALA v. Norton, Civ. No. 00-2339, 2004 WL 3246687 at *3 (D.D.C. June 2, 2004).

²¹A senior Service official stated that the emphasis was put on compiling information to refute petitioners' claims because if a petition was found to be "not substantial," the 90-day petition finding was the agency's final action on that petition. The Service therefore needed to adequately document in the administrative record the reasons that the petition was denied.

Table 3: Outcomes of the Service's 90-day Petition Findings Issued from 2005 through 2007

Issuance date for 90-day petition findings	Number of positive, or "substantial," petition findings	Number of negative, or "not substantial," petition findings	Total number of petition findings	Percentage of negative findings
54 petition findings included in our survey sample				
Jan. 2005–Apr. 2005	4	2	6	33%
May 2005–Nov. 2006	13	17	30	57
Dec. 2006–Dec. 2007	8	10	18	56
Subtotal	25	29	54	54%
13 petition findings excluded from our survey sample				
Jan. 2005–Dec. 2007	2	11*	13	85
Total	27	40	67	60%

Source: GAO.

Note: The first time period, January 2005 through April 2005, includes the 90-day petition findings in our sample issued before the May 2005 informal guidance was being used. The second time period, May 2005 through November 2006, includes the 18-month period when the May 2005 information guidance was being used. The third time period, December 2006 through December 2007, includes the 90-day petition findings in our sample issued after the May 2005 informal guidance was superseded by new draft guidance in November 2006.

Five of these decisions have been or are being revised as the result of litigation, and two additional decisions were involved in ongoing litigation as of March 31, 2008.

In November 2006, the Service distributed new draft guidance on the processing of 90-day petitions, which specified that additional information in Service files could be used to refute or support issues raised in the petition but not to "augment a weak petition" by introducing new issues. For example, if a 90-day petition to list a species claimed that the species was threatened by predation and habitat loss, the Service could not supplement the petition by adding information describing threats posed by disease. The May 2005 informal guidance was thus in use until this November 2006 guidance was distributed, or approximately 18 months.

Our survey results showed that in most cases, the additional information collected by Service biologists when evaluating 90-day petitions was used to support as well as refute information in petitions (see table 4). According to the Service biologists we surveyed, additional information was used exclusively to refute information in 90-day petitions in only 8 of 54 cases. In these 8 cases, the biologists said, this approach was taken because of the facts, circumstances, and the additional information specific to each petition, not because they believed that it was against Service policy to use additional information to support a petition. In particular, with regard to the 4 petitions processed during May 2005 through November 2006 for which additional information was used exclusively to refute petition information, the biologists stated that the reasons they did not use information to support claims made in the petition was that either the claims themselves did not have merit or the information reviewed did not support the petitioner's claims. Three of the four biologists responsible for these petitions also stated that they did not think it was against Service policy to use additional information to support issues raised in a petition. The fourth biologist was uncertain whether it was against Service policy to support issues raised in a petition.²²

²²The biologist did not cite the May 2005 guidance when asked what guidance was followed in evaluating the petition, so it is unlikely that the finding was affected by the May 2005 guidance document.

Table 4: How Service Biologists Used Additional Information from 2005 through 2007 to Evaluate 54 90-day Petitions Included in Our Survey

Issuance date for 90-day petition findings	Support and refute	Support only	Refute only	Did not use additional information	Total
Jan. 2005–Apr. 2005	2	1	2	1	6
May 2005–Nov. 2006	17	5	4	4	30
Dec. 2006–Dec. 2007	13	1	2	2	18
Total	32	7	8	7	54

Source: GAO.

The Service Faces Challenges in Processing 90-Day Petitions in a Timely Manner and in Responding to Court Decisions Issued Since 2004

While the May 2005 informal guidance did not have a substantive effect on the Service's processing of 90-day petitions, the Service still faces challenges in processing 90-day petitions in a timely manner and in responding to court decisions issued since 2004. None of the 90-day petition findings issued from 2005 through 2007 were issued within the desired 90-day time frame. During this period, the median processing time was 900 days, or about 2.5 years, with a range of 100 days to 5,545 days (more than 15 years).²³ According to Service officials, almost all of their ESA workload is driven by litigation. Petitioners have brought a number of individual cases against the Service for its failure to respond to their petitions in a timely manner. This issue presents continuing challenges because the Service's workload increased sharply in the summer of 2007, when it received two petitions to list 475 and 206 species, respectively.

The Service is also facing several management challenges stemming from a number of court decisions since 2004:

- According to senior Service officials, the Service currently has no official guidance on how to develop 90-day petition findings, partially because of a 2004 court decision invalidating part of the Service's 1996 Petition Management Guidance. The Service's official 1996 Petition Management Guidance contained a controversial provision that treated 90-day petitions as "redundant" if a species had already been placed on the candidate list via the Service's internal process.²⁴ In 2004, a federal district court issued a nationwide injunction striking down this portion of the guidance.²⁵ Senior service officials stated that the Service rescinded use of the document in response to this court ruling and began an iterative process in 2004 to develop revised guidance on the 90-day petition process. According to these officials, guidance was distributed in piecemeal fashion, dealing with individual aspects of the process in the form of e-mails, conference-call discussions, and various informal guidance documents. Our survey respondents indicated that the lack of official guidance created confusion and inefficiencies in processing 90-day petitions. Specifically, survey respondents were confused on what types of additional information they could use to evaluate 90-day petitions—whether they were limited to information in Service files, or whether they could use information solicited from their professional contacts to clarify or expand on issues raised in the petition. Several survey respondents also stated that unclear and frequently changing guidance resulted in longer processing times for 90-day petition findings, which was frustrating because potentially endangered species decline further as the Service determines whether they are worthy of protection. Further complicating matters, 31 of the 44 biologists we surveyed, or 70 percent, had never drafted a 90-day peti-

²³ Processing times were calculated as number of days from the date the Service received the petition (or the date the petition was written, if the date of receipt was unavailable) to the date the associated finding was published in the Federal Register.

²⁴ Some of the 281 species on the candidate list have been waiting for a proposed listing decision for more than a decade.

²⁵ ALA v. Norton, Civ. No. 00-2339, 2004 WL 3246687 at *3 (D.D.C. June 2, 2004) (permanent nationwide injunction based on Gunnison sage grouse). See also ALA v. Norton, 242 F. Supp. 2d 1, 18 (2003) (declaring this aspect of the guidance to be invalid). The adequacy of the guidance was also challenged in a 2001 decision, Center for Biological Diversity v. Gale Norton, 254 F.3d 833, 838-40 (2001) (holding that provisions of the guidance related to candidate species violated the ESA).

tion finding before. According to a senior Service official, the Service is planning to issue official guidance on how 90-day petition findings should be developed to eliminate confusion and inconsistencies.

- With regard to the use of outside information in evaluating petitions, the Service must continue to adapt to a number of court decisions dating back to 2004 holding that the Service should not solicit information from outside sources in developing 90-day petition findings. A December 2004 decision by the U.S. District Court for the District of Colorado stated that the Service's "consideration of outside information and opinions provided by state and federal agencies during the 90-day review was overinclusive of the type of information the ESA contemplates to be reviewed at this stage...[and] those petitions that are meritorious on their face should not be subject to refutation by information and views provided by selected third parties solicited by [the Service]." ²⁶ Since then, several other courts have reached similar conclusions. ²⁷ Despite the constancy of various courts' holdings, 25 out of the 54 90-day petition findings in our survey, or 46 percent, were based in part on information from outside sources, according to Service biologists.
- In addition, the Service must continue to adapt to a number of court decisions since 2004 on whether it is imposing too high a standard in evaluating 90-day petitions. This issue—essentially, what level of evidence is required at the 90-day petition stage and how this evidence should be evaluated—goes hand in hand with the issue of using additional information outside of petitions in reaching ESA decisions. In overturning three negative 90-day petition findings, three recent court decisions in 2006 and 2007 have held, in part, that the Service imposed too high a standard in evaluating the information presented in the petitions. ²⁸ These court decisions have focused on the meaning of key phrases in the ESA and federal regulations, such as "substantial" information, "a reasonable person," and "may be warranted." In 2006, the U.S. District Court for the District of Montana concluded that the threshold necessary to pass the 90-day petition stage and move forward to a 12-month review was "not high." ²⁹ Again, some Service officials are concerned that these recent court decisions may lead to approval of more 90-day petitions, thus moving them forward for in-depth 12-month reviews and straining the Service's limited resources.

Beyond these general challenges, the Service's 90-day petition finding in a recent case involving the Sonoran Desert population of the bald eagle has come under severe criticism by the U.S. District Court for the District of Arizona. ³⁰ The court noted that Service scientists were told in a conference call that headquarters and regional Service officials had reached a "policy call" to deny the 90-day petition and that "we need to support [that call]." A headquarters official made this statement even though the Service had been unable to find information in its files refuting the petition and even though at least some Service scientists had concluded that listing may be warranted. The court stated that the Service participants in a July 18, 2006, conference call appeared to have received "marching orders" and were directed to find an analysis that fit a 90-day finding that the Sonoran Desert population of the bald eagle did not constitute a distinct population segment. The court stated that "these facts cause the Court to have no confidence in the objectivity of the agency's decision-making process in its August 30, 2006, 90-day finding." In contrast, in a

²⁶ Center for Biological Diversity v. Morganweck, 351 F. Supp. 2d 1137, 1143 (D. Colo. 2004).

²⁷ Colorado River Cutthroat Trout, et al. v. Kempthorne, 448 F. Supp. 2d 170 (2006); Western Watersheds Project v. Norton, Civ. No. 06-127, 2007 WL 2827375 (D. Idaho Sept. 6, 2007) (pygmy rabbit); Center for Biological Diversity v. Kempthorne, Civ. No. 07-0038, 2008 WL 6598322 (D. Ariz. March 6, 2008) (Sonoran desert population of bald eagle). The Service's May 2005 informal guidance directed biologists to use information in Service files or "other information," which the guidance did not elaborate on. The Service's November 2006 draft guidance stated that biologists should identify and review "readily available information within Service files" as part of evaluating information contained in petitions. The biologists we surveyed expressed confusion and lack of consensus on the meaning of the terms "readily available" and "within Service files." Some Service officials were concerned that if information solicited from outside sources could not be considered in developing 90-day petition findings, many more 90-day petitions would be approved and moved forward for in-depth 12-month reviews, further straining the Service's limited resources.

²⁸ Defenders of Wildlife v. Kempthorne, Civ. No. 05-99 (D. Mont. Sept. 29, 2006) (wolverine); Center for Biological Diversity v. Kempthorne, Civ. No. 06-04186, 2007 WL 163244 (N.D. Cal. Jan. 19, 2007) (Siskiyou Mountains salamander and Scott Bar salamander); Western Watersheds Project v. Norton, Civ. No. 06-127, 2007 WL 2827375 (D. Idaho Sept. 6, 2007) (pygmy rabbit).

²⁹ Defenders of Wildlife v. Kempthorne, Civ. No. 05-99, slip op. at 20 (D. Mont. Sept. 29, 2006).

³⁰ Center for Biological Diversity v. Kempthorne, Civ. No. 07-0038, 2008 WL 659822 (D. Ariz. Mar. 6, 2008).

September 2007 decision, the U.S. District Court for the District of Idaho upheld the Service's "not substantial" 90-day petition findings on the interior mountain quail distinct population segment.³¹

Recovery Criteria for Threatened and Endangered Species Were Generally Met in Final Delisting Decisions but Not in Proposed Delisting Decisions

Of the eight U.S. species delisted from 2000 through 2007 because of recovery, the Service reported that recovery criteria were completely met for five species and partially met for the remaining three species. When the delistings were first proposed, however, the respective recovery criteria for only two of the eight species had been completely met. Although the ESA does not specifically require the Service to meet recovery criteria before delisting a species, courts have held that the Service must address the ESA's five threat factors for listing/delisting, to the maximum extent practicable, in developing recovery criteria. For each of the delisted species that we reviewed, the Service determined that the five threat factors listed in the ESA no longer posed a significant enough threat to the continued existence of the species to warrant continued listing as threatened or endangered.

Table 5 summarizes whether the recovery criteria for the eight species delisted from 2000 through 2007 were partially or completely met at the proposed rule stage and the final rule stage. At the proposed rule stage, only two of the eight species had completely met their respective recovery criteria; that fraction increased to five of eight at the final rule stage. The period between the proposed rules and the final rules ranged from less than 1 year for the gray wolf's western Great Lakes distinct population segment to just over 8 years for the bald eagle.

Table 5: The Extent to Which Recovery Criteria Were Met for the Eight U.S. Species Delisted from 2000 through 2007 Because of Recovery

Species	Proposed Delisting Rule	Recovery criteria met	Final Delisting Rule	Recovery criteria met
Gray wolf: western Great Lakes distinct population segment	71 Fed. Reg. 15266 (Mar. 27, 2006)	Completely	72 Fed. Reg. 6051 (Feb. 8, 2007)	Completely
Hoover's woolly-star	66 Fed. Reg. 13474 (Mar. 6, 2001)	Completely	68 Fed. Reg. 57829 (Oct. 7, 2003)	Completely
Bald eagle*	64 Fed. Reg. 36454 (July 8, 1999)	Partially	72 Fed. Reg. 37345 (July 9, 2007)	Completely
Eggert's sunflower	69 Fed. Reg. 17627 (Apr. 5, 2004)	Partially	70 Fed. Reg. 48482 (Aug. 18, 2005)	Completely
Robbins' cinquefoil	66 Fed. Reg. 30860 (June 8, 2001)	Partially	67 Fed. Reg. 54968 (Aug. 27, 2002)	Completely
Grizzly bear: Yellowstone distinct population segment	70 Fed. Reg. 69854 (Nov. 17, 2005)	Partially	72 Fed. Reg. 14865 (Mar. 29, 2007)	Partially
Columbian white-tailed deer: Douglas County distinct	64 Fed. Reg. 25263 (May 11, 1999)	Partially	68 Fed. Reg. 43647 (July 24, 2003)	Partially
Aleutian Canada goose	64 Fed. Reg. 42058 (Aug. 3, 1999)	Partially	66 Fed. Reg. 15643 (Mar. 20, 2001)	Partially

Source: U.S. Fish and Wildlife Service and the Federal Register.

A federal district court prevented the delisting of the Sonoran Desert population of the bald eagle, pending a 12-month status review and lawful determination of its status as a distinct population segment.

For the species where the criteria were not completely met before final delisting, the Service indicated that the recovery criteria were outdated or otherwise not feasible to achieve. For example, the recovery plan for the Douglas County population of Columbian white-tailed deer was originally developed in 1976 and later updated in 1983. The recovery plan recommended maintaining a minimum population of 500 animals distributed in suitable, secure habitat within Oregon's Umpqua Basin. The Service reported it was not feasible to demonstrate, without considerable expense, that 500 specific deer live entirely within secure lands managed for their benefit, for most deer move between public and private lands. Even though this specific recovery criterion was not met, the Service indicated that the species warranted delisting because of the overall increase in its population and amount of secure habitat.

The West Virginia northern flying squirrel, whose final delisting decision was pending at the time of our review, offers an example of a species proposed for delisting even though the recovery criteria have not been met. The species was proposed for delisting on December 19, 2006.³² The squirrel's recovery plan was developed in 1990 and amended in 2001 to incorporate guidelines for habitat identification and management in the Monongahela National Forest, which supports almost

³¹Western Watersheds Project v. Hall, Civ. No. 06-0073, 2007 WL 2790404 (D. Idaho Sept. 24, 2007).

³²71 Fed. Reg. 75924 (Dec. 19, 2006).

all of the squirrel's populations. The Service asserted that, other than the 2001 amendment, the West Virginia northern flying squirrel recovery plan is outdated and no longer actively used to guide recovery. This was in part because the squirrel's known range at the time of proposed delisting was much wider than the geographic recovery areas designated in the recovery plan and because the recovery areas have no formal or regulatory distinction. In support of its delisting decision, the Service indicated that the squirrel population had increased and that suitable habitat had been expanding. The Service drew these conclusions largely on the basis of a 5-year review—an ESA-mandated process to ensure the continued accuracy of a listing classification—completed in 2006, and not on the basis of the squirrel's 1990 recovery plan. The Service also reported that the recovery plan's criteria did not specifically address the five threat factors.

According to the Service, most recovery plan criteria have focused on demographic parameters, such as population numbers, trends, and distribution. While the Service acknowledges that these types of criteria are valid and useful, it also cautions that, by themselves they are not adequate for determining a species' status. The Service reports that recovery can be accomplished via many paths and may be achieved even if not all recovery criteria are fully met. A senior Service official noted that the quality of recovery plans varies considerably, and some criteria may be outdated. Furthermore, Service officials also noted, recovery plans are fluid documents, and the plan's respective criteria can be updated as new threat information about a particular species becomes available.

While the ESA does not specifically require the Service to meet recovery criteria before delisting a species, courts have held that it must address each of the five threat factors to the maximum extent practicable when developing recovery criteria.³³ In a 2006 report, we provided information on 107 randomly sampled recovery plans covering about 200 species.³⁴ Specifically, we found that only 5 of the 107 reviewed recovery plans included recovery criteria that addressed all five threat factors. We recommended that in recovery planning guidance, the Service include direction that all new and revised recovery plans contain either recovery criteria to demonstrate consideration of all five threat factors or a statement about why it is not practicable to include such criteria. In January 2008, in response to our recommendation, the Director of the Service issued a memorandum requiring all new and revised recovery plans to include criteria addressing each of the five threat factors.

Concluding Observations

In conclusion, Mr. Chairman, questions remain about the extent to which Interior officials other than Ms. MacDonald may have inappropriately influenced ESA decisions and whether broader ESA policies should be revisited. Under the original direction from Interior's Deputy Secretary and the three selection criteria followed by the Service, a variety of ESA decisions were excluded from the selection process. Broadening the scope of the review might have resulted in the selection of more decisions, but it is unclear to what extent. The Service recognizes the need for official guidance on how 90-day petition findings should be developed to eliminate confusion and inconsistencies. The guidance will need to reflect the Service's implementation of recent court decisions on how far the Service can go in collecting additional information to evaluate 90-day petitions and reflect what standards should be applied to determine if a petition presents "substantial" information. The need for clear guidance is more urgent than ever with the Service's receipt in the summer of 2007 of two petitions to list 681 species.

Assuming successful implementation of the Service's January 2008 directive that recovery criteria be aligned with the five threat factors in the ESA, we believe that future delistings will more likely meet recovery criteria while also satisfying the ESA's delisting requirements based on the five threat factors.

³³ See *Defenders of Wildlife v. Babbitt*, 130 F. Supp. 2d 121 (D.D.C. 2001); *Fund for Animals v. Babbitt*, 903 F. Supp. 96 (D.D.C. 1995). In *Defenders of Wildlife*, the court remanded the recovery plan to the Service to incorporate delisting criteria or to provide an adequate explanation of why delisting criteria could not practicably be incorporated. In *Fund for Animals*, the court remanded the plan back to the Service for revision of the recovery criteria.

³⁴ GAO, *Endangered Species: Time and Costs Required to Recover Species Are Largely Unknown*, GAO-06-463R (Washington D.C.: Apr. 6, 2006). The random sample of 107 recovery plans included 99 recovery plans (covering 192 species) for which the Service has either primary responsibility or shared responsibility with the National Oceanic and Atmospheric Administration's Fisheries Service, and 8 recovery plans (covering 9 species) for which the National Oceanic and Atmospheric Administration's Fisheries Service has primary responsibility.

Agency Comments

We provided Interior with a draft of this testimony for review and comment. However, no comments were provided in time for them to be included as part of this testimony. Mr. Chairman, this completes my prepared statement. I would be happy to respond to any questions you or other members of the Committee may have at this time.

GAO Contacts and Staff Acknowledgments

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GAO Highlights

U.S. FISH AND WILDLIFE SERVICE
ENDANGERED SPECIES ACT DECISION MAKING

Why GAO Did This Study

The Department of the Interior's (Interior) U.S. Fish and Wildlife Service (Service) is generally required to use the best available scientific information when making key decisions under the Endangered Species Act (ESA). Controversy has surrounded whether former Deputy Assistant Secretary Julie MacDonald may have inappropriately influenced ESA decisions by basing decisions on political factors rather than scientific data. Interior directed the Service to review ESA decisions to determine which decisions may have been unduly influenced.

ESA actions include, among others, 90-day petition findings, 12-month listing or delisting findings, and recovery planning. The Service distributed informal guidance in May 2005 on the processing of 90-day petitions. Recovery plans generally must include recovery criteria that, when met, would result in the species being delisted.

GAO examined three separate issues: (1) what types of decisions, if any, were excluded from the Service's review of decisions that may have been inappropriately influenced; (2) to what extent the Service's May 2005 informal guidance affected 90-day petition findings; and (3) to what extent the Service has, before delisting species, met recovery criteria. GAO interviewed Service staff, surveyed Service biologists, and reviewed delisting rules and recovery plans. Interior did not provide comments in time for them to be included in this testimony.

What GAO Found

Several types of decisions were excluded from the Service's review of decisions that may have been inappropriately influenced. Using the following selection criteria, the Service identified eight ESA decisions for potential revision: (1) whether Ms. MacDonald influenced the decision directly, (2) was the scientific basis of the decision compromised, and (3) did the decision significantly change and result in a potentially negative impact on the species. The Service excluded (1) decisions made by Interior officials other than Ms. MacDonald, (2) policy decisions that limited the application of science, and (3) decisions that were changed but not significantly or to the point of negative impact on the species.

The Service's May 2005 informal guidance had no substantive effect on 90-day petition findings. In May 2005, Service headquarters distributed a guidance document via e-mail to endangered-species biologists that could have been interpreted as instructing them to use additional information collected to evaluate a 90-day petition only to refute statements made therein. GAO's survey of 90-day petition findings issued by the Service from 2005 through 2007 found that biologists used additional information collected to evaluate petitions to both support and refute claims made in the petitions, as applicable, including during the 18-month period when the May 2005 informal guidance was being used. However, GAO found that the Service faces various other challenges in processing petitions, such as making decisions within 90 days and adjusting to recent court decisions. None of the 90-day petition findings issued from 2005 through 2007 were issued within the desired 90-day time frame. During these years, the median processing time was 900 days, or about 2.5 years, with a range of 100 days to 5,545 days (over 15 years). Additionally, the Service faces several challenges in responding to court decisions issued since 2004. For example, the Service has not yet developed new official guidance on how to process 90-day petitions after the courts invalidated a portion of the prior guidance.

Finally, of the eight species delisted because of recovery from 2000 through 2007, the Service determined that recovery criteria were completely met for five species and partially met for the remaining three species because some recovery criteria were outdated or otherwise not feasible to achieve. When the delistings were first proposed, however, only two of the eight species had completely met all their respective recovery criteria. Although the ESA does not explicitly require the Service to follow recovery plans when delisting species, courts have held that the Service must address the ESA's listing/delisting threat factors to the maximum extent practicable when developing recovery criteria. In 2006, GAO reported that the Service's recovery plans generally did not contain criteria specifying when a species could be recovered and removed from the endangered species list. Earlier this year, in response to GAO's recommendation, the Service issued a directive requiring all new and revised recovery plans to include criteria addressing each of the ESA's listing/delisting threat factors.

Appendix I: Objectives, Scope, and Methodology

We are reporting on (1) what types of decisions, if any, were excluded from the U.S. Fish and Wildlife Service's (Service) selection process of Endangered Species Act (ESA) decisions that were potentially inappropriately influenced; (2) the extent to which the Service's May 2005 informal guidance affected the Service's decisions on petitions to list or delist species; and (3) the extent to which the Service determined, before delisting, whether species met recovery criteria outlined in recovery plans.

To address our first objective, we interviewed the Director of the Service, all eight regional directors, and key regional staff. Also, we conducted site visits, phone interviews, or both with ESA staff from ten field offices in five regions that were actively engaged in ESA decision making. Further, we reviewed documentation developed by Service headquarters, regions, and field offices about the selection process and the status of the Service's review. In addition, we reviewed Service policies and procedures for making ESA decisions and reviewed other species-specific information.

To address our second objective, we identified 67 90-day petition findings issued by the Service from 2005 through 2007 and conducted structured telephone interviews of current and former Service biologists responsible for drafting 90-day petition findings issued in that time frame. Of the 67, we excluded 13 petition findings from our survey: 5 had been overturned by the courts or were being redone as a result of a settlement agreement; 3 involved up-listing already protected species from threatened to endangered; 2 involved ongoing litigation; 2 involved species located outside the United States; and 1 involved a petition to revise a critical habitat designation for a species that was already protected. In total, we surveyed 44 biologists responsible for drafting 54 90-day petition findings. To identify the lead author responsible for drafting the 90-day petition findings in our survey, we contacted the field office supervisor at the office where the petition finding was drafted. The field office supervisor directed us to the biologist who was the lead author of the finding or, if that person was not available, a supporting or supervising biologist. Of the 44 biologists we surveyed, 39 were lead biologists in drafting the finding, 3 were supervising biologists, and 2 were supporting biologists. From February 1, 2008, and February 6, 2008, we pretested the survey with 5 biologists from three regions between, and we used their feedback to refine the survey. The five 90-day petition findings we selected for the pretest were all published in 2004 to most closely approximate, but not overlap with, our sample. They represented a balance between listing and delisting petitions, substantial and not substantial findings, and types of information used in evaluating the petition as stated in the Federal Register notice. We conducted the pretests through structured telephone interviews to ensure that (1) the questions were clear and unambiguous, (2) terms were precise, and (3) the questions were not sensitive and that the questions as phrased could be candidly answered. A GAO survey specialist also independently reviewed the questionnaire.

Our structured interview questions were designed to obtain information about the process the Service uses in making 90-day petition findings under the ESA and the types of information used to draft each 90-day petition finding. Specifically, the structured questions focused on information that was not cited or referred to in a listing or delisting petition but was either internal to Service files or obtained from sources outside the Service.¹ In each of these categories, we asked whether the information was used to support, refute, or raise new issues not cited in the petition.

¹ We defined information in Service files as information not included or cited in the petition but used regularly over the course of the lead biologists' work. We defined information external

Table 6 summarizes the key questions we are reporting on that we asked during the structured interviews. We also asked other questions in the survey that we do not specifically report on: these questions do not appear in the table below.

Table 6: Selected Survey Questions

General questions
Was this the first 90-day petition finding you drafted in your career?
What was your role in evaluating this 90-day petition?
Was there information in Service files related to this petition?
What is the name of, or how do you refer to, the Service's petition guidance that you followed in evaluating this 90-day petition?
Specific questions addressing information in Service files and information external to Service files
Did you use information [in Service files/external to Service files] in drafting your decision on the petition?
Did you use information [in Service files/external to Service files] to further support any specific issues raised in the petition?
If you did not use information [in Service files/external to Service files] to further support any specific issues raised in the petition, was this because, (a) information in Service files simply did not support the petition, (b) it is against Service policy to use information [in Service files/external to Service files] this way, or (c) some other reason?
Did you use information [in Service files/external to Service files] to refute any specific issues raised in the petition?
In your opinion, had you used information [in Service files/external to Service files] in evaluating the petition, how likely is it that the information would have changed your finding on this petition?
Specific questions on the definition of readily available
Would you consider information obtained through an exhaustive literature search or by soliciting the information from another entity "readily available"?
How would you define "readily available"?
Concluding question
Would you like to share any additional information regarding the Service's processing of 90-day petition findings or the Service's overall decision making under the ESA?

Source: GAO.

Our survey results demonstrated in several ways that the May 2005 guidance did not have a substantive effect on the outcomes of 90-day petition findings. First, Service biologists who chose not to use information outside of petitions to support claims made in the petitions said that Service policy had no influence on this choice. Second, when asked what guidance they followed in drafting their 90-day petition finding, very few respondents cited the May 2005 guidance, indicating that although this guidance may have been followed to create an internal agency outline, it did not have a substantive effect on the finding itself. Third, in response to our concluding, open-ended question, none of the biologists mentioned specific reservations about the May 2005 guidance.

To address our third objective, we generated a list of all of the Service's final delisting decisions published as rules in the Federal Register (and corresponding proposed delisting rules) from calendar years 2000 through 2007, to determine the number of species removed from the list of threatened and endangered species by the Service. As of December 31, 2007, the Service had issued final rules resulting in the delisting of 17 species. Of those 17 delisted species, 2 species were delisted because they had been declared extinct, 6 species were delisted because the original data used to list the species were in error, and 9 species were delisted as a result of recovery. Of the 9 recovered species, we excluded the Tinian monarch, a species located in a U.S. territory, which reduced the number of species we looked at to 8

to Service files as information not included or cited in the petition but solicited from other entities or obtained through exhaustive literature searches during the process of reviewing the petition.

U.S. species delisted because of recovery. To examine whether the Service met recovery criteria outlined in recovery plans before delisting species, we obtained and reviewed the Service's recovery plans for each of those 8 delisted species and also examined the Federal Register proposed and final delisting rules. This information indicated whether the Service believed that it had met the criteria laid out in the recovery plans for the 8 delisted U.S. species. Finally, we also reviewed the proposed rule to delist the West Virginia northern flying squirrel; as of March 31, 2008, the Service had not finalized this proposed rule.

We conducted this performance audit from August 2007 to May 2008 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

Appendix II: Ninety-Day Petition Findings Issued from 2005 through 2007

Species	Petitioned action	90-day petition finding	Federal Register citation
Ninety-day petition findings included in our survey			
Arizona brome and nodding needlegrass	List	Not substantial	70 Fed. Reg. 3504 (Jan. 25, 2005)
<i>Cicurina cueva</i> (a spider)	List	Substantial	70 Fed. Reg. 5123 (Feb. 1, 2005)
Gentry indigo bush	List	Substantial	70 Fed. Reg. 5401 (Feb. 2, 2005)
Porter feathergrass	List	Not substantial	70 Fed. Reg. 5959 (Feb. 4, 2005)
Idaho springsnail	Delist	Substantial	70 Fed. Reg. 20512 (Apr. 20, 2005)
Jackson Lake springsnail, Harney Lake springsnail, and Columbia springsnail	List	Substantial	70 Fed. Reg. 20512 (Apr. 20, 2005)*
California spotted owl	List	Substantial	70 Fed. Reg. 35607 (June 21, 2005)
American eel	List	Substantial	70 Fed. Reg. 38849 (July 6, 2005)
Roundtail chub, lower Colorado River basin distinct population segment, and headwater chub	List	Substantial	70 Fed. Reg. 39981 (July 12, 2005)
Wright fishhook cactus	Delist	Not substantial	70 Fed. Reg. 44544 (Aug. 3, 2005)
Furbish lousewort	Delist	Not substantial	70 Fed. Reg. 46467 (Aug. 10, 2005)
Slackwater darter	Delist	Not substantial	70 Fed. Reg. 46465 (Aug. 10, 2005)
Gray wolf, northern Rocky Mountain distinct population segment	Delist	Substantial	70 Fed. Reg. 61770 (Oct. 26, 2005)
Uinta mountainsnail	List	Not substantial	70 Fed. Reg. 69303 (Nov. 15, 2005)
Peirson's milkvetch	Delist	Substantial	70 Fed. Reg. 71795 (Nov. 30, 2005)
Gray wolf in Nevada	Delist	Not substantial	70 Fed. Reg. 73190 (Dec. 9, 2005)
Northern Mexican garter snake	List	Substantial	71 Fed. Reg. 315 (Jan. 4, 2006)
American dipper, Black Hills, South Dakota, population	List	Not substantial	71 Fed. Reg. 4341 (Jan. 26, 2006)
Mussentuchit gilia	List	Not substantial	71 Fed. Reg. 4337 (Jan. 26, 2006)
Polar bear	List	Substantial	71 Fed. Reg. 6745 (Feb. 9, 2006)

Species	Petitioned action	90-day petition finding	Federal Register citation
Island marble butterfly	List	Substantial	71 Fed. Reg. 7497 (Feb. 13, 2006)
Douglas County pocket gopher	List	Not substantial	71 Fed. Reg. 7715 (Feb. 14, 2006)
Henderson's checkermallow	List	Not substantial	71 Fed. Reg. 8252 (Feb. 16, 2006)
Black Hills mountainsnail	List	Not substantial	71 Fed. Reg. 9988 (Feb. 28, 2006)
Andrews' dune scarab beetle	List	Not substantial	71 Fed. Reg. 26444 (May 5, 2006)
California brown pelican	Delist	Substantial	71 Fed. Reg. 29908 (May 24, 2006)
Sand Mountain blue butterfly	List	Substantial	71 Fed. Reg. 44988 (Aug. 8, 2006)
Casey's June beetle	List	Substantial	71 Fed. Reg. 44960 (Aug. 8, 2006)
Thorne's hairstreak butterfly	List	Not substantial	71 Fed. Reg. 44980 (Aug. 8, 2006)
Hermes copper butterfly	List	Not substantial	71 Fed. Reg. 44966 (Aug. 8, 2006)
Sixteen insect species from the Algodones Sand Dunes, Imperial County, California	List	Not substantial	71 Fed. Reg. 47765 (Aug. 18, 2006)
Island night lizard	Delist	Substantial	71 Fed. Reg. 48900 (Aug. 22, 2006)
<i>Usnea longissima</i> (a lichen)	List	Not substantial	71 Fed. Reg. 56937 (Sept. 28, 2006)
Anacapa deer mouse	List	Not substantial	71 Fed. Reg. 56932 (Sept. 28, 2006)
Plymouth red-bellied turtle	Delist	Substantial	71 Fed. Reg. 58363 (Oct. 3, 2006)
Columbian sharp-tailed grouse	List	Not substantial	71 Fed. Reg. 67318 (Nov. 21, 2006)
Tricolored blackbird	List	Not substantial	71 Fed. Reg. 70483 (Dec. 5, 2006)
Sacramento Mountains thistle	Delist	Not substantial	71 Fed. Reg. 70479 (Dec. 5, 2006)
Northern water snake, upper tidal Potomac River population	List	Not substantial	71 Fed. Reg. 70715 (Dec. 6, 2006)
Uinta Basin hookless cactus	Delist	Not substantial	71 Fed. Reg. 75215 (Dec. 14, 2006)
Pariette cactus	List	Substantial	71 Fed. Reg. 75215 (Dec. 14, 2006)*

Species	Petitioned action	90-day petition finding	Federal Register citation
Jollyville Plateau salamander	List	Substantial	72 Fed. Reg. 6699 (Feb. 13, 2007)
San Felipe gambusia	List	Not substantial	72 Fed. Reg. 6703 (Feb. 13, 2007)
DeBeque milkvetch	List	Not substantial	72 Fed. Reg. 6998 (Feb. 14, 2007)
Longnose sucker, Monongohela River population	List	Not substantial	72 Fed. Reg. 10477 (Mar. 8, 2007)
Mt. Charleston blue butterfly	List	Substantial	72 Fed. Reg. 29933 (May 30, 2007)
Yellow-billed loon	List	Substantial	72 Fed. Reg. 31256 (June 6, 2007)
Utah (desert) valvata snail	Delist	Substantial	72 Fed. Reg. 31264 (June 6, 2007)
Bliss Rapids snail	Delist	Substantial	72 Fed. Reg. 31250 (June 6, 2007)
Bison, Yellowstone National Park herd	List	Not substantial	72 Fed. Reg. 45717 (Aug. 15, 2007)
Goose Creek milkvetch	List	Substantial	72 Fed. Reg. 46023 (Aug. 16, 2007)
Kenk's amphipod, northern Virginia well amphipod, and a copepod	List	Not substantial	72 Fed. Reg. 51766 (Sept. 11, 2007)
Black-footed albatross	List	Substantial	72 Fed. Reg. 57278 (Oct. 9, 2007)
Kokanee, Issaquah Creek summer run	List	Not substantial	72 Fed. Reg. 59979 (Oct. 23, 2007)
90-day petition findings excluded from our survey			
Overtuned or settled as a result of litigation			
Pygmy rabbit ^a	List	Not substantial	70 Fed. Reg. 29253 (May 20, 2005)
Gunnison's prairie dog ^d	List	Not substantial	71 Fed. Reg. 6241 (Feb. 7, 2006)
Bald eagle, Sonoran Desert population ^a	List	Not substantial	71 Fed. Reg. 51549 (Aug. 30, 2006)
Greater sage grouse, Mono Basin area ^d	List	Not substantial	71 Fed. Reg. 76057 (Dec. 19, 2006)
Siskiyou Mountains salamander and Scott Bar salamander ^a	List	Not Substantial	72 Fed. Reg. 23886 (Apr. 25, 2006)

Species	Petitioned action	90-day petition finding	Federal Register citation
Uplistings			
Florida scrub-jay	Uplist	Not substantial	71 Fed. Reg. 4092 (Jan. 25, 2006)
Utah prairie dog	Uplist	Not Substantial	72 Fed. Reg. 7843 (Feb. 21, 2007)
Grizzly bear, Yellowstone distinct population segment	Uplist	Not substantial	72 Fed. Reg. 14865 (Mar. 29, 2007)
Ongoing litigation			
Giant Palouse earthworm ^h	List	Not substantial	72 Fed. Reg. 57273 (Oct. 9, 2007)
Mountain whitefish in the Big Lost River, Idaho ⁱ	List	Not substantial	72 Fed. Reg. 59983 (Oct. 23, 2007)
International species			
Morcelot's crocodile	Delist	Substantial	71 Fed. Reg. 36743 (June 28, 2006)
Twelve penguin species	List	Substantial	72 Fed. Reg. 37695 (July 11, 2007)
Revision to critical habitat			
Indiana bat	Revise critical habitat	Not substantial	72 Fed. Reg. 9913 (Mar. 6, 2007)

Source: U.S. Fish and Wildlife Service and the Federal Register.

^aThe Service published findings for the petition to list three snail species and the petition to delist one snail species in the same Federal Register notice.

^bThe Service published findings for the petition to delist the Uinta Basin hookless cactus (found not substantial) and the petition to list the Pariette cactus (found substantial) in the same Federal Register notice.

^cWestern Watersheds Project v. Norton, Civ. No. 06-127, 2007 WL 2827375 (D. Idaho Sept. 6, 2007).

^dForest Guardians v. Kempthorne, Civ. No. 06-02115 (D.D.C.), settlement filed June 29, 2007.

^eCenter for Biological Diversity v. Kempthorne, Civ. No. 07-0038, 2008 WL 659822 (D. Ariz. Mar. 6, 2008).

^fCenter for Biological Diversity v. United States Fish and Wildlife Service, Civ. No. 07-4347 (N.D. Cal.), settlement filed Feb. 21, 2008.

^gCenter for Biological Diversity v. Kempthorne, Civ. No. 06-04186, 2007 WL 163244 (N.D. Cal. Jan. 19, 2007).

^hWestern Watersheds Project v. Kempthorne, Civ. No. 07-00409 (D. Idaho), complaint filed Jan. 25, 2008.

ⁱPalouse Prairie Foundation v. Kempthorne, Civ. No. 08-032 (E.D. Wash.), complaint filed Jan. 24, 2008.

Appendix III: Briefing Slides



U.S. Fish and Wildlife Service: Review of Endangered Species Act Decision Making

Briefing for the House Natural Resources Committee

December 17, 2007*

*Updated April 2008

1



Introduction

- In April 2006, an anonymous complaint prompted the Department of the Interior's (Interior) Office of Inspector General to begin investigating Deputy Assistant Secretary Julie MacDonald's activities and her involvement with Endangered Species Act (ESA) decisions.
- On March 23, 2007, Interior's Inspector General reported on its investigation of allegations that Ms. MacDonald was involved in unethical and illegal activities related to ESA decision making.
- The investigation did not reveal illegal activity but concluded that Ms. MacDonald violated federal rules by sending internal agency documents to industry lobbyists.
- On May 1, 2007, Ms. MacDonald resigned from her position as Deputy Assistant Secretary.

2



Introduction

- On May 9, 2007, the House Natural Resources Committee held a congressional hearing titled *Endangered Species Act Implementation: Science or Politics?* (House Hearing No. 110-24).
- On May 22, 2007, Interior's Deputy Secretary, Lynn Scarlett, directed Interior's U.S. Fish and Wildlife Service (Service) Director Dale Hall to examine all work products that were produced by the Service, reviewed by Ms. MacDonald, and could require additional review because of her involvement.
- In response to the directive, the Service identified eight decisions for further review.

3



Objectives

Subsequent to these events, we were requested to examine:

- The Service's selection process for determining which ESA decisions were potentially inappropriately influenced by former Deputy Assistant Secretary MacDonald and the status of the Service's review of these decisions.
- The types of decisions, if any, excluded from the Service's selection process.

4



Scope and Methodology

- Interviewed the Director of the Service, all eight regional directors, and key regional ESA staff.
- Conducted site visits, phone interviews, or both with ESA staff from 10 field offices in five regions that were actively engaged in ESA decision making.
- Reviewed documentation developed by Service headquarters, regions, and field offices about the selection process and the current status of the Service's review.
- Reviewed Service policies and procedures for making ESA decisions and reviewed other species-specific documentation.

5



Results in Brief

Applying three criteria, the Service's selection process, which varied across regions, identified eight ESA decisions for potential revision.

- Director Hall granted the regions discretion to carry out the selection process and each region incorporated varying degrees of field input.
- The regions generally applied all of three selection criteria:
 1. Ms. MacDonald influenced the decision directly.
 2. The scientific basis of the decision was compromised.
 3. The decision was significantly changed and resulted in a potentially negative impact on the species.
- Upon further review, the Service concluded that seven of eight selected decisions warranted revision.
- The Service proposed revisions on three decisions, is planning to take action on two in 2008, and is determining time frames for addressing two.

6



Results in Brief

Excluded from the Service's selection process were:

- decisions made by Interior officials other than Ms. MacDonald;
- policy decisions that influenced how science was to be used;
- decisions that were changed, but not significantly or to the point of having a negative impact on the species; and
- Other decisions influenced by Ms. MacDonald but that, for various reasons, might not warrant revisiting, such as decisions that had already been addressed by the courts or were not feasible to reverse.

7



Background

Overview of the ESA

- The purpose of the Endangered Species Act of 1973 is to conserve threatened and endangered species and the ecosystems upon which they depend.
- The ESA requires listing a species as endangered if it faces extinction throughout all or a significant portion of its range and as threatened if it is likely to become endangered in the foreseeable future.
- The ESA has provisions to protect and recover species after they are listed, and it prohibits the "taking" of listed animal species.
- Many ESA decisions must be based, at least in part, on the best available scientific information.

8



Background

Key types of ESA decisions

Decision	Description	Information used to make decision
Petition to list (90-day petition finding)	Request for the Service to consider undertaking a 12-month review to determine whether listing a species is warranted	Information presented in the petition or information readily accessible in Service files
Listing/delisting	Analysis of whether a species warrants inclusion on or removal from the endangered or threatened list on the basis of its status	Best available scientific and commercial data
Critical habitat	Designation of habitat determined to be essential to a species' conservation	Best available scientific data, taking into consideration information on economic and other impacts
Recovery plan	Site-specific management plan for the conservation of listed species	Information from scientific experts, stakeholders, and others
Section 7 consultation	Determination of whether federal actions are likely to jeopardize the continued existence of listed species or result in the destruction or adverse modification of critical habitat	Best available scientific and commercial data
Habitat conservation plan (HCP)	Development of a plan that allows landowners "incidental take" of listed species in conjunction with mitigating actions that protect the listed species on their land	Not specified

Source: ESA and U.S. Fish and Wildlife Service regulations and policies.

9

Background

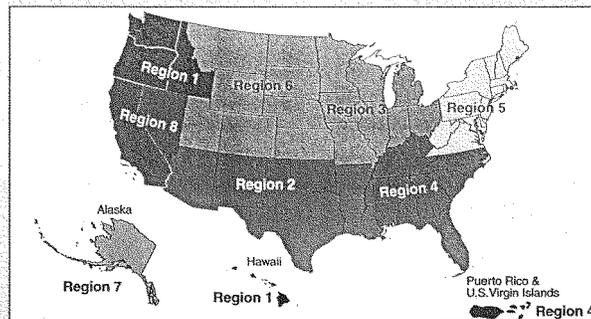
Responsibilities for ESA implementation

- Interior is responsible for implementing the ESA for freshwater and terrestrial species.
- Interior has delegated many of its ESA responsibilities to the Service.
- Service staff at headquarters, regional, and field offices are largely responsible for implementing the various ESA provisions.
- Field office staff are generally responsible for initiating ESA decision-making actions; listing and critical habitat decisions are forwarded to regional and headquarters offices for review.

10

Background

Service regions



Source: U.S. Fish and Wildlife Service.

11



Background

- The Service forwards listing decisions to Interior's Office of Assistant Secretary for Fish and Wildlife and Parks for review; the Service Director generally approves final decisions.
- For critical habitat, the Service forwards its recommendations to Interior's Office of Assistant Secretary for Fish and Wildlife and Parks, which applies economic, national security, and other factors before it approves a final determination.
- While in office from July 2002 until May 2007, Interior's former Deputy Assistant Secretary MacDonald reviewed more than 200 ESA decisions.
- Dale Hall was sworn in on October 12, 2005, as Service Director. In February 2006, he met with Ms. MacDonald and other Interior officials about their review and involvement in the Service's ESA decisions.

12



Background

Recent Interior Inspector General investigations

- On November 27, 2007, Interior's Inspector General reported on an investigation of allegations that Ms. MacDonald's involvement resulted in the withdrawal of the Service's decision to list the Sacramento splittail as threatened. The investigation concluded that Ms. MacDonald stood to gain financially by the decision and therefore should have recused herself.
- On November 30, 2007, Senator Wyden sent a letter to the Inspector General requesting an investigation of potential inappropriate involvement by Ms. MacDonald on 18 ESA decisions. Two more species were subsequently added to this investigation.

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Objective 1: The Service's selection process and current status of reviews

The selection process the Service followed varied by region

- On May 30, 2007, Director Hall held a conference call with the regional directors to communicate Deputy Secretary Scarlett's directive to examine decisions reviewed by Ms. MacDonald that could require revision because of her involvement.
- Director Hall delegated the selection process to the regional directors and asked that they consult their field offices.
- Director Hall said the selection process should include any type of ESA decision made during Ms. MacDonald's time in office.
- The regions were given the month of June to select decisions for potential revision.
- Director Hall granted the regions considerable discretion in making their selections, deferring to them to submit decisions for potential revision.

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Objective 1: The Service's selection process and current status of reviews

- Regional selection processes varied: in one regional office, a few staff met to discuss decisions; in another, a systematic process was undertaken, including developing memos of instruction, reviewing decision files, and holding conference calls with field offices.
- Regional offices incorporated input from their field offices to varying degrees; a few interacted little or not at all with field staff in making their selections.
- Four of the eight regions reviewed documents from their decision files; many regional staff stated that they already knew which decisions might warrant revision without reviewing their records.
- The universe of decisions reviewed varied slightly by region: some regions reviewed decisions made through 2006; others reviewed decisions made during 2007.

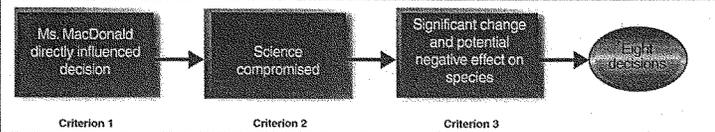
15



Objective 1: The Service's selection process and current status of reviews

The regions generally applied three criteria to identify decisions for potential revision:

1. Ms. MacDonald influenced the decision directly;
2. the scientific basis of the decision was compromised; and
3. the decision was significantly changed and resulted in a potentially negative impact on the species.



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graph LR
    C1[Ms. MacDonald directly influenced decision] --> C2[Science compromised]
    C2 --> C3[Significant change and potential negative effect on species]
    C3 --> ED((Eight decisions))
  
```

Source: GAO.

16



Objective 1: The Service's selection process and current status of reviews

The Service's selection process identified eight decisions

- At the end of the selection process, the regional offices discussed the results with Director Hall and submitted memos to the Director, listing 11 decisions for potential revision.
- One of the decisions, the Mexican garter snake, was subsequently withdrawn from the list after further discussion determined that the decision was made internally by Service headquarters.
- On July 12, 2007, Director Hall sent a memo to Deputy Secretary Scarlett reporting that 10 decisions submitted by the regions would be reviewed.

17

Objective 1: The Service's selection process and current status of reviews

- On July 19, 2007, 2 decisions were withdrawn by region 1—bull trout and marbled murrelet—after determining that neither decision involved the inappropriate use of science, but rather involved policy interpretations.
- On July 20, 2007, Director Hall sent a memo to Deputy Secretary Scarlett revising the original list of decisions based on the region 1 withdrawals, changing the total from 10 to 8.
- Of the 8 decisions, 6 were critical habitat designations.

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Objective 1: The Service's selection process and current status of reviews

Result of the Service's selection process

Region	Species	Decision	Description of MacDonald involvement	Date published
1	Twelve species of Hawaiian picture-wing flies	Proposed critical habitat	Reduced acreage to about 1 percent of scientific recommendation	8-15-06
2	Southwestern willow flycatcher	Final critical habitat	Reduced range area by about half	10-19-05
	White-tailed prairie dog	90-day petition finding	Reversed finding to "not substantial"	11-9-04
	Preble's meadow jumping mouse	12-month review finding/proposed delisting	Directed the Service to use minority scientific opinion to support delisting	2-2-05
6	Preble's meadow jumping mouse	Final critical habitat	Excluded three counties from critical habitat on basis of HCPs that were not finalized	6-23-03
	Canada lynx	Final critical habitat	Excluded Forest Service lands and private lands	11-9-06
	Arroyo toad	Final critical habitat	Reduced area by more than 85 percent	4-13-05
8	California red-legged frog	Final critical habitat	Directed the Service to use minimum range and disregard some scientific studies	4-13-06

Source: GAO.

Note: Regions 3, 4, 5, and 7 did not submit any decisions. Also, decisions regarding the bull trout, marbled murrelet, and Mexican garter snake were submitted by the regions in the initial list of 11, but subsequently withdrawn by the regions that submitted them.

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Objective 1: The Service's selection process and current status of reviews

The Service concluded that seven of the eight decisions warranted revision

- Director Hall has stated that revising the decisions is a high priority.
- The Service has proposed amended rules for three decisions.
- The Service is planning to initiate one status review on or before May 1, 2008 and propose one revised critical habitat rule on or before August 29, 2008.
- The Service is determining time frames for addressing two other decisions.
- The Service is not planning to revise one decision because it concluded that the critical habitat designation represents a scientifically supportable and reasonable range for the species.

20

Objective 1: The Service's selection process and status of reviews

Status of the decisions selected for potential revision

Species	Decision	Service actions to address decision
Twelve species of Hawaiian picture-wing flies	Proposed critical habitat	Published an amended proposed critical habitat on November 28, 2007 (72 Fed. Reg. 67428).
Arroyo toad	Final critical habitat	The Service and the Plaintiffs are negotiating a settlement agreement regarding a date for issuing proposed and final revisions of the critical habitat designation for this species.
California red-legged frog	Final critical habitat	Propose a revised critical habitat rule on or before August 29, 2008. Issue final revised critical habitat rule on or before August 31, 2009.
White-tailed prairie dog	90-day petition finding	Initiate a status review on or before May 1, 2008. Issue a 12-month finding on or before June 1, 2010.
Preble's meadow jumping mouse	12-month review finding/proposed delisting	Withdrew proposed delisting and published an amended proposed listing rule on November 7, 2007 (72 Fed. Reg. 62992).
Preble's meadow jumping mouse	Final critical habitat	Revisit critical habitat when listing is final and funds are available.
Canada lynx	Final critical habitat	Published a proposed rule describing revised critical habitat on February 28, 2008 (73 Fed. Reg. 10860).
Southwestern willow flycatcher	Final critical habitat	No action. The Service did not recommend revision of the critical habitat because the reduced range was scientifically supportable.

Source: GAO.

21

GAO
Accountability • Integrity • Reliability

Objective 2: Decisions excluded from the Service's selection process

Certain types of decisions were excluded from the Service's selection process

- Following criterion 1, the Service excluded decisions reviewed by Interior officials other than Ms. MacDonald.

```

graph LR
    C1[Ms. MacDonald directly influenced decision] --> C2[Science compromised]
    C1 --> C3[Significant change and potential negative effect on species]
    C2 --> C3
    C3 --> E[Assess potential for emergency listing]
    
```

Source: GAO.

22

GAO
Accountability • Integrity • Reliability

Objective 2: Decisions excluded from the Service's selection process

- While Ms. MacDonald was the primary reviewer of most ESA decisions, other Interior officials were also involved.

Example: Miami blue butterfly

The Service received a petition to list the Miami blue butterfly on an emergency basis and reviewed the species' status to determine if such listing was warranted. After review, Service officials at all levels supported a recommendation for listing. Citing a Florida state management plan and existence of a captive-bred population, however, an Interior official besides Ms. MacDonald determined that emergency listing was not warranted, and the blue butterfly was designated as a candidate instead of a listed species.

Source: H.L. Salvato.

23

GAO
Accountability • Integrity • Reliability

Objective 2: Decisions excluded from the Service's selection process

- Following criterion 2, the Service excluded policy decisions that limited the application of science.

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graph LR
    subgraph Criterion 1
        A[Other Interior official directly influenced decision]
        B[Ms. MacDonald directly influenced decision]
    end
    subgraph Criterion 2
        C[Informal policies limiting use of science]
        D[Science compromised]
    end
    subgraph Criterion 3
        E[Significant change and potential negative effect on species]
    end
    F((Decisions potentially legal decisions or need of revision))

    A -.-> C
    B -.-> C
    A -.-> D
    B -.-> D
    C --> E
    D --> E
    E --> F
  
```

Source: GAO.

24

GAO
Accountability • Integrity • Reliability

Objective 2: Decisions excluded from the Service's selection process

- Under Ms. MacDonald, several informal policies were established that influenced how science was to be used when making ESA decisions.
 - Petition guidance*: Service staff cited a practice whereby they were limited to using only the information contained in a petition when making a decision. They could, however, use information external to the petition if such information would support a decision that listing was not warranted.
 - Recovery plans*: A practice was developed that Service staff could generally not use or cite recovery plans when developing critical habitat designations.

25

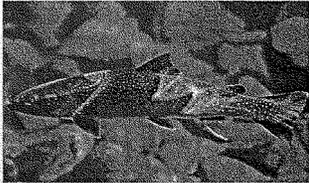


Objective 2: Decisions excluded from the Service's selection process

- Defining occupancy:** Under Ms. MacDonald, the ESA wording "occupied by the species at the time it is listed" was narrowly applied when designating critical habitat.

Example: bull trout

After the Service proposed critical habitat for the bull trout, Ms. MacDonald questioned Service biologists' conclusions about the species' occupied habitat. As a result, some proposed critical habitat areas were removed, in part because occupancy by the species could not be ascertained.



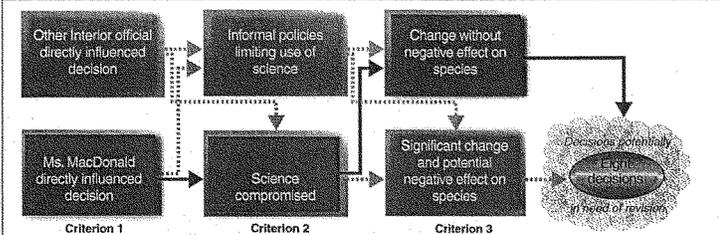
Source: U.S. Fish and Wildlife Service.

26



Objective 2: Decisions excluded from the Service's selection process

- Following criterion 3, the Service excluded decisions that were changed but not significantly or to the point of negative impact on the species.



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    graph TD
      A[Other Interior official directly influenced decision] --> B[Informal policies limiting use of science]
      C[Ms. MacDonald directly influenced decision] --> D[Science compromised]
      B --> E[Change without negative effect on species]
      D --> F[Significant change and potential negative effect on species]
      E --> G((Decisions potentially eligible for exclusion if need of revision))
      F --> G
      A -.-> D
      C -.-> B
      B -.-> F
      D -.-> E
      
```

Source: GAO.

27



Objective 2: Decisions excluded from the Service's selection process

Example: Comal Springs invertebrates

Under Ms. MacDonald's influence, subterranean waters were removed from the animals' critical habitat designation. Service staff said they believed that the exclusion of such habitats would not significantly affect the species because aboveground waters were more important habitat. They also acknowledged that not much is known about these species' use of subterranean waters.

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Objective 2: Decisions excluded from the Service's selection process

Additionally, we identified six other categories of decisions that, in some or all cases, were excluded from the Service's selection process.

1. In some cases, decisions that already had been addressed by the courts were excluded from the Service's selection process.

Example: California tiger salamander

Under Ms. MacDonald, the Central California tiger salamander population was combined with two other populations of tiger salamanders, against the recommendation of Service staff. As a result, the Service changed the two populations' listing from endangered to threatened. This decision was challenged and overturned by a federal court. [*Center for Biological Diversity v. U.S. Fish and Wildlife Service*, Civ. No. 04-4324, slip. op. at 9 (N.D. Cal. August 19, 2005)]

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Objective 2: Decisions excluded from the Service's selection process

2. Decisions that could not be reversed were excluded from the Service's selection process.

Example: Palos Verdes blue butterfly

Navy-owned land that was critical habitat for the Palos Verdes blue butterfly was exchanged after involvement by Ms. MacDonald in a section 7 consultation, and the habitat of the species' last known wild population was destroyed by development. Had the habitat not already disappeared, Service field staff believe the decision would warrant revisiting.

30

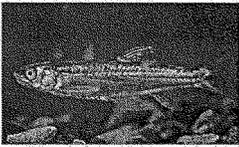


Objective 2: Decisions excluded from the Service's selection process

3. In some cases, decisions were excluded from the Service's selection process where revising the decision was determined to be an inefficient use of resources because it would not significantly alter the species' recovery.

Example: Spikedace and loach minnow

Ms. MacDonald limited the fishes' critical habitat to those areas that had been occupied within the previous 10 years, reducing the total area of critical habitat designated. Service staff did not believe the change would significantly alter the fishes' recovery and therefore felt that revisiting the decision would not be an efficient use of resources.



Source: U.S. Fish and Wildlife Service.

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Objective 2: Decisions excluded from the Service's selection process

4. Decisions were excluded from the Service's selection process where it could not be conclusively determined that Ms. MacDonald changed the decision. Service staff cited instances where they believed that Ms. MacDonald had changed decisions, but because the documentation was not clear, it could not be determined for certain if the changes could be attributed to her.
5. Decisions that were implicitly attributed to Ms. MacDonald were excluded from the Service's selection process. Service staff described a climate under Ms. MacDonald where they were continually questioned about their scientific reasoning; staff said they learned to anticipate what would be approved—primarily with regard to critical habitat designations—and wrote their decisions accordingly.

32

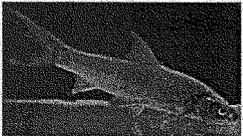
GAO
Accountability • Integrity • Reliability

Objective 2: Decisions excluded from the Service's selection process

6. Decisions were excluded from the Service's selection process where Ms. MacDonald did not change the final outcome but may have inappropriately affected supporting scientific information in the decision.

Example: Sacramento splittail

After a federal court required the Service to re-evaluate the species' threatened status, Ms. MacDonald raised concerns about a statistical approach the Service had applied in analyzing the species' population. In the final decision, she edited information regarding the statistical analysis. Service staff said that these edits could make it harder to use the scientific analysis in the future.



Source: Tina Swanson

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Concluding Observations

The Service was given the opportunity to identify all ESA decisions potentially warranting revision because of undue political influence by Ms. MacDonald. The Service's selection process led it to identify 8 decisions—less than 4 percent of more than 200 decisions reviewed—7 of which it has determined will need revision. Ms. MacDonald was significantly involved, and in some cases possibly inappropriately so, with more than 8 decisions. Nevertheless, additional decisions were not selected for further review for a variety of reasons; for example, her involvement did not always result in the reversal of a decision. The Service believes that all decisions inappropriately influenced by Ms. MacDonald and meriting revision are being addressed.

34



Concluding Observations

In a broader context, questions remain about the extent to which other Interior officials may have inappropriately influenced ESA decisions and whether broader ESA policies should be revisited. Under the original direction from Deputy Secretary Scarlett and the three selection criteria followed by the Service, a variety of ESA decisions were excluded from the selection process. Broadening the scope of the review might have resulted in the selection of more decisions, but it is unclear to what extent.

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The CHAIRMAN. Mr. Laverty?

STATEMENT OF R. LYLE LAVERTY, ASSISTANT SECRETARY FOR FISH AND WILDLIFE AND PARKS, U.S. DEPARTMENT OF THE INTERIOR, ACCOMPANIED BY REN LOHOEFENER, FISH AND WILDLIFE SERVICE, U.S. DEPARTMENT OF INTERIOR, AND ED SHEPARD, BUREAU OF LAND MANAGEMENT, U.S. DEPARTMENT OF INTERIOR

Mr. LAVERTY. Good morning, Mr. Chairman and Members of the Committee. I am Lyle Laverty. I am the Assistant Secretary for Fish, Wildlife and Parks for the Department of the Interior.

I want to thank you for this opportunity to share with you the Department's recent actions relating to our implementation of the Endangered Species Act. This is my first appearance before you and your Committee since my confirmation as Assistant Secretary, and it truly is an honor to be here in front of you today.

Let me begin by mentioning our most recent listing activity. As you know, Mr. Chairman, Secretary Kempthorne announced last week that he accepted my recommendation of the U.S. Fish and Wildlife Service Director Dale Hall's decision to list the polar bear as a threatened species under the Endangered Species Act.

This listing decision is based on the best available science, which shows that the loss of sea ice threatens and will continue to threaten the polar bear habitat. This loss of habitat puts polar bears at risk of becoming endangered in the foreseeable future, which is the standard established by the Endangered Species Act for designating threatened species.

In making the decision, the Secretary also announced that he was using the authority provided in Section 4[d] of the Endangered Species Act to develop a rule that states if an activity is permissible under the stricter standards conservation regulatory requirements and standards imposed by the Marine Mammal Protection Act, it is also permissible under the Endangered Species Act with respect to the polar bear.

This rule, which we have issued as an interim final rule which is effective immediately, will ensure the protection of the bear while allowing for continued development of our natural resources in the Arctic region in an environmentally sound fashion.

While my nomination was pending with the U.S. Senate, this Committee held several hearings. Because of the unique position that I held at that time I was still an outsider, but by virtue of the nature of the position to which I had been nominated I was extremely interested in the issues that you were discussing.

At that time I was fortunate to have both the time and the opportunity to reflect on what I was hearing and reading and what actions would in my mind address the problems and add real value to the process. I determined it was important for me to immediately set a firm tone on the issues of ethical behavior and how policy and science should interact in the Department.

One of my commitments to both committees, and one of the first actions I took after the nomination, was to meet with my staff and the Department's ethics officer for a comprehensive briefing on the Department's ethics standards. I also committed to and have explained to my staff that any contacts they have with field personnel either at the Fish and Wildlife Service or the National Park Service

regarding questions of science must and will be through established organizational channels and only with my prior approval.

I strive to ensure that everyone in my office treats everyone else and is, in turn, treated with dignity and respect. If there are questions of science, and there should be, I expect those discussions to flow through the Director for clarification.

As a natural resource professional, I understand the role of science. I am committed to ensure the integrity of science as the foundation for our resource decisions. I have met with the Fish and Wildlife Service Director Dale Hall and Director Mary Bomar and have affirmed my commitment to professional behavior and personal code of conduct when it comes to the interaction. I affirmed this again in my letters to Senator Boxer and Senator Bingaman.

I believe in performance accountability, including my own. I meet on a weekly basis with Director Hall to talk about communication, staff interactions and performance, on my feedback, on my performance, and the question am I doing what I said I would do? I value those conversations.

I have read the GAO report regarding the Fish and Wildlife Service endangered species decision making. I have discussed the report with Fish and Wildlife staff and understand the Service is currently implementing the recovery plan recommendations. The 90-day petition finding guidance is under review and incorporates and addresses the court decisions, as well as recommendations to the GAO.

Director Hall has established a series of code of conducts as it relates to professional organizations. He has shared that with you.

I will move on, just very quickly, to give an update on the discussion on decision review. The Service is moving ahead with the review of the decisions that were overseen by the former Deputy Assistant Secretary. The process for reviewing decisions is established by the Service, and engaged resource professionals in those assessments.

Let me highlight just a few points that Deputy Director Ken Stansell shared with the Committee. It talked about the conclusion and the revision to seven of the eight decisions that should be made. There are actions underway to deal with many of those issues. I can go into more detail in a minute with you if you would like to do that.

In conclusion, I believe that the Department and the Service have made great strides over this past year, ensuring that our decision-making processes are clearly delineated, that we maintain a strong emphasis on ethical conduct, and that we are continuing our commitment to maintaining the integrity of science used in the decision-making process.

I want to thank you for this opportunity to join you, and I look forward to having a chance to answer any questions you might have for me. Thank you.

[The prepared statement of Mr. Laverty follows:]

Statement of R. Lyle Laverty, Assistant Secretary for Fish and Wildlife and Parks, U.S. Department of the Interior

Mr. Chairman and Members of the Committee, I am Lyle Laverty, Assistant Secretary for Fish and Wildlife and Parks at the Department of the Interior. I thank you for the opportunity to share with you the Department's recent actions relating

to our implementation of the Endangered Species Act. This is my first appearance before you and your Committee since my confirmation as Assistant Secretary, and it is my great pleasure to be here today.

I am accompanied today by Mr. Ren Lohofener, Regional Director for the U.S. Fish and Wildlife Service's Pacific Region, and Mr. Ed Shepard, the Bureau of Land Management's Oregon State Director. These gentlemen have made themselves available, at your request, to respond to any questions that you or other Members of the Committee may have about the spotted owl recovery plan and the Western Oregon Plan Revisions.

Let me begin by mentioning our most recent listing activity. As you know, Mr. Chairman, Secretary Kempthorne announced last week that he accepted my recommendation of Fish and Wildlife Service Director Dale Hall's decision to list the polar bear as a threatened species under the Endangered Species Act. The listing is based on the best available science, which shows that loss of sea ice threatens, and will likely continue to threaten, polar bear habitat. This loss of habitat puts polar bears at risk of becoming endangered in the foreseeable future, the standard established by the ESA for designating a threatened species.

In making the decision, the Secretary also announced that he was using the authority provided in Section 4(d) of the ESA to develop a rule that states that if an activity is permissible under the stricter standards imposed by the Marine Mammal Protection Act, it is also permissible under the Endangered Species Act with respect to the polar bear. This rule, which we have issued as an interim final rule and which is effective immediately, will ensure the protection of the bear while allowing for continued development of our natural resources in the arctic region in an environmentally sound way.

Past Hearings on ESA Implementation and Science

During the time my nomination was pending before the Senate last year, this Committee held several hearings at which general implementation of the ESA was discussed, and the Department's process for reviewing ESA-related decisions and the use of science and policy in that process were discussed in detail. At that time, both Deputy Secretary Lynn Scarlett and Fish and Wildlife Service Director Dale Hall affirmed that science is the cornerstone of the Service's work, including our decision-making under the ESA, and reiterated the Department's absolute commitment to the scientific integrity of that process. We have taken many actions, both before and since, that I will briefly discuss this morning.

I should begin by acknowledging that Secretary Kempthorne has, since the time of his confirmation, placed a strong emphasis on ethical conduct and scientific integrity as we carry out our work for the American public. I know that throughout his career in public service, the Secretary has exhibited, and continues to exhibit, a commitment to the quality and integrity of science in the decision-making process. He, along with Deputy Secretary Scarlett, has been effective in setting a high standard in this regard.

As Director Hall noted before the Committee last July, both science and policy have roles in the implementation of the ESA. Under the ESA, the Service must use the best available science, be explicit about the level of uncertainty in that science, and leave it to decision makers to choose among available options that achieve the objectives of the Act when making a decision. He also acknowledged that policy decisions in critical habitat designations are appropriate in the section 4(b)(2) exclusion process of the ESA, pursuant to which the Secretary must weigh the benefits of exclusion against the benefits of inclusion, and that

...the assimilation, application, and interpretation of science often represent the beginning point in making policy decisions under the ESA. The peer review process, agency leadership, and the public comment process help to ensure high quality decisions.

Recent Management Activities

As I mentioned above, the Committee's hearings were held last year while my nomination was pending in the United States Senate. Because of my unique position at the time, still an outsider but, by virtue of the position to which I had been nominated, extremely interested in the issues, I was fortunate to have both the time and opportunity to reflect on what I was hearing and reading and what actions would, in my mind, address the problems and add real value to the process.

I determined that it was important for me to immediately set a firm tone on the issues of ethical behavior and how policy and science should interact in the Department. One of my commitments, and one of the first actions I took after confirmation, was to meet with my staff and the Department's Ethics Officer for a comprehensive briefing on the Department's ethics standards. I also committed to explaining, and

have explained, to my staff that any contacts they have with field personnel at either the Fish and Wildlife Service or the National Park Service regarding questions of science must and will be through established organizational channels, and only with my prior approval. I documented my commitment with a letter to all National Park Service and Fish and Wildlife Service employees on my first day as Assistant Secretary. I strive to ensure that everyone in my office treats everyone else and is, in turn, treated with dignity and respect.

I have met with Fish and Wildlife Service Director Dale Hall and National Park Service Director Mary Bomar and affirmed this commitment to professional behavior and the personal code of conduct when it comes to the interaction between career and political staff.

In a similar vein, in July of last year, Service Director Hall appeared before you and presented his views on ESA implementation and the various actions he had taken as Director to ensure that the Service implements the ESA with the utmost scientific integrity. Several of these important recent steps discussed at that hearing include:

1. the issuance, in February 2006, of a memorandum detailing the Director's views on how science should be used in making recommendations and decisions, as well as the process by which science would be reviewed in a policy and legal context; and
2. clarification of the division of responsibilities for ESA reviews and decisions between the Service and the Assistant Secretary's Office, including that the formulation of science would be the responsibility of the Service, while discussions between the Director's office and Assistant Secretary's office would focus on policy decision-making.

The Service also announced this past January that it is implementing a code of scientific conduct, a series of guidelines applicable not only to scientists, but to managers and executives within the Service, including the Director. Moreover, while it applies to scientific conduct, it extends to include the translation and application of science used to inform resource management decisions. The code is modeled on other codes developed and implemented by professional organizations, such as The Wildlife Society and The American Fisheries Society, and these organizations have praised this effort as an important ingredient of organizational integrity. The code is intended to provide uniform policies for Service employees to follow as they conduct and manage scientific activities, with the utmost regard for maintaining and enhancing the Service's reputation for professionalism, integrity and objectivity.

All of these taken together serve as potent examples of the seriousness with which Secretary Kempthorne, Deputy Secretary Scarlett, and I, along with Director Hall and others in the Department, are treating the issue of scientific integrity and the commitment we have made to ensuring that our science-based decisions are made according to the highest possible standards.

Update on Decision Reviews

Finally, let me provide you with a brief update on the Service's progress on revision of the seven ESA decisions. The process for reviewing decisions established by the Service was one of the subjects discussed in detail by the Committee and Director Hall at the July 2007 hearing. For that reason, I will not go into detail on that process, but will instead highlight the letter sent to you, Mr. Chairman, by the Service's Deputy Director Kenneth Stansell in November 2007. That letter forwarded the Service's conclusion that revisions to seven of the eight decisions should be made and provided a small amount of detail about each decision.

Currently, Mr. Chairman, work is on-going for four of the seven decisions. In November 2007, the Service published a proposed rule to revise the listing of the Preble's meadow jumping mouse, and the Service expects to make a final listing determination by June 2008. Work on the revision of the critical habitat designation for the Preble's meadow jumping mouse will begin in June 2008, with a final decision expected in June 2010. A proposed rule to revise designation of critical habitat for the 12 Hawaiian picture-wing flies was also published in November 2007 and a final critical habitat determination is expected in November 2008. A proposed rule to revise critical habitat for the Canada lynx was published in February 2008, and a final critical habitat determination is expected in February 2009.

Work on the critical habitat for the arroyo toad and the finding for the white-tailed prairie dog will begin in Fiscal Year 2009.

FWS has allocated approximately \$1 million from Fiscal Year 2008 and identified \$1.12 million from the Fiscal Year 2009 budget request for the Endangered Species Program for work related to revising six of the seven decisions under the ESA. Revision of the seventh decision, involving the listed entity for the Preble's meadow jumping mouse, is not included in the list above because the revision will be com-

pleted in Fiscal Year 2008 and funding has come from the base allocation for the recovery program from Fiscal Years 2007 and 2008 due to our delisting proposal.

Conclusion

I believe the Department and the Service have made great strides over the past year in ensuring that our ESA decision-making processes are clearly delineated and that we maintain a strong emphasis on ethical conduct and continue our commitment to maintaining the integrity of the science used in the decision-making process. Again, thank you and I am happy to answer any questions that you may have.

**Response to questions submitted for the record by R. Lyle Laverty,
Assistant Secretary for Fish and Wildlife and Parks, U.S. Department of
the Interior**

Questions from Chairman Nick J. Rahall, II

Guidance for Listing Decisions

Question: GAO found (page 17) that 70 percent of the biologists surveyed and who are responsible for determining whether a listing petition is warranted have never drafted a petition finding. Biologists responding to GAO's survey said frequently changing guidance resulted in longer processing times, and delayed listing decisions. What are your plans to issue official guidance to eliminate confusion and inconsistencies in the determination of 90-day petition findings?

Response: A draft Director's memorandum providing interim guidance on 90-day petition findings under the Endangered Species Act (ESA) is currently under review within the U.S. Fish and Wildlife Service (Service). We anticipate that a final Director's memorandum on this guidance will be provided to the Regional and field offices by late summer 2008.

Spotted Owl Recovery Plan

Question: When the spotted owl recovery plan was announced last week, Members of Congressional staff were told that if peer review supported changes, FWS would gladly re-do the recovery plan. Do you plan to solicit peer review on the May 16 recovery plan? If peer reviewers recommend changes, will you revise the plan?

Response: The Service is always amenable to expert review of its recovery practices and will look to the recovery plan implementers for advice on when adaptive management may be needed.

Recovery Plan for Jaguar

Question: In Jan 2008, Director Hall determined that a recovery plan was not necessary because the bulk of the jaguar population resides outside the United States. Yet, recovery plans were prepared for a number of species with a significant portion of their range outside the United States. As examples, recovery plans were prepared for the Sonoran pronghorn, Yuma Clapper rail and New Mexico Ridge-nosed Rattlesnake. The jaguar occurs from southern Arizona and New Mexico to South America. Why was a recovery plan not prepared for the jaguar?

Response: The examples cited above are all species for which a significant portion of the range and breeding populations of the species do occur in the United States. Neither is true for the jaguar. The ESA requires that recovery plans include objective and measurable delisting criteria and an implementation schedule with estimated costs and responsible parties which, when fully met and implemented, would lead to a determination that the species be removed from the List. The jaguar's range extends through the jurisdictions of approximately 20 countries from the United States border through Mexico, Central and South America. The northern extreme of its range occurs in the southern United States; this area represents less than one percent of the jaguar's entire range.

Generally, the United States has little authority to implement actions needed to recover species outside its borders. These powers are limited to prohibiting unauthorized importation of listed species into the United States, and prohibiting persons subject to United States jurisdiction from engaging in commercial transportation or sale of listed species in foreign commerce. The "take" prohibitions of section 9 only apply within the United States, within the territorial seas of the United States and on the high seas. They do not apply in the foreign countries where nearly all jaguars are actually found. Consequently, the management and recovery of listed foreign species remain the responsibility of the countries in which the species occur, with the help of available technical and monetary assistance from the United States. In

short, the Service believes that preparation of a recovery plan for this largely international species will not promote its conservation.

Question: Shouldn't this type of decision to exempt a species from the requirement to prepare a recovery plan be one for which the Service solicits public review and comment?

Response: Section 4(f)(1) of the ESA provides that the Secretary shall develop a recovery plan "unless he finds such a plan will not promote the conservation of the species," and there is no statutory requirement that the Secretary's finding be subject to public review and comment.

Question: What is the statutory basis that the FWS relied upon in denying full ESA protections to a species with a significant foreign population?

Response: The Service has not denied full ESA protection to the jaguar by its decision that preparation of a recovery plan would not benefit the species. The jaguar is still fully protected by all provisions of the ESA within U.S. borders.

Although we find that formal recovery planning at this time will not promote the conservation of the jaguar, we intend to continue our efforts to protect jaguars within our borders, and to work cooperatively with our partners in northern Mexico in their efforts to conduct research, protect habitat, and reduce killing of jaguars in northern Mexico. Toward that end, we participate in the Jaguar Conservation Team (JAGCT), a federal, state and private partnership formed in 1997 to conserve the jaguar in the southwest United States and northern Mexico.

Spotted Owl Recovery Plan

Question: Why is the FWS preparing a recovery plan for the northern spotted owl? Haven't the courts said that the Northwest Forest Plan is sufficient to protect the owl and a recovery plan is not necessary? Why are you using resources on this effort anyway?

Response: According to the Endangered Species Act, the U.S. Fish and Wildlife Service is required to prepare recovery plans for listed species unless the Service determines that such a plan will not promote the conservation of the listed species. Recovery plans must include a description of site specific management actions and recovery criteria. The Northwest Forest Plan, while describing important management practices for the northern spotted owl, does not include the recovery criteria or actions for the owl, as required in the ESA.

Question: Dr. Franklin also recommends that the Fish and Wildlife Service use the late successional reserves as the core of the spotted owl conservation area strategy, and supplement them with additional designated conservation areas as necessary. He says the 133 owl conservation areas identified in the plan are inadequate. Will you consider his recommendation and revise the plan accordingly?

Response: According to the most recent northern spotted owl population modeling, the conservation area design as described in the Northern Spotted Owl Recovery Plan should, over the long term, be sufficient to address the loss of habitat. In fact, the Managed Owl Conservation Areas (MOCAs) on the west side of the Cascade Mountains, added to the federal lands managed for northern spotted owls on the east side of the Cascades, coupled with the additional Federal older forests maintained over the next 10 years while we explore the threat from barred owls, will equal or exceed the total amount of Late Successional Reserves.

Delistings

Question: We understand that funds for delisting and recovery come out of the same account and that the Service's priority is to use these funds to delist species instead of focusing on recovery activities. Is our understanding correct?

Response: The Service funds recovery activities using one sub-activity account. Recovery activities include developing recovery plans, implementing recovery actions, conducting 5-year status reviews, and addressing delisting and downlisting petition findings. In addition, we may use this funding to process species rules, such as experimental population designations under section 10(j). When recovery has been achieved for a species, we use this funding for regulatory actions to delist the species and develop post-delisting monitoring plans.

We do not prioritize our funding allocation for regulatory actions, specifically delisting species. The bulk of our funding is allocated out by a formula that considers the number of listed species and the complexity of recovery implementation activities for those species. In addition, approximately 5% of the total general funds, or roughly \$3.5 million, is allocated to specific Service projects or actions through a competitive proposal process. In FY08, we targeted, through this proposal process, \$2.5 million towards on-the-ground recovery actions that either prevented extinction or funded recovery action that would move the species towards recovery faster. Approximately \$990,000 of the \$3.5 million allocated through the national competition

was used to fund the regulatory action for complicated or complex delisting or downlisting actions. A portion of the \$990,000 was also used to develop post-delisting monitoring plans for the bald eagle and brown pelican.

Wolverine

Question: The Service's decision in March not to list the wolverine in the lower 48 seems to be based on the reasoning that it is too imperiled to be significant enough to warrant protection. Isn't that conclusion completely at odds with the plain meaning and intent of the ESA? Using this same reasoning how would wolves and grizzly bears recover in the lower 48 under the ESA?

Response: The Service based our determination that the wolverine in the lower 48 contiguous United States was not warranted for listing on the following reasoning (see 73 FR 12929)

* The contiguous U.S. population of the wolverine did not meet the discreteness criteria for a Distinct Population Segment under the Service's 1996 policy. The international border could not be used to delineate a U.S. DPS, because differences between the two countries regarding control of exploitation, management of habitat, conservation status, or regulatory mechanisms are not significant in light of section 4(a)(1)(D) of the ESA.

* The contiguous U.S. population of the wolverine did not meet the significance criteria for a Distinct Population Segment under the Service's 1996 policy. The focus of the 12-month petition finding was on the contribution of the contiguous U.S. population of the wolverine to the North American subspecies as a whole. Only a small portion of the North American wolverine subspecies has ever occurred in the contiguous United States. The finding documented that the U.S. population was not significant to the continued existence of the North American subspecies in Canada and Alaska where it is faring reasonably well.

Unlike the wolverine, the wolf and the grizzly bear both meet discreteness criteria defined in the DPS Policy as "delimited by international governmental boundaries within which differences in control of exploitation, management of habitat, conservation status, or regulatory mechanisms exist that are significant in light of section 4(a)(1)(D) of the Act." Trapping and hunting regulations within the contiguous United States were not sufficient to maintain persistence of wolves and grizzly bears, which were reduced to low numbers at the time they were listed under the ESA. In Canada and Alaska, wolves and grizzly bears were also being trapped and hunted, but these activities were not threatening the healthy populations that exist there.

Trapping and hunting of wolverines is legal only in Montana within the contiguous United States, and this program is closely monitored. Trapping and hunting do not pose a threat to the species; thus, differences in control of exploitation that are significant in light of section 4(a)(1)(D) did not exist to support the determination that the wolverine in the contiguous United States qualifies as a DPS.

Gray Wolves

Question: How many wolves will have to be killed to trigger a decision to relist the species?

Response: The Service identified four scenarios in the Northern Rocky Mountain distinct population segment (NRM DPS) that could prompt us to initiate a status review and analysis of threats to determine if relisting would be warranted. These scenarios are: (1) if the wolf population for any one state in the DPS (MT, ID, WY) range falls below the minimum NRM wolf population recovery level of 10 breeding pairs of wolves and 100 wolves; (2) if the wolf population segment in Montana, Idaho, or Wyoming falls below 15 breeding pairs or 150 wolves in any one of those states for 3 consecutive years; (3) if the wolf population in Wyoming outside of National Park Service lands falls below 7 breeding pairs for 3 consecutive years; or, (4) if a change in state law or management objectives would significantly increase the threat to the wolf population.

Furthermore, if any of these scenarios occurred during the mandatory 5-year post-delisting monitoring period, the post-delisting monitoring period would be extended 5 additional years from that point in that State.

The post-delisting monitoring plan for the Western Great Lakes distinct population segment (WGL DPS) outlines three scenarios that may cause the Service to consider relisting or emergency relisting the WGL DPS. These scenarios are: (1) a decline that reduces the combined Wisconsin-Michigan (excluding Isle Royale and the Lower Peninsula) late winter wolf population estimate to 200 or fewer wolves; (2) a decline that brings either the Wisconsin or the Michigan (excluding Isle Royale and the Lower Peninsula) wolf estimate to 100 or fewer wolves; or, (3) a decline that

brings the Minnesota winter wolf population point estimate or lower end of the 90% confidence interval to 1,500 or fewer wolves.

Although the thresholds for initiating analyses for relisting are based on population numbers, any determination to relist the gray wolf would not be based solely on the number of wolves killed or even the overall population level alone. The Endangered Species Act requires that listing be based on the analyses of current and future threats to the entity under consideration using the best scientific and commercial data available. Our delisting analyses found that all threats to the NRM DPS and the WGL DPS of the gray wolf have been removed. In the past, the primary threat to wolves was deliberate and organized persecution. Wolf populations are otherwise very resilient to human-caused and other forms of mortality. On average, humans would have to kill more than 30-50% of a wolf population each year to cause population declines. Without the use of poisons (which are now banned) and/or a government-sponsored eradication program, the Service believes that, as a practical matter, it would be very difficult to kill enough wolves for a long enough period of time to threaten the wolf population and require relisting under the Endangered Species Act.

Before we could delist the WGL DPS and NRM DPS, each State with a portion of a recovered wolf population had to commit in FWS-approved wolf management plans to maintain their segment of the wolf population so that the overall populations will remain well above recovery goal levels. The States also committed to continue to monitor their wolf population for the mandatory 5-year post-delisting monitoring period and report results to the FWS.

In the NRM DPS, the three core States of Idaho, Montana, and Wyoming committed in their wolf management plans to manage for at least 15 breeding pairs and 150 wolves each, which is 50% higher than the minimum recovery goal level. The combined number of wolves that the States indicated they will actually manage for is around 1,000, which is more than triple the minimum recovery goal level. Currently, the NRM DPS population is at about 1,500 adults and yearlings plus approximately 500 pups born this spring.

In the WGL DPS, the three core States of Minnesota, Wisconsin, and Michigan describe in their management plans the minimum number of wolves each State will maintain. Minnesota's minimum statewide winter population goal is 1,600 wolves. Wisconsin's minimum population goal is 350 wolves outside of Indian Reservations. Michigan's plan calls for a minimum sustainable population of 200 wolves in the Upper Peninsula. The numeric recovery goals were 1,251-1,400 for Minnesota and 100 for the Wisconsin-Michigan population. Currently, the Minnesota population is estimated at more than 3,000 wolves. Wisconsin's current estimate is 520-545 wolves outside Indian Reservations, and Michigan's estimate is 434 wolves.

Wolves in the contiguous United States outside the NRM DPS and WGL DPS remain listed under the Endangered Species Act. The estimated 50-60,000 wolves in Canada and 8-10,000 in Alaska are not listed.

Mexican Wolf

Question: Why has the Fish and Wildlife Service not revised the recovery plan for the Mexican wolf?

Response: The Mexican gray wolf was listed as an endangered subspecies on April 28, 1976 (41 FR 17736). On March 9, 1978, the Service issued a final rule that eliminated individual subspecies on the list and reclassified the entire species *C. lupus* as either endangered or threatened in North America south of Canada (43 FR 9607). However, the final rule stated that we would continue to recognize valid biological subspecies for purposes of research and conservation (43 FR 9610). The first (and only) Mexican Wolf Recovery Plan was international in scope and was approved on September 15, 1982, by the Director of the Service and the Director General of Mexico's Dirección General de la Fauna Silvestre.

In April 2003, the Service reclassified the gray wolf, creating three distinct population segments (DPS): the eastern, western, and southwestern DPS (SWDPS) (68 FR 15804). Creation of the SWDPS provided an opportunity to engage a full recovery planning effort and develop delisting criteria for the gray wolf in the southwest, which included the non-essential experimental population of Mexican wolves. The Service convened the SWDPS Gray Wolf Recovery Team in October 2003. The Recovery Team was nearing the end of the internal planning process in February 2005 when an Oregon Federal Court ruled on litigation brought by a coalition of environmental groups and enjoined and vacated the 2003 Reclassification Rule (*Defenders of Wildlife v. Norton*, 03-1348-JO; *National Wildlife Federation v. Norton*, 1:03-CV-340, D. VT. 2005).

In response to these rulings, Region 2 put the SWDPS recovery team on hold. The recovery team could not continue its work until legal issues were resolved and thus

we have not been able to complete a formal revised recovery plan for the Mexican wolf.

As an interim measure, the Service is developing a conservation assessment for the Mexican gray wolf. This assessment will draw upon much of the information generated by the Recovery Team during their initial preparation of the draft Mexican wolf recovery plan. The conservation assessment will provide background information about the species, describe current threats, and contain recommendations to advance recovery through the wolf program. It will not contain decisions about how many wolves are necessary to achieve recovery, nor will it recommend specific geographic areas for expansion of Mexican wolf recovery efforts. However, much of the information from the conservation assessment could be utilized in a future recovery plan and in preparing modifications to the rule.

In addition to the conservation assessment, the Service is simultaneously updating the Mexican Wolf Environmental Impact Statement. This process will provide broad public participation opportunities and will allow us to use knowledge gained over the last ten years to shape alternatives that address successful recovery activities.

Question: In his testimony, Mr. Parsons on panel 2 states that we are witnessing the extinction of the Mexican wolf. How will the DOI put the wolf back on a track towards recovery?

Response: The Mexican wolf was extirpated from the United State by the mid-twentieth century. Decades later, we better understand and support the role that top predators play in balancing ecosystems. The Service and its partners have established a group of primarily wild born wolves that are breeding and reproducing in the Southwest and has demonstrated substantial progress towards recovery. We continue to use all available management options for increasing the number of wolves in the 10(j) area. The population in New Mexico and Arizona has remained near 50 wolves from 2003 to 2007.

Prior to the Service's 1998 initial release of wolves into the 10(j) area, the known wild population was zero. As a result of the Service's wolf program, the existence of a stable experimental population of wolves in the wild over the last several years makes it clear that we are not witnessing the extinction of the Mexican wolves as suggested by Mr. Parsons' testimony. The captive breeding program is managed under a Species Survival Plan. There are currently close to 300 wolves in the captive population, and all of the wolves released into the wild came from this captive population.

Question: How do you square the additional killing or permanent removal of wolves allowed under Standard Operating Procedures 13 with the ESA requirement that killing and permanent removal must not preclude progress toward recovery?

Response: The Environmental Impact Statement (EIS) established for the re-introduction of Mexican wolves into the Southwestern United States stated: "The FWS will permanently remove from the wild or, as a last resort, euthanize any wolves exhibiting a consistent pattern of livestock depredation (three or more confirmed kills—(page 2-16)."

The Service and its partners have set policy that is consistent with the foundation documents of this project. Re-introduction of wolves as an experimental 10(j) population with Standard Operating Procedures (SOP) provisions are not in violation of the ESA and support the goal of successful re-introduction by managing human/wolf conflicts.

The primary reason for the extirpation of wolves from the Southwest was lack of tolerance (both by the public and government agencies) of wolves because of human/wolf conflicts. Active management of individual wolves that kill cattle has been the management paradigm in the Midwest, the Northern Rockies and the Southwest and clearly increases tolerance for wolves by the local public. The Service believes that other aspects within this project are more limiting relative to overall recovery, including: (1) a single population of wolves rather than multiple populations; (2) the recovery area's geographic limitations; and, (3) the difficulties of establishing a wild population from captive stock.

Our records show about half of all wolf removals (both permanent and temporary) are due to livestock interactions. From 1998 through 2007, the Service's records show 34 wolves have been permanently removed from the wild (11 lethally) and 108 were removed on a temporary basis. The remainder of removals are based on other factors including boundary violations, nuisance behavior and illegal shootings. Temporarily removed wolves are eligible to be re-released into the wild. This summer, New Mexico Department Game and Fish (NMDGF) will transfer two adult Mexican wolves into the wild.

Moratorium on Take of Mexican Wolves

Question: Mexican wolf experts have called for a moratorium on “take” until an expert task force can be convened to provide guidance? Do you agree with the experts?

Response: The Mexican Wolf Reintroduction Project is a cooperative effort among the Service, Arizona Game and Fish Department (AZGFD), NMDGF, U.S. Department of Agriculture—Wildlife Services, USDA Forest Service, and the White Mountain Apache Tribe. In addition, many state and federal agencies, counties, Native American Tribes, zoos, wildlife sanctuaries, universities, and non-government organizations in both the United States and Mexico have assisted in planning and implementing recovery efforts for the Mexican wolf. We are fortunate to be able to draw on the expertise of so many dedicated biologists with practical experience and expertise in managing endangered species on the ground in Arizona and New Mexico.

While the Service has removed one wolf and translocated wolves within the 10(j) area in 2008, there have been no legal lethal takes this year. We are also leading efforts to review and revise the program’s Standard Operating Procedures to provide us with a broader scope of management options to help avoid future lethal removals.

Biologically, the reintroduction project is successful. We have second generation wolves finding mates in the wild, establishing their own packs, and taking down native prey. Forty-seven of the 52 wolves (90%) documented in 2007 were wild born animals. However, the socio-economic effects of reintroducing a top predator into cattle country are a reality that must be factored into the equation. Wolf/livestock conflict is one of the most challenging obstacles facing the Mexican wolf reintroduction program. Resolution of this impediment will help accommodate the recovery of the Mexican wolf.

When livestock conflicts occur, our preference is to work with the livestock owner to help disrupt depredation behavior by hazing or other non-lethal methods of discouraging wolves that are seeking cattle. If that does not work, the non-essential experimental population rule governing the reintroduction project allows for permanent removal as one of the tools to resolve livestock depredation problems.

Wolf removals are not our preference as they can disrupt pack behavior. In order to reduce the economic impacts of livestock depredations by wolves, we have suggested a proactive Mexican Wolf/Livestock interdiction fund. The fund would provide for interdiction, incentives and compensation to effected ranchers. We believe that—when fully implemented—the interdiction fund will provide a means to offset the costs of losses due to wolf recovery to ranchers and allow the Service to suspend wolf removals under SOP 13.

Red Knots

Question: When can we expect action to be taken on this year’s emergency listing petition for red knots?

Response: The Service has received four petitions to emergency list the red knot. The most recent on February 27, 2008, requested that the Service list the U.S. populations of two subspecies of the red knot (*Calidris canutus roselaari* and *Calidris canutus rufa*) as endangered and emergency list one of the subspecies of red knot (*Calidris canutus rufa*). The Service responded to the petitioners in a letter dated May 1, 2008. In the letter the Service reiterated to the petitioners that we had already made a determination that listing the red knot (*Calidris canutus rufa*) is warranted but precluded by other listings of higher priority and have added the subspecies to our list of candidates. We annually determine whether listing remains warranted and precluded and whether we need to utilize the emergency listing provisions of the ESA. The Service is currently in the process of making the annual finding for this subspecies and anticipates the review and reevaluation of our previous finding will be completed by the end of this year. In the same letter, we also stated that due to funding constraints, we are unable to address the petition to list the red knot (*Calidris canutus roselaari*) this year. Currently all of our listing and critical habitat funding for Fiscal Year 2008 has been spent on court orders, settlement agreements, and other statutory deadlines. We anticipate making an initial finding in the Fiscal Year 2009 as to whether the petition contains substantial information indicating the action may be warranted.

Question: Notwithstanding the evidence pointing to the continued decline of the species, the red knot was listed as a “6” on a priority scale of 1 to 12 for candidate species. Why does the red knot have such a low listing priority?

Response: The Service considers three factors when determining the appropriate Listing Priority Number (LPN) for a species: (1) the magnitude of threats; (2) the immediacy of threats; and (3) the taxonomy of the species. Under the third factor, taxonomy, a monotypic genus is afforded priority over a full species which is af-

forded priority over a subspecies or distinct population segment. As a subspecies of red knot, *Calidris canutus rufa* could potentially be assigned an LPN of 3, 6, 9, or 12 only. As of last year, we had determined the *rufa* subspecies had a high magnitude of threat due to the modification of habitat through harvesting of horseshoe crabs to an extent that put the viability of the red knot at substantial risk. However, we determined the threats were non-imminent because of reductions and restrictions on harvesting horseshoe crabs adopted by the States in the Delaware Bay region. The red knot was therefore assigned an LPN of 6; an LPN of 3, the only higher designation the subspecies could potentially receive, would require both a high magnitude and a high immediacy of threat.

Cactus Ferruginous Pygmy-Owl (Arizona Population)

Question: When can we expect the Service to make a finding on whether the petition to list the Sonoran desert population of pygmy owls is warranted?

Response: The Service announced on June 2, 2008, that the cactus ferruginous pygmy-owl may warrant federal protection as a threatened or endangered species under the Endangered Species Act. This decision follows an initial review of a petition seeking to protect the pygmy-owl by adding it to the federal list of endangered and threatened wildlife. With this announcement, the Service has begun the 12-month status review process.

White Nose Bat Syndrome

Question: Bats in New York, Connecticut and Vermont are apparently affected by the white nosed bat syndrome. Scientists are concerned that the syndrome could spread to other states, such as West Virginia and Virginia where the endangered Indiana Bat lives. What is the agency doing to address this growing problem?

Response: The Service is working closely with State agencies, the U.S. Geological Survey, academic institutions, laboratories, and non-government organizations to address the threat to bats posed by white-nose syndrome (WNS). The Service is taking the following actions:

1. Facilitating information exchange, coordination, and communication by hosting weekly conference calls with state and federal agencies throughout the Northeast and Midwest, and maintaining a WNS webpage to keep the public and media informed.
2. Developing containment and decontamination protocols for researchers and cavers to reduce the risk of potentially accelerating the spread of WNS.
3. Tracking surveyed sites for presence or absence of WNS to monitor its apparent spread.
4. Mapping caver and biologist movements to investigate any possible correlation with affected sites.
5. Addressing permitting requirements for listed species work.
6. Assisting with field work including collection of samples for lab analysis and the counting and capture of live bats for monitoring of population health in affected and unaffected regions.
7. Working with the states and labs to determine baseline information needs in unaffected areas and to develop study designs.
8. Developing proposals for collaborative research projects and assisting states in identifying and securing potential sources of funding.
9. Helping to plan and organize a three-day working group meeting of all state, federal, and private agencies, laboratories, and academic institutions that have been involved with WNS investigations and monitoring to date, to further our understanding of white-nose syndrome and conserve important bat populations.

Piping Plover Critical Habitat

Question: Were you aware of the proposed Kenedy Ranch wind project in Texas before you announced your plans to re-designate critical habitat for piping plover along the Southeast Texas coast?

Response: Yes, we knew of proposals for two wind farms when we received the July 2006 court order to vacate 19 existing units of critical habitat for piping plover on the Texas coast and reconsider them by May 2008.

Question: Has the Department or the Service discussed this proposal with the project proponent or the State of Texas? If so, can you please describe this consultation and the results?

Response: The project proponents considered and documented whether their projects would affect endangered species and concluded that piping plovers and their habitat do not occur in the wind farm project areas, hence they have drawn the conclusion that piping plovers are not anticipated to be affected. Since federal monies or permits are not necessary for this project that is on private lands, the project pro-

ponents are not required to consult with the Service on impacts to endangered species.

Question: Does the Department intend to intercede with the State of Texas to request that construction of this project not be permitted until such time that additional piping plover critical habitat is designated by the Service?

Response: We are unaware of any Departmental plans to intercede with the State of Texas

Question: Should the Kenedy Ranch Project move forward as planned, will the Department pursue enforcement of the Endangered Species Act and Migratory Bird Treaty Act when illegal take of piping plover occurs?

Response: Endangered Species Act and Migratory Bird Treaty Act enforcement will occur as appropriate on all wind power projects, including those planned for Kenedy County.

West Virginia Flying Squirrel

Question: What are the main threats to the West Virginia Northern Flying Squirrel's habitat?

Response: The main threats that led to the listing of the WVNFS were the rangewide clear cut logging of the red spruce-northern hardwood forests and fires associated with the logging in the mid-1800s. The red spruce forests have regenerated on their own and through restoration efforts. As stated in our December 19, 2006, proposed delisting rule, there is no current threat of clear cut logging within the WVNFS habitat, nor is this threat likely to occur in the future. The Service determined in the proposed rule that any threat to the West Virginia northern flying squirrel's (WVNFS) habitat has been either eliminated or largely abated.

Question: Have all the threats to the West Virginia Northern Flying Squirrel's habitat been reduced? If the threats to West Virginia Northern Flying Squirrel have not been reduced, why is the Fish and Wildlife Service moving forward, especially when squirrel population has not been measured?

Response: Yes, all threats have been eliminated or largely abated such that the subspecies no longer meets the definition of threatened or endangered under the Endangered Species Act.

Question: Why wasn't population taken into consideration in the delisting proposal?

Response: The Service considered population dynamics when assessing the status of the WVNFS using the best available scientific data. The Service considers persistence to be the best indicator of successfully reproducing populations for this subspecies. We define persistence as continuing captures of WVNFS over multiple generations at previously documented sites throughout the historical range. The Service has analyzed 20+ years of presence/absence data to determine persistence of WVNFS across its range, taking into consideration detectability rates, life span, reproductive capacity, dispersal capability, linkages to other populations, and the naturally patchy habitat distribution of the subspecies. These data consistently indicate a relatively high degree of persistence (roughly 80 percent) across the landscape, and are not indicative of a declining population of WVNFS.

Questions from Rep. Peter A. DeFazio

Question: The peer reviews of the draft recovery plan, the SEI review, and the members of the habitat working group for the final plan, all concluded that all owl habitats should be protected, regardless of their location. Why didn't the FWS follow this recommendation? Upon what scientific studies is the decision to deviate from the habitat working group's recommendation based?

Response: Input from the SEI report (2008) and the habitat work group convened by the Service concerned occupied spotted owl habitat and "high-quality" spotted owl habitat; these groups did not recommend to the Service that "all owl habitat" be maintained. The final recovery plan looks to the maintenance of "substantially all of the older and more structurally complex multi-layered conifer forests on Federal lands outside of MOCAs" (Recovery Action 32). Maintenance of this higher-quality habitat (a subset of suitable habitat) was recommended because: (1) these stands include occupied sites, (2) costly and time-consuming pre-project surveys can be avoided, and (3) chances are reduced of modifying sites either temporarily not occupied by spotted owls or actually occupied by spotted owls but not detected (due to presence of barred owls).

Question: Rangewide, only 55% of the MOCAs on the west side actually contain owl habitat (p. 89). Given the scientific consensus to protect all owl habitat everywhere, why aren't these "reserves" bigger? How can a species in decline survive—much less rebound and be delisted with only 55% of a home, 55% of prey, and 55% of a mate?

Response: There was not scientific consensus to protect all owl habitat everywhere. Input from the SEI report (2008) and the habitat work group convened by the Service concerned occupied spotted owl habitat and “high-quality” spotted owl habitat; these groups did not recommend to the Service that “all owl habitat” be maintained. Recovery Action 5 (page 20) states, “Manage habitat-capable lands within MOCAs to produce the highest amount and highest quality spotted owl habitat the lands are capable of producing.” The final plan recommends that lands within the MOCAs that may become suitable habitat should be managed to do so. In Table C6 (starting on page 85), the percentage of habitat-capable lands within the MOCAs are listed in the column titled “Percent (capable of total)”. The percentages are generally above 90 percent.

Question: Can you name any other species for which FWS has proposed reducing existing habitat protections while the species population is declining?

Response: Since recovery plans are guidance documents, the Service does not believe that the northern spotted owl recovery plan reduces existing protections.

Question: The MOCAs are based on the reserves proposed in 1990 by the ISC, and by the 1992 recovery plan. However, since then, scientists (including Dr. Franklin) have concluded that those reserves are not big enough or contain enough habitat to help the owl, and that there should be more of them. Why aren’t the MOCAs bigger and contain more habitat?

Response: According to the most recent northern spotted owl population modeling, the conservation area design as described in the Northern Spotted Owl Recovery Plan will address the loss of habitat. In fact, the MOCAs on the west side of the Cascade Mountains, added to the federal lands managed for northern spotted owls on the east side of the Cascades, coupled with the additional Federal older forests maintained over the next 10 years while we explore the threat from barred owls, will equal or exceed the total amount of Late Successional Reserves.

Question: You spoke of “acceptable risk” in managing for the owl. What about the risk of litigation for a recovery plan that doesn’t pass scientific muster? What about the risk of region wide injunctions? What about the risk of more controversy in my district and state? Do these things figure into your calculus of “risk”?

Response: The Service is charged with using the best available information to create a recovery plan designed to recover the owl and incorporate the stakeholders. The Northern Spotted Owl Recovery Plan represents such a document.

Question: According to the final recovery plan, the MOCA strategy is based on “Option 7” of the ten options discussed in the FEMAT report, which provided the scientific foundation for the Northwest Forest Plan (Final Recovery Plan, 74). FEMAT states that “all options except option 7 incorporate the Scientific Analysis Team (Thomas et. al. 1993) approach to late successional and riparian forest management (which enhances both connectivity between reserve areas and increases the acreage of late successional and old-growth forest available to northern spotted owls)” (FEMAT, 11-31). Option 7 had the second lowest likelihood of leading to a recovered and well-distributed NSO population. Why is the final recovery plan based on the only option considered by FEMAT that wasn’t based on the best available science? Why is Option 7 any better today than it was in 1993?

Response: The recovery plan uses the most recent science available. Recent spotted owl population modeling using the latest techniques and demographic information indicates the size (MOCA 1s are to support 20 or more pair, and MOCA 2s to support 1-19 pair) and spacing (no more than 12 miles apart for MOCA 1s and no more than 7 miles apart) of the MOCAs is expected to provide for a recovery level of occupancy over 100 years. In fact, the MOCAs on the west side of the Cascade Mountains, added to the federal lands managed for northern spotted owls on the east side of the Cascades, coupled with the additional Federal older forests maintained over the next 10 years while we explore the threat from barred owls, will equal or exceed the total amount of Late Successional Reserves.

In addition, the Plan identifies a landscape approach to spotted owl habitat conservation on the fire-prone eastern side of the species’ range that was strongly recommended by leading spotted owl and fire experts.

In these three Provinces, Eastern Washington Cascades, Eastern Oregon Cascades, and the California Cascades, the goal is to maintain an ecologically sustainable environment in which spotted owls can persist. Spatially dynamic spotted owl habitat patches will be identified by a work group after the plan is completed. These habitat patches are expected to move around as they are affected by natural disturbances, such as fire or insect damage. The entire area outside of the habitat patches will be managed to restore ecological processes and functions and to reduce the potential for significant losses by stand-replacement fires, insects and disease. All areas outside of habitat patches will be actively managed to reduce risks to spot-

ted owl habitat, through such actions as fuels treatments and maintenance of large, fire-resistant trees.

The recovery plan's goal is to maintain 30 to 35 percent of the dry forest habitat-capable area in each eastside province for spotted owl habitat, which totals more than 900,000 acres. Added to the acres of MOCAs, about 7.35 million acres would be managed for spotted owl habitat.

Further, the plan looks to federal land managers to maintain older, complex forests on federal lands west of the Cascade crest to benefit spotted owls, and identifies almost 2.4 million acres of non-Federal lands as Conservation Support Areas, which are meant to provide demographic support to the MOCAs.

Question: What is the difference between the habitat conservation strategy you have proposed and the ineffective strategies of the early 1990s that lead to the owl's listing?

Response: It is unclear what strategies are being referenced. The Service is charged with using the best available information to create a plan that it believes is capable of recovering the owl. The Northern Spotted Owl Recovery Plan is the first finalized recovery plan for the owl and will be implemented in concert with all willing partners.

Question: Are the MOCAs stationary? The draft recovery plan created MOCAs based on a "rule set" that the USFS and BLM could use to delineate the reserves. I'd like clarification on whether that rule set was carried forward into the final plan, or if FWS has drawn these lines on a map.

Response: The MOCAs are stationary and their boundaries are displayed in the maps provided in Appendix D of the Recovery Plan (pages 93-95).

Question: How does the FWS define "high quality habitat"? Is this the same as "nesting, roosting, and foraging" habitat, or something else?

Response: "High-quality habitat" is defined on page 10 of the Recovery Plan as, "Older, multi-layered structurally complex forests that are characterized as having large diameter trees, high amounts of canopy cover, and decadence components such as broken-topped live trees, mistletoe, cavities, large snags, and fallen trees. This is a subset of suitable habitat." Nesting, roosting and foraging habitat is defined differently (page 9) as, "Suitable habitat that provides nesting, roosting and foraging opportunities for spotted owls. Important stand elements are high canopy with larger overstory trees and a presence of broken-topped trees or other nesting platforms (e.g., mistletoe clumps). Some suitable habitat may have limited nesting opportunities, but still provide foraging opportunities." All high-quality habitat is nesting, roosting or foraging habitat, but all nesting, roosting and foraging habitat is not necessarily high-quality habitat.

Question: The recovery plan states "the recovery plan specifies the spotted owl habitat goals for the MOCAs but defers the actual management of those acres to the expertise of the land management agencies" (Final Recovery Plan Appendix F, Response to Comments). Since the FWS is the "expert" when it comes to the spotted owl, why is the agency leaving the actual management requirements up to the USFS and BLM to determine?

Response: While the Service is the federal agency with expertise in northern spotted owl biology, the Forest Service and the BLM are experts in managing federal forests. Recovery plans are guidance documents that are meant to establish the recovery criteria, goals, and recommended actions for achieving recovery. Recovery Action 5 (page 20) states, "Manage habitat-capable lands within MOCAs to produce the highest amount and highest quality spotted owl habitat the lands are capable of producing." In other words, all the lands within the MOCAs that may become suitable habitat should be managed to do so. The Service believes the land management agencies, in technical consultation with the Service, have the most expertise on how best to actually implement this recovery action.

Question: The recovery plan states that the MOCAs on BLM land in southern Oregon "coincide with the proposed Late Successional Management Areas (LSMAs) in the BLM's preferred alternative for its WOPR" and that "the best approach for spotted owl recovery now appears to be maintain the MOCAs on BLM land and to implement a landscape-management approach on U.S. Forest Service land, but this discussion requires further analysis" (Final Recovery Plan, 24). What does this mean? Is it possible that there will be no reserves in southern Oregon?

Response: Input from the SEI report (2008) and the fire work group convened by the Service clearly indicated that the Klamath Provinces in Oregon and California should ultimately be managed in a manner similar to the east-side landscape approach. However, specific design of such an approach needs more work. On Page 25, the Recovery Plan states, "The first task of the [Dry-Forest Landscape] Work Group will be to review the interim strategy for the Klamath Provinces and make

recommendations for a final strategy there. The review should entail: 1. inclusion of appropriate scientists, Federal agencies, and interested parties as appropriate..."

Question: The recovery planning process for the owl has been highly controversial in the past, and has continued today. Given the controversy surrounding the draft plan, do you expect to take scientific peer review of the final plan? What will you do if that review is negative? Will you revise the plan immediately? If you do revise the recovery plan, how might that revision affect ongoing management actions (timber sales, WOPR, etc.) that tier to the recovery plan?

Response: Consistent with our established policy (see 59 FR 34270), the Service conducted peer review of the draft recovery plan and we made adjustments to the final plan in response to comments that we received. While no further Service-instigated peer review of this plan is anticipated in the near future, we could modify the Northern Spotted Owl Recovery Plan if the implementation advisors believe sufficient information exists to warrant an adaptive management modification.

Question: I support landscape restoration efforts, both east and west of the Cascade crest. The final recovery plan calls for large-scale thinning east of the crest, which is something I could support. However, the recovery plan does not specify what these treatments will look like. Who will decide what those forest treatments will be, and will there be any independent review of those prescriptions?

Response: Recovery Action 9 (page 25) calls for the establishment of an inter-agency Dry-Forest Landscape Work Group that will be responsible for making recommendations on how to best accomplish the goals of the Recovery Plan in those areas. We anticipate this group will be interdisciplinary and will include researchers, biologists, silviculturists, planners and managers, among other expertise. Projects implemented by the land management agencies will be evaluated for NEPA clearance.

Question: How will you determine whether the spotted owl population is responding to the recovery plan? Will you use habitat models, or "hoot for owls"?

Response: Spotted owl population monitoring is currently conducted through a statistically rigorous, extensive sampling program. Anthony et al., 2006, Status and Trends in Demography of Northern Spotted Owls, 1985-2003, Wildlife Monographs. There are 13 long-term demographic study areas (DSAs) across the range of the spotted owl that constitute the sampling process. These DSAs are large and cover much of the owl's geographic range including a variety of landownership (but mostly federal) and management strategies. The monitoring program provides the general trend of the species representative of most owl populations on federal lands, not the total population of the species. Once the DSAs indicate the status of the species is improving toward stability a more extensive monitoring effort may be desired for at least 10 years to determine if Recovery Criterion 1 is met, i.e., "The population trend of spotted owls is stable or increasing over 10 years of monitoring."

Question: If you are relying on habitat models to determine whether the species is progressing towards recovery, why are you doing so, given that peer reviewers have concluded are not accurate, and do not provide enough information to accurately determine the health of the owl population? What science supports your habitat model approach, for the spotted owl?

Response: The Service is relying on the results of the demographic monitoring program to determine the species' progress. Habitat maintenance (as part of the MOCA strategy, the high-quality habitat provision and the dry-forest landscape approach) represents only one part of the recovery strategy.

Question: How does the FWS plan to get an aggressive "hoot and shoot" plan for the barred owl through the NEPA and ESA consultation process?

Response: Recovery Action 29 (p. 31) calls for the design and implementation of large-scale control experiments to "assess the effects of barred owl removal on spotted owl site occupancy, reproduction, and survival." If the results are favorable, we may decide to pursue further control efforts. For the initial control experiment, we anticipate conducting a rigorous NEPA process, with full public review, and conducting an intra-Service consultation on this recovery action.

Question: Is the draft EIS for WOPR consistent with the final recovery plan?

Response: The Western Oregon Plan Revision (WOPR) Draft Environmental Impact Statement (DEIS) was based on, and is consistent with, the 2007 Draft Recovery Plan, however, the Bureau of Land Management is working to make the final WOPR consistent with the final recovery plan released in May 2008. The Service has worked closely with the Bureau of Land Management and other federal land management agencies to discuss what is needed to recover the spotted owl.

Question: The final recovery plan is expressly predicated on the implementation of the Northwest Forest Plan (Final Recovery Plan, 7). Yet, the BLM is proposing to eliminate LSRs and substantially reduce Riparian Reserves in its WOPR. How will this affect the assumptions and conclusions in the recovery plan?

Response: Where possible and where it made biological sense, MOCAs were overlaid on Northwest Forest Plan reserves because of their management over the past 14 years. However, the MOCA system, the retention of high quality habitat and the dry-forest landscape approach are all intended to function independently from the Northwest Forest Plan.

Question: Who is going to conduct the monitoring required by the recovery plan? How will it be paid for?

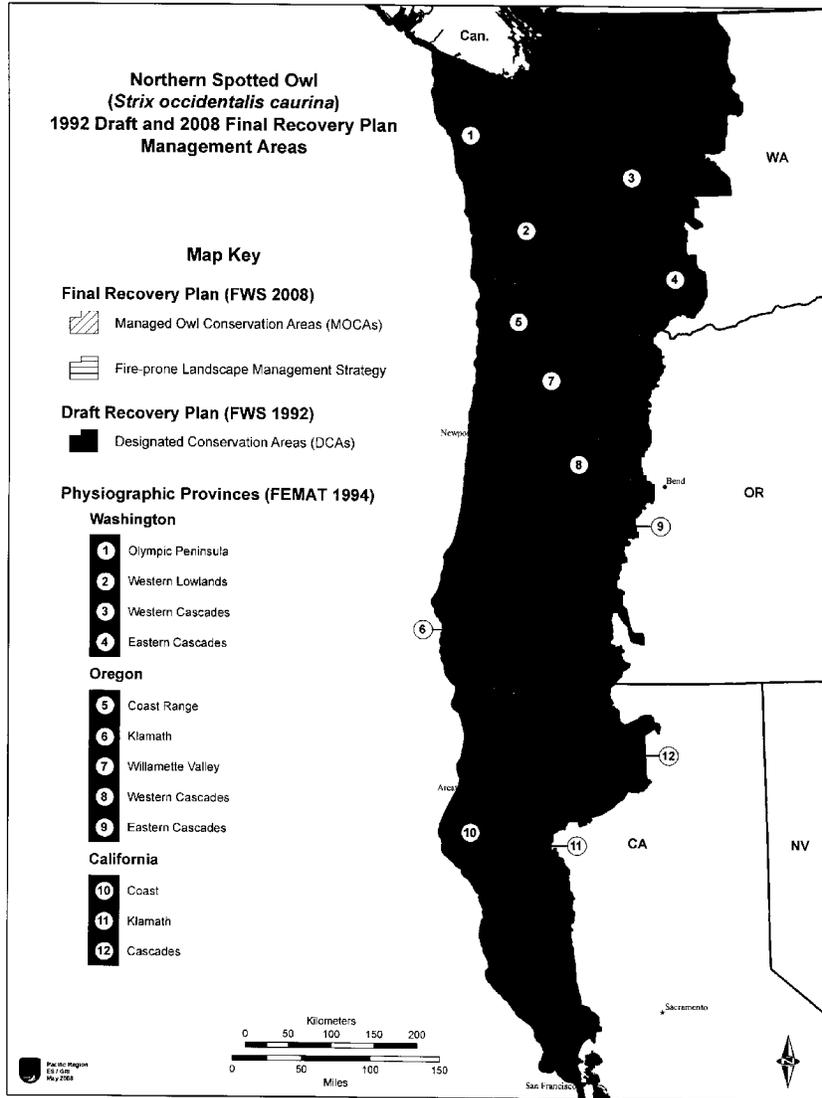
Response: The current demographic monitoring program is supported by the BLM, Forest Service and, to a more limited extent, the National Park Service. We anticipate these three agencies, in cooperation with the Service, and perhaps the states on state land will continue to fund the monitoring program.

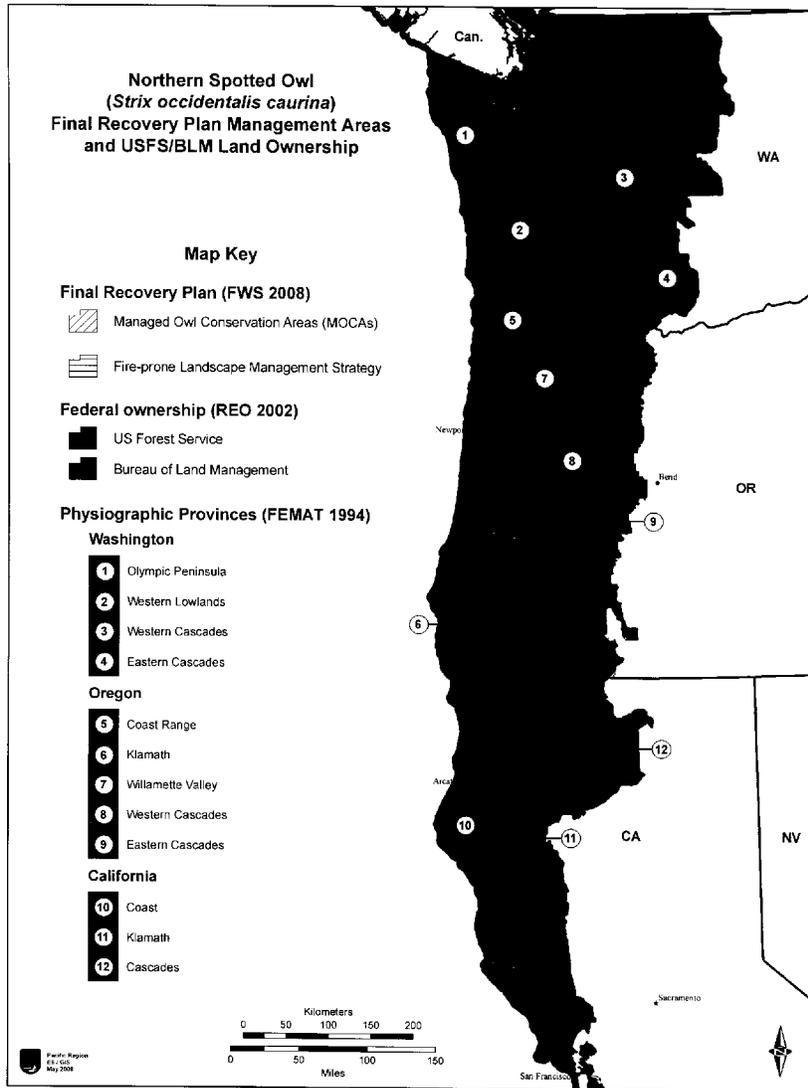
Question: What can we expect from FWS in terms of NSO critical habitat, which I understand will be out in early June?

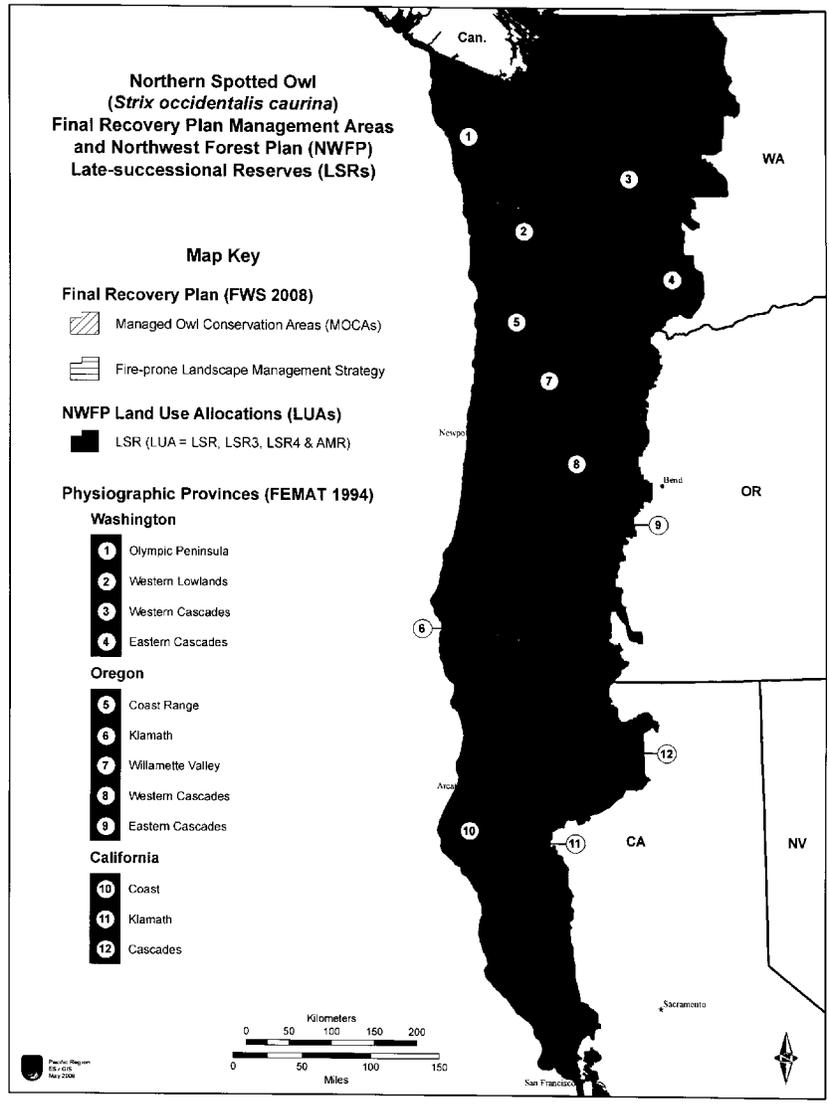
Response: Except for the areas east of the Cascades, the Service intends to designate a critical habitat network that is consistent with the Recovery Plan. However, critical habitat requires mapped units and is not flexible in recognizing landscapes that naturally change. The Recovery Plan does not recommend static conservation areas in the dry-forest landscape. Consequently, the critical habitat strategy for the eastside uses the areas identified in the 2007 draft of the Recovery Plan as necessary for recovery.

Question: Please submit for the record maps of the NSO provinces overlaying (a) FS and BLM land ownership; (b) Designated Conservation Areas as identified in the 1992 draft recovery plan; (c) LSRs as described in the Northwest Forest Plan; and (d) MOCAs under the 2008 recovery plan.

Response: The requested materials are attached.







Response to questions submitted for the record by Ed Shepard, Bureau of Land Management, U.S. Department of the Interior

- 1. The draft EIS for the WOPR was based on the draft recovery plan, both of which were roundly criticized, including by its own scientists. Now that the recovery plan has been finalized, how will the BLM respond? Will the BLM be “maintaining substantially all high quality habitat” outside of MOCAs, and managing the remaining land to produce the highest amount and highest quality habitat that those lands are capable of producing? Does that include not logging old growth, which BLM earlier proposed to log under WOPR?**

The BLM is still in the planning process, and I cannot predetermine the final decisions that will be the outcome of that process. However, I can tell you that the BLM has worked closely with the U.S. Fish and Wildlife Service (FWS) during the development of the Final Northern Spotted Owl Recovery Plan and BLM’s Proposed Western Oregon Plan Revisions (WOPR). The BLM released the draft Environmental Impact Statement (EIS) in August 2007 and is continuing to work with the FWS to make the final EIS consistent with the Recovery Plan. The BLM’s close collaboration with the FWS will continue as the Recovery Plan undergoes adaptive management in the future.

- 2. One of the key assumptions of the recovery plan is that “existing habitat conservation strategies (e.g., the NWFP) would be in place” (Final Recovery Plan, 7). But WOPR would eliminate the LSRs in southern Oregon (still an area of concern due to past management and the checkerboard), and drastically reduce the Riparian Reserves. What does this mean for the assumptions and conclusions of the final recovery plan? How will the BLM respond?**

The BLM is still in the planning process, and I cannot predetermine the final decisions that will be the outcome of that process. The quoted text, “existing habitat conservation strategies (e.g., the NWFP) would be in place” is a baseline assumption made by a panel of seven experts for use in a Delphi process at a meeting held on June 1, 2006, not a key assumption. The final Recovery Plan does not recommend maintaining the Northwest Forest Plan (NWFP) late successional reserve network for any province. The Recovery Plan for southern Oregon includes the following statement:

“This Plan recommends implementation of a MOCA network for the Klamath Provinces, but it will be considered an interim strategy until such time another strategy is adopted. A change to a non-MOCA landscape approach, at least on the Forest Service lands, is expected following the work of the Dry-Forest Landscape Work Group (discussed below).

The MOCAs in the Klamath Provinces in Oregon and California coincide with the proposed Late Successional Management Areas (LSMAs) in the BLM’s preferred alternative for its Western Oregon Plan Revision and with U.S. Forest Service LSRs. There is a significant difference in land ownership patterns between the BLM and U.S. Forest Service in this area (i.e., much of the BLM owned land is in a checkerboard pattern, while the Forest Service administers large contiguous blocks of land). BLM’s checkerboard land ownership means the agency generally does not manage more than 50 percent of the land in a given area, so its approach to fire management and spotted owl recovery may differ from that of the U.S. Forest Service. The best approach for spotted owl recovery now appears to be to maintain the MOCAs on BLM land and to implement a landscape-management approach on U.S. Forest Service land, but this discussion requires further analysis.” (Page 24)

The final Recovery Plan makes no recommendation for the width of riparian management areas. The only reference to riparian management areas is found on page 19. It notes “While there is uncertainty regarding the forest conditions required for spotted owl dispersal, it is assumed dispersal success is better when the habitat between the blocks more closely resembles suitable habitat. Land use allocations such as visual corridors, riparian management zones, unstable soil areas, and special management areas for other species that support higher-quality spotted owl habitat embedded in a landscape of forest lands managed for timber production should facilitate dispersal of spotted owls.”

3. It seems to me that the BLM is going to have to make extensive revisions to the draft EIS for WOPR, in light of the recovery plan, spotted owl critical habitat due out any day now, and the BLM's own internal science review of WOPR. Would you like more time to make these revisions?

The BLM has been working closely with the FWS on the Western Oregon Plan Revisions and the Recovery Plan. Because of this close coordination, we expect to issue a Record of Decision for the current Western Oregon Plan Revisions planning process by the end of 2008.

The CHAIRMAN. Ms. Luxton?

**STATEMENT OF JANE LUXTON, GENERAL COUNSEL,
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION,
U.S. DEPARTMENT OF COMMERCE**

Ms. LUXTON. Thank you, Chairman Rahall and Members of the Committee, for the opportunity to discuss the proposed rule to implement speed restrictions to reduce the threat of ship collisions with North Atlantic right whales.

The North Atlantic right whale is one of the most critically endangered large whale species in the world. The latest NOAA peer reviewed stock assessment indicates that a minimum of 313 individuals were estimated to have existed in 2002. The minimum population size has likely hovered near 3,000 [sic] individuals for several decades, having increased from perhaps fewer than 100 individuals by 1935 when international protection for right whales came into effect.

From 1995 to 2002, the period when estimates are available, the minimum number of right whales alive has fluctuated from 284 in 1995, to 313 in 2002. These numbers indicate that this population remains at risk. Collisions with marine vessels, which we call ship strikes, are of the greatest known human-related causes of right whale deaths and serious injuries.

To address this threat, NOAA, in collaboration with other agencies and stakeholders, developed a right whale ship strike reduction program, which includes rulemaking to reduce ship speeds in areas where right whales occur. NOAA described the program in an advanced notice of public rulemaking, which we call ANPRs, in June 2004. After considering comments on the ANPR and consulting with other affected agencies, NOAA published a proposed ship speed restriction rule on June 26, 2006.

The proposed rule would impose a ship speed limit of 10 knots on commercial vessels 65 feet and greater in overall length, which are subject to the jurisdiction of the United States. The proposed rule also sought comments on 12 and 14 knot speed limits. For reasons I will explain in a moment, U.S. vessels owned or operated by, or under contract to, the Federal government would be exempt from this speed restriction.

The proposed restrictions would apply in specific marine areas and certain port entrances along the East Coast of the United States, imposing seasonal speed limits only in parts of designated regions that correspond to right whale feeding, migration and nursery/calving areas, and high vessel density. The areas designated were confined as much as possible to reduce economic impact to the shipping industry and the ports.

The proposed rule also includes speed restrictions that are triggered in dynamic management areas where NOAA determines there is concentration of three or more right whales, or there are one or more right whales in a designated shipping lane.

NOAA's proposed rule exempted Federal vessels, as I mentioned before, based on a determination that national security and navigational and human safety missions of some agencies may be compromised by a mandatory speed limit. NOAA further noted such an exemption would not relieve Federal agencies of their obligations to protect endangered right whales under the Endangered Species Act, including Section 7.

In conjunction with this rule, NOAA also completed a draft environmental impact statement analyzing six alternatives. The EIS included an economic analysis of the rule. NOAA accepted written comments on the proposed regulation and the draft environmental impact statement, and held several public hearings in Jacksonville, Baltimore and Boston during 2006.

NOAA received more than 10,000 comments on the proposed rule from the following groups: State and Federal agencies; shipping industry and cruise lines; ports, pilots, marinas and longshoremen; whale watch and passenger ferries; recreational fishing sector; environmental groups; members of environmental groups; and individuals.

Comments focused on the data available, speed restrictions, area covered by the rulemaking, economic impacts and safety concerns. Of the comments, more than 9,700 were some type of form response.

After considering all public comments on the proposed rule and consulting other affected Federal agencies, NOAA drafted a final rule and transmitted it to the Office of Management and Budget on February 20, 2007, in accordance with Executive Order 12866. At present, NOAA's final rule is under interagency review.

NOAA has also taken steps to reduce ship strikes through vessel routing measures. The United States prepared and submitted to the International Maritime Organization a proposal to reconfigure the traffic separation scheme that services Boston, Massachusetts. The IMO reviewed and adopted the proposal, and the realignment was implemented in July 2007.

NOAA has also addressed the threat of large whale entanglement in fishing gear, another serious problem for right whales. On October 5, 2007, NOAA issued a final rule to amend the regulations implementing the Atlantic Large Whale Take Reduction Plan. This final rule revises the management measures for reducing the incidental mortality and serious injury to the northern right whale, also humpback whales and fin whales in commercial fisheries, to meet the goals of the Marine Mammal Protection Act and Endangered Species Act.

Thank you again, Mr. Chairman, for the opportunity to testify. I am happy to respond to any questions.

[The prepared statement of Ms. Luxton follows:]

Statement of Jane Luxton, National Oceanic and Atmospheric Administration, U.S. Department of Commerce

Good morning, I am Jane Luxton, from the National Oceanic and Atmospheric Administration (NOAA). Thank you, Chairman Rahall, and members of the Committee

for the opportunity to discuss the proposed rule to implement speed restrictions to reduce the threat of ship collisions with North Atlantic right whales.

The North Atlantic right whale (*Eubalaena glacialis*) is one of the most critically endangered large whale species in the world; the latest NOAA peer-reviewed stock assessment indicates that a minimum of 313 individuals were estimated to have existed in 2002. The minimum population size has likely hovered near 300 individuals for several decades, having increased from perhaps fewer than 100 individuals by 1935, when international protection for right whales came into effect. From 1995 to 2002 (the period when estimates are available) the minimum number of right whales alive has fluctuated from 284 individuals in 1995 to 313 individuals in 2002. These numbers indicate that this population remains at risk. Collisions with marine vessels (“ship strikes”) are one of the greatest known human-related causes of right whale deaths and serious injuries.

To address this threat, NOAA, in collaboration with other agencies and stakeholders, developed a right whale ship strike reduction program, which includes rule-making to reduce ship speeds in areas where right whales occur. NOAA described the program in an Advanced Notice of Public Rulemaking (ANPR; 69 Fed. Reg. 30,857) on June 1, 2004. After considering comments on its ANPR and consulting with other affected agencies, NOAA published a proposed ship speed restriction rule on June 26, 2006 (71 Fed. Reg. 36,299).

The proposed rule would impose a ship speed limit of 10 knots on commercial vessels 65 ft and greater in overall length, which are subject to the jurisdiction of the United States. The proposed rule also sought comments on 12 and 14 knot speed limits. For reasons I will explain in a moment, U.S. vessels owned or operated by, or under contract to, the Federal Government would be exempt from this speed restriction. The proposed restrictions would apply in specific marine areas and certain port entrances along the East Coast of the United States, imposing seasonal speed limits only in parts of designated regions that correspond to right whale feeding, migration, and nursery/calving areas and high vessel density. The areas designated were confined as much as possible to reduce economic impact to the shipping industry. The proposed rule also includes speed restrictions that are triggered in “Dynamic Management Areas” where NOAA determines there is a concentration of three or more right whales or there are one or more right whales in a designated shipping lane. NOAA’s proposed rule exempted federal vessels based on a determination that national security and navigational and human safety missions of some agencies may be compromised by a mandatory speed limit. NOAA further noted that such an exemption would not relieve federal agencies of their obligations to protect endangered right whales under the Endangered Species Act, including Section 7.

In conjunction with this rule, NOAA also completed a draft Environmental Impact Statement (EIS) analyzing six alternatives. The EIS included an economic analysis of the rule. NOAA announced the availability of the draft EIS on July 7, 2006 (71 Fed. Reg. 38,640). NOAA accepted written comments on the proposed regulation and the draft EIS, and held several public hearings in Jacksonville, Baltimore, and Boston during 2006.

NOAA received more than 10,000 comments on the proposed rule from the following groups:

- state or federal agencies
- shipping industry and cruise lines
- ports, pilots, marinas, and longshoremen
- whale watch and passenger ferries
- recreational fishing sector
- environmental groups
- members of environmental groups
- individuals

Comments focused on the data available, speed restrictions, area covered by the rulemaking, economic impacts, and safety concerns. Of the comments, more than 9,700 were some type of form response.

After considering all public comments on the proposed rule and consulting other affected agencies, NOAA drafted a final rule and transmitted it to the Office of Management and Budget (OMB) on February 20, 2007, in accordance with Executive Order 12866. At present, NOAA’s final rule is under interagency review.

NOAA has also taken steps to reduce ship strikes through vessel routing measures. The United States prepared and submitted to the International Maritime Organization (IMO) a proposal to reconfigure the “Traffic Separation Scheme” that services Boston, Massachusetts. The proposed realignment is expected to provide a significant reduction in ship strike risk to right whales and all baleen whale species occurring in the area, with minimal concurrent impact to mariners. The IMO re-

viewed and adopted the proposal, and the realignment was implemented in July 2007.

NOAA has also addressed the threat of large whale entanglement in fishing gear. On October 5, 2007, NOAA issued a final rule (72 FR 57104) to amend the regulations implementing the Atlantic Large Whale Take Reduction Plan. This final rule revises the management measures for reducing the incidental mortality and serious injury to the Northern right whale (*Eubalaena glacialis*), humpback whale (*Megaptera novaeangliae*), and fin whale (*Balaenoptera physalus*) in commercial fisheries to meet the goals of the Marine Mammal Protection Act and the Endangered Species Act.

Thank you again, Mr. Chairman, for the opportunity to testify. I am happy to respond to any questions.

Response to questions submitted for the record by Jane Luxton

Cabinet Level Decision

We understand that the ship strike rule has been discussed in Department meetings and could be the subject of a cabinet meeting. This is reminiscent of the rarely invoked God Squad provision where cabinet members meet to decide whether a proposed agency action should go forward notwithstanding the likelihood that species may go extinct.

How are we not to conclude that the delay in issuing the regulation to protect the right whale is anything more than another example of this Administration's politicization of a scientific decision?

The process for publishing the ship speed reduction rule has been similar to the process for other rulemakings under the Endangered Species Act (ESA). It is also the same process that NOAA goes through under other mandates such as the Magnuson-Stevens Act and the Marine Mammal Protection Act.

It began with an Advance Notice of Proposed Rulemaking, followed by a public comment period during which time the agency conducted public meetings up and down the East coast. NOAA then filed a notice of intent to prepare a draft environmental impact statement and had additional public meetings as required by the National Environmental Policy Act (NEPA). Next, following interagency review coordinated by the Office of Management and Budget (OMB), as required by Executive Order 12866, NOAA published a Proposed Rule and a notice of availability for the draft environmental impact statement. Public comments were accepted again as required by NEPA and the Administrative Procedure Act. Following this, NOAA developed a final rule and final environmental impact statement. All three rulemaking documents were sent to the OMB for interagency review, as required by Executive Order 12866.

Under Executive Order 12866, which has been in effect since the Clinton Administration, OMB is notified of all proposed federal rulemaking actions and coordinates the interagency review of all rules that are deemed to be significant. Rules are "significant" if they may have \$100 million or more in annual economic effect, interfere with or are inconsistent with actions taken or planned by another agency, or raise novel legal or policy issues. This rulemaking has an economic impact exceeding \$100 million, and thus is considered significant; therefore OMB has been coordinating the interagency review process.

Vice President's Interest

Why is the Vice President's office interested in the ship strike rule? Scientific issues were not seen as important when OMB reviewed the proposed rule. What has changed?

This rule is based on peer-reviewed science. The interagency review process set forth in Executive Order 12866 will help ensure that the Final Rule achieves its regulatory objective in the most cost-effective manner, based on "the best scientific, technical, economic and other information," and taking into account the views of other agencies and members of the public. The rulemaking process is meant to support robust interagency dialogue on all of these issues.

Delay of Rule

What is the scientific justification for further delays in the proposed rule?

The interagency review process set forth in Executive Order 12866 will help ensure the Final Rule achieves its regulatory objective as effectively as possible, based on "the best scientific, technical, economic and other information," and taking into

account the views of other agencies and members of the public. The rulemaking process is meant to support robust interagency dialogue on all of these issues.

\$100 million Cost

We understand that the rule could cost international shipping interests \$100 million which is significant, even if the amount represents only .1 percent of annual receipts for international shippers. It is my understanding that the Chamber of Shipping of America, which primarily represents American companies, is willing to accept the rule. Yet, the World Shipping Council representing international interests opposes the regulation.

Why is the Administration giving more credence to the concerns of the World Shipping Council than to the Chamber of Shipping of America, if American companies are willing to do what it takes to protect the whale?

In conjunction with this rule, NOAA conducted numerous public meetings and held several rounds of discussions with the shipping community and other stakeholders to describe the content and purpose of the ship strike reduction proposals.

NOAA received more than 10,000 comments on the proposed rule from the following groups:

- state or federal agencies
- shipping industry and cruise lines
- ports, pilots, marinas, and longshoremen
- whale watch and passenger ferries
- recreational fishing sector
- environmental groups
- members of environmental groups
- individuals

Comments from all stakeholders were considered in drafting the Final Rule.

Deadlines

Why has the White House in reviewing the right whale regulation missed the deadlines in Executive Order 12866?

Rules are “significant” if they may have \$100 million or more in economic implications, interfere with or are inconsistent with actions taken or planned by another agency, or raise novel legal or policy issues. This rulemaking is considered significant under Executive Order 12866 and involves complex issues that have generated substantial public comment. OMB is taking the time needed to coordinate the interagency review process.

The CHAIRMAN. Thank you all for your testimony. I appreciate it.

Let me begin by asking Ms. Nazzaro, based on your work, do you believe there are ESA decisions that were inappropriately influenced by Interior officials other than Ms. MacDonald?

Ms. NAZZARO. Through the course of our work, we did identify that had the Agency broadened their criteria—they used three criteria—primarily were the decisions influenced by Ms. MacDonald, was the scientific basis of that decision compromised and did the decision significantly change or result in a negative impact? Had they broadened that criteria, yes, they would have identified other decisions for possible revision.

The CHAIRMAN. And who?

Ms. NAZZARO. It might be more important for me to identify titles. I don’t know if the names will mean as much as to identify so that you could get a sense of where in the organization they possibly would be.

The CHAIRMAN. That would be a good start.

Ms. NAZZARO. But one would be the Special Assistant to the Assistant Secretary. Another would be—I don’t have his title. One was a former Assistant Secretary, and the other was a Deputy Assistant Secretary. Another was Chief of Staff, so we identified a number of individuals.

The CHAIRMAN. Can you name names?

Ms. NAZZARO. I could.

The CHAIRMAN. Please.

Ms. NAZZARO. OK. The Special Assistant to the Assistant Secretary was Randall Bowman. We found that there were five decisions that he affected. Another would be Judge Craig Manson; he was a former Assistant Secretary. We found three ESA decisions that he impacted. Third, the Deputy Assistant Secretary was Todd Willens. He affected one decision. And Brian Waidmann, who was Chief of Staff, was not mentioned in connection with a particular species, but his name appeared in various sources as also reviewing decision packages and generally supporting decisions that Julie MacDonald made.

Now again, this was through our conversations and reviews of studies. We are not saying it is an exhaustive list, but we have an indication that had they broadened it, there could have been others.

The CHAIRMAN. You mentioned Brian Waidmann. Is he still Chief of Staff to the Secretary, Mr. Kempthorne?

Mr. LAVERTY. Yes, sir, he is.

The CHAIRMAN. He is still holding the title "Chief of Staff." And you feel he may have inappropriately influenced ESA decisions?

Ms. NAZZARO. From the sources that we reviewed, sir, we found that he frequently reviewed ESA decision packages and generally supported decisions that Julie MacDonald made.

The CHAIRMAN. Thank you.

Let me ask Ms. Luxton a question. Please do not take this in the wrong way. I recognize that you are not the witness whom we had requested to be with us today. The Agency instead put you up, so this is in no way a reflection upon you or your abilities, and therefore I will keep the question very simple. It only will require a "yes" or a "no."

Has the White House interfered in any way on the right whale issue? Yes or no?

Ms. LUXTON. I am really not in a position to answer that question. I mean, the interagency review process is, I think, what you may be referring to, and that is a part of the typical review process that goes on with any significant rule, and this is classified as a significant rule.

The CHAIRMAN. Do you have any knowledge of any White House involvement?

Ms. LUXTON. Well, in the typical interagency process, there is always a review by all interested parts of the Federal government, and that process is going on now. This is an ongoing rulemaking, and that is the normal process.

The CHAIRMAN. Are you aware of any involvement of the Council of Economic Advisors?

Ms. LUXTON. Again, all parts of the Federal government are part of the interagency review, all that are interested in this particular rule, so it is a broad group, just as NOAA is involved in interagency reviews when other Agency questions come up that have a NOAA aspect of interest to the Agency.

The CHAIRMAN. And why is it taking so long for this rule to get out?

Ms. LUXTON. I agree. This rule has taken longer than we would have liked it to take. It is a significant rule.

As I mentioned, we received 10,000 comments on this rule, and it involves a great many aspects of vessel safety and maneuverability, economics, scientific issues, technical issues, and all of them are part of the extensive comments we received and the discussions that need to be had to make sure we produce the best rule possible.

The CHAIRMAN. OK. Let me ask Assistant Secretary Laverty. You heard my opening remarks and the GAO testimony that the American people expect more from their government, yet at the Interior Department, it appears lessons learned are still being lost. The Fish and Wildlife Service bungled its review of the Julie MacDonald decisions. Politics is still trumping science.

Your testimony notwithstanding, I would like your response to what GAO has reported and to wit: "Questions remain about the extent to which Interior officials other than Ms. MacDonald may have inappropriately influenced ESA decisions and whether broader ESA policies should be revisited." Your comments, please?

Mr. LAVERTY. Yes, Mr. Chairman. I am not aware specifically of the specific references in the report as it relates to these outside of Ms. MacDonald. I would be happy to follow up on that.

I can tell you right now that the integrity of the science and the process is absolutely clear, and I can assure you that decisions that are being made by Fish and Wildlife Service are based on the integrity of science, and that there are no changes taking place in science.

The CHAIRMAN. Let me ask you what we just heard from the previous witness, Ms. Nazzaro, about the Secretary's Chief of Staff, Mr. Waidmann, is involved in this decision-making process. Do you have a comment on that?

Mr. LAVERTY. I am not aware of what his involvement would be. I think, as a normal course of review, the Chief of Staff does review decisions, but I am not sure what effect it would have had in previous ones.

I have had conversations with him on actions that we are taking, but I don't find those to be changing decisions.

The CHAIRMAN. All right. I recognize the acting Ranking Member from Nebraska.

Mr. SMITH. Thank you, Mr. Chairman and Members. Certainly, I am a relatively new Member to this Committee, and it is very interesting the more information that I receive.

I am a bit curious, Ms. Nazzaro. What is the process? For example, Julie MacDonald or Mr. Waidmann—folks like this whose names are mentioned in hearings such as this—do you interview them as part of your investigation?

Ms. NAZZARO. We did not interview these individuals. Our methodology, as I mentioned earlier, we had talked with Director Hall. We also talked to the eight regional directors.

We also went to 10 field offices in five different regions, focusing on those field offices that had the majority of the listing and delisting activities, as well as to provide geographic coverage.

Mr. SMITH. And so, is there any opportunity given to these individuals for rebuttal before their names are mentioned in a setting such as this?

Ms. NAZZARO. We are not making an accusation. We are saying they potentially inappropriately influenced it. We did not research to what extent they have influenced it or what the outcomes were.

The question asked was to what extent were other individuals potentially influencing decisions, and we just felt that the scope of the study that the Agency engaged in was a rather narrow scope just looking at Ms. MacDonald.

We understand the allegations that were made regarding her, and we understand why they chose to do that as a first step. We are just saying, if they had broadened it, they may have come up with others.

Mr. SMITH. But the emphasis would be on the potential you mentioned?

Ms. NAZZARO. Correct. Correct. I mean, these came through conversations. We also reviewed studies, such as studies by the Union of Concerned Scientists and others of that nature.

Mr. SMITH. But these individuals have not been interviewed by GAO?

Ms. NAZZARO. Correct.

Mr. SMITH. Thank you.

The CHAIRMAN. Would the gentleman yield, very quickly, on that?

Mr. SMITH. Sure.

The CHAIRMAN. Did you also have access, as part of your methodology, to memos?

Ms. NAZZARO. Yes.

The CHAIRMAN. Thank you.

Ms. NAZZARO. Emails, documents, Agency documents. Yes. We had a quite extensive record of where these individuals' names were mentioned numerous times.

Mr. SMITH. Sure. Well, I appreciate that. You know, we have a job to do here, and you do as well, and I appreciate your service to the public as with anyone here in the room. I mean, there are many responsibilities that all of us have.

I have been sifting through some paperwork here, and I would like to submit for the record a rebuttal from Ms. MacDonald for the record.

The CHAIRMAN. Without objection. It will be made part of the record.

[The letter submitted for the record by Ms. MacDonald follows:]

Julie A. MacDonald
MacDonald Consulting
Phone: 202-333-0844

June 2, 2008

Mr. Gene Dodaro
Acting Comptroller General
Government Accountability Office
441 G. St., NW
Washington, DC 20548

Dear Mr. Dodaro;

The purpose of this letter is to correct several inaccuracies in GAO's report on Endangered Species Act Decision-Making, GAO-08-688T. In addition to the report,

these inaccuracies—both general and specific in nature—were also included in GAO’s testimony before the House Resource Committee on May 21, 2008. Sadly, most of the errors could have been avoided had the author reviewed the source documents and interviewed the primary subjects of the report.

The report misstates the requirements of the Act and is also misleading with respect to the duties of the Fish and Wildlife Service and the Department of the Interior. With an almost unbelievable lack of thoroughness, the authors clearly failed to even read the text of the Endangered Species Act. This is a particularly egregious omission, since its provisions form the basis of the entire decision-making process which is the subject of the report. In addition, the authors apparently neglected to perform even the most cursory review of the source documents comprising the record. All the emails and comments regarding the referenced regulatory documents are readily available and a matter of public record. Further, a letter rebutting the specific claims made in the referenced Inspector General’s Report was made available to 8 senior staff at the Department. Despite the fact that the rebuttal was referenced publicly in a House Resource Committee hearing in July of 2007, the GAO ignored the information, choosing instead to perpetuate the IG’s mischaracterizations. Finally, the GAO never bothered to contact either me or the other officials whose activities are referenced in the body of the report.

Apparently, the GAO prefers to draw the conclusions in its reports untrammelled by the facts. Attached is a rebuttal of the specific claims included in the report. I presume based on the GAO’s mission and core values, that the errors and unsubstantiated accusations will be corrected by your office. To fail to do so will indelibly mark the Office with the taint of partisanship carelessness, and disregard for the law and facts.

Sincerely,

Julie A. MacDonald

**DETAILED CORRECTIONS TO
“ENDANGERED SPECIES ACT DECISION-MAKING”
GAO REPORT-08-688T
June 2, 2008**

The report is written to support a conclusion that science was ‘inappropriately’ influenced. The artifice used to support the conclusion has several components, which include:

- Mischaracterization of the requirements of the Endangered Species Act;
- Confusion of the role of the Assistant Secretary’s Office;
- Misstatement of the role of the Fish and Wildlife Service;
- Mischaracterization of legitimate quality control activities of the Assistant Secretary’s Office;
- Omission of readily available facts

The approach used by GAO is cynical and contrary to its mission, which is to provide Congress information that is objective, fact-based, nonpartisan, nonideological, fair, and balanced¹. Instead, the GAO has delivered a document to Congress that could hardly have been more misleading or inaccurate. Further, the approach used in developing the report is contrary to the core values of GAO, which states all facts and analyses in our work are thoroughly checked for accuracy². As the following paragraphs will demonstrate, facts were not checked, or even considered, and analyses were completed in a context that did not reflect the requirements of the law.

- Mischaracterization of the requirements of the Endangered Species Act³

The ESA provides for 3 major regulatory activities, listing, designation of critical habitat and consultation on discretionary federal activities. All of the regulatory activities rely on one standard, the best scientific and commercial data available.

In the summary, GAO characterizes the standard used for ESA decisions as the ‘best available scientific information’:⁴

¹ GAO Mission Statement; <http://www.gao.gov/about/index.html>

² GAO Core Values; <http://www.gao.gov/about/index.html>

³ http://frwebgate.access.gpo.gov/cgi-bin/getdoc.cgi?dbname=browse_usc&docid=Cite:+16USC1533

⁴ With respect to listing determinations the Act states:

(b) Basis for determinations

(1)(A) 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 to him...

With respect to critical habitat designations the Act states.

'The Department of the Interior's (Interior) U.S. Fish and Wildlife Service (Service) is generally required to use the best available scientific information when making key decisions under the Endangered Species Act (ESA).'

Then on page 1, GAO repeats the error;

Generally, Interior and the Service are required to use the best available scientific information when making key ESA decisions.

And again several times on page 9, where oddly, GAO characterizes one out of six activities as most activities...

'In most cases, ESA decisions must be based at least in part on the best available scientific information (see table 1).'

'...some ESA decisions are both "peer reviewed" and reviewed internally to help ensure that they are based on the best available science...'

And again on page 8 of the House staff briefing materials:

'Many ESA decisions must be based, at least in part, on the best available scientific information.'

However, Table 1 of the GAO Report, found on page 8, recognizes that only one activity has a standard based on the less rigorous standard of 'information' as opposed to data, and that is the 90-day petition finding, which has no regulatory effect. No scientific standards are imposed on Recovery Plans.

There are only two possible explanations for the repeated errors on this score. Either the GAO never examined the requirements of the statutes or the GAO deliberately ignored the contents of the statute and chose to mischaracterize its requirements. Neither explanation is consistent with the mission or core values of the GAO.

• **Confusion Of The Role Of The Assistant Secretary's Office**

By statute the Assistant Secretary's Office supervises the Director of the Fish and Wildlife Service. Yet, in characterizing the activities of the Office as 'inappropriate' the GAO report implies that the supervisory authority exercised by the office was not authorized by law.

Of the activities undertaken by that office, what exactly was inappropriate?

- Requiring that statements in rulemakings were supported by data, which is a requirement of the Act?
- Requiring that citations of scientific literature be accurate?
- Requiring that comment letters from states and the public be read and considered?
- Requiring that the language in final rules was internally consistent and fully explained the basis for decisions?
- Perhaps GAO finds that the exercise of the explicit authority given to the Secretary to exclude lands from critical habitat was inappropriate?

The above listed activities, which the GAO is characterizing as 'inappropriate', were conducted by the Office of Assistant Secretary Manson. These activities were clearly authorized in law and in fact were exercised in fulfillment of the statutory responsibilities of the Office. To the extent that final rules were influenced by these activities, the influence was consistent with the requirements of the Act and due to the fact that the rules did not originally meet those standards.

By using the term 'inappropriate decision making' the GAO neatly sidesteps the fact that the decisions were well within the Assistant Secretary's purview, but lays spurious doubts on whether they were in fact carried out to fulfill the requirements of the ESA.

(2) The Secretary shall designate critical habitat, and make revisions thereto, under subsection (a)(3) of this section on the basis of the best scientific data available and after taking 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.

With respect to biological opinions the Act states:

(2) Each Federal agency shall, in consultation with and with the assistance of the Secretary, insure that any action authorized, funded, or carried out by such agency (hereinafter in this section referred to as an "agency action") is not likely to jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of habitat of such species which is determined by the Secretary, after consultation as appropriate with affected States, to be critical, unless such agency has been granted an exemption for such action by the Committee pursuant to subsection (h) of this section. In fulfilling the requirements of this paragraph each agency shall use the best scientific and commercial data available.

- **Misstatement of the role of the Fish and Wildlife Service**

The ESA gives no role to the Fish and Wildlife Service. While by convention and delegation the FWS gathers data, reviews it, and prepares regulatory documents; the ultimate decision-making authority rests with the Secretary. The Assistant Secretary in supervising the FWS sets policy and standards in order to ensure that those documents prepared by the FWS meet the standards of the Department of the Interior for factual accuracy and legal sufficiency. However, the Act gives no authority to the FWS, and the Secretary could just as easily through regulation require preparation and response to listing documents be prepared by another bureau within the Department of the Interior.

Nevertheless, the report states:

Although the Service is responsible for making science-based decisions, Interior takes responsibility for applying policy and other considerations to scientific recommendations.

There is absolutely no legal authority for such a statement or any of the myriad statements implying that the FWS has a statutory role in ESA decisions. While the Service may have authority delegated to make decisions, that authority is always subject to review of the Director's superiors, in this case the Assistant Secretary. The FWS prepares documents based on scientific data. The Assistant Secretary, as the supervisor of the Director of the Fish and Wildlife Service, reviews those documents and in the course of the review, may legitimately impose standards on those documents.

GAO's conclusions regarding the role of the Director of the FWS and the Secretary's Office is akin to finding that a Colonel in the Army has the authority to override a General's military decisions.

- **Mischaracterization of legitimate quality control activities of the Assistant Secretary's Office**

As supervisor of the Director of the Fish and Wildlife Service, the Assistant Secretary is responsible for the quality of the products produced by the FWS. As a function of his supervision of the Director the Assistant Secretary imposed quality control standards. Those standards included:

- Requiring that all statements in listing rules be supported by data, as required by statute;
- Requiring that all comment letters be considered;
- Requiring that data support identification of habitat as occupied;
- Requiring that all studies and data were considered;
- Requiring that all rules be written clearly enough for the reader to understand the basis for the decision included in the rules;

First, it is the Secretary of the Interior who is empowered to make the decisions under the Endangered Species Act, not staff biologists. The statute doesn't envision someone who has spent their entire career in a narrow field of study making national policy.

Second, decisions under the Act are required to be based on best commercial and scientific data available, not the more nebulous standard of 'best science', or 'best scientific information' either of which can be construed to include theory, hypothesis, speculation and even opinion.

GAO has chosen to characterize these activities as 'inappropriately influencing' the work. Is it possible to have a more ridiculous or nebulous charge? It is the role of a supervisor to ensure the work meets the required standards. What the GAO has identified in the report is that the Assistant Secretary's Office would not accept opinion and speculation in place of data and studies based on the scientific method. Just because a scientist has an opinion, doesn't make it science.

- **Omission of readily available facts**

The report repeatedly mischaracterizes matters of fact which could have readily been identified with a minimum of effort. Had the authors even taken the trouble to interview me the errors would have been avoided. Documentation is available.

- **The report misstates the direction given to the FWS staff regarding the use of Recovery Plans.** The draft information guidance document entitled 'Lessons Learned' clearly states for biologists to use the science behind the recovery plan, rather than citing the recovery plan. This is because there is no scientific standard applied to the conclusions and recommendations in a Recovery Plan. The Act requires that all information be considered for a Recovery Plan, but provides no standard for the final determination as to what is included in the plan.

Thus the Assistant Secretary's Office merely required that underlying science supporting the Recovery Plan be used.

The GAO Report characterized the guidance in this manner:

‘...a practice was developed that Service staff should generally not use or cite recovery plans when developing critical habitat designations.’

The statement could hardly be more misleading given the actual direction given to the FWS. The ‘lessons learned’ document is a matter of public record, and as a matter of fact was the subject of a FOIA request. How unfortunate that the GAO staff didn’t bother to review this guidance.

- **The GAO mischaracterizes the nature of policy decisions related to application of a standard for ‘occupied at the time of listing’.** The Act requires that critical habitat be designated on areas occupied at the time of listing. GAO notes that the Assistant Secretary’s Office interpreted this requirement narrowly, and implies this was improper. The Assistant Secretary’s Office exercised appropriate policy guidance by requiring the FWS to define a standard for ‘occupied at the time of listing’ and include that standard in the rule. The standard was determined on a species by species basis. In the case of the bull trout, which the GAO references, an area was defined as occupied at the time of listing if there was one sighting by a qualified professional within a 20 year period; hardly a narrow window.

The GAO report states:

‘...some proposed critical habitat areas were removed, in part because occupancy by the species could not be ascertained.’

That means there is no data to support occupancy. The Act requires data to make determinations. Is the GAO suggesting that the Assistant Secretary’s Office should ignore the requirements of the Act and allow regulations to be imposed based on speculation and hypothesis?

- **The GAO implies that Recovery Plans have a greater role in listing determinations than is provided in law. In the report, the GAO states:**

‘ESA does not specifically require the Service to meet recovery criteria before delisting a species’

In fact, there is no place for Recovery Plans in listing determinations. Under the Act, one listing determination is made, and that is: whether or not a species belongs on the list. There are five factors that apply to the decision. Recovery Plans have no scientific standard required in the statute and they have no regulatory authority. The Service routinely ignores Recovery Plan standards if and when species meet them. In doing so the Service appropriately relies instead on the analysis of the five factors which the statute requires for a listing determination.

- **The GAO mischaracterizes the nature of MacDonald involvement in the Sacramento Splittail Decision.**

The GAO report states:

‘...she edited information regarding the statistical analysis. Service staff said that these edits could make it harder to use the scientific analysis in the future...’

What the GAO fails to note in its report is that first, all the edits were to support the FWS original recommendation on the splittail. Second, the wording in the report leads the reader to believe that a study was altered in some way, or excluded. The truth is just the opposite. The Service had conducted two studies on the splittail. My edits ensured that the results of both studies were included in the final rule. None of the study data or findings was changed or excluded. How odd that the GAO writers failed to either identify the fact or report it.

- **The GAO Report Ignores the Factual Rebuttal to the First Inspector General Report.**

The GAO report references the IG report, yet fails to acknowledge the rebuttal provided to Interior and first referenced in a July 2007 Resources Committee hearing. In letter responding to a query by Congressman Young, the IG stated that his report merely repeated allegations. Those two documents should have raised sufficient questions regarding the accuracy of the statements in the IG report and subsequent statements by selected service staff for the GAO to at least check their facts with the subject of the report.

Mr. SMITH. Mr. Laverly, can you tell us some of the challenges, I guess, with implementing recovery programs? I know that in my district, we have the Platte River Recovery Program. I have tried to be helpful with that so that we can arrive at a workable scenario.

I may not be a big fan of some of the legislation or the statutes, but I know that it is here and we need to work within those confines and so I want to be a good steward of everything afforded me and my constituents. Can you tell us what some of the challenges with implementing these recovery programs might entail?

Mr. LAVERTY. Perhaps as a starter, I think one of the challenges comes from working across jurisdictions and working with multiple agencies because most species have no understanding of administrative boundaries, jurisdictional boundaries.

In my past life as the regional forester with the Rocky Mountain Region of the Forest Service, working across agency boundaries, administrative boundaries, becomes one of the biggest challenges that we have, I think, of bringing people together to agree on recovery strategies and then mounting the resources to make those come about.

Mr. SMITH. Thank you. I would like to discuss in what little time I have left, and if any of you would like the opportunity to respond, there is a frustration, certainly, among my constituents, and actually I would concede to Mr. DeFazio the local nature of many of these issues—that local folks typically know the most about a situation, especially as it involves the environmental impacts of public policy, or lack thereof.

In my district, there was talk of not having enough prairie dogs. They are cute little creatures. Most of my constituents would argue that there were plenty of them, and when they got word that there weren't enough of them, in some minds, they got kind of worked up about that. You know, it seemed to be that maybe there was some political science involved with wanting to list that; maybe not. I don't know, truly.

It seems to me that some of these policies are maybe premature, and they tend to draw a bigger distance between the public and policymakers or policy enforcers. Could you speak to that at all?

Mr. LAVERTY. Yes, I can. I believe the conversations that we have had and, in fact, I shared during my confirmation hearings with both committees, is the foundation of science as the basis for policy. I think you have to have that as the starting point for the conversations.

The challenge then comes in working with different constituent groups, and I think your example of the prairie dogs, and black footed ferrets are another example, are what we are working on recovering, but yet working with communities, working with landowners, disparate types of philosophies, if you will, becomes the challenge, and I think that is why we have great people working underground to bring these about.

Mr. SMITH. OK. Thank you. I appreciate all of you participating today and answering questions, and I yield back.

Mr. DEFAZIO [presiding]. OK. Thank you.

Mr. Laverty, I understand you are accompanied by some people behind you who you might need to refer to since I am going to be asking you about something which is specific to my region and has a long history and is a bit complicated, but let me ask a general question first.

I mean, given your professional background, do you believe that peer review is useful?

Mr. LAVERTY. Absolutely.

Mr. DEFAZIO. OK. And then when the Agency solicits peer review, what do you think they should do with the peer review?

Mr. LAVERTY. Well, I can share with you the peer review that we did on science as a framework for the polar bear listing. I think it just sharpens the final product, and I believe you can look at examples on the science reports that were done by USGS and the peer review comments. Those were incorporated into the final product.

Mr. DEFAZIO. OK. So they actually incorporated some of the critique or suggestions from the peer review into the final product?

Mr. LAVERTY. I believe the final review incorporated thoughts. Probably not all of them.

Mr. DEFAZIO. Right.

Mr. LAVERTY. I would imagine if you went back and looked at the—

Mr. DEFAZIO. So generally, when you solicit peer review, it would be useful to receive it, evaluate it, and then incorporate it into your final recovery plan? That is just sort of a simple question.

Mr. LAVERTY. Sure.

Mr. DEFAZIO. OK. Good. All right.

Mr. LAVERTY. I understand.

Mr. DEFAZIO. OK. Again, you may not be able to address this, but I guess my question would be, in the case of the recovery plan for the spotted owl, the Agency did solicit peer review and received a critique which the Agency had solicited in April 2008, but they rewrote the recovery plan before they received the peer review, and the peer review was extraordinarily critical of the recovery plan.

I guess, perhaps to Mr. Lohofener—

Mr. LAVERTY. Lohofener. Yes, sir.

Mr. DEFAZIO.—if we could perhaps allow him to answer the question?

Why are we rushing ahead with the draft recovery plan without having a chance to fully incorporate the critique which you solicited and received only last month?

For the record, state your name and position, please. You will have to pull that a little closer.

Mr. LOHOEFENER. Ren Lohofener, Regional Director, Pacific Region, the United States Fish and Wildlife Service.

Thank you for that question. It gives me the opportunity to correct a misconception. We received the first drafts of the SEI report, the solicited peer review that you referred to, in either late March or early April. That draft changed in very, very minor ways from the final.

We began using the first draft the minute we had it and, in fact, as the SEI report was being developed, the principal contractor on that, Dr. Steven Courtney, was in almost daily contact with our recovery leader, Dr. Paul Fifer. So, from the very beginning, we used the information that was being collected in the SEI report to craft the final report.

Mr. DEFAZIO. Well, I can see it appears that, particularly on the east side, you were somewhat responsive, but I have real concerns, and some of your east side work I think does address sustainability of those ecosystems and the potential for recovery over there, but I have particular concerns about the west side.

Has there ever been another recovery plan where you have a declining population where you recommend reducing existing habitat?

Mr. LOHOEFENER. Again, Congressman, thank you for that question. Again, it gives me the opportunity to correct a misconception that seems to be out there.

I believe the reduced amount of habitat you are referring to goes back to the Northwest Forest Plan. You will recall the Northwest Forest Plan addressed the needs of over 100 species in addition to the spotted owl and, in fact, the Northwest Forest Plan did not lay out any recovery criteria specific to the forest plan.

Therefore, it is no great surprise that when we write a plan specific to the spotted owl the habitat, which is still well over six million acres recognized as needed for the spotted owl, is less than the forest plan.

On the west side, which you referred to, we maintain what we call managed owl conservation areas, which are principally the reserves.

Mr. DEFAZIO. Just to clarify, unfortunately I know way too much about this. I have been involved probably as long or longer than you have on this issue, and I just hate revisiting all this stuff.

As I look at those, they remind me an awful lot of the preexisting habitat conservation areas which actually were in place, but led actually to the injunctions which we had. We seem to be harking back. Has the science changed on evaluating those areas in the last 22 years?

Mr. LOHOEFENER. Congressman, I would fully agree. Your experience out there over the last 18 years with the listing of this owl is longer term than mine. No doubt about that. Many things have changed in the range of the spotted owl, not the least of which is the new threat we recognize, the barred owl.

On the west side, to get back to that issue, in addition to the conservation areas that have been set up I particularly congratulate the Forest Service and the Bureau of Land Management for stepping forward and agreeing to look at habitat that may serve as a buffer, as an ability to keep the spotted owl and the landscape as we deal with the barred owl question.

They have voluntarily stepped forward and agreed to at least for the next 10 years as we look at the barred owl question maintain that complex forest system. We also are looking to the state and the private individuals out there to maintain the connected areas between the reserve areas, so I think we have an outstanding strategy, especially for the next 10 years, and if we can control the barred owl threat I look for us to turn the corner on recovery of the spotted owl.

Mr. DEFAZIO. OK. I have exceeded my time, but I will have more questions.

I would now turn to Mr. Duncan.

Mr. DUNCAN. Thank you, Mr. Chairman. I don't really have any questions since I just got here, although I was told that the recovery plan for the spotted owl has doubled from \$189 million to \$400 million. Is that correct? If so, why is that?

Mr. LOHOEFENER. Actually your last estimate is a little bit low. I think it is even a little bit more than that.

A large part of the funds being tied up in the needs for the owl recovery is the recognition of the huge need to manage against wildfire on the east side. That is a very expensive thing to do.

Mr. DUNCAN. So if that \$400 million is low, what is the current estimate of the cost?

Mr. LOHOEFENER. It is in the recovery plan. Without looking at it specifically, it is in the neighborhood of \$450 million, I believe.

Mr. DUNCAN. All right. Thank you very much.

Mr. LOHOEFENER. Assistant Secretary Laverty points out to me it is actually \$459 million.

Mr. DUNCAN. All right. Thank you.

Mr. DEFAZIO. With that, Mr. Grijalva would be next.

Mr. GRIJALVA. Thank you, Mr. Chairman.

Ms. Nazzaro, can you briefly elaborate? We understand scientists were instructed to Julie-proof their decisions to gain Ms. MacDonald's approval for their work. Can you elaborate on that? What does it mean to Julie-proof a decision?

Ms. NAZZARO. Yes. This was a term that we heard during our interviews with some of the Service biologists regarding their decisions.

What this would be, it would be an act of anticipating what it would take to get a decision approved by Julie MacDonald, so in their activities, they were writing the decision based on that criteria rather than on the basis of the science—what they anticipated she was looking for, rather than using what the science would have dictated.

Mr. GRIJALVA. Thank you.

Ms. Luxton, can you tell me and the Committee why the Vice President's office is interested in the ship strike rule? You know, OMB reviewed the proposed rule, didn't seem to have any issue with it. What has changed since then?

Ms. LUXTON. Well, again, Congressman, the interagency review process provides the opportunity for any part of the Federal government that has an interest in the issue to be part of a robust dialogue to make sure that the rule is as strong a final product as it can be.

Beyond that, I really can't get into the details of the interagency review process in an ongoing rulemaking.

Mr. GRIJALVA. OK. Secretary, in January Director Hall issued a scientific code of conduct for the Department, but it doesn't apply to the Assistant Secretary, Deputy Assistant Secretary or anyone else in those offices.

Would you consider the idea of it being Department-wide including those offices, the application of that code of conduct?

Mr. LAVERTY. The first day on the job, I spent some time with Dale, as the Director of the Fish and Wildlife Service, and his staff as well as with my immediate staff, and I shared with them my performance expectations as it relates to the involvement of my staff with Dale and his staff.

I believe that the framework that we established at that moment in time talks very clearly about the roles and relationships of the Fish and Wildlife Service in terms of the integrity of science and the role and interaction that my office would have with both the Fish and Wildlife Service, as well as the Park Service.

I believe it sets the bar very high, and I think the Secretary has also done a great job in terms of establishing a standard of performance and ethics, and with those elements in place I believe that we have the mechanism in place to do the kinds of things that need to be done to hold again the integrity of science.

Mr. GRIJALVA. Without the application of the code?

Mr. LAVERTY. I think Dale's code is an absolutely important part.

Mr. GRIJALVA. That should apply to the respective offices that I referred to—Assistant Secretary, Deputy Assistant Secretary and their staffs, Chief of Staff?

Mr. LAVERTY. It certainly fits for all of our folks, and I believe that the Secretary's code of ethics sets the standard on behavior across the Department.

Mr. GRIJALVA. OK. If I may, Mr. Secretary, two territorial issues dealing with the endangered species.

First, the cactus pygmy owl in Arizona in my district. It was delisted in April 2006. I think the conclusion that Fish and Wildlife came up with is that while the population was endangered in southern Arizona that there was more of the species in Mexico. Consequently, the protection shouldn't be extended.

A petition was filed, I think, on March 15, 2007, to list the Sonoran Desert population of pygmy owls, which includes distinct owls between Arizona and New Mexico. The 90-day period on the petition was due in June. It has been almost a year. Can we expect the Service to have a finding on the petition to list in any time-frame soon?

Mr. LAVERTY. Mr. Grijalva, I will follow up on that as soon as I get back. I am sorry. I can't tell you the exact status on that one, but I will follow back up when I get back.

Mr. GRIJALVA. And let me just continue with the reasoning of delisting the pygmy owl.

If we follow that reasoning, Mr. Secretary, then wouldn't it be accurate to say that wolves, grizzly bears, jaguars, Canadian lynx, and other species found in the U.S. but also found in greater numbers in Canada and Mexico, wouldn't they be warranted for delisting as well if you follow that reasoning on this particular species?

Mr. LAVERTY. I believe the status reviews of the Fish and Wildlife Service considers populations at large.

Mr. GRIJALVA. And the other species is the Mexican wolf. Experts tell us that it is probably necessary to call a moratorium on the taking, on take, until there is a task force of experts that can really provide guidance.

Do you agree with that concept? How do you square the additional killing or permanent removal of wolves under Standard Operating Procedure 13 with the ESA requirement that killing and permanent removal must not preclude progress to recovery? How do you reconcile that and the moratorium so experts could convene and provide some real guidance to the Department?

Mr. LAVERTY. Mr. Grijalva, I understand a little bit of what is taking place as it relates to the Mexican gray wolf, and I know that they are gathering additional information as part of the 10[g] effort.

How all those pieces come together and incorporate not only the new science and what they are finding in terms of what is actually happening with numbers of wolves, but also then the interaction with the grazing community, so I think there are some things that are going on that will help in terms of defining what needs to be done.

Mr. GRIJALVA. But the reconciling of Procedure 13 and recovery?

Mr. LAVERTY. I think that has to all be part of that.

Mr. GRIJALVA. Thank you.

Thank you, Mr. Chair.

Mr. DEFAZIO. I now turn to Mr. Gohmert.

Mr. GOHMERT. Thank you, Chairman. I appreciate having this hearing because this certainly is an issue that needs to be dealt with.

Let me ask anybody that knows. I had read somewhere—and you know you can't trust everything you read, and that is why I am asking—that there have been spotted owls spotted mating in such innocuous places as a K-Mart sign. Have you all read or heard anything like that? Other places outside of the virgin woods. Are you aware of any spotting of the spotted owl outside their virgin wood territory?

Mr. LOHOEFENER. Thank you for that question. One thing I learned way back when I took ornithology in college was that a bird can show up any place, any time. That is the benefit of having wings.

Certainly owls disperse. I have no doubt that they can get lost at times and show up places that normally they wouldn't be.

Mr. GOHMERT. Well, my thought was that if the spotted owl were capable of mating on a K-Mart sign then maybe as an endangered species we ought to consider the K-Mart signs because they have been in financial trouble. We have lost a lot of K-Marts.

Maybe we could bring a bunch of the K-Mart signs together and have them in a little K-Mart forest and encourage the spotted owl there because as I read and the Oregonian said the versatile and voracious barred owl is proving far more adept at getting rid of the small owls, such as the spotted owl, than the Endangered Species Act was in saving it.

What gets me is for years we heard the Federal government had to stop the logging in the Northwest. We put thousands and thousands of people out of work. We put thousands of people into poverty to save this little owl, and it turns out we weren't saving the owl. Nature is taking care of getting rid of the owl with the barred owl moving in.

Sometimes it just seems that we get so arrogant, that we think that we are so much more powerful than nature, that we are going to come in. I don't know. Have there been any thoughts of maybe killing some of the barred owl to try to save the spotted owl? Is that where we are going to intervene next is to try to stop nature from taking its course? Do you know?

Mr. LOHOEFENER. You ask a good question, Congressman. There are two questions revolving around the barred owl. Should we control barred owls, and can we control barred owls?

The first question is a policy question. The barred owl is protected by the Migratory Bird Treaty Act itself. It is a policy question we need to address in a public forum soon and resolve that.

The second question, can we control barred owls, is an equally relevant question. My information shows that the barred owl now occurs throughout the range of the northern spotted owl, so that is a large area. I am not at all sure even if the—

Mr. GOHMERT. Now, they originally weren't in some of the northwestern forests where the northern spotted owl was. Isn't that correct? They have moved into that territory now, as I understand it.

Mr. LOHOEFENER. My information is that over the past 100 years the barred owl has been moving first west through Canada and now south down through Canada and now throughout the range of the spotted owl, even down into California, so it has changed its range.

Many species change their range through time. As climate change happens, I think we expect this phenomena to be more common. All the more need to address the philosophical question of should we manage the species.

Mr. GOHMERT. You bring up climate change. There is another issue because the climate change experts assured us back in the 1970s absolutely certain. We had 30 years showing that the climate was changing. It was getting colder.

We were told repeatedly we are at the beginning of a new ice age. I am going, "Do you really think so?" Thirty years. No. We have 30 years of data showing that we are at the beginning of a new ice age. Thirty years later, we are saying the data shows we are at the beginning of burning up the planet.

Let me just mention this. I will tell you, I am really a bit emotional about this in addition to being sarcastic a moment ago. I was talking to an 83-year-old lady back home, and she is not getting the change she believes in or what she ought to have, but she is now paying \$400 to \$500 a month for energy, and she is thinking she needs to change and go back to her energy source when she was a little girl of wood because we are putting so much of our vast resources off limits. We are endangering species like my 83-year-old constituent back home.

With this Endangered Species Act, Mr. Chairman, we had an improvement in the last Congress that passed the House because it took head on this issue of one percent of the species being saved. We want to save the species.

This has not been the way to do it, and we ought to end this policy that encourages shooting, shoveling and shutting up. We ought to pay people if we take their land because they have an endangered species. We would start saving a lot more species.

Thank you. I see my time is up.

Mr. DEFAZIO. Thank you. Just a quick response, living at the epicenter of the spotted owl controversy.

The spotted owl is one of many potential indicators for old growth ecosystems. The fight is now and always has been about the last vestiges of old growth in the Pacific Northwest, plain and simple. Distill out all the science. That is what it is about.

Until we protect that old growth, we are going to continue to have this controversy. We can argue it infringes the spotted owl or

other issues, but that is what it is all about, it has always been about. We are stepping backwards to the 1990s, and I just fear we are going to end up seeing our forests totally shut down again. That is going to be a disaster.

Mr. GOHMERT. Will the Chairman yield for a question?

Mr. DEFAZIO. Certainly.

Mr. GOHMERT. One of the things we figured out to save older forests in east Texas is to go in and trim undergrowth and have fire lanes to prevent spreading of fire. Is that something that is being done or contemplated to make sure that nature doesn't wipe out the old growth forest?

Mr. DEFAZIO. Nowhere near enough actually. I am developing a plan substantially based on thinning, both green thinning and fuel reduction thinning. We haven't had adequate budgets to implement our fuel reduction in the Pacific Northwest.

That is part of their proposed recovery plan on the east side. I think that has a lot of merit. The west side doesn't have as much fire danger, but southern Oregon does. I don't think their plan gets at that issue.

No. You are right about that. We do not want to lose these ecosystems to unnaturally intense fires that come from poor management over a number of years, so the gentleman is correct there.

Mr. Inslee?

Mr. INSLEE. Thank you.

Mr. Laverty, folks my age are really excited about maybe having grandkids, and we are very concerned those grandkids are going to grow up in a diminished world, a world without polar bears, without salmon, without orca.

We are doubly concerned because this Administration has given them nothing but delay and dysfunction and just outright deceit in this endangered listing situation. I think that unfortunately continued in this really hoax of a polar bear listing. I want to ask you about that.

I want to make sure I understand. Despite my friend Mr. Gohmert's argument, the Bush Administration has concluded, has it not, that the best available science indicates that the polar bear faces a major risk of extinction within the next century because of global climactic changes associated with global warming gases? That is true, isn't it?

Mr. LAVERTY. Mr. Inslee, the listing decision and the best available science that came to us from perhaps the best scientists in the world as it relates to the understanding of polar bears and the Arctic conditions tells us that the listing basis was based on the fact of sea ice lost and continued sea ice loss.

Mr. INSLEE. Right. And the sea ice loss is due to climactic changes caused by human anthropomorphic introduction of greenhouse gases into the atmosphere. The Bush Administration has reached that conclusion, has it not?

Mr. LAVERTY. There is no question, and I think everyone agrees, that warming is taking place.

Mr. INSLEE. And we all agree and the Bush Administration agrees the warming is taking place at least in substantial part because humans are putting greenhouse gases in the atmosphere. Just say "Yes." We can move on.

Mr. LAVERTY. I would agree, and I think you——

Mr. INSLEE. You agree that the Bush Administration——

Mr. LAVERTY.—have to look at that from a very global perspective across the United States.

Mr. INSLEE. OK. Now, when you reach a conclusion like that, the Endangered Species Act gives a promise to Americans, does it not, that the Federal government will change course to reduce the threat that would cause this extinction? You certainly agree with that, do you not?

Mr. LAVERTY. The challenge that you have with that question is linking the cause of emissions to a specific point and impact on the habitat. You can't do that.

Mr. INSLEE. You agree with me that a listing decision calls for the Federal government to change course so that it can reduce the threat caused by the problem. Isn't that true? I mean, come on. Everybody agrees with that, right?

Mr. LAVERTY. The listing decision is to help recover the species.

Mr. INSLEE. Right. So let us talk about what the Bush Administration has done as a result of this listing decision.

The day before the listing decision, it opposed a cap on the trade to reduce the threat of global warming that would cause the extinction of this bear and the collapse of the polar ice sheet, which is already occurring. We have already lost a million square miles last summer of the polar ice cap.

The day after the listing did the Bush Administration embrace a cap in the trade system?

Mr. LAVERTY. I would take your comment.

Mr. INSLEE. Well, just so we can be clear, the listing did not cause the Bush Administration to change one iota in its resistance to the single most important thing that can prevent the loss of the Arctic and the loss of the bear, which is the cap in the trade system. Isn't that right?

Mr. LAVERTY. I would suggest that dealing with emissions and climate change is a global issue. It is not going to just take place here in the United States.

We know from the science that if we shut off emissions today that it would take 40 plus years before we would see a change in conditions in greenhouse gases.

Mr. INSLEE. Right. We will get to that.

Mr. LAVERTY. I am sure we will.

Mr. INSLEE. You will have a chance to put your talking points on the record.

Did the Bush Administration embrace a renewable portfolio standard for clean energy as a result of this listing of this bear?

Mr. LAVERTY. I can't tell you if it was related to the bear.

Mr. INSLEE. Did the Bush Administration change its position regarding research and development budgets for clean energy that can save the polar ice cap and this bear as a result of this listing?

Mr. LAVERTY. I don't know that it is related to the bear.

Mr. INSLEE. Well, the answer would be no, right?

Mr. LAVERTY. I don't know if it was related to the bear.

Mr. INSLEE. Well, did the Bush Administration do anything as a result of listing this bear? The answer is no.

Did it change its permitting process for oil and drilling rigs in the North Sea?

Mr. LAVERTY. I believe we already have protection in oil and gas drilling in the North Sea with MMPA.

Mr. INSLEE. Did it change? Did it change its permitting process for drilling in the North Sea as a result of this listing?

Mr. LAVERTY. I would say again because of the protections that are already provided through MMPA there was probably not a need to do that.

Mr. INSLEE. All I hear from you in this listing is a list of things the Bush Administration has refused to do, even though it has concluded that this bear is going to go extinct because of global warming.

I haven't heard a single thing on the list of what the Bush Administration is going to do as a result of this listing that will, in fact, prevent the extinction of this bear and the allowance of our grandkids to have this bear in their life.

Now, can you point to a single thing the Bush Administration has done as a result of this listing?

Mr. LAVERTY. I would say that as a result of the soliciting that took place last week that we have already done some things to move ahead on what we can do to protect this species.

I, too, because of my age—I have grandchildren. I have a granddaughter and I have a grandson, and I engage in conversations with my grandkids about the polar bear. They are as concerned about the polar bear as I am, and I believe that we are on course to do the kinds of things in terms of raising the awareness of American people globally about what needs to take place to deal proactively with the challenges.

This is not just a United States issue. This is a global issue, and I believe that we have to be working harder globally to deal with this issue.

Mr. INSLEE. That is great, but we are the Federal government of the proudest country in the world, and you haven't done a single thing to protect these bears. You can't tell your kids or grandkids you have done anything, and you can't tell me you have done anything because you haven't done anything.

Mr. DEFAZIO. The gentleman's time has expired. Thank you.

I would turn now to the gentleman from Alaska, Mr. Young.

Mr. YOUNG. I thank the Chairman. It is awfully difficult for me to sit there. You know, thank God for George Bush.

If we wouldn't have had the hurricane, if we wouldn't have had the earthquake in China and the polar bear cap habitat wouldn't be lost. I mean, the whole thing. It is just marvelous to watch somebody instead of using science browbeat somebody at the Department of Interior on nothing.

If anybody reads the geology of the world and the past of the world, 11,000 years ago there was no ice cap and the polar bear survived. That is amazing. I am one of those few people who do not believe that man is creating this so-called climate change, and 300 other scientists from your state, by the way, and other areas around this nation agree with me.

No one wants to debate the issue because we have fallen into this idea that this whole thing is coming to a collapse, and the ice

cap is disappearing and the polar bears are going to disappear and that is nonsense. I have geologists come to me and talk about the oil under the North Pole. Now, if that is the case there wasn't an ice cap.

Think about that a moment. All I know is, Mr. Chairman, and I don't want to be partisan in this, is that Bush is blamed for the high cost of gasoline. I would respectfully say we have done nothing to mount the supply since 1973. The last time this Committee passed the trans-Alaskan pipeline is the last Act this Congress has done to promote supply.

Demand is going up. Supply is going down. We have a great, great supply of oil in the Chukchi Sea, the Beaufort Sea and other parts of Alaska, let alone the Gulf of California or the coast of California and the coast of Florida, and yet no one wants to develop it. I want to ask my American people if they like paying \$4 a gallon. It will be up to \$6 a gallon by the end of July, so you better buy some and store it because this Congress hasn't acted.

Now, I have said this about this Congress. Not you. We haven't done nothing. We were in control 12 years and did nothing. The Congress is irresponsible when it comes to supply, and we must do this supply equation in delivery of fuel to this nation if we want an economic base.

Mr. Laverty, one of the things I would like to know is you made a decision. I am not overly happy with the threatened decision, but it is better than endangered. What model did you base the fact that these bears are threatened?

In fact, there are I think 25,000 polar bears now in the world and a few years ago there was less than 15,000, so something is occurring. What was the model that you used in finding the decision on how these were listed?

Mr. LAVERTY. Congressman Young, the model that provided the framework was based on the IPCC models. We put together an ensemble of those models, going back and looking at how they fit with what has happened in the past and then projecting into the future. That became the foundation for the estimates out in the future.

The other part that factored into that was the actual observed trends and what is actually happening with sea ice loss and how it relates to the forecasting models. Since the sea ice is the foundation for that species in terms of its food gathering and becomes the important part of it, any time you look at habitat loss that becomes a challenge.

I believe that wildlife modeling becomes an extremely important part of this. You talk about the population that exists today. Much of the population recovery today is because of managed harvest levels, so it has brought it up from places where probably back in the 1960s and 1970s we were down around 10,000 and 12,000 bears, and because of managed sustainable harvesting that population is back up.

Now the bears are facing a different kind of threat, and that is the loss of habitat. That was the foundation for the decision.

Mr. YOUNG. Again, you know, I don't want to dispute this, Mr. Chairman.

Keep in mind I heard the same argument about Terror Lake in Kodiak. We couldn't build a lake and raise the water because there

were two brown bear dens, and they would be flooded. I just ask you how dumb those bears are because we did build the dam, and the bears just moved above the waterline to another denning area.

We are the only species that I know of who are not trying to adapt to climate change, if there is climate change, and apparently some people think there is. Is it man caused? I don't believe it is.

But if that is the case, then we are the only ones that want to keep everything at status quo instead of looking at adaptation. Animals will adapt. They will not be extinct, contrary to what some people say in this room. But oh, woe is us. They are all going to die. They didn't do it 11,000 years ago.

It is an amazing thing, but of course we didn't have scientists and newspapers and Congressmen that just go on emotionalism about how the world is coming to an end and saying maybe we ought to think about adaptation if this is occurring.

Mr. Laverty, again as I talked to the Secretary and yourself, we have some other issues concerning polar bears that we will discuss at a later date. Hopefully we can solve those problems together.

I am glad to see that some people said in this room earlier on, according to information I received, that someone had supposedly done something wrong without really backing it up. I suggest before anyone makes a statement that might impugn someone's character that they might want to look at the facts and understand it.

I yield back, Mr Chairman.

Mr. DUNCAN. Would the gentleman yield just for a second? Just very quickly.

Mr. YOUNG. Go ahead.

Mr. DUNCAN. I am just curious about one thing that was just said, and I want to see how accurate it is. You said the population of the polar bears was 10,000 or 12,000 in the 1970s. Is that correct?

Mr. LAVERTY. That is correct, sir. Yes.

Mr. DUNCAN. And what is it now?

Mr. LAVERTY. Approximately 20,000 to 25,000.

Mr. DUNCAN. All right. Thank you.

Mr. DEFAZIO. We would now turn to Mr. Sarbanes.

Mr. SARBANES. Thank you, Mr. Chairman. Thank you to the panel.

I wanted to go back briefly to the "Julie-proofing" concept that Congressman Grijalva was asking you about, Ms. Nazzaro, because there are two sinister consequences to what you are describing. There are implications here.

One is when science comes up unfiltered and then it is rejected, which is a problem that we have been discussing and actually is analogous to intelligence, for example. In the intelligence community that comes up and then gets rejected. That is bad enough.

Even worse is when the resistance at the top begins to contaminate the entire process of gathering information and having a deterrent effect on people at lower levels in terms of what they will offer up because then you are not even getting the science or in the intelligence community, analog intelligence, coming up to the higher levels.

What happens is the policy begins to influence the way it is gathered, analyzed and presented, and that pushes out and down and

dangerously insulates the agency at all its levels from making good decisions.

So when you were talking about the “Julie-proofing,” you explained that people below Julie MacDonald would provide or present or include criteria on things and considerations that they thought she was interested in, rather than the science. I am just fascinated by that as a kind of guide for us on this danger.

Can you be a little more specific? What is an example? Give me a couple examples, if you can, of a Julie MacDonald criteria that somebody would include, and what is the kind of science criteria that they might keep out in favor of that Julie criteria?

Ms. NAZZARO. Actually, why don’t I have the staff who actually did the interviews of some of these people come up—

Mr. SARBANES. Yes.

Ms. NAZZARO.—because this issue came up both during interviews we did with some of the Service biologists, as well as during surveys we did.

What they were doing was anticipating what kind of criteria she would be looking for to support their decisions and then they were writing their decisions based on this anticipation, knowing that they wanted to get these things approved through her.

I have Jeff Malcolm with me, who is the Assistant Director responsible for this engagement, and I will have him directly respond to your question if you please.

Mr. SARBANES. Mr. Chairman, I assume that is fine that we can hear from Mr. Malcolm? Yes.

Mr. MALCOLM. My name is Jeff Malcolm, Assistant Director with GAO’s Natural Resource and Environment Team.

There were a number of policies we discussed, informal policies, and definitions of some items that weren’t particularly clear in the Act. “Occupied at the time of listing” is one of the examples that we used, so in designating critical habitat there has been a lot of discussion about what that phrase actually means.

In some cases species were listed very early in the Act, let us say in the 1970s, that still don’t have a critical habitat designated yet, so doing that today there was a large debate over what occupied at the time of listing meant. Was that the occupied territory when it was listed in the 1970s?

Julie had some interpretations on how that should be implemented, in some cases limiting it to a specific timeframe around the listing decision so that influenced decisions, so they would put information forward only talking about occupied habitat specifically during a specific timeframe based on policies and formal guidance that she had provided.

Mr. SARBANES. So in other words, she had kind of made it clear what her interpretation was and so then they designed their analysis and presentation of the information around that particular interpretation—

Mr. MALCOLM. Right.

Mr. SARBANES.—to get it through, basically?

Mr. MALCOLM. Right. There were a couple different things. In some cases we heard that people wrote two different decisions. I mean, they would have one in their pocket in case the other one didn’t go through. Then they would have the one that they thought

would more likely go through. In other cases it was just write the other decision the first time and send that forward.

Ms. NAZZARO. I think you raised two issues. One is there are opportunities where you would make a decision based on a policy call, and there are times when that is appropriate, but what we are asking for is transparency in the process.

The other issue that you are raising is the fact that the guidance is not clear. We talked about the fact that the last time formal guidance was written as far as the 90-day petition process was back in 1996. In 2004, the courts struck down various aspects of that both on merit, as well as on formality, if you will.

And so what we are hearing from a lot of the scientists is there are nebulous terms. They don't know what it means. You know, people have the opportunity to interpret it as they see in this case. It appears that she had different definitions for things.

What we are asking the Service to do is to finalize this draft guidance that has been in draft now for over eight years I believe in various forms. It is time to get something out there so that the Service biologists know what they are supposed to be using and it is transparent to the general public.

Mr. SARBANES. I see my time is up. Mr. Chairman, we have reached a scary place if scientists and professionals in the Department have to carry around an extra version of their analysis in their pocket and try to gauge which version will be able to get past their superiors.

I yield back.

The CHAIRMAN [presiding]. OK. Do other Members have questions? Yes, sir. Mr. Wittman?

Mr. WITTMAN. Thank you, Mr. Chairman. Just a question for Mr. Lavery.

We have heard about polar bear populations as a worldwide group and then population dynamics of those polar bears within the United States. Can you tell us as a means to manage the U.S. population are you going to use the numbers or the population dynamics of the world as a whole?

If so, when you do that how are you going to look at approaching or designating how levels are being approached for polar bears that are harvested or that are affected by human-bear interactions here within the United States?

Mr. LAVERTY. There are several pieces to the response to your question.

Two weeks ago, I had a chance to journey to Canada with the Secretary and met with the Minister of the Environment in Canada. We talked about what we can do, jointly with the Canadians, in terms of U.S.-Canadian relationships and managing bears. The Canadians have about two-thirds of the total population of bears, and I believe that some of the actions that came out of that are the kind of things that will fit.

The next step the Fish and Wildlife Service will be undertaking is the designation and delineation of critical habitat. That is going to start right away. I think as we begin to get those pieces together, continuing to look at how we can gather more information and knowledge about bears and bear populations, bears' behavior,

adaptability, those are all pieces that come together as we continue to move ahead on how to protect and conserve the bear.

Mr. WITTMAN. Mr. Chair, one more question. I am just curious.

Has the Department requested funding to implement the U.S.-Russia Polar Bear Treaty? If so, what are the extent of resources that are needed in order to implement that?

Mr. LAVERTY. Congressman, I am not sure. I will follow up with that one.

The CHAIRMAN. The Chair wishes to apologize to the gentlelady from Guam for failing to recognize her in proper order.

And now the gentlelady from Guam, our distinguished Subcommittee Chair on Fish and Wildlife, is recognized for whatever time she desires.

Ms. BORDALLO. Thank you. Thank you very much, Mr. Chairman. I won't take up too much time. I did come in late. The Subcommittee on Insular Affairs also has a hearing this morning.

I hope these questions haven't been asked, but I would like to hear them again if they have. To you, Ms. Nazzaro. Did the Service follow a consistent process across the eight regions in selecting the eight MacDonald ESA decisions for further review?

Ms. NAZZARO. Our conclusion is that they generally followed it because they used the same criteria. However, the process that they used did vary slightly by region. There was a telephone conversation from Director Hall to the regional directors instructing them basically to revisit issues, decisions that Julie MacDonald had been involved in.

How they came up with those is where there was a slight variation, and some of it had to do with the workload. A region that did not have many decisions it may have been readily available, but the regional director would have known what decisions to include. Others did involve lower level staff so, like I say, it varied slightly, but generally they all used the same criteria.

Ms. BORDALLO. A follow-up question then. Overall in what ways can the decision-making process be improved in your opinion?

Ms. NAZZARO. I think some of the issues that we raised with Representative Sarbanes' questions. We do recognize the difficult task that these officials are asked to do.

A lot of times there is not a lot of information on the species or the habitat. You can reach different conclusions with the information. We have also talked about how vague some of the guidance is and that there is a need to redo it.

We really are looking for an environment where we have a trust that the decisions that are being made are the right decisions, and we would view certainly having guidance that is very specific is useful for the Service biologists and then is transparent to the general public.

You know, for example, we talked about the recovery plans, not using the recovery plans as criteria for delisting. Well, the recovery plans go through a public scrutiny process. The general public thinks that is the criteria being used, and then they find out the Service used other criteria and it just raises questions.

Again, it is the trust of the decision makers. Let us make the process transparent. Let us make it clear and very straightforward,

and I think it would minimize a lot of these allegations and improve communication.

Ms. BORDALLO. Are you beginning to overturn or restructure this decision-making process currently? Is it ongoing now? Have you begun to do the work now? How long until you think you will have everything in the right place?

Mr. LAVERTY. If I could perhaps respond?

Ms. BORDALLO. Yes.

Mr. LAVERTY. The Service has, in fact, moved ahead on some of the recommendations that came from the GAO report and recommendations as it relates to the findings in the recovery piece. We are working on the guidance, and that should be out fairly quickly.

Ms. BORDALLO. Good. The other question I have is for Mr. Laverty. Why does it take the Service an average of two and a half years to respond to a 90-day petition?

Mr. LAVERTY. I will try. I have been in the job for a little over 180 days, but let me tell you what I have learned.

The bear is a good example, the polar bear, the incredible amount of information and science that has to come together to make those decisions. Some of them are fairly straightforward. Some are fairly simple. Others I think are extremely complex, and they require not only gathering science, but then the scientists in terms of their peer review. That takes time.

Just as we went through the polar bear, we had peer review that took time. Then we put that out for comment, so it does take time to do that.

Ms. BORDALLO. Thank you, Mr. Chairman. I think that answers my questions. Thank you.

The CHAIRMAN. Thank you.

The gentleman from Washington, Mr. Inslee?

Mr. INSLEE. Thank you, Mr. Chair, for indulging me. A previous question prodded me.

Mr. Laverty, you mentioned you had gone to Canada. Did I hear accurately that in Canada you told Canadian media that you thought the Congress should amend the law so that bears could be shot, polar bears could be shot in Canada and imported into the United States?

Mr. LAVERTY. I don't believe I said that, sir.

Mr. INSLEE. I am sorry?

Mr. LAVERTY. I don't believe I said that.

Mr. INSLEE. I appreciate that. We just had received reports of that. Thanks for clarifying that.

I should give you a chance to make sure. Do you want to clarify what you did say?

Mr. LAVERTY. I would like to, yes.

Mr. INSLEE. Go ahead. I am sorry.

Mr. LAVERTY. Once the bears are listed under the ESA as threatened it becomes a depleted species under the Marine Mammal Protection Act, and once it is listed as a depleted species under the Marine Mammal Protection Act you can no longer bring those animals into the States.

To make any adjustments it would require an Act of the Congress to amend the Marine Mammal Protection Act to permit that import of those trophy or species taken in Alaska.

Mr. INSLEE. I am reading a CBC news report, May 16, 2008. It is talking about the fact that, as you have indicated, the current law would say they are depleted and not subject to importation.

It reads, "But Lyle Laverty, the U.S. Assistant Secretary of the Interior for Fish and Wildlife and Parks, told CBC News that there is some hope that an exception could be made for polar bear trophies, even though polar bears are now a threatened species. "What we are going to have to do is to work with Congress," Laverty said Thursday. "I don't want to say it is simple, but with just a little amendment to the Marine Mammal Protection Act, Congress can make a provision that would permit the importation of a trophy from Canada."

That sounds to me like you were saying that there should be a little amendment to the Marine Mammal Protection Act that would allow bears to be shot in Canada that are now listed as threatened and imported into the United States. Am I misreading that, or is that a misquote?

Mr. LAVERTY. I can tell you the essence of the conversation. It was in fact she asked how could bears that were taken in Canada come into the States, and I was very forthright, and told her that it would take a change in the Marine Mammal Protection Act.

That certainly becomes the role of the Congress. If that becomes an action that you would like to take that certainly is the prerogative of the Congress.

Mr. INSLEE. This news report—

Mr. LAVERTY. Just a second.

Mr. INSLEE. I am sorry. Go ahead. Go ahead.

Mr. LAVERTY. If I could just close up on that, what becomes important is that harvesting of bears in Canada is under a very, very sustained and managed process, and I believe that the action to do that would not be a threat to the bear. We could not find that harvesting for either subsistence or trophy hunting is, in fact, a perceived threat to the bear.

Mr. INSLEE. So is this article inaccurate when it said that you hoped such an exception could be made? Do you hope that such an exception can be made?

Mr. LAVERTY. You know, I guess I would bring it back to you.

I think that the fact that people have been able to bring in species is an important part to the Canadian economy, and if that fits into the scheme of things and there is not a threat to the bear then I would say it is worthy of conversation.

Mr. INSLEE. So do you hope there is an exception or not?

Mr. LAVERTY. I would say yes.

Mr. INSLEE. Pardon?

Mr. LAVERTY. Yes.

Mr. INSLEE. So the Assistant Secretary in charge of marine mammal protection who just listed the bear as a threatened species hopes it will be allowed to be shot in Canada and brought home. Is that right?

Mr. LAVERTY. I would say that given the fact that sustainable harvesting of bears in Canada is not a threat to the species, it is an OK thing to do.

Mr. INSLEE. Well, I think that your hopes in that regard—I am not against hope. I am all for hope, but your hopes in that regard are consistent with the failure of the Administration to do anything as a result of this listing, which is my concern. A listing that is just a listing, without action, is just a piece of paper.

Now, you have mentioned that you are going to go and start working on a critical habitat designation for the polar bears, but we all know what the critical habitat is. It is the ice, and if the ice is gone the platform that supports the bears' survival will be gone.

This Administration has concluded that the ice is likely to be gone as a result of global warming, so isn't it true that we already know what the critical habitat is, we already know that global warming is causing it to disappear, we already know that the Bush Administration agrees with that, contrary to the comments of some of my colleagues across the aisle?

Their own party's President has recognized what the critical habitat is, and the fact is that the Bush Administration is not doing anything significant to reduce that threat. Isn't that a pretty fair statement?

Mr. LAVERTY. I guess I would say not necessarily so. I think the fact that we have raised the awareness of the importance of dealing with climate change is absolutely fundamental to engaging in conversations.

If we are going to solve this problem, it is a global issue and you cannot just look at the issues in dealing with the United States' emissions without bringing into the context all the rest of the emissions that are taking place that are impacting the bear.

You cannot tell me that there are any emissions that come directly from the United States that impact the specific site for the bear.

Mr. INSLEE. I can't tell you which molecule of DDT would have killed which eagle either or which Al-Qaeda terrorist may threaten us.

Mr. LAVERTY. Precisely.

Mr. INSLEE. But when the Federal government refuses to act to a known threat, that is irresponsible and against the law of the Endangered Species Act.

What you have said, that you are satisfied that by this listing you have raised the awareness, the consciousness of the community, that is great, but a fire department that simply hollers "Fire!" and raises the awareness and does not get a ladder, and does not get a hose, and does not get the engine out of the fire shop, is not doing its job.

I just don't believe, under any stretch of the imagination, this Agency is doing its job to respond to this listing, which is to do something about the threat. You know what the threat is. You know what it is going to do to the polar bears, but this Administration refuses to act.

I think it is sad it is going to take a new President. I really wish that we had an epiphany from this President. It is apparent to me

from your testimony we haven't got one, but we are going to have to do some really fast work in January. You can respond if you would like.

Mr. LAVERTY. No, sir.

The CHAIRMAN. The gentleman from Oregon, Mr. DeFazio, is recognized.

Mr. DEFAZIO. Thank you, Mr. Chairman.

Ms. Nazzaro, on the question about the decisions that we visited last year in the hearing by Ms. MacDonald and those decisions that were influenced or corrupted by her work, one of the things that was done to clean up the Agency was to set up a conduct accountability board, as I understand it.

It is my understanding that the board can only review matters referred to it by Ms. Scarlett, who we took testimony from last year, and the Chief of Staff, Brian Waidmann. I am not certain what their knowledge of or involvement in some of Ms. MacDonald's work was.

I know that apparently Mr. Waidmann at least signed off on some of those and approved some of those decisions which had been influenced by her. Have you interviewed those two individuals?

Ms. NAZZARO. We did not interview either of them, and Ms. Scarlett's name has not come up. Again, our intention in raising these was just that there was we felt a lost opportunity, if you will.

Mr. DEFAZIO. Why haven't you interviewed Mr. Waidmann then since he signed off on some of these faulty decisions?

Ms. NAZZARO. As I said, we weren't there to try to corroborate or to get the extent. You also have to realize the amount of time that we had to do these engagements. We didn't start this until late last year and so it was a relatively short timeframe.

We tried to gather as much information as we could to raise some of the issues, and what we are saying is that it appears that there was a lost opportunity. The Agency recognized there had been a problem with Ms. MacDonald. They were revisiting some of those decisions.

We felt if they had cast a broader net maybe there were others that they would have wanted to revisit as well. We are listing them as potential, but we have not verified or validated the extent of their involvement.

Mr. DEFAZIO. OK. I mean, wouldn't it be useful to sit down with Mr. Waidmann since he was in such a key position and discuss?

I mean, since now he is one of the two people who can refer matters to the ethics review board, wouldn't it be useful to know what his role and knowledge of those decisions was at the time he approved them?

Ms. NAZZARO. No. I certainly agree that that is a next step that would come after what we have—

Mr. DEFAZIO. OK. So have you asked to interview him?

Ms. NAZZARO. We have not yet, no.

Mr. DEFAZIO. OK.

Ms. NAZZARO. It was not something the Committee asked us to do.

Mr. DEFAZIO. But you intend to do that?

Ms. NAZZARO. If the Committee asked us. As you know, GAO works basically at the request of Congress so if we are asked to do that we certainly could do that.

Mr. DEFAZIO. OK. Thank you.

OK. I am going to go back to my more parochial issue here because I don't think that we quite got an answer, Mr. Lohoefer. Sorry, sir. People have trouble with my name too.

What I was trying to say was that basically, as I read your final recovery plan, that it really seems to me substantially comparable to Option 7 back in the FEMAT, and I don't know if you are familiar with Option 7, but Option 7 at least in my layman's reading of that, and I will certainly ask Dr. Franklin about this later, but I did have a brief conversation with him this morning where I think he might confirm that we are revisiting Option 7, and that had a very low probability of recovery, Option 7 back then 20 years ago.

I guess my question is why we think basically reducing habitat in much the way that was recommended in Option 7, which was evaluated back then to not have a high probability, having the second lowest out of the 10 options to leading to recovery, why we are going there now when it was rejected 20 years ago?

Mr. LOHOEFENER. Thank you, Congressman. I have the advantage. I can address you as Mr. Congressman, where you have to pronounce my last name, so I appreciate that.

I do not know Option 7 so I can't speak to that directly. I can tell you that the recovery plan we have in our hands today is the result of 18 years, basically, of hard work by many individuals to recover the owl—specifically over the last two years, 12 peer reviews, a long, contracted peer review, five months of public comment, and over 80,000 comments received.

The recovery team that was convened and the recovery team that finalized the plan believed that the habitat that is identified in the plan, if all the recovery actions are taken and if the recovery action is successful, will be sufficient to recover the owl over the next 30 years.

Mr. DEFAZIO. But we talked previously, and you have received a critical report. You say you were working to address some of those concerns from the draft critical peer review, but the question is what will you do to accommodate other concerns that were raised at that time or concerns that are being raised now about your final recovery plan?

Mr. LOHOEFENER. A final recovery plan is a guidance document—it is not regulation—which means we can take comments on the guidance document any time, and we are happy to do so.

I will convene an oversight group made up of state, Federal and other interested private parties, whatever, to help guide and implement the recovery plan. If at any time these comments rise to the occasion of needing adaptive management of the recovery plan we can do that, and if that adaptive management warrants public comment we can put the amendment back out for public comment and will do that.

Mr. DEFAZIO. OK. Just to note, it does say on page 74 of the plan that the MOCA—I mean, I hate all these acronyms, but anyway, the MOCA network—identified in this recovery plan most closely

resembles Option 7 and the 20 pair system described in Noon & McKelvey, 1996.

Again, and I guess I will be asking Dr. Franklin, why we would think today that with a species in decline and a plan that was rejected back then, we would be going back and essentially implementing something that had a lower probability. But again, I will have to ask Dr. Franklin.

One other, and you may not be able to address this, and this may be BLM, but as I understand the final recovery plan—at least you can address this part—it is predicated to some great extent upon the ongoing implementation of the Northwest Forest Plan. Is that correct?

Mr. LOHOEFENER. The Northwest Forest Plan, like the IST report, like the 1992 draft recovery plan, all played an important part in the documents in the underlying information that was used in the original draft of the recovery plan.

Mr. DEFAZIO. Right, but here is where I am getting into this sort of circular problem. You have a new final recovery plan. It is substantially based in looking at ongoing implementation of the Northwest Forest Plan, yet the BLM is proposing to substantially revise the Northwest Forest Plan.

So how do these things interrelate? I mean, should they revisit their whopper to incorporate basically some of the assumptions and concerns that the final recovery plan is based on, which is the Northwest Forest Plan, or should you revisit your final recovery plan given the fact that they are proposing to substantially change the Northwest Forest Plan and see what impact that would have on your final recovery plan? How do we get out of this little loop here?

Mr. LOHOEFENER. Thank you, Congressman. I won't begin to address the land management issues that the Bureau of Land Management has to contend with out there. As you know, managing public lands under a multiple use doctrine is an incredibly complex job, and I am certainly not the person to speak to that.

I would go back to my answer I gave you a while ago though and say the forest plan addressed the needs of over 100 species and were not specific to the spotted owl. The final recovery plan is specific to the spotted owl, and we worked very closely.

In fact, the help that BLM has given over the last three years as we developed the recovery plan can't be acknowledged enough in my opinion, so I am very confident that the land management that BLM will take on the land will work to recover the spotted owl.

Mr. DEFAZIO. OK. So eliminating habitat and old growth will help with the recovery?

Mr. LOHOEFENER. I am sorry, Congressman. Would you restate that?

Mr. DEFAZIO. Their whopper plan is substantially based on substantial harvest of remaining old growth and so you are thinking that harvesting remaining old growth habitat will help with the recovery?

Mr. LOHOEFENER. Again, I won't speak to the land management prerogatives of the Bureau of Land Management, but again I will reiterate that I am confident that the Bureau of Land Manage-

ment's management, if successful, of the spotted owl will lead to the recovery of the owl.

Mr. DEFAZIO. OK. Mr. Chairman, I know I am over time, but there is a BLM person here too. Perhaps he could address this.

I just see we are getting into this little circle here where you are making assumptions in the recovery plan which are going to be contradicted by the actions of the BLM. As I expressed earlier, I am very concerned that we are just going to end up with a total injunction and an end to what is already an anemic level of Federal timber harvest.

Perhaps the BLM witness, and please identify yourself. I am over time, so if you could address that briefly? I know it is a complicated question.

Mr. SHEPARD. It is complicated.

Mr. DEFAZIO. Just for the record identify yourself.

Mr. SHEPARD. Ed Shepard. I am the BLM State Director for the states of Oregon and Washington.

You know, it is very complicated, but we have worked very closely. Our biologists have worked very closely with them. Under the plan revisions, we will be harvesting some old growth. We will also be protecting a considerable amount of old growth and growing some old growth.

Based on the recent recovery plan, we know that we have some changes that we have to make in our plans to bring that into compliance.

Mr. DEFAZIO. OK. All right. When will you be undertaking to make those changes?

Mr. SHEPARD. We are doing it right now.

Mr. DEFAZIO. OK. So what is the time period?

Mr. SHEPARD. Well, we expect that we are going to have the final out this fall.

Mr. DEFAZIO. OK. All right. Thank you.

Thank you, Mr. Chairman.

The CHAIRMAN. The gentleman from Texas, Mr. Gohmert?

Mr. GOHMERT. Thank you, Mr. Chairman. I am not going to need 11 minutes to make my comments and address my concern.

Earlier, a couple of speakers ago, we heard a recitation of so-called facts. We know that this is the case. We know that global warming is threatening polar bears. If we were back in my old courtroom, then I would have had to sustain an objection to someone assuming facts that are not in evidence because we don't know all of those things.

It just seems like the U.S. Government may be the only place where we take a look and we see that the facts are, as we have already heard, that polar bears have gone from 10,000 to 12,000 in number to 25,000 in number, so that makes them threatened. I mean, what other government would make that analysis and come to that conclusion?

We are told that CO₂ emissions are going to destroy the planet. Mr. Chairman, it seems like the worst source of CO₂ emissions seems to be the Floor of the House of Representatives. Maybe we do need to put more strict controls on that.

But I am concerned about the premise of the hearing. It is deeply troubling. The premise seems to be that there is a problem in hav-

ing political appointees who are accountable to the taxpayer and who are put in place by the elected head of the United States Government; that there is somehow something wrong with having that person oversee and supervise the work of career employees who are not directly accountable to the taxpayer.

The fact of the matter is the political appointees from Secretary Babbitt on down oversaw the work of scientists during the Clinton Administration, just as political appointees do in the current Administration.

I would also remind what I have read is that the Office of Inspector General concluded that in the case of Julie MacDonald, "We discovered no illegal activity on her part," that there was no case presented that she "harassed, bullied and insulted Fish and Wildlife or FWS employees," so we seem to be making some false assumptions even for the premise of the hearing.

But when an Assistant Secretary weighs in on a decision it means he or she is doing his or her job. Career biologists in Fish and Wildlife Service are human beings. Like anyone else, they have their biases, and on occasion they may ignore valid policy objectives. This is where legitimate oversight by supervisors comes into play. Someone has to do quality control, especially when there are problems with bias, even among Fish and Wildlife Service employees.

What we seem to be hearing from the Majority side of the aisle today is that we should cede control to unelected career government bureaucrats who are also prone to make mistakes and who can ignore valid management objectives the Administration or Congress might wish to implement.

But both career bureaucrats and Presidential appointees simply need oversight, and that is why I have appreciated the oversight hearings the Chairman has had, but to turn over every four to eight years at the top of these massive agencies the control is not a bad thing per se. The only way the system of appointees every four to eight years with new Administration is a bad thing is if we don't trust the majority of American voters.

We are told by polls currently that they expect the majority of voters in the United States to elect a Democrat as President in November of this year. What the Majority of this Committee seems to be saying is that they want to be on record as saying they don't trust the judgment of those kind of people that would vote for a Democrat for President.

I trust the American voter. I think they do a good job, and I hate to sit idly by and have the majority here insult those voters who may vote Democrat in the November election.

Thank you, Mr. Chairman.

The CHAIRMAN. The gentleman from Arizona, Mr. Grijalva?

Mr. GRIJALVA. Thank you very much. I would agree with my colleague that there is no inherent bad thing about political appointees, and I am looking forward to a new crop.

But I think those political appointees have to be guided by some very fundamental principles and values having to do with integrity, having to do with transparency and having to do with the fact that the public's right to know on how decisions are being made. I think

once we follow those rules we wouldn't be dealing with the situation.

I want to thank the Chairman. A year ago we had a hearing based on the Inspector General's report dealing with manipulation of scientific decisions on the Endangered Species Act. It has been a year. Ms. MacDonald has resigned. Eight decisions—maybe it should have been more—are being reviewed.

I think, unfortunately, the damage has been done. I say that because the greatest allies that endangered species have under the Act is science. That is the greatest ally, and the route to recovery is guided by science and guided by the Act itself. Once that gets manipulated and once that begins to be part of the political decision and not the scientific decision-making scheme then all things are lost.

So when we talk about the wolverine, the red nut bird, the gray wolf, the Mexican wolf, the pygmy owl, on and on and on, the jaguar, we have jeopardized them because now we have allowed a different culture to run it.

And so, my question is a very general one. Correct me if I am wrong. I think the change that needs to happen is not with the Act itself, but with the Administration and the implementation of the Act. I say that because I think we have institutionalized now a culture that is about pleasing a political outcome and not dealing with the reality of facts and science. That has been institutionalized with regard to the Endangered Species Act, and that change has to be fundamental and thorough in the near future.

And so, my question is am I wrong, Mr. Lavery, if I may? Am I wrong in assuming that we are not really going to make any progress until that massive institutional change and culture is changed?

I really think what we are talking about today—process, specifics—is good and healthy. I think the overall culture needs to be changed tremendously with regard to the application of the Act. Am I wrong in that assumption or in that conclusion to be more exact?

Mr. LAVERTY. Mr. Grijalva, I believe—and I can share this with absolute confidence—that if you were to ask any scientist in the Fish and Wildlife Service or the United States Geological Service about the integrity of science you would find that today the answer would be that they believe the integrity of science is whole.

I believe I can share that with you because I have established in my own set of principles and values conversations with Director Dale Hall and his folks that I value the integrity of science, and I am going to do, as I shared with you in my earlier testimony, all I can to ensure the integrity of science.

Now, as I pointed out, I think it is very, very important to be able to have questions about clarity of science. That should be OK. That should not be viewed as a threat. That should not be viewed as a negative thing. It should be absolutely important to make sure that when we come together with the best science that that stands the test of integrity.

The fact that you question me is good. We need to be able to do that, and I think that same thing is true for science. I believe that the actions that have been taken, as I mentioned, in the short time

that I have been here—we have four listings warranted, two not warranted. Those are based on absolute integrity of science. We have come together with nine substantial 90-day findings, and I would venture to say that if you ask anyone to come and look at that it would be based absolutely on science.

I want to go back and clarify perhaps some of the points that were made regarding Brian Waidmann, Chief of Staff. Brian Waidmann reviews every Federal Register listing that comes out whether it is Fish and Wildlife Service, Park Service, USGS, anything.

Brian Waidmann initials and reviews that, and I think some of those reviews are to make sure that we are, in fact, clear that the pieces all connect together. That shouldn't be again viewed as a negative thing, but I think it is a very important piece.

One of the things, if I could just follow up while I—

Mr. GRIJALVA. Well, let me go back to my original question, if I may.

Mr. LAVERTY. Sure.

Mr. GRIJALVA. My earlier question. When I talked about the scientific code of conduct that was implemented by Hall, it doesn't apply to yourself or anybody else in your office, and the question I asked then, shouldn't it so that we have a level of consistency on the integrity question?

Mr. LAVERTY. Mr. Grijalva, I would be happy to share with you the letter that I sent to the Department folks, to both Fish and Wildlife Service and the Park Service, that established my personal code of conduct and how I was going to operate, how I was going to establish that set of principles for my staff.

I believe that we have a very, very solid platform to work. We can assure that.

Mr. GRIJALVA. My time is up, Mr. Secretary, and I appreciate your honesty and your response, and I yield back.

Mr. LAVERTY. Thank you.

The CHAIRMAN. The gentlelady from California, Ms. Napolitano? Mrs. NAPOLITANO. Thank you, Mr. Chair.

I would like to talk to Mr. Laverty in regard to the petitioning under the ESA. I guess many things have not been corrected, and apparently last week the long-fin smelt in the California Bay-Delta was deemed substantial nine months after it was petitioned.

What assurances do we in this Subcommittee have that the status review for the smelt will now proceed efficiently and, moreover, be based on the best available science, and will it be completed in the next 12 months, which then goes to improving the efficiency of the 90-day petition, and how will Fish and Wildlife ensure the new delta smelt stands up to court scrutiny, the buyout?

Mr. LAVERTY. Thank you for that question. I actually had a chance to spend some time with Secretary Cristman and Regional Manager Steve Thompson talking about the delta smelt and how that science and the biological opinions come together.

One of the things that has to happen is we have to complete that biological opinion, and I understand that part of that now is with the Bureau of Reclamation. I just found that out this morning, so I will follow up on that on the delta smelt.

Mrs. NAPOLITANO. How long will that take?

Mr. LAVERTY. The long-fin. Was that the one that we just listed? In a couple months I think we are going to have that one out.

Mrs. NAPOLITANO. Are we sure it is a couple months and not a year or more?

Mr. LAVERTY. Absolutely. I can assure you. I am getting poked. Yes.

Mrs. NAPOLITANO. May I ask that the Committee be given the information as soon as possible?

Mr. LAVERTY. Yes, ma'am.

Mrs. NAPOLITANO. And if you will proceed with the rest of the question about the 90-day approval of the implementation?

I am sorry. Should we be concerned with the delays on other decisions, such as the 12-month status reviews in Section 7 consultations—listing and delisting and others?

Mr. LAVERTY. I believe part of our conversation earlier focused on the findings from the GAO in terms of guidance to the field on the 90-day listing, and I believe we have the mechanism in place and that is currently under review. We should have that out fairly quickly.

Mrs. NAPOLITANO. What about the new delta smelt biological opinion? Will it stand up to court scrutiny?

Mr. LAVERTY. I can tell you it will be based on the best available science.

Mrs. NAPOLITANO. OK. Ms. Nazzaro, on page 22 of your report it says: "Furthermore, Service officials also noted recovery plans are fluid documents, and the plan's respective criteria can be updated as new threat information about a particular species becomes available."

Were you able to check the veracity of the Service's statement? Is that true that the recovery plans are regularly revised?

Mr. MALCOLM. We can't say specifically if they were regularly revised, but a number of the species we have examples of in our report the recovery plans had been updated, so it can happen.

Again, we also note that a lot of the activity at least on the listing side of the house is litigation driven, so there obviously is a prioritization process that happens. They do have authority to revise the plans. It may not happen—

Mrs. NAPOLITANO. Why the litigation? Based on what?

Mr. MALCOLM. The example you just used on a late 90-day finding. So if the finding is too late there could be litigation brought to say—

Mrs. NAPOLITANO. Which brings it back to are we ensuring that we are going to expedite some of those petitions?

Mr. MALCOLM. Right. Yes.

Mrs. NAPOLITANO. Avoid litigation.

Mr. MALCOLM. Well, some of the litigation involved is over missed deadlines, but again there are so many species and so many decisions and not listing/delisting, but critical habitat and recovery plans and all those types of actions, so doing everything for every single species on time obviously would be challenging for the Department.

Mrs. NAPOLITANO. Well, according to the review of the recovery plans in the Fish and Wildlife database, it shows that only 22 recovery plans have been formally revised in the last 12 years and

30 in the last 20, and of the 22 in the last 12 only 13 have been formally completed and made final. The average length is 17 years.

Ms. NAZZARO. Certainly one thing that we did hear was that litigation does take a lot of time and so a lot of the other priorities that the Service would set, they are distracted from that because of litigation.

Mrs. NAPOLITANO. But if you have litigation that is causing the delay because it is not done—how would I say—expeditiously, within the period required, wouldn't that solve some of the problems?

Ms. NAZZARO. What we are hoping is we have not reviewed the draft guidance that Mr. Lavery discusses, but we anticipate that once that guidance gets issued it is going to clarify how the Service biologists go about reviewing these 90-day petitions, and it would certainly expedite the process.

Mrs. NAPOLITANO. Could you tell me how many of your revision plans or actually—I am sorry. I am getting my thoughts together. Of the litigated ones are based on late filings or extended filings? Is there any amount, percentage?

Mr. LAVERTY. I am sorry. I don't know what that answer would be. It would be substantial.

Mrs. NAPOLITANO. Would you find that out for us and let us know, because then we can understand that maybe this is part of the answer.

Mr. LAVERTY. Yes, ma'am.

Mrs. NAPOLITANO. Thank you, Mr. Chair.

The CHAIRMAN. The gentleman from California, Mr. Costa?

Mr. COSTA. Thank you very much, Mr. Chairman, for this important and timely hearing.

I have a specific question that follows on the one Chairwoman Napolitano asked with regard to the Sacramento-San Joaquin River Delta system, and then I have a more general question as it relates to the Endangered Species Act, which is the subject that we are hearing today.

As it relates to the specific question involving the issues of listed species in the Sacramento-San Joaquin Delta, which is the largest delta region on the West Coast that has numerous problems I would argue as it relates to the multi-purposes and the multi-facets of that delta river system that provides not only transportation, but a source of water, a source of fishery and critical habitat for the West Coast and for California particularly.

As it relates to the smelt issue that Congresswoman Napolitano was talking about, when these various scientific efforts are being pursued to deal with the various causations how are we attempting to weigh the factors, the other factors that are causing the degradation of the fisheries—not only the smelt, but the salmon and the other?

When we try to weigh the factors in of invasive species, when we try to weigh the factors of the impacts of tremendous urbanization that has taken place over the last two decades in the area, when we try to weigh the fact that there is over 1,600 pumps that are within the region that are unscreened—we have pumps throughout the country that are screened—and that we deal with diversions of water upstream as well besides the exportation, how do you weigh all those factors in?

Mr. LAVERTY. Mr. Costa, I believe the question you framed captures the complexity of the challenges that not only the Fish and Wildlife Service faces as we look at the recovery of species, but it capitalizes and captures the essence of how do we work with multiple jurisdictions to deal with these kinds of issues? I know from my conversations with resource professionals on the ground that this is an incredibly vexing problem for them.

I would have to say there is not any magic that is just going to pop out and we are going to find an instant situation. The delta is a classic example I think of the complexities that we face. You know, not only is that water important for fish, but it is also important for the commerce and the economy of California.

Finding that balance I believe is going to be our challenge working together, and I think that is why some of the conversations that we have had with the Governor's office, as well as with municipalities and agencies that are all impacted, that is where we are going to have to find that balance.

Mr. COSTA. Yes, I know, but the balance is always the challenge.

Mr. LAVERTY. Absolutely.

Mr. COSTA. You know, I want to ask a broader question, but it is related to this. I mean, regardless of our philosophical discussions, we all agree that good science ought to apply.

The problem is that scientists focus in their domain and their effort, and they have varied degrees of expertise, but then not withstanding the science there are always the tradeoffs. It is not up to the scientists necessarily to determine the social tradeoffs because they involve social, economic and other ethos that we all have that are similar and common and different.

Therein lies when you set the balance of the values in terms of trying to strike that balance I am not so sure it is fair to ask the scientists to do that.

Mr. LAVERTY. I would agree, and I believe that setting a policy call is not the role of the scientist.

Mr. COSTA. Right.

Mr. LAVERTY. The scientist is to bring together the best available science to that policy table and then policymakers then weigh those tradeoffs, if you will.

Mr. COSTA. Well, then that brings me to the question, and I don't know if I have enough time here. With the title, "Danger of Deception: Do Endangered Species Have a Chance?", it just seems to me that we ought to back up a little bit and try to figure out when we deal with risk assessment versus risk management what in our day and age today is the art of the possible.

I mean, I can assure you that if we didn't have the 38 million people that live in California today, not to mention the other people that live in Oregon and Washington, we could do a whole lot to restore the environment and the riparian systems and everything else because we wouldn't have the demands that all the people place on those important resources.

But the problem is we do have 38 million people living in California, and we have millions of people living in Oregon and Washington, and they share the same resources with all the other important species that we try to coexist with.

We never, it seems to me, make an evaluation or attempt to try to make the judgment because before people ever set foot on this continent, I mean, you had species that went extinct. It is the natural evolution of things, but they went extinct based upon various climate conditions and other predatory species and the like.

Now, we are the big species here, and we are very predatory I would argue, and therefore we impact all the other species, but we seem to have this notion that we can have it both ways, that we can turn the clock back 150 years or whatever time you choose when mankind wasn't impacting all the species.

I am not so sure you can have it both ways, but I don't think we ever have that conversation or that intellectual discussion, which is what I think we ought to have in terms of what the art of the possible is. That was an editorial. I don't know. Do you folks ever have these policy discussions?

Mr. LAVERTY. Every day. I don't mean to be flippant in that response, but that is really the fundamental issue that we face as we bring together the science of what we know about species in our environment and how do we then engage in helping make these critical decisions as it relates to policy calls on our needs as a society and how do we provide that long-term quality for what this country is all about.

Mr. COSTA. And it is the art of the possible. If you will, Mr. Chairman, give me 30 more seconds, I mean, just to add to this point. We have made a determination after 18 years plus of lawsuit on the San Joaquin River to reach an out-of-court settlement agreement.

I am not going to put a value on as to whether it is good, bad or indifferent because everybody has a different perspective, but the parties, both the plaintiffs and the defendants, decided after 18 years they were going to quit suing one another to attempt to restore a species on the San Joaquin River on 47 miles of the river that has not flowed since 1964. It is a very noble experiment at a cost of somewhere between \$300 and \$600 million. We don't know what the cost will be.

And so we can do a lot of things, but we also have to factor in what the costs and the tradeoffs are. We hope in the period of the 15 years during the implementation of this agreement that we will be successful, but we don't know that we will be. Yes?

Mr. LAVERTY. Just perhaps one last comment. I think you framed it very, very well in terms of the importance of good, hard, quality science. That becomes the foundation for many of these conversations.

That is exactly what we are trying to do is make sure that we have that kind of science that has that integrity that policymakers can understand what the tradeoffs might be.

Mr. COSTA. Thank you, Mr. Chairman.

Mr. LAVERTY. Thank you for your comments.

The CHAIRMAN. The gentleman from Texas, Mr. Gohmert?

Mr. GOHMERT. Thank you, Mr. Chairman. I think our friend, Mr. Costa, did a beautiful job of articulating the real balance necessary to have proper governance over this country.

I was affected by my friend from California Ms. Napolitano's discussion about the long-finned smelt, and I would like to yield to get an answer to a question regarding this balance.

It is my understanding that if the long-finned smelt, this little fish, is actually determined to be or classified as being an endangered species it will be necessary to hold more water up in the delta region, which would apparently deprive a lot of Southern California from much needed water.

I am curious. In the consideration of trying to preserve species, which we would all like to do, should any policy consideration be given to the adverse effects on the humanity there in Southern California? I yield to the gentlelady.

Mrs. NAPOLITANO. Thank you for yielding. I can tell you there is an ongoing battle in regard to allowing water to flow naturally down from Northern California. This is a north/south issue.

The fact that there have been lawsuits and much controversy over ESA and its effect on the population, let me assure you that both sides, no matter what, we need to ensure that we protect some of that. I am even discussing in some areas if there is endangered species why are we not having hatcheries to be able to ensure that the species survive? There is an issue there with the environmentalists, which I can understand, but I would rather have the DNA be a little bit watered down rather than lose it.

Protection of people? It depends because I can tell you in some areas you can be in the lowlands and look up and there is a boat going by up in the upper regions. You see it up high, the levees. One of those earthquakes is going to come down and all of that land is going to be affected. Salt will be intruded into the drinking water. It will ruin a lot of California's economy. The rest of the nation is going to suffer.

Now, do we protect? Yes, we have to protect much like we want to protect ourselves, the human race. There are many things we need to do. How we do it, working cooperatively, and this is what Jim was alluding to, is they decided that it is better to work with them because it does help the ecosystem.

With that I would like to turn it over to Jim to finish that up.

Mr. GOHMERT. Well, let me reclaim my time for a moment. It is my understanding though, and you mentioned the allowing of the natural flow of water, but it is my understanding if the long-finned smelt were classified as endangered then it would probably be required to have an unnatural restraint of water in order to help the long-finned smelt, and it would be the unnatural restraint of water flow that would so adversely affect portions of Southern California.

I would be glad to yield to my friend, Mr. Costa, if he has a comment. You really did a beautiful job of articulating the difficulty there.

Mr. COSTA. Well, thank you. I mean, we in California made a promise to Chairman Rahall a couple years ago not to bring California water problems to the Committee, but they are problems.

Mr. GOHMERT. Yes.

Mr. COSTA. I appreciate your interest. But I really think they are reflective of water problems that we are going to face around the country and around the world in the 21st Century, and maybe if we can do a better job in California than we have in terms of solv-

ing some of them maybe that will be helpful to other parts of the world.

The smelt specifically that you asked the question of. If they are listed and there is a portion of the listing, the process, and that was the questions we were referring to, could cut back as much as an estimated 70 percent of the water supply to Southern California and as much to the area that I live in and that many of my colleagues do where we farm, so it is a very serious issue in terms of the ability to export water south of the delta.

From a standpoint of geography and plumbing, you wouldn't have designed California. We have two-thirds of the population living where there is very little water, in Southern California, and their water supply comes from the Colorado River; it comes from the east side of the Sierra; it comes from the north.

Eighty percent of the developed water resources in California agriculture uses. We have picked a lot of low-hanging fruit in the last two decades to conserve water. Water is not cheap in California I would argue any more.

But we have a host of competing challenges on the delta smelt that you made reference to. For example, striped bass are not native to the delta. They are an eastern fish. They were introduced in the 1920s as a good game fish. They are a very predatory fish, and they eat smelt, which is the food for the salmon. They also eat juvenile salmon. Up until recently actually we still sold striped bass stamps, fishing stamps, to increase the propagation of striped bass, so these are the internal conflicts that drive us nuts.

Let me just close with one piece of advice when you wade into the water of the West. Mark Twain, I think, had it right over a century ago when he said, as a reporter in the West, it was clear to him that whiskey was made for drinking and water was made for fighting, and we are still fighting over those water resources today.

Mr. GOHMERT. OK. Thank you.

Reclaiming my time—well, actually it has expired—if I could just say, we certainly want to work with all states with water problems, and I hope that we can also, at some point, have a hearing on the invasive plant species that are about to take over waterways all over the South. We are about to lose a lot of natural—

Mr. COSTA. If the gentleman would yield?

Mr. GOHMERT. Sure.

Mr. COSTA. I think invasive species, period. I would not limit it to plants.

Mrs. NAPOLITANO. Would the gentleman yield for a second?

Mr. GOHMERT. Sure.

Mrs. NAPOLITANO. One of the things we are battling right now is the quagga mussel, which is eating some of the food from the fish—

Mr. COSTA. Right.

Mrs. NAPOLITANO.—which we have yet to find the solution to, and I think working cooperatively we may be able to have the R&D to be able to at least begin to address it because that is clogging all your pumps. Not only that; it is taking some of the natural food element of a lot of the fish.

Mr. COSTA. Right.

Mrs. NAPOLITANO. So it is a series of things, not just one rather. Thank you, sir.

Mr. GOHMERT. OK. Thank you, and thank you, Mr. Chairman. It sounds like you have some Members who would love a hearing on invasive species.

The CHAIRMAN. It sounds like it, but I think right now the panel needs to be relieved so I will thank the gentlemen and ladies that appeared before us today for your expertise and your patience and all your help to this Committee and say that you are excused. Thank you.

The Chair will call the next panel, Panel II, composed of Dr. Scott D. Kraus, the Vice President of Research, New England Aquarium; Dr. Jerry F. Franklin, Ph.D., College of Forest Resources, University of Washington; Dr. Francesca T. Grifo, Ph.D., Senior Scientist and Director, Scientific Integrity Program, Union of Concerned Scientists;

Scott Hoffman Black, the Executive Director of the Xerces Society for Invertebrate Conservation; David R. Parsons, a Science Fellow at the Rewilding Institute; and Larry L. Irwin, Ph.D., Principal Scientist, National Council for Air & Stream Improvement.

Is everybody still here? The Chair will remind all witnesses we do have your prepared testimony and, without objection, it will be made part of the record as if actually read. You are encouraged to summarize your prepared testimony.

We will begin with Dr. Kraus. Dr. Kraus, you have been recognized to proceed first.

**STATEMENT OF SCOTT D. KRAUS, PH.D., VICE PRESIDENT
OF RESEARCH, NEW ENGLAND AQUARIUM**

Mr. KRAUS. Thank you, Mr. Chairman. We are going to move into the ocean.

I am from the New England Aquarium. I have been running a research program on North Atlantic right whales for almost 30 years, and I would like to briefly talk about those animals and the issues around the ship strike rule that has been proposed by NOAA.

The North Atlantic right whale currently numbers less than 400 animals, making it one of the most endangered of the large whales. In the western North Atlantic, they are found along the entire East Coast of North America. Calving occurs in the coastal waters of the southeastern U.S. during the winter, and the migratory zone is along the Mid-Atlantic. In the summer, spring and fall, right whales are found in the Gulf of Maine in several habitats.

Historically, the species was hunted nearly to extinction, and despite protection for 70 years, the right whale population remains at very low numbers. Today, the primary reasons for right whale losses are accidental kills by ships and fishing gear.

Since 1999, at least 30 right whales have been hit by ships, leaving 15 dead, four seriously injured and likely to die, and 11 with injuries. Another 37 right whales have been entangled in fishing gear, six of which were fatal, and another six had potentially fatal injuries. In addition to the documented deaths, an average of six right whales per year disappear from the population and are presumed dead, adding to the mortality rates.

The Department of Commerce's National Marine Fisheries Service is the agency responsible for right whales under the ESA and the MMPA. The Agency is working hard with the research and fishing communities to solve the problem of entanglements in fishing gear, and more work is needed in this area.

However, the problem of ships killing whales is well defined, and the Agency's proposed rule to slow ships is a solution that will work. There have been a number of questions about the science posed by the Office of Management and Budget, the World Shipping Council, as well as some to one of my staff by the Council of Economic Advisors. I would like to address those questions briefly.

First, the evidence that high ship speeds kill whales. Many scientific studies have been done to assess the role of speed in ship kills of large whales and in particular for right whales. In my submitted testimony, I have provided the relevant graphs of speed versus the probability of collision, as well as a comprehensive list of all the scientific publications on this topic.

In all cases, scientists have used existing data to model the probability of lethal injury to a right whale from ships going at different speeds. When you add them all together, the cumulative results of all of these studies are conclusive. No matter which analytical technique is applied, increased shipping speed carries increased risk of death and serious injury to all large whales.

Questions have been raised about whether ship size matters to the danger posed to whales. It turns out that it doesn't matter very much when the difference is large. Ships are, let us say, somewhere between 5,000 and 50,000 dead weight tons, and a large whale might only be 40 dead weight tons.

For comparison, imagine a vehicle colliding with a songbird. Whether the vehicle is a motorcycle or a car or a train, the bird will probably survive a collision of five to 10 miles an hour. However, a collision with any of those vehicles at 30 miles an hour or 50 miles an hour, the bird is likely to die. The difference in mass doesn't matter as long as the vehicle is substantially larger than the bird. Only speed matters.

The same principles apply to whales. Because whale to ship size differences are large, the severity of damage to a whale in the event of a collision with a ship is primarily a function of speed. Therefore, speed reductions will reduce the risk of fatal collisions between all large ships and whales.

Now, what is the evidence that many of these different ship types are involved? Well, there has been a review by a couple of National Marine Fisheries Service scientists, and it turns out that just about every large ship around the world that we can think of in terms of types have been involved—Navy vessels, container, cargo ships, freighters, whale-watching vessels, cruise ships, Coast Guard vessels, ferries, dredges, et cetera. The data confirm that all types of vessels are involved in collisions with whales.

What does NMFS need to carry out its mandate under the Endangered Species Act for right whales? They have a statutory obligation under the Endangered Species Act to take actions that enable the recovery of right whales. It needs the support of Congress to get this rule in place.

NMFS also needs appropriate funding levels from Congress to monitor the population to determine how many animals are being lost to human activities, and which management measures are working. Failure to support NMFS' efforts is a disservice to the industries that are being regulated and will undermine their ability to ensure the survival of the North Atlantic right whale.

In conclusion, fast ships kill large whales. Slowing ships will, one, reduce the probability of a fatality should an encounter occur and, two, give whales the time to evade oncoming vessels. Ship strikes of whales involve all ship types, all whale species and occur all along the East Coast.

The National Marine Fisheries Service has taken the appropriate approach in using the 10 knot speed limit. This speed limit considers economic impact, safe navigation and benefit to right whales in a fair and well-researched manner.

There is no scientific justification for further delays in the proposed rule to seasonally slow ships in right whale habitats and migratory corridors along the East Coast of the United States. Thank you.

[The prepared statement of Mr. Kraus follows:]

Statement of Scott D. Kraus, Ph.D., Vice President for Research, New England Aquarium, Boston, Massachusetts

The North Atlantic right whale currently numbers less than 400 animals, making it one of the most endangered of the large whales. In the western North Atlantic, individual right whales have been observed from the Gulf of Mexico to the Gulf of St Lawrence, but most are found seasonally in one of five known habitats. The only calving ground is in the coastal waters of the southeastern U.S. during the winter months. The migratory corridor for all right whale mothers and calves is the coastal zone of the U.S. between Florida and Massachusetts. In the spring, aggregations of right whales are present in the Great South Channel (east of Cape Cod) and in Cape Cod and Massachusetts Bays. In the summer and fall, right whales are observed in the Bay of Fundy, between Maine and Nova Scotia, and in an area 50 km south of Nova Scotia called Roseway Basin. Aerial surveys also have recently discovered winter-time aggregations in the middle of the Gulf of Maine.

Historically, this species was hunted to near extinction, and, despite protection for 70 years, the right whale population remains at very low numbers. Today, the primary reasons for the population's slow recovery are the accidental kills by ships and fishing gear. Since 1999, at least 30 right whales have been hit by ships, leaving 15 dead, 4 seriously injured and likely to die, and 11 with injuries (Table 1). Another 37 right whales have been entangled in fishing gear, of which 6 were fatal, and 6 caused potentially fatal injuries. In addition to the documented deaths, an average of 6 animals per year (range: 1–11) have disappeared from the population and are presumed dead, adding to total mortality rates.

Shipping and entanglement deaths are added to natural mortality, and several population models have shown that this population was declining during the 1990's (Caswell et al. 1999; Fujiwara and Caswell 2001). Fujiwara and Caswell's projections indicated that those trends would drive the North Atlantic right whale to extinction in approximately two centuries. However, those same models suggested that saving just two females per year could reverse this trend. These circumstances confirm that this is a critical period for right whales and that focused and dedicated efforts will be required if we are to assure the recovery of the North Atlantic right whale population.

The NOAA National Marine Fisheries Service (NMFS) requirement for recovery is a population increase for a period of 35 years at an average rate of increase equal to or greater than 2% per year. Preliminary analyses indicate that this group of right whales has had an average growth rate over the last two decades of about 1%. Recent calf counts have increased slightly, although increases in mortality in recent years may have offset those gains.

The Department of Commerce's National Marine Fisheries Service is the responsible agency for right whale conservation under the ESA and the MMPA. The agency is working hard with the research and fishing communities to solve the problem

of entanglements in fishing gear, and more work is needed in this area. However, the problem of ships killing whales is well-defined, and the NMFS proposal to slow ships is a solution that will work. There have been a number of questions about the science posed by the OMB, the OIRA, and the World Shipping Council, including questions posed directly to a colleague on my staff by the Council of Economic Advisors. I would like to address these questions briefly.

Evidence that High Ship Speeds Kills Whales

Many scientific studies have been done to assess the role of speed in ship kills of large whales, and 5 studies have specifically evaluated this for right whales. These studies (Vanderlaan and Taggart 2007; Pace and Silber 2005; Laist et al. 2001; Kite Powell, et al., 2007; Vanderlaan et al., 2008) used different analytical approaches, but all reached the same conclusion that vessel speed plays a role in the level of severity of a strike. In addition, a Knowlton et al (1998) report titled The Hydrodynamic Effects of Large Vessels on Right Whales: Phase Two concluded that in none of their simulations was there a situation where a slower moving ship increased the risk of collision. A slower ship has lower hydrodynamic forces and is thus safer for a whale trying to take avoidance action.

To summarize the results of all of these studies, I have provided a single graph from each of the four quantitative papers in the following pages, and offer a summary statement from many of the papers on whales and shipping here. The cumulative results of these multiple studies are conclusive—no matter which technique is applied, increased shipping speed carries increased risk of death and serious injury to all large whales.

Laist et al., 2001 “Collision accounts compiled here suggest that serious injuries to whales may occur infrequently at vessel speeds below 14 kn and rarely at speeds below 10 kn.”

Jensen and Silber, 2003 “All vessel classes are represented in our database, but it appears generally that relatively large and relatively fast moving vessels are most often involved.”

Pace and Silber 2005 “We found strong evidence ($P=0.0025$) that the probability of death or serious injury increases rapidly with increasing ship speed (Figure 1).”

Vanderlaan and Taggart 2007. “Notably, it is only at speeds below 11.8 knots that the chances of lethal injury drop below 50% and above 15 knots the chances asymptotically increase toward 100%.”

Kite-Powell, et al., 2007 “Model results suggest that more than half of right whales located in or swimming into the path of an oncoming ship traveling at 15 knots or more are likely to be struck even when they do take evasive action.”

Vanderlaan and Taggart, 2008 “Only the reduced vessel-speed option will decrease the likelihood of a lethal injury should an encounter occur.”

In the following graphs, scientists have used the existing data to model the probability of lethal injury to a right whale from ships going at different speeds. In the first one, Vanderlaan and Taggart (2007) show that the probability of fatal injury rises rapidly after 8-10 knots and approaches 100% above 18kts. In the second (Vanderlaan et al., 2008), they add the probability of a whale-ship encounter to the original data to show the combined likelihood of a fatal collision (in color, where red is bad (fatal), and blue is good (not fatal)).

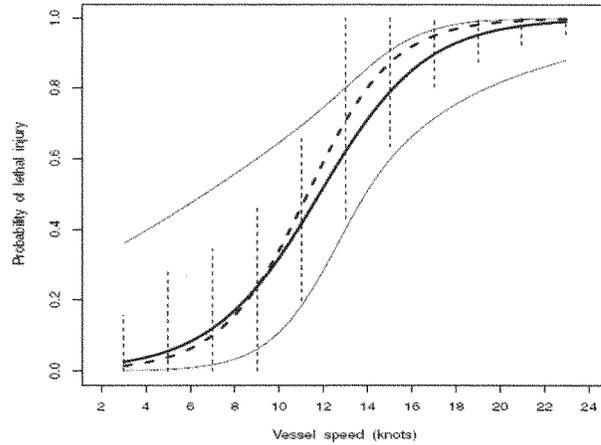


Figure 3. Probability of a lethal injury resulting from a vessel strike to a large whale as a function of vessel speed based on the simple logistic regression (solid heavy line) and 95% CI (solid thin lines) and the logistic fitted to the bootstrapped predicted probability distributions (heavy dashed line) and 95% CI for each distribution (vertical dashed line) where each datum (Δ) is the proportion of whales killed or severely injured (i.e., lethal injury) when struck by a vessel navigating within a given two-knot speed class. There are no data in the 4–6 knot speed class.

Above: From Vanderlaan and Taggart, 2007.

Below: From Vanderlaan et al., 2008

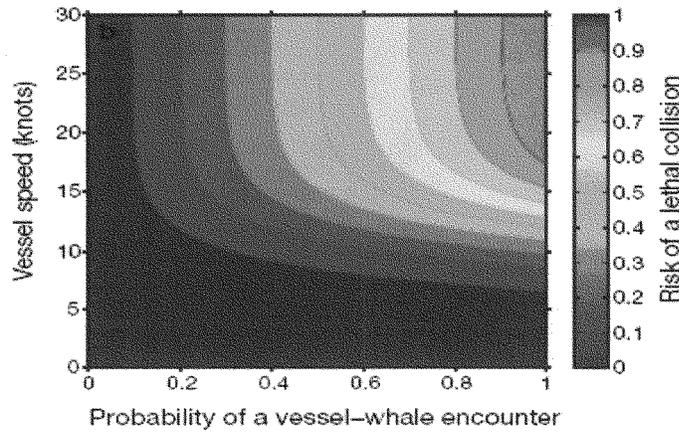


Fig. 2. Nomograph illustrating the risk of a lethal collision as a function of speed (from Vanderlaan et al. 2008) given a vessel-whale encounter.

In the next graph, Pace and Silber (2005) modeled a slightly larger dataset without binning into speed categories, and obtained nearly the same results as Vanderlaan and Taggart (2007)(shown above). Their analysis shows that the probability of mortality or serious injury increases dramatically above 7 knots.

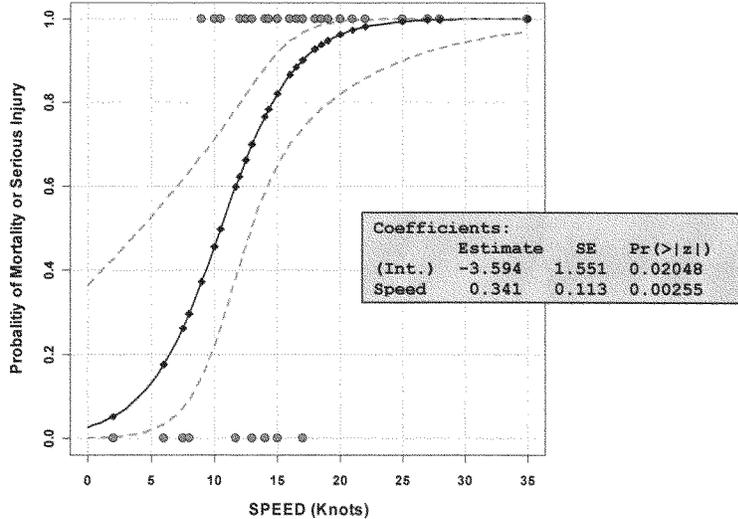


Figure 1. Fitted logistic regression showing the relationship between serious injury and vessel speed. (Green dots are observed, black diamonds are predicted and red-dashed lines are the 95% CI about the individual predicted values. From Pace and Silber, 2005

Despite some confusion on the part of the World Shipping Council and the CEA, ship mass does not matter much when the difference between the ship and the whale is large. From a shipping perspective, most ships are much more massive than a whale (5000-100,000 DWT vs 40 DWT). As C. Taggart points out (in lit. Aug 31 2007 to S.E. Dudley OIRA) the situation is similar to a vehicle colliding with a song bird. Whether the vehicle is a motorcycle, a car, a bus, or a train, the bird will probably survive a collision of 5-10 miles per hour. However, in a collision with any of those vehicles at 20-30 miles per hour, the bird is highly likely to die.

Thus mass (size) does not matter as long as the difference between the animal and the vehicle is large. The severity of damage to a whale in the event of a collision with a large vessel is primarily a function of speed. Therefore, regardless of ship size, speed reductions will reduce the risk of fatal collisions between ships and large whales.

Note that most of the results discussed above are predicated upon passive whales, in other words, a whale that does not attempt to move out of the way of a closely approaching ship. However, Kite-Powell et al. (2007) analyzed close approaches (less than 500 m) of ships to right whales, and found that a majority of whales do attempt evasive actions. Although the sample size is limited, evasive actions increased as proximity to the ship increased. Taking whale behavior into account, Kite-Powell and colleagues modeled ship/whale encounters at various speeds and produced the following graph, which shows the probability of collision given different speeds and different ships. Although this does not predict fatal injuries, it is consistent with the previous models which show that the risk of collision between ships and whales increases with speed. These results indicate that slowing ships to a speed of ten knots gives whales an increasing amount of time to avoid collisions by taking evasive action.

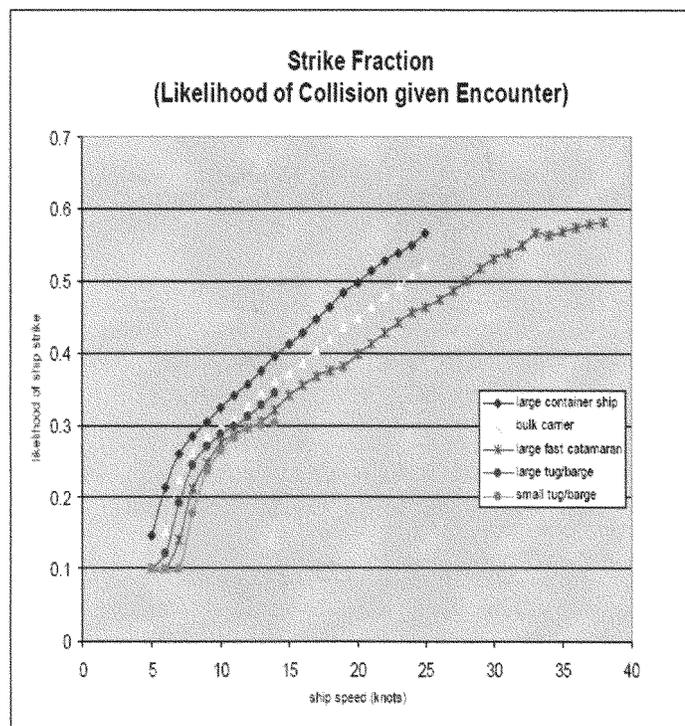


Figure 2: Strike fraction for different ships as a function of speed

From Kite-Powell et al. 2007

Evidence that All Ship Types are Involved

Jensen and Silber (2003) provide detailed information of the vessel types involved in strikes worldwide. "Of the 134 cases of known vessel type, there are 23 reported incidents (17.1%) of Navy vessels hitting whales, 20 reports (14.9%) of ship strike for container/cargo ships/freighters, 19 (14.2%) reports of ship strike for whale-watching vessels, and 17 reports (12.7%) for cruise ships/liners (Figure 5). Sixteen reports of ship strike (11.9%) are attributed to ferries. Nine cases of ship strike (6.7%) are reported for Coast Guard vessels and eight cases (6.0%) for tankers. Recreational vessels and steamships were each responsible for seven collisions (5.2%) in the database, while fishing vessels were responsible for four records (3.0%) of strike. One collision (0.75 %) was reported from each of the following: dredge boat, research vessel, pilot boat, and whaling catcher boat."

These data confirm that all types of vessels are involved in collisions with whales, although care should be taken in interpreting these numbers. Large ships (e.g. container ships, tankers, and cruise ships) may not be aware that a collision with a whale has occurred and thus do not report the incident. Captains of ships of all sizes are under no obligation to report collisions and may not do so due to apathy or fear of legal consequences. The high percentage of Navy and Coast Guard collision reports is likely due to standardized military and government reporting practice rather than an actual higher frequency of collisions relative to other ship types. Both federal agencies are actively involved in large whale protection programs and reporting struck or dead whales to the National Marine Fisheries Service are standard operating procedures.

Evidence that Ship Kills are Impacting All Large Whales

NMFS has done a thorough job of keeping track of serious injury and mortality events (Nelson, et al. 2007). From 2001-2005, NMFS verified 292 large whale mor-

talities and determined that 26 were due to entanglements and 27 were the result of ship strikes. The cause of death could not be determined for 223 (76%) of the carcasses (Nelson 2007), since animals floating at sea are typically not retrieved for a necropsy (except right whales). Because of the endangered status of right whales, NMFS has supported the retrieval and necropsy all right whale carcasses when feasible. From 2001 through 2007, a total of 31 right whale carcasses have been documented. Fourteen of these carcasses were towed to shore, 10 were found on the beach, and seven were unretrievable. Of the 14 carcasses retrieved, nine (64%) died as the result of ship strike. If we applied this percentage to all large whale carcasses that were not retrieved (223 animals), there may have been as many as 142 large whales that died as the result of a vessel strike in that five-year timeframe. This suggests that all large whale species in the near coastal waters of the U.S. are at risk from ship strikes and would be afforded protection from this rule.

What NMFS Needs to Carry Out Its Mandate Under the ESA for Right Whales

NMFS has the statutory obligation under the Endangered Species Act to take actions that enable the recovery of right whales. The NMFS proposed rule has the weight of multiple independent scientific studies behind it. Other agencies should review the proposed rule for economic and other consequences, but should not attempt to second guess the science.

Reducing right whale deaths is critical to protecting the species, yet federal funding for right whale research was halved in 2006, eliminating support for necropsies, entanglement mitigation, acoustic surveys, and photo-identification surveys, thereby negating the ability to monitor population health, survival and reproduction. Without these ongoing research efforts, it will be impossible to determine how many animals are being lost to human activities, which management measures are working, and what can be done to support the recovery of the species. This data loss is a disservice to the industries that are being regulated to reduce human-caused kills of this species, and it will hamper NMFS' ability to assure the recovery of the North Atlantic right whale under the Endangered Species Act.

Conclusion

Fast ships kill large whales. Slowing ships will 1) reduce the probability of a fatality should an encounter occur, and 2) give whales the time to evade oncoming vessels. Ship strikes of whales involve all ship types, all species, and occur in all waters of the East Coast. NMFS, as the agency responsible for mitigating right whale mortality by law, has taken the appropriate approach in using the 10-knot speed limit. This speed limit considers economic impacts, safe navigation, and benefit to right whales in a fair and well-researched manner. There is no scientific justification for further delays in the proposed rule to seasonally slow ships in right whale habitats and migratory corridors along the East Coast of the U.S.

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Table 1. Summary of North Atlantic Right Whale Vessel Strikes, 1999-2008

Compiled using data obtained from the National Marine Fisheries Service, the Provincetown Center for Coastal Studies, the New England Aquarium, and Woods Hole Oceanographic Institution.

For more information on individually identified whales, go to <http://rwcatalog.neaq.org/>.

Information Current as of April 2008

	Sex	Date	Location First Reported	Status*	Cause of Death
1	Female (adult) #1014 "Staccato"	4/20/99	MA (Cape Cod Bay)	Dead	Vessel strike
2	Male (unknown age) #2820	7/07/00	Canada (Bay of Fundy)	Serious injury	Vessel strike
3	Female (adult) #1160	1/29/01	FL (Northeast coast)	Injury	Vessel strike
4	Male (calf)	3/17/01	VA (Assateague)	Dead	Vessel strike
5	Female (calf)	6/18/01	NY (Long Island)	Dead	Vessel strike
6	Male (unknown age)	7/01	Newfoundland (St. Theresas)	Dead	Probable vessel strike (numerous broken vertebra)
7	Female (juvenile)	8/22/02	MD (Ocean City)	Dead	Vessel strike
8	Female (unknown age) #2430	9/25/02	Canada (Bay of Fundy)	Injury	Vessel strike
9	Female (calf) #3317	1/26/03	FL	Injury	Vessel strike
10	Male (calf) #3301	8/14/03	Canada (Bay of Fundy)	Injury	Vessel strike
11	Female (adult) #2150	10/2/03	Canada (Bay of Fundy)	Dead	Vessel strike
12	Unknown age and sex #3450	1/1/04	GA	Injury	Vessel strike
13	Female (adult, pregnant) #1004 "Stumpy"	2/7/04	VA (Virginia Beach)	Dead	Vessel strike
14	Female (adult, pregnant) #1909	11/24/04	NC (Ocean Sands)	Dead	Vessel strike
15	Female (adult, pregnant) #2143 "Lucky"	1/12/05	GA (Cumberland Island)	Dead	Infection from previous vessel strike
16	Female (juvenile) #2753	1/27/05	FL	Injury	Vessel strike
17	Female (adult) #2425	3/10/05	GA (Cumberland Island)	Serious Injury	Vessel strike
18	Female (adult) #2617	4/28/05	MA (Monomoy Island)	Dead	Vessel strike

	Sex	Date	Location First Reported	Status*	Cause of Death
19	Unknown age and sex #3380	6/9/05	MA (Great South Channel)	Injury	Vessel strike
20	Unknown (calf)	12/11/05	FL (Miami)	Serious injury	Vessel strike or entanglement
21	Female (juvenile)	1/8/06	FL (Northeast coast)	Injury	Vessel strike
22	Male (calf)	1/10/06	FL (off Jacksonville)	Dead	Vessel strike
23	Male (juvenile) #3522	3/11/06	GA (off Cumberland Island)	Serious Injury	Vessel strike
24	Unknown (CT50)	4/14/06	MA (Cape Cod Bay)	Injury	Vessel strike
25	Female (calf)	7/24/06	Canada (Bay of Fundy)	Dead	Vessel strike
26	Female (adult)	8/24/06	Canada (Roseway Basin, Nova Scotia)	Dead	Vessel strike
27	Male (juvenile) #3508	12/30/06	GA (off Brunswick)	Dead	Vessel strike
28	Female (juvenile) #3503 "Caterpillar"	3/12/07	MA (Cape Cod Bay)	Injury	Vessel strike
29	Male (calf)	3/30/07	NC (off Avon)	Dead	Entanglement, possible vessel strike
30	Unknown (1 year old)	8/5/07	Canada (Bay of Fundy)	Injury	Vessel strike

* Events were categorized as ship-strike serious injuries if, following the appearance of a linear laceration or large gouge, a living whale exhibited a marked decline in appearance, including skin discoloration, lesions near the nares, fat loss, or increased cyamid loads. (Glass AH, Cole TVN, Garron M, Merrick RL, Pace RM III. 2008. Mortality and serious injury determinations for baleen whale stocks along the United States eastern seaboard and adjacent Canadian Maritimes, 2002-2006. US Dept Commer, Northeast Fish Sci Cent Ref Doc. 08-04; 18 p. Available from: National Marine Fisheries Service, 166 Water Street, Woods Hole, MA 02543-1026.)

The CHAIRMAN. Thank you.
Dr. Franklin?

STATEMENT OF JERRY F. FRANKLIN, PH.D., COLLEGE OF FOREST RESOURCES, UNIVERSITY OF WASHINGTON

Mr. FRANKLIN. Thank you. I appreciate the invitation to be here today. I would just put down for the record that I have been involved in the issues with regard to the northern spotted owl for well over 20 years now, so I have had a little bit of experience with it.

I was part of the Thomas Committee that did the original development of the DCA strategy. I was a member of the Gang of Four. I was a major participant in the FEMAT and Northwest Forest Plan preparation process, and I was a part of two sustainable ecosystem institute groups that were convened by the Fish and Wildlife Service, one to do a comprehensive science review on the owl and the most recent one to advise them on how to respond to the criticisms of the draft recovery plan.

I want to compliment the Fish and Wildlife Service on the incredible improvement in the plan, going from the draft recovery plan to the final recovery plan that they issued last week. It was

an order of magnitude improvement in the plan, but they had a long way to go.

I particularly want to compliment them on the adoption of a credible strategy for dealing with owls in the dry forest habitats found on the eastern slope of the Cascade Range. That dry forest may turn out to be one of the keys to the long-term survival of this subspecies of the spotted owl because it appears that there is a possibility that the barred owl is going to be less competitive on these dry sites, so it was critical to address that.

I also want to compliment them on the adoption of some adaptive approaches to keep problem areas. Certainly implementing the dry forest strategy, really developing a scientific basis for addressing the barred owl and for addressing issues in the very complex Klamath-Siskiyou region.

I want to apologize to the Fish and Wildlife Service with regard to my testimony. I suggested in my testimony that various advisory committees that they intended to put together were just going to be Federal. The stated intent with regard to most of these in the recovery plan is that they would be multi-institutional and involve a range of stakeholders, and I just would encourage this Committee to be sure that it happens that way.

Perhaps my major criticism of the final recovery plan is that it does not adequately protect suitable owl habitat within the range of the northern spotted owl. This is recognized in the final recovery plan itself, which is why they have a Recovery Action 32 that says: Maintain substantially all of the older and more structurally complex multi-layered conifer forests on Federal lands outside of the MOCAs.

Basically what has happened even in the final recovery plan is that we have a species in very serious decline, and still we are proposing in this final recovery plan to actually reduce both the quantity and quality of designated habitat on the Federal lands for the owl.

We sort of went back to, this is perhaps too strong a word, but an ancient reserve design as a basis for the MOCAs. The concept in terms of addressing reserves on the Federal lands really advanced under the FEMAT and Northwest Forest Plan process to late successional reserves, which analysis has shown were much superior in terms of both the quantity and the quality of habitat insofar as owls are concerned.

There are a couple of things that could be done very easily to resolve this. One would simply be to base any kind of a designated reserve system on Federal lands as the late successional reserve system and then add other areas as needed.

If that seems to be unacceptable and the Agency doesn't want to do that, it would be possible to develop a more definitive basis for their Recovery Action 32, one which would actually define for the Federal agencies what that suitable habitat is and then simply require the agencies to be accountable for ensuring that it is maintained.

I think I can end with that. Maybe I will just comment one other thing here. There was a suggestion that well, the late successional reserves are not really appropriate for this because they were for more than that. Well, I was there as part of a small team with Eric

Forsman, Mr. Spotted Owl or Dr. Spotted Owl, drawing the boundaries of the late successional reserves in FEMAT.

They were drawn very explicitly to meet owl criteria. We would have had a very different system if, in fact, the owl biologists had not been very and appropriately influential in that process. So to suggest that, in fact, they were not designed primarily to accommodate owls is not an accurate representation, so I will leave it there.

Thank you.

[The prepared statement of Mr. Franklin follows:]

**Statement of Dr. Jerry F. Franklin, Professor of Ecosystem Analysis,
College of Forest Resources, University of Washington**

I am here today to provide testimony on development and revision of the Recovery Plan for the Northern Spotted Owl, which was released by the U.S. Fish and Wildlife Service (USFWS) on May 16, 2008. I am Professor of Ecosystem Analysis in the College of Forest Resources at the University of Washington. These comments reflect my own views and not those of any institution or organization with which I am associated.

Development of the recovery plan for the Northern Spotted Owl (*Strix caurina* var. *occidentalis*) (NSO) has a history that extends back nearly 20 years and which are interwoven with many other planning efforts, including the Interagency Scientific committee to Address the Conservation of the Northern Spotted Owl (Thomas et al. 1990), Scientific Committee on Late Successional Forest Ecosystems (1991), Forest Ecosystem Management Team (1993), and Northwest Forest Plan (1994), in which I have been personally involved. I was a member of a Sustainable Ecosystem Institute's (SEI) team that was commissioned by the USFWS to do a comprehensive 10-year science review of the owl. In 2007 the USFWS finally issued a Draft Recovery Plan, which received extensive public comment and scientific review, including by a scientific panel created by The Wildlife Society and in which I participated. Finally, earlier this year I participated in a science team commissioned by the USFWS and convened by SEI to advise the agency regarding responses to scientific criticisms raised of the draft plan in completing a final recovery plan.

The SEI Team was convened to assist the USFWS in assessing the merit of the numerous scientific criticisms that were made of the Draft Recovery Plan and in developing appropriate responses to these criticisms during revision of the draft plan. The report of this group, "Scientific Review of the Draft Northern Spotted Owl Recovery Plan and Reviewer Comments" is available at the Sustainable Ecosystems Institute website (<http://sei.org>). The team membership included several NSO specialists as well as scientific experts in fire ecology. SEI Team activities included two open meetings in which testimony was taken from numerous other scientific experts.

Major findings of the SEI review of the Draft Recovery Plan included: (1) Major threats remain the loss of suitable habitat to fire and timber harvest and Barred Owl competition; (2) Much geographic variability exists in the ecology of NSO, especially suitable habitat and prey use, and this needs to be reflected in a final recovery plan; (3) The Draft Recovery Plan underestimates the threat of habitat loss from fire and from harvest or salvage of large trees; (4) The Draft Recovery Plan is unclear about how much suitable habitat will be protected—and this must be clarified in a revised plan; (5) The relation of NSO to habitat following wildfire in their home ranges is not clear—all fires do not result in habitat loss but intense stand-replacement fires are certainly not desirable circumstances for the owls; (6) Control of Barred Owls may be warranted but credible experimentation and other research needs to be done before a control program is designed and adopted; (7) Wildfire threats are seriously underplayed in the Draft Recovery Plan and are likely to increase with climate change; (8) The "...only viable conservation strategy [in the dry forests of the eastern Cascades] will be to actively managed fire-prone forests and landscapes to sustain Spotted Owl habitat. However, this needs to be closely monitored through an adaptive management process."; and (9) "A simple reserve network is unsustainable in east-side fire-prone habitats. Conservation strategies, to be viable, must be designed and implemented at the landscape level." The SEI team also concluded that dealing with wildfire threats to NSO habitat in the Klamath Province (Klamath-Siskiyou Mountains) is critical but could not reach a consensus on what strategies should be adopted, given the considerable ecological complexity of the region; hence, the team concluded that developing an active conservation strategy for NSO in that province is a high priority in the near future and that it

should include a team of scientific and technical experts diverse in both expertise and institutional affiliation.

The SEI report on the Draft Recovery Plan emphasizes adaptive and collaborative approaches to approaching the several problem areas, including implementation of an Eastside Cascade management approach, development of a management approach for NSO in the Klamath Province, research and experimentation on Barred Owls; and, most important, general oversight on the implementation and effectiveness of a Final Recovery Plan. The history of the recovery planning effort and related federal activities, such as the Bureau of Land Management's WOPR, makes clear that there is very little confidence in the ability of the federal agencies to objectively implement such programs without participation and oversight by scientific and technical personnel from outside the federal establishment. Models from other regional efforts, which involve independent standing committees of experts who are well educated and full engaged in regional conservation efforts, should be utilized in creating an oversight body for the final recovery plan.

As is apparent from the preceding comments and the public record, the Draft Recovery Plan for the Northern Spotted Owl had significant scientific deficiencies. These included massive reductions in the acreage of critical habitat designated for the species, inappropriate extrapolation of scientific findings from the southwestern portions of the NSO range to its entire range, a failure to credibly address the threat of uncharacteristic wildfire in drier portions of the NSO range, and adoption of an aggressive program of Barred Owl removal without any scientific evidence as to whether it would be effective. All of the scientific reviews have been critical—intensely critical—of many aspects of the Draft Recovery Plan and of its overall scientific credibility. In effect, the Draft Recovery Plan failed all scientific tests.

The final recovery plan for the NSO that was released last week represents a major improvement in scientific credibility over the draft recovery plan. The amount of critical habitat, identified as Managed Owl Conservation Areas (MOCAs) has been modestly increased, although it still falls well short of designating all suitable NSO habitat on federal lands. A credible strategy is provided for addressing risks of NSO habitat loss to uncharacteristic stand replacement wildfires has been incorporated into the plan (I will elaborate more on this later in my testimony). There is a plan for comprehensive scientific study and experimentation on the relationships between the barred and spotted owl prior to any extensive barred owl removal program.

USFWS is to be applauded for these significant improvements in the scientific content of the final Northern Spotted Owl Recovery Plan. However, it is important that Congress recognize that these improvements are largely a consequence of the oversight provided by extensive public involvement, including comprehensive and independent scientific review during the development of the recovery plan.

It is important to continue this kind of public oversight and broad scientific participation during the implementation of the plan. Specifically, the plan calls for the development of several inter-organizational working groups, including a group that will oversee implementation of the plan and subgroups that will deal with the research programs on Barred Owls, development of a strategy for the Klamath Province, and implementation of the eastside landscape management approach. The USFWS apparently intends to only populate these working groups with employees of federal agencies; if this is correct, it is a serious mistake. Oversight and planning activities of these types should draw their participants from diverse organizations and stakeholder groups; they should not be limited to participants from federal agencies. Beyond broadened participation in these processes, independent third-party assessments are going to be critical in assuring the viability and credibility of adaptive management processes.

My personal perspectives on two specific aspects of the Final Recovery Plan follow:

Conservation Areas. The 133 owl conservation areas identified in the plan are not adequate. These are based on an old reserve design that was developed by the Interagency Scientific Committee to Address the Conservation of the Northern Spotted Owl (the "Thomas Committee") in 1989-1990. This system of reserves (referred to as Habitat Conservation Areas or HCAs at that time) was designed to provide adequate habitat for NSOs but distributed so as to minimize impacts on timber harvest programs. I see no scientific reason why the USFWS would have based their approach on this old strategy. The Northwest Forest Plan provided for a much more extensive system of Late Successional Reserves (LSRs), a system of reserves superior to the HCAs in both the amount and quality of owl habitat that was conserved. Given the critical status of the NSO it seems appropriate to me to provide both the larger amount and better quality of habitat found in

the LSRs in preference to the system of MOCAs adapted from the earlier HCA strategy. An explanation of why LSRs were not used as the identified and mapped conservation area system is not provided in the Final Recovery Plan. The USFWS should use the NW Forest Plan's system of Late Successional Reserves as the core of the NSO conservation area strategy and supplement it as necessary with additional designated conservation areas. Given the declining status of NSO populations, these additions to the LSRs might well include all mature and old-growth forest outside of the LSRs on moist forest sites.

Eastside Dry Forest Strategy. Better explanation or elaboration of the highly meritorious eastern Cascade Range dry forest strategy is appropriate in both press releases and in the main body of the plan, although a fuller presentation is available in an appendix. The press release describes the strategy as "...one of shifting spotted owl habitat patches in an entire landscape..."; the emphasis should not be on the transient or shifting nature of the patches since the real intent is actually to decrease the risk that the denser forest patches of NSO nesting, roosting, and foraging habitat will burn and, conversely, increase the probability that the designated patches will persist. Further, at various places the plan describes the treatments of the forests within which these patches are embedded as "thinning"; in fact, the silvicultural treatments are much more than simply thinning but, rather, restoration treatments that include prescribed fire and efforts to conserve and restore mature and old tree populations. USFWS should emphasize these landscape-level treatments as silvicultural treatments to restore more historic or characteristic (and, certainly, more sustainable) conditions and that the patches of NSO habitat will not be subject to significant mechanical thinning but, rather, retained intact and for as far into the future as possible.

This approach of providing for sustainable owl habitat in the context of a larger, more holistic effort to restore the dry forest landscapes, stands, and old tree populations on the eastern slope of the Cascades is important. Optimizing the output of any single resource inevitably results in adverse affects on other elements of the ecosystem, whether organisms, processes or disturbance regimes. The proposed approach in the dry eastside Cascade forest holds the potential to benefit the full array of resources.

Which leads me to my concluding comment on the NSO recovery planning process: I conclude my comments with a plea for holistic integrated approaches to resolution of natural resource management issues, including those related to endangered species. Historically there is a pattern of sequential episodes of planning and management of natural resources that essentially focus on a primary resource value. The dominant focus was wood production for many decades, shifted to conservation of biological diversity (as exemplified by Northern Spotted Owls), and, most recently to fuel treatments related to wildfire. It is inevitable that when we adopt a dominant focus on any single resource that there are significant negative impacts on other important resource values; it seems to be one of those great absolutes that this inevitably happens when you optimize for one specific resource outcome. Focusing primarily on timber production is a great example for we learned incontrovertibly that devoting a landscape primarily to maximizing wood production will result in negative impacts to many other important resource values, regardless of efforts at mitigation. Natural processes rarely produce forests and landscapes that "optimize" for specific organisms or processes, including disturbances; that is simply not the pattern by which they evolved. I believe that we need to stop lurching from one singular emphasis to another and begin to develop management regimes that truly integrate a variety of objectives (including timber production, provision of NSO habitat, and greater sustainability in the face elevated disturbance regimes). These approaches must be: Based on fundamental scientific knowledge about forest ecosystems and landscapes, including their integrated terrestrial and aquatic components; Holistic in their perspective and integrative in practice; and Actively engage stakeholders in both design and implementation, incorporate adaptive approaches, and provide for credible public oversight of agency performance.

Mr. DEFAZIO. OK. Thank you for clarifying that point.

We would now go to the next witness, and I can't see that far.
Dr. Francesca Grifo?

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

Ms. GRIFO. Thank you, Mr. Chairman, and thank you to the Committee for inviting me here today. I am a Senior Scientist and the Director of the Scientific Integrity Program at the Union of Concerned Scientists, a nonprofit working for a healthy environment and a safer world.

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.

Unfortunately, this has not been the case. The politicalization of endangered species science undermines the ESA's implementation and enforcement. As the GAO report confirms, in every stage of the process from the consideration of species for protection to the creation of recovery plans for critically endangered species, the Fish and Wildlife Service has both distorted science and changed the way it uses scientific information, creating a bias against endangered and threatened species. Julie MacDonald was truly only the tip of the iceberg.

More than 80 species decisions from the past several years are under some type of review because of inappropriate interference for political or economic reasons. While we must continue to uncover instances where endangered species science has been manipulated, edited, overruled or ignored, it is equally important to determine what policies allow that interference to take place.

For example, a Fish and Wildlife policy uncovered under the Freedom of Information Act prohibited Fish and Wildlife scientists from using Agency data to support the protection of endangered species during the 90-day finding, which is the first step in determining whether a species merits protection.

The new policy still contains a table that requests data to refute the petition's information and clearly states that the information within the Service's files is not to be used to augment a weak petition, which had previously not been the case.

Documents also show that one portion of the policy which requires a summary to be sent to Interior months before the petition review has been completed was implemented specifically so that Fish, Wildlife and Parks could discuss any issues early in the process. In the current context, we wonder what that really means.

And while the spotlight exposing political interference in endangered species falls most harshly on Fish and Wildlife Service and Interior, NOAA and the Department of Commerce are not immune to political pressures. As we have heard, a rule intended to reduce fatal collisions between ships and the critically endangered right whale has been held at the Office of Management and Budget for 456 days when by executive order a 90-day turnaround is required.

Documents that we have uncovered show that the Office of the Vice President and White House Council of Economic Advisors spearheaded an attempt by the White House to discredit the science supporting the rulemaking.

The Council of Economic Advisors went so far as to recollect the raw data, reprogram a nonrandom selection of data points—some might call that “cherry picking” the data—and use the resulting unscientific analysis to attempt to discredit the relationship with vessel speed and whale mortality. NOAA scientists described this analysis as biased and unlike any formal sensitivity analysis we are familiar with.

Secretary Kempthorne did not list a single domestic species for two years and five days until a court deadline forced him to make a decision on the polar bear. Two hundred and eighty species await protections on the candidate list. Our research reveals that 52 90-day petitions and 34 12-month reviews were denied between 2002 and 2007.

The Fish and Wildlife Service and the National Marine Fisheries Service have failed to establish a transparent means of implementing the Endangered Species Act. Agency officials are making decisions behind closed doors and with little accountability, giving those who abuse science considerable cover.

The problem of political interference in science will not be solved solely by the arrival of a new Administration or the resignation of additional political appointees. There will always be pressure on elected officials from special interests to twist information in their favor and, for that reason, I urge this Committee to support systemic reforms.

Specifically, meaningful publicly available ethics guidelines must be implemented at all agencies addressing the protection of imperiled species. We agree with GAO that the decision-making process must be made more transparent to expose the misuse of scientific information.

Scientists should be allowed basic freedoms to carry out their work and keep up with advances in their field. This should include the right to publish in peer reviewed journals regardless of whether their research results agree with Administration policy or not, the right to speak freely based on clear media and communication policies and the encouragement to actively participate in all aspects of scientific societies.

The conference committee reconciling the Whistleblower Protection Enhancement Act must give Federal scientists the right to expose political interference in their research without fear of retribution and to close in the short term and now because delay has consequences.

Secretary Kempthorne should send a clear message to all political appointees that substituting opinions for science is not acceptable. We made this suggestion a year ago at this hearing, and we are still waiting.

In light of the GAO report and the demonstrated pervasiveness of political interference in recent years, the Interior Department should engage in a systemic review of all Bush Administration decisions to ensure that the science behind those decisions was not altered or distorted, and Secretary Kempthorne must demonstrate that all 90-day reviews happen on time and are protective of species as required by law. We would like to see stakeholder input into the finalization of that guidance.

Given the number of recent attempts to undermine the scientific underpinnings of the ESA by Members of Congress and political appointees, congressional committees of jurisdiction must act to safeguard the role of science in protecting highly imperiled species.

Thank you.

[The prepared statement of Ms. Grifo follows:]

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

This testimony is presented by Dr. Francesca Grifo, Senior Scientist with the Union of Concerned Scientists (UCS), a leading science-based nonprofit working for a healthy environment and a better world. The full testimony is submitted for the record. Dr. Grifo will summarize her statement for the Committee on the problem of political interference in the work of federal government scientists. This written testimony contains a critique of the ethics policies of the Fish and Wildlife Service (FWS), evidence of a concerted effort by political appointees to interfere with the legally mandated process of listing endangered species, examples of interference in legally mandated endangered species actions, an overview of the problem of political interference in science, an updated summary of documented abuses of science in Endangered Species Act (ESA) decisions, and recommended government reforms needed to restore scientific integrity to the federal policy making process.

Chairman Rahall, Ranking Member Young, and Members of the Committee, the Union of Concerned Scientists appreciates the opportunity to testify today on an extremely important issue—the federal government’s implementation of the Endangered Species Act and whether the science used to implement the law has been compromised.

One of the great strengths of the Endangered Species Act is its foundation in robust scientific principles and its reliance on the best available science. Objective scientific information and methods should be used in listing species, the habitat needs of endangered species should be “scientifically well-informed” and the Endangered Species Act standard of “best available science” must rely on “impartial scientific experts.”

Unfortunately, time and time again, when scientific knowledge has appeared to be in conflict with its political goals, the current administration has manipulated the process through which science enters into its decisions. At many federal agencies and departments, including the Department of Interior (DOI), this has been accomplished by placing people who are professionally unqualified or who have clear conflicts of interest in official posts; by censoring and suppressing reports by the government’s own scientists, and by actually omitting or distorting scientific data.

I. Introduction

Politicization of the science surrounding the Endangered Species Act undermines its implementation and enforcement. The manipulation and suppression of this science is pervasive and is not limited to one aspect of the execution of the Act, but rather it is rampant from the first steps of the listing process to the creation of recovery plans of critically endangered species. In addition, the Fish and Wildlife Service (FWS) and the National Marine Fisheries Service (NMFS) have failed to establish a transparent means of implementing the Act nor one subject to a clear code of ethics. Instead, the agencies allow political appointees within and without the conservation agencies to interfere with individual species decisions and propagate policies that reduce the role of science in endangered species decision making.

The Endangered Species Act is a strong and significant environmental law, but its implementation is wearing thin under the assault of political pressures. This failure to insulate science based decision making from political considerations frequently lands FWS and NMFS in court, on the losing side of litigation. Decision-making occurs out of the view of the public, and out of reach of open government laws like the Freedom of Information Act.

While it is imperative that we continue to uncover instances where endangered species science has been manipulated, edited, overruled, or ignored in its entirety, it is equally important to determine what policies exist or existed in the DOI and Department of Commerce to allow such interference to take place. Listing under the ESA is based solely on science; critical habitat and recovery plans can include economic and other concerns, but shouldn’t be allowed to completely outweigh scientific conservation goals. With 80 FWS and NMFS decisions (Appendix I) under review because of political interference, this process of investigation of possibly illegal decisions has already begun. Unfortunately, FWS in its current capacity cannot be

relied upon to initiate these reviews themselves, as they only found 7 decisions to review. Systemic problems are more difficult to detect from the outside, and more difficult to root out. However, we are hopeful that with clear, unambiguous ethics policies, a renewed commitment to transparent decision making, and a working environment free of interference and intimidation from high level political appointees, the career scientists and managers of the conservation agencies will be able to identify and correct the processes that have lead to the current abysmal situation.

This testimony includes our analysis of the beginnings and failings of ethical reform at the DOI and FWS (page 1), problems with listing species under the ESA both at the anecdotal level and the procedural level, a discussion of the inherent flaws in the 90-day review policy (page 4) the problems in the implementation of the Act after listing, highlighting the recent case of the right whale, (page 9) and a discussion of the economic consequences of politically influenced decisions, and policies that may reduce species protections (page 12). In conclusion we present our recommendations for how this can be remedied (page 13).

II. Ethics at the Department of the Interior (DOI) and FWS

Many of the problems with the implementation of the ESA stem from political appointees manipulating or overruling the science behind ESA decision-making. A strong ethics policy should address this problem, together with greater accountability, more transparency, and a retaliation-free environment for reporting political interference. Recent ethics policies at DOI and FWS attempt to achieving this goal, with varying degrees of success.

Secretary Kempthorne's Ethics Reform

In June 2007, Department of Interior Secretary Dirk Kempthorne unveiled a 10-point ethics plan designed to transform the FWS into "a model of an ethical workplace."¹ A month later, Kempthorne quietly scaled back the scope and utility of one of the central pillars of his plan, the Conduct Accountability Board.² Jurisdiction of the Board was limited to cases involving "Executive Level" employees—less than 1% of the Interior workforce—and the Board was only allowed to review matters referred to it by the Deputy Secretary and Chief of Staff.

This means that if former Deputy Secretary Steven Griles, now serving time in federal prison for obstruction of justice related to his unethical connections to Jack Abramoff,³ was still at Interior he could have determined whether his conduct would be eligible for Board review. Griles was the subject of an Inspector General investigation probing Griles' arrangement of meetings between former clients in the oil and gas industry and Interior Officials. Inspector General Earl E. Devaney expressed outrage before the House Government Reform Subcommittee on Energy on Sept 13, 2006 that 23 of 25 potential ethical violations he had uncovered were dismissed, and then-Secretary of Interior Gale Norton decided not to act on the remaining two allegations.⁴ As for the general ethics of the DOI's leadership, Mr. Devaney charged, "Simply stated, short of a crime, anything goes at the highest levels of the Department of the Interior."⁵

It is unclear what functionality, if any, the Conduct Accountability Board retains. The first chair of the Board, Mark Linbaugh, then-assistant secretary for water and science, resigned 16 days after his appointment to chair in order work for the Ferguson Group as a water lobbyist for industry.⁶ Kempthorne had also identified Linbaugh as one of the Department officials charged to review the ethics issues raised by the Inspector General's report on Julie MacDonald. The IG determined that MacDonald, former Assistant Secretary of Fish, Wildlife, and Parks, had been "heavily involved with editing, commenting on, and reshaping the Endangered Species Program's scientific reports from the field" and had "disclosed nonpublic infor-

¹ Kempthorne, Dirk. Memorandum to All Employees. Subject: Promoting Ethics, the Public Interest, and Respectful Behavior. June 27, 2007. Hosted online by Public Employees for Environmental Responsibility (PEER) at http://www.peer.org/docs/doi/07_03_07_doi_ethics_directive.pdf

² Kempthorne, Dirk. Amendment No. 1 to Order No. 3268. Subject: Creation of the Conduct Accountability Board at the Department of the Interior. July 25, 2007. Hosted online by PEER at http://www.peer.org/docs/doi/07_17_12_cab_scope.pdf

³ Department of Justice. Former Interior Deputy Secretary Steven Griles Sentenced to 10 Months in Prison for Obstructing U.S. Senate Investigation into Abramoff Corruption Scandal. June 26, 3007. Available online at http://www.justice.gov/opa/pr/2007/June/07_crm_455.html

⁴ Andrews, Edmund L. Interior Official Assails Agency for Ethics Slide. The New York Times. September 14, 2006.

⁵ Ibid.

⁶ Wyden, Ron. Press Release: Wyden Asks Secretary Kempthorne for Answers on Interior Ethics Concerns. July 19, 2007. Available online at <http://wyden.senate.gov/newsroom/record.cfm?id=279869&>

mation to private sector sources.”⁷ Interior Deputy Secretary Lynn Scarlett refused to condemn MacDonald’s actions in testimony on May 9, 2007 before this committee; she instead said that MacDonald “strived to do what she thought was her duty to ensure quality product.”⁸

The Department of Interior clearly needs an ethical conduct board to review the actions of its high level appointees, and it also needs to send a stronger message that, at every level of its leadership, it will adhere to strong ethical standards. It also needs to open the charge of the Board to review allegations from all-comers, not just two high ranking officials.

FWS Code of Scientific Conduct

Fish and Wildlife Service Director Dale Hall also took steps towards ethical reform at his agency. In late January 2008, Hall released a Scientific Code of Professional Conduct that covers FWS employees.⁹ While a positive first step, we believe this code has many shortfalls. The code does not encourage transparency. There is no way for scientists to express their difference of opinion on a regulatory decision. The code also does not create protections for scientists who express concerns about interference in science, or an outlet for them to do so anonymously without fear of reprisal.

We are particularly concerned about two sections of the code. Section 7.7 (F) states that employees, should “Strive to understand and accurately interpret, report, and apply scientific information to support management decisions affecting fish and wildlife and their habitats.”¹⁰ There are several documented cases of political interference where scientists were forced to manipulate their data to support pre-determined management decisions. For example, FOIA documents show that Benjamin Tuggle, regional director of the FWS Southwestern office, and Ren Lohofener, former assistant director for the Endangered Species Program in the FWS Washington D.C. Office, “reached a policy call” that the southwestern bald eagle did not meet the requirements under the ESA to be listed as a distinct population segment, or DPS.¹¹ In order to support this decision, FWS scientists were instructed during a meeting that the “answer has to be that it’s not a DPS” and “now we need to find an analysis that works.”¹² We are concerned that the implementation of this clause in the ethics policy could further systemize situations like that of the bald eagle decision.

Section 7.9(C) states that “Employees must...Be forthright and honest about the scientific foundation used for possible policy options and the uncertainties associated with any resulting prediction of consequences for fish and wildlife and their habitats.”¹³ Exaggerating scientific uncertainty is a common approach for political opposition to a science-based rule, so while we wholeheartedly agree that employees should be fully honest about scientific uncertainty, they should also be fully protected from the misinterpretation of this uncertainty.

While the concerns above are all serious issues that should be addressed, the principal problem with this code of conduct is that it doesn’t cover the leadership at the Interior Department. In a mid-January 2008 meeting between Deputy Secretary Lynn Scarlett and several conservation organizations, Scarlett stated that the Interior Department could not create an overarching scientific code of ethics because the agencies varied too widely in their mission and procedures for decision making.¹⁴ The Department should be able to agree on a basic set of ethics to guide how science is used to inform decisions. We encourage the Interior Department as a whole to adopt a policy like the FWS Scientific Code of Professional Conduct, taking note of our concerns. If it is truly impossible for Interior to adopt a uniform ethics code,

⁷Department of the Interior Office of the Inspector General. Investigative Report On Allegations Against Julie MacDonald, Deputy Assistant Secretary, Fish, Wildlife, and Parks. Available online at http://wyden.senate.gov/DOL_IG_Report.pdf

⁸Scarlett, Lynn. Committee on Natural Resources hearing transcript. Hearing entitled: Endangered Species Act Implementation: Science or Politics? May 9, 2007.

⁹Hall, Dale. Scientific Code of Professional Conduct. Jan 30, 2008. Available online at <http://www.fws.gov/science/>

¹⁰Ibid.

¹¹Union of Concerned Scientists. FWS Decrees the Southwestern Bald Eagle is Safe, in Spite of Science. FOIA documents on the southwestern bald eagle all obtained by the Center for Biological Diversity and generously shared with UCS. Available online at http://www.ucsusa.org/scientific_integrity/interference/fws-decrees-southwestern-bald-eagle-safe.html

¹²Ibid.

¹³Hall, Dale. Scientific Code of Professional Conduct. Jan 30, 2008. Available online at <http://www.fws.gov/science/>

¹⁴Meeting between Deputy Secretary Lynn Scarlett and conservation groups, including UCS. Jan 14, 2008.

then it should formally agree to abide by and be subject to the ethics codes of its individual agencies in its dealings with them.

III. Problems with Listing

On May 14, 2008, Department of Interior Secretary Dirk Kempthorne, acting under a court ordered deadline, listed the polar bear as threatened under the Endangered Species Act.¹⁵ Until that day, Kempthorne had gone two years and five days without listing a single domestic species, the longest drought in listing in the history of the ESA.¹⁶

The implementation of the listing process for the Endangered Species Act is broken. While we do not have a clear picture for why the listing process has been so effectively severed, we believe it is a combination of individual actions against species and a biased policy on evaluating petitions that discriminates against listing. The following cases support this idea, but a thorough examination of the full policies and procedures governing listing is needed to ensure that imperiled species received the protections guaranteed to them by the ESA.

An Unfair Policy on 90-Day Petitions

The FWS policy on conducting reviews of citizen petitions for ESA protection of species is biased towards denying listing, likely raises the standard that a petition must meet higher than is required by the Act and federal regulations, and prevents a full picture of the “best available scientific and commercial data” from being used in this first and critical stage towards listing. Through documents, many highly redacted, obtained via the Freedom of Information Act, UCS establishes that the implementation of the 90-day petition review process is open to political interference from high ranking officials in the FWS and DOI, and is likely part of the reason that the listing process ground to a halt for two full years.

An overview of the rules governing listing—Two listing pathways were established for imperiled species in Endangered Species Act—a discretionary pathway where FWS can initiate the listing process either by placing a species on the candidate list or by issuing a proposed listing rule, and a pathway for action by the public. The listing record clearly shows that citizen petitions, and the court settlements enforcing their timetables, are the primary entry point to the endangered species list. The Service, for whatever reasons or constraints, rarely initiates its own reviews.

The first stage of the citizen-initiated listing pathway is the 90-day period, where the FWS determines whether or not to do a full-scale review of the species for listing. This process is determined by Sect 4(b)(3)(A) of the Endangered Species Act, which states,

“To the maximum extent practicable, within 90 days after receiving the petition of an interested person under section 533(e) of title 5, United States Code, to add a species to, or to remove a species from, either of the lists published under subsection (c), the Secretary shall make a finding as to whether the petition presents substantial scientific or commercial information indicating that the petitioned action may be warranted. If such a petition is found to present such information, the Secretary shall promptly commence a review of the status of the species concerned.”¹⁷

The standard for substantial information within the Code of Federal Regulations (CFR) is “that amount of information that would lead a reasonable person to believe that the measure proposed in the petition may be warranted.”¹⁸ Petitioners are not required to prove that a listing is warranted, only to demonstrate the reliability of the information they present supporting the action advocated by the petition.

The FWS interpretation of listing rules—Through the narrow glimpse available through FOIA documents, the FWS policy for reviewing 90-day petitions interprets the Act and its accompanying regulations in such a way that the petition listing route is effectively closed. FWS internal memos (Appendix II) show that their policy (which updated policies from 1995, but which we have been informed has been since slightly modified) interprets the Act to mean that, “it is the responsibility of the petitioner to provide substantial scientific or commercial information to support the

¹⁵ Kempthorne, Dirk. Secretary Kempthorne Announces Decision to Protect Polar Bears under Endangered Species Act. May 14, 2008. Available online at http://www.fws.gov/home/feature/2008/polarbear012308/pdf/DOI_polar_bears_news_release.pdf

¹⁶ 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

¹⁷ The Endangered Species Act. Available online at <http://www.fws.gov/endangered/pdfs/ESAall.pdf>

¹⁸ 50 CFR 424.14(b)

petitioned action.”¹⁹ The Service, in its implementation of this clause, requires the petition to be both legally and scientifically comprehensive, a standard which the average citizen or even the average environmental group cannot easily meet.

In fact, FWS policy explicitly prevents its scientists from using information they already have within their own files to support a citizen’s petition. A memo obtained through FOIA entitled “Policy on 90-Day Petition Findings Under the Endangered Species Act” emailed to the regional directors on 11/08/2006 by Chris Nolin (chief of the division of conservation and classification at the Fish and Wildlife Service) says, in the section discussing the scope of information to be considered, that information in FWS files is only to be used to

“...evaluate the reliability of the information contained within the petition...The information within the Service’s files is not to be used to augment a ‘weak’ petition. If we have information independent of that provided in the petition that is sufficient to support a change in the species’ listing status, it is the Service’s responsibility to utilize our internal candidate, listing, and delisting priorities and processes.” (Emphasis in original).²⁰

Again, FWS rarely initiates its own review of species, so refusing to continue a 90-day petition in the face of Service data suggesting that the species needs review is the least protective option FWS could take.

FWS formalized the attitude that Service information should only be used to discredit a listing petition, and not augment it in such a way that imperiled species would quickly receive protections, by creating a new procedure for the review process, known as the 90-day petition outline and table. The new procedure, which FWS has told UCS was only used during 2005 and 2006, was requested by the office of the Assistant Secretary of Fish, Wildlife, and Parks as an early-warning system to allow them to “discuss any issues early in the process.”²¹

FWS scientists now had to prepare a 1-2 pages summary and an attached table detailing specifically each claim made in the petition, the information in the petition to support each claim, and if there was information in the Service’s files to refute the petition. In fact, one column of the table explicitly calls for FWS information to refute the petition; there is no corresponding column for supporting information, and FWS scientists were explicitly told they could not use any.²² This outline and table were due at the Washington Office at least 2 months before the petition analysis was completed, so that the Washington Office could forward this report up the Assistant Director’s level.²³

Specific flaws in the current interpretation—The FWS 90 day policy is fundamentally flawed for the following reasons:

1. The policy does not allow the use of the best available science. Listing decisions are required by the Act to be based on the best available science. The 90-day petition is the first step towards listing. Selective use of data in the review of a species is inherently not using the best available scientific data.
2. Scientific data in Service files is used in a biased manner which favors denying protections. Only allowing information from Service files to be used to refute a petition, not support a petition, is an uneven use of the taxpayer-funded science of the FWS. FWS files may contain the critical information suggesting that a species requires immediate protections, but the FWS policy prevents its employees from using this information in conjunction with the review already underway to make sure threatened and endangered species get their protections in a timely fashion. Instead, the policy requires Service employees to use their information to start a separate internal review, a process which rarely happens. Also, since the issue at hand is the protection of species threatened with extinction, bureaucratic delays due to uneven policies can and surely will result in the unnecessary extinctions.
3. The FWS policy lacks transparency. UCS requested the 90 day tables and the policies regarding the 90 day process in a FOIA request on November 28, 2007.

¹⁹ Memorandum from the Director. Policy on 90-Day Petition Findings Under the Endangered Species Act. Sent to the Region heads by Chris Nolin on November 8, 2006. Obtained via FOIA by UCS. Appendix II.

²⁰ Ibid.

²¹ Email from Michelle Morgan. Subject: New petition outline. May 2, 2005. Obtained via FOIA by UCS. Available from UCS upon request.

²² Previous two references, and also: Listing meeting notes (regarding the southwestern bald eagle). May 16, 2005. Obtained via FOIA by the Center for Biological Diversity. All bald eagle FOIAs referred to in this testimony obtained by CBD. Available online at http://www.biologicaldiversity.org/news/press_releases/desert-bald-eagle-05-17-2007.html

²³ Memorandum from the Director. Policy on 90-Day Petition Findings Under the Endangered Species Act. Sent to the Region heads by Chris Nolin on November 8, 2006. Obtained via FOIA by UCS. Appendix II.

Six months later, we still only have a partial response. In what we have received, FWS has redacted all of the “Service conclusion” portions of the table which would allow you to see the effects of their selective use of scientific data. FWS claims that their conclusions are predecisional. This response is inconsistent with FWS’s response to a FOIA request by the Center for Biological Diversity (CBD) regarding the southwestern bald eagle, in which no parts of the 90-day table were redacted.

4. The policy likely raises the burden of proof higher than is required by the Act or the CFR. According to the Act and the CFR, the petitioner has to provide substantial information that the petitioned action is warranted. They do not have to present an air-tight case that the species is warranted for the petitioned action—that is the threshold for the 12-month process. The CFR says they have to present enough information that a “reasonable person” would believe the action to be warranted. While we cannot tell the precise effects of the use of selective data because of the redactions in our FOIA, the table provided to the CBD for the bald eagle shows that 34 of their points were rated “substantial” while 4 points were rated “information in dispute”. FWS subsequently denied Bald Eagle petition, but a court has since ordered a 12 month review of this subpopulation because of evidence that the scientists were forced to manipulate their findings to support a predetermined policy position.
5. FWS scientists are not allowed to use their full expertise. Hamstringing the ability of taxpayer-funded scientists with unfair restrictions on the use of data does a great disservice to the scientists, the imperiled species, and the public. From what we can tell from the redacted 90-day tables provided to us, FWS are not always adhering to the restrictions in the FWS policy, and we applaud them for their efforts.
6. The policy opens up the review process to political appointees. The inclusion of the 90-day table and outline to the review process was done so explicitly at the request of the Office of Fish, Wildlife and Parks. Internal emails show that conversations with the Assistant Secretary’s office were the catalyst for the inclusion of the column for information which refutes, never supports, the petition. The Assistant Secretary’s office has, through its former deputy assistant secretary Julie MacDonald, a documented history of manipulating, distorting, and suppressing endangered species science, and overturning the listing decisions of FWS scientists by executive fiat. It is not a stretch to assume that the 90-day outline and table were a part of the inappropriate interference of this office. While FWS says that the table is no longer being used in the petition process, we do not know if it has been replaced with something else, or if FWS has taken steps to insulate its scientists from the unacceptable manipulation of high level political appointees.

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 IG, the Government Accountability Office, or the courts. We will highlight a few cases (See Appendix I for more examples):

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 impacted by 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.²⁴

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

²⁴ 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

struck down in court due to the direct political interference overriding the use of best available science.²⁵

An Unclear Future

Two full years and a handful of days, from May 9 2006 to May 14, 2008, passed in which Secretary Kempthorne failed to list a single domestic species.²⁶ This was not due to a lack of species—280 species await protections on the candidate list,²⁷ and our FOIA reveals that 52 90-day petitions and 34 12-month reviews were denied between 2002 and 2007.²⁸ With over 80 species decisions from a similar time period under various public, court, congressional, IG, or GAO reviews because of inappropriate interference for political or economic reasons,²⁹ our faith that those petition denials were done in a fair and scientifically accurate process is greatly eroded.

IV. Problems with Implementation after listing

Listing is not the only area of Endangered Species Act implementation that is under assault from political interference. The pieces of the Act intended to ensure species' recovery—critical habitat and recovery plans—are subject to interference via delay, manipulation of science, biased cost-benefit analyses, and more. We highlight here a few blatant cases of politicization.

Right Whale Interference

Political interference in endangered species decisions is not limited to the FWS and DOI. A new investigation by the Union of Concerned Scientists reveals unprecedented interference with a proposed rule intended to minimize losses of the critically endangered Northern Atlantic right whale. Documents show that five executive branch offices—The Office of Management and Budget, the Council on Environmental Quality, the Office of Science and Technology Policy, the Council of Economic Advisers, and the Office of the Vice President—have all been involved in blocking the National Marine Fisheries Service from issuing the rule to protect whales from fatal collisions with ships.

The right whale is critically endangered—Only about 300 right whales remain on the East Coast, and their numbers are threatened by fatal collisions with ships and entanglement in fishing gear.³⁰ Ship strikes have caused at least 19 right whale deaths since 1986, with more suspected but unconfirmed.³¹ According to NMFS, “no mortality or serious injury for this [whale] can be considered insignificant” and that the death of even a single whale, particularly a breeding female, “may contribute to the extinction of the species.”³²

As part of its efforts to protect the remaining individuals of the species, NMFS proposed a rule to implement a 10-knot speed limit around 16 Atlantic ports and coastal areas during the seasons of right whale feeding, migrating, and reproducing.³³ After an extensive, thorough, and transparent four years of drafting, NMFS sent its final rule to OMB for review on Feb 20, 2007.³⁴

OMB delays the rule—Under the executive order authorizing the OMB to review regulations, OMB must complete its rule within 120 days—90 days plus a 30-day extension.³⁵ The date of this hearing, May 21, 2008, will mark 456 days since the rule was sent to OMB.

White House repeatedly attacks the science underlying the rule—Internal documents obtained by UCS from anonymous sources show that offices within the White

²⁵ 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#

²⁶ 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

²⁷ Department of the Interior. 72 FR 69034.

²⁸ UCS. FOIA into use of the 90-day table. Available upon request.

²⁹ Appendix I

³⁰ NOAA Fisheries—Office of Protected Resources. North Atlantic Right Whales (*Eubaleana glacialis*) webpage. http://www.nmfs.noaa.gov/pr/species/mammals/cetaceans/rightwhale_northatlantic.htm

³¹ NOAA. Proposed Rule to Implement Speed Restrictions to Reduce the Threat of Ship Collisions with North Atlantic Right Whales. 71 FR 36299, 36300. June 26, 2006.

³² Stock Assessment, 12. NOAA. Advanced Notice of Proposed Rulemaking for Right Whale Ship Strike Reduction. 69 FR 30857. June 1, 2004.

³³ NOAA. Proposed Rule to Implement Speed Restrictions to Reduce the Threat of Ship Collisions with North Atlantic Right Whales. 71 FR 36299, 36300. June 26, 2006.

³⁴ Office of Information and Regulatory Affairs (OIRA). EO 12866 Regulatory Review—Search results for Department of Commerce. <http://www.reginfo.gov/public/do/eoPackageMain>

³⁵ Executive Order No. 12866. 58 FR 51734. Oct 4, 1993.

House have repeatedly challenged and attempted to discredit the scientific work of NMFS scientists with the goal of altering the rule.

1. The Office of the Vice President claims NMFS has “no data”. In private communication, UCS has been told that the OVP has repeatedly challenged NOAA/NMFS conclusion that slowing ships, even ships of extremely large size, will reduce whale mortality. This is supported by the documents obtained by UCS. One document dated October 2007 shows NMFS employees replying to unfounded attacks from the Office of the Vice President:

“OVP staff wonders what evidence NOAA has of whales surviving a collision with a ‘large ship.’ OVP staff contends that we have no evidence (i.e., hard data) that lowering the speeds of “large ships will actually make a difference.”³⁶

NOAA’s reply indicated this was not the first time they had to defend against these allegations:

“Several types of statistical analysis (provided earlier) of the ship strike records and theoretical physics (provided earlier and appearing in peer-reviewed literature) indicated that vessel speed is a critical variable in reducing the severity of a ship strike.” “The size parameter is not statistically significant in the models which incorporate it, while speed is significant in all the models that included it” “Accordingly, these theoretical exercises provide no basis to overturn our previous conclusion that imposing a speed limit on large vessels would be beneficial to whales.”³⁷

2. The Council of Economic Advisers conducts a biased analysis. After a meeting on July 10, 2007 involving NOAA, DOC, OMB, OSTP, OVP, and CEA to discuss the right whale ship speed rule, CEA announced it would “investigate the reliability of analysis in the published literature on which NOAA is basing its position.”³⁸ UCS has obtained a copy of that analysis, which can be seen in Appendix III in a side by side comparison to the NOAA analysis.³⁹ NOAA helped CEA construct the database of ship strike records; CEA also solicited information directly from academic researchers. Christopher Taggart of Delhousie University and Amy Knowlton of the New England Aquarium were both asked for data and analysis by CEA.⁴⁰

For its analysis, CEA’s staff, which has no expertise in either the right whale or scientific biometrical modeling, re-coded a non-random selection of datapoints, and concluded that the relationship between whale mortality and ship speed is not as strong as is suggested by career NOAA scientists and independent, peer-reviewed publications. CEA also questioned the choice of 10 knots as a speed limit.⁴¹

NOAA responded to the CEA analysis in a document obtained from an anonymous source. In this document, NOAA says:

“NOAA has reviewed CEA’s analysis and finds it is a biased sensitivity analysis. “Furthermore, this analysis is unlike any formal sensitivity analysis NMFS biometricians are familiar with.” “The basic facts remain that (1) there is a direct relationship between speed and death/serious injury, and (2) at vessel speeds at or below 10 knots the probability of death/serious injury is greatly reduced.”⁴²

3. NOAA and NMFS scientists have been assailed by attempts to undermine their science. Through private communications, leaked documents, public records and anonymous mailings, UCS has determined that NOAA scientists have been constantly challenged by industry, White House agencies, and other departments within the federal government.
 - As yet another challenge to the NOAA research, OSTP contracted a scientist from Woods Hole Oceanographic Institute to conduct yet another study on ship speed and right whale mortality. UCS has been unable to

³⁶ NOAA. Response to the Office of the Vice President—Ship Strike Rulemaking. Oct 2007. Available online at <http://oversight.house.gov/documents/20080430104427.pdf>

³⁷ Ibid.

³⁸ NOAA. Response to Council of Economic Advisers’ (CEA) Analysis of Vessel Speed vs. Whale Ship Strikes. July 31, 2007. Available online at <http://oversight.house.gov/documents/20080430104427.pdf>

³⁹ Appendix III. Side by side comparison of NMFS analysis of right whale mortality vs ship speed with the CEA analysis of the same thing.

⁴⁰ Private communication with Dr. Amy Knowlton and Dr. Christopher Taggart.

⁴¹ NOAA. Response to Council of Economic Advisers’ (CEA) Analysis of Vessel Speed vs. Whale Ship Strikes. July 31, 2007. Available online at <http://oversight.house.gov/documents/20080430104427.pdf>

⁴² Ibid.

find a copy of this report, and the scientist has signed a confidentiality agreement.⁴³

- The World Shipping Council, and industry group, has been pressuring OMB to dismiss or seriously alter the rule. The shipping community is not united in this attitude, as the Chamber of Shipping of America supports the rule with minor exemptions.⁴⁴
- NOAA fielded at least one other round of questions from the White House, this time questioning calf birth data, the impact force required to kill a whale, and the decision of 30 nautical miles as the radius around points of concern. NOAA responded to these questions on Nov 20, 2007.⁴⁵
- The Maritime Administration, a branch of the Department of Transportation, has repeatedly challenged the rulemaking in internal, private meetings.⁴⁶

It is wholly inappropriate for White House agencies to attempt to manipulate right whale science—The case of the right whale speed rule displays political interference in science at its worst. NOAA scientists have done absolutely everything required of them in the rulemaking, conducting an open and stakeholder-accessible process based on the best available science. Unfortunately, we have no idea if their staunch defense of their rule has been successful, both because the rule is delayed and because the current executive branch review of the rule is completely opaque.

Uncovering this story took time and patience, as the good scientists at NOAA wrestled both wanting the political interference to be exposed and fearing for retaliation against themselves and the rule itself. However, through anonymous documentation, it is now clear that White House agencies have conducted two separate studies attempting to inject artificial uncertainty into the relationship between ship speed and whale mortality; one of these studies was biased and did not follow accepted, peer-reviewed practices for analysis. The Office of the Vice President has boldly doubted the conclusions of the NOAA scientists, and the OMB has delayed the rule for a year and three months.

Political Interference in Other Species Protections

Besides the right whale, many other species have suffered from political interference reducing their chances at recovery. Among them are the arroyo toad, bull trout, 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.⁴⁷ Many of these are under investigation (Appendix I). 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.

Spotted Owl—High ranking officials from the DOI, FWS, and the other federal land agencies intervened in the recovery plan for the northern spotted owl, compromising the science-based protections in order to reduce barriers to increased logging in old-growth forests.⁴⁸ According to peer review by scientists, the draft Northern Spotted Owl Recovery Plan⁴⁹ prepared in 2007 by FWS is a hodgepodge of deliberately misrepresented or selectively applied science that downplays the importance of habitat loss.⁵⁰ It also includes a second management option, forced upon the recovery team by senior officials, that eliminates fixed protected areas for the bird.

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 deleted from the economic analysis, the costs associated

⁴³ Private communication.

⁴⁴ Office of Management and Budget. Public Comments webpage for NOAA. <http://www.whitehouse.gov/omb/oir/0648/comments.html>

⁴⁵ NOAA. Responses to 16 November Questions from the White House on Right Whale Ship Strike Reduction Final Rule. November 20, 2007. Available online at <http://oversight.house.gov/documents/20080430104534.pdf>

⁴⁶ Private communication.

⁴⁷ Appendix I.

⁴⁸ DellaSala, Dominick. Written testimony for the House Natural Resources Committee Hearing entitled "Endangered Species Act Implementation: Science or Politics?" May 9, 2007. <http://www.nccsp.org/files/land/spottedowltestimonydds.pdf>

⁴⁹ FWS. Draft Recovery Plan for the Northern Spotted Owl: Merged Options 1 and 2. April 2007. Available online at http://www.fws.gov/pacific/ecoservices/endangered/recovery/documents/DraftRecoveryPlanNorthernSpottedOwlWEB_000.pdf

⁵⁰ FWS. N. Spotted Owl Draft Recovery Plan peer reviews. See in particular the Society for Conservation Biology (North American Section) and American Ornithologist's Union review. <http://www.fws.gov/pacific/ecoservices/endangered/recovery/peer.html>

with this species' protection were inflated.⁵¹ 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.

Economic Consequences

Political interference in science not only delays or prevents much needed protections for imperiled species; it can also have drastic economic consequences. For example, in two scientifically compromised decisions, FWS and NMFS determined that water use plans in California would not harm several species of endangered fish, including the delta smelt, winter and spring run Chinook salmon, and Central Valley Steelhead. Federal courts later confirmed the allegations that politics overruled science and struck these decisions down, demanding they be rewritten. However, implementation of water use plans had already begun to move forward based on these illegal decisions.⁵²

The costs, both economic and ecological, of these decisions are innumerable and far-reaching. California is experiencing severe drops in populations in many fish species and the salmon fishery in the Sacramento system has crashed, along with several other species in the Delta. The federal government has been asked for \$150 million in disaster relief for the fishing industry, and the recreational fishing industry (a \$4.8 billion industry supporting 41,000 jobs) and recreational boating (\$60 million in sales in 2006) will be hit hard.⁵³ Additional costs, yet undetermined, will be incurred by agriculture and the urban water industries as water deliveries to urban and farming areas are cut dramatically in an attempt to bring these species back from the brink. Had the FWS and NMFS used the best available science and determined that the proposed water delivery options would jeopardize these species in the first place, the region might not be in the critical situation it finds itself in now.

New Policies of Concern

On March 16, 2007, the Interior Office of the Solicitor issued a memorandum re-examining what the ESA means when it defines an "endangered species" as one which is "in danger of extinction throughout all or a significant portion of its range."⁵⁴ The conclusion of this memo finds that the range of a species is limited to that area where it currently exists, and should not include any range in which the species historically existed but has since been extirpated. This conclusion will likely impact both listing and the protection of listed species. Many endangered species live in habitats of severely reduced size due to urban encroachment or pollution. If FWS rules that species have no right to their historic range, many will be left in situations where they simply cannot recover to the point where they can be removed from the endangered species list.

In addition, simultaneous to the listing of the polar bear, Secretary Kempthorne announced that DOI would be issuing another solicitor's opinion narrowing the scope of possible protective actions for the polar bear.⁵⁵ The press release also stated that "the Department will proposed common sense modifications to the existing regulatory language." Modifications to the regulatory language of the ESA have been attempted before which would have significantly reduced the effectiveness of the Act. Congress must remain vigilant as to what these new regulatory changes will be to ensure that the Act continues to function as the premier defense against extinction.

V. Recommendations—Systemic Problems Require Systemic Solutions

The problem of political interference in science will not be solved by a new Administration or the resignation of additional political appointees. There will always be pressure on elected officials from special interests—to weaken environmental laws.

⁵¹ FWS press release, "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>.

⁵² Endangered Species Coalition. Political Interference and the Loss of Salmon: How Federal Biological Opinions Affected the Salmon Fishing Closure. Available upon request.

⁵³ Pool, Richard. Testimony before the Subcommittee on Fisheries, Wildlife and Oceans. May 15, 2008. Available online at http://resourcescommittee.house.gov/images/Documents/20080515/testimony_pool.pdf

⁵⁴ Department of the Interior Office of the Solicitor. Subject: The Meaning of "In Danger of Extinction Throughout All or a Significant Portion of its Range." March 16, 2007. Available online at <http://www.doi.gov/solicitor/M37013.pdf>

⁵⁵ Kempthorne, Dirk. Secretary Kempthorne Announces Decision to Protect Polar Bears under Endangered Species Act. May 14, 2008. Available online at http://www.fws.gov/home/feature/2008/polarbear012308/pdf/DOI_polar_bears_news_release.pdf

For that reason the Union of Concerned Scientists urges this committee to enact systemic reforms:

Ethics at the DOI

Secretary Kempthorne must fully implement the 10-point ethics plan he unveiled over a year ago. We have not been able to discern the extent to which it has been implemented or modified but they do not appear to be extensive. The Conduct Accountability board appears to be particularly flawed and dysfunctional and in need of reform such as a broader charge. The DOI should also create a Scientific Code of Professional Conduct similar to the FWS and do this with scientific community input.

Ensuring Agency Independence

While the Office of Management and Budget and other White House offices play important roles in coordinating and overseeing the regulatory process, those roles should not include second-guessing or editing the science underlying ESA decisions.

Transparency in Scientific Decisions

Scientists at the FWS recommended more transparency in the decisions making process. Said one FWS biologist, “Plac[e] much more scrutiny on the decision-making process between the draft scientific document and the final decision. The work is great until it hits the supervisory chain, and then things are dropped, changed, altered (usually without written record) and then finalized with dismissive responses to concerns.”

To ensure the work of federal scientists will not be subject to political manipulation, the Department of Interior should increase transparency in the decision-making process to expose manipulation of science and make other political appointees think twice before altering or distorting scientific documents. We make the following recommendations:

- The DOI should publish a statement explaining the scientific rationale for each listing decision (positive or negative) and recovery plan. The statement should justify and defend how FWS staff reconcile scientific and economic data to make the final decision. The statement must include the scientific documentation that went into the decision and the names of the FWS employees and officers involved in the process.
- If FWS scientists have significant concerns with or criticisms of the decision, they must also be able to submit a statement explaining their disagreement. This would provide them with an opportunity to make their concerns public and provide FWS with an opportunity to explain how they have addressed the concerns or why they are not significant.
- DOI should establish a formal and independent scientific review board for agency policies and decisions.

Scientific Freedoms

Scientists should be allowed basic freedoms to carry out their work and keep up with advances in their field. One FWS scientist recommended, “Encourag[ing] scientists to keep abreast of scientific information (e.g. Membership in professional societies, pay for them to attend professional meetings) and allowing scientists to do their job—make sure they can focus on getting the science right before they are bombarded with the social, political and economic angles that come with each issue.”

- DOI scientists should be free to publish their tax-payer funded research in peer-reviewed journals and other scientific publications and be able to make oral presentations at professional society meetings. The only exception should be if the publication or presentation of the research is subject to Federal export control, national security, or is proprietary information.
- DOI scientists should be encouraged to actively participate in relevant scientific association meetings including serving on their boards or as officers. These activities should not be viewed as a conflict of interest.

Scientific Communication

Open communication among scientists is one of the pillars of the scientific method. For society to fully reap the benefits of scientific advances, information must also flow freely among scientists, policymakers, and the general public. The federal government must respect the constitutional right of scientists to speak about any subject, including policy-related matters and those outside their area of expertise, so long as the scientists make it clear that they do so in their private capacity, and such communications do not unreasonably take from agency time and resources.

- DOI should adopt media and communication policies that ensure tax-payer funded scientific research is open and accessible to Congress, the media, and the public. The policy should:
 - Affirm that scientists and other staff have the fundamental right to express their personal views, provided they specify that they are not speaking on behalf of, or as a representative of, the agency but rather in their private capacity.
 - Create an internal disclosure system to allow for the confidential reporting and meaningful resolution of inappropriate alterations, conduct, or conflicts of interest that arise with regard to media communications.
 - Include provisions to actively train staff and post employee rights to scientific freedom in all workplaces and public areas.

Whistleblower Rights

In the past, scientists who have attempted to disclose political interference with science have been found ineligible for whistleblower protection. Whistleblower protections for scientists who report abuse of science would help ensure that basic scientific freedoms of federal scientists are respected.

- The Conference Committee reconciling the Whistleblower Enhancement Act, must retain the House provision which would give federal scientists the right to expose political interference in their research without fear of retribution. It's time for the Conference Committee to act to protect scientists.
- DOI scientists who provide information or assist in an investigation regarding manipulation or suppression of scientific research should be given adequate protection from retaliation.
- DOI should fully investigate any retaliatory actions against a scientist who expresses their concerns within or outside of the agency.

Immediate Actions

There are several immediate actions that the Interior Department and Congress should take to prevent political interference in science and reinforce the scientific foundation of the Endangered Species Act:

- Interior Department Secretary Dirk Kempthorne should send a clear message to all political appointees that substituting opinions for science is unacceptable.
- In light of the demonstrated pervasiveness of political interference in Endangered Species Act decisions during the past several years, the Interior Department should engage in a systematic review of all Bush administration decisions to ensure that the science behind those decisions was not altered or distorted. At the very least, Secretary Kempthorne should require an immediate reevaluation of all the decisions where political interference has been exposed.
- Secretary Kempthorne must demonstrate that the 90 day review is protective of species. Listing decisions must be based on best available scientific and commercial data. Secretary Kempthorne must insure that all the information the FWS has is included—not just the information that would not support a listing.
- Given the number of recent attempts to undermine the scientific underpinnings of the Endangered Species Act by Members of Congress and political appointees, congressional committees of jurisdiction must act to safeguard the role of science in protecting highly imperiled species.

We look forward to working with the 110th Congress on comprehensive bipartisan legislation and other reforms to restore scientific integrity to federal policymaking.

Appendix I: 80 Species with Allegations of Political Interference

Species	Decision	Species	Decision
Alameda whipsnake	Critical Habitat	Monterey Spineflower	Critical Habitat
Antillean manatee	5 year review	Munz's onion	Critical Habitat
Arkansas river shiner	Critical Habitat	Noel's amphipod	Critical Habitat
Arroyo toad	Critical Habitat	Northern Spotted Owl	Recovery Plan
Braken bat cave meshweaver	Critical Habitat	Northern Spotted Owl	Critical Habitat
Buena Vista Lake ornate shrew	Critical Habitat	Pallid Sturgeon	Biological Opinion
Bull Trout	Critical Habitat	Peck's cave amphipod	Critical Habitat
California least tern	5 Year Review	Pecos assimineea snail	Critical Habitat
California red-legged frog	Critical Habitat	Peirson's milkvetch	12 Month Finding
Canada Lynx	Critical Habitat	Piping plover	Critical Habitat
Cape Sable seaside sparrow	Critical Habitat	Preble's meadow jumping mouse	Critical Habitat
Caribbean brown pelican	5 Year Review	Preble's meadow jumping mouse	12 Month Finding
Central California tiger salamander	Critical Habitat	Quino checkerspot butterfly	Critical Habitat
Coachella valley milkvetch	Critical Habitat	Rhadine infernalis ground beetle	Critical Habitat
Cokendolpher cave harvestman	Critical Habitat	Riverside fairy shrimp	Critical Habitat
Comal Springs dryopid beetle	Critical Habitat	Robber baron cave spider	Critical Habitat
Comal Springs riffle beetle	Critical Habitat	Robust Spineflower	Critical Habitat
Delta Smelt	Biological Opinion	Roswell springsnail	Critical Habitat
Eastern brown pelican	5 Year Review	Roundtail chub	90-Day Finding
Florida manatee	5 Year Review	Sacramento splittail	12 Month Finding
Florida Panther	Recovery Plan	Sacramento splittail	Critical Habitat
Gila chub	Critical Habitat	Salmon + Steelhead	
Government Canyon bat cave meshweaver	Critical Habitat	San Jacinto crownscale	Critical Habitat
Government Canyon bat cave spider	Critical Habitat	Santa ana sucker	Critical Habitat
Greater Sage Grouse	12 Month Finding	Santa Barbara salamander	90-Day Finding
Gulf sturgeon, critical habitat	Critical Habitat	Santa Cruz tarplant	Critical Habitat
Gunnison Sage Grouse	90-Day Finding	Sonoma California tiger salamander	Critical Habitat
Gunnison's Prairie Dog	90-Day Finding	Southwestern bald eagle	90-Day Finding
Hawaiian picture wing flies (12 species)	Critical Habitat	Southwestern willow flycatcher	Critical Habitat
Helotes mold beetle	Critical Habitat	Spikedace	Critical Habitat
Kootenai River Sturgeon		Spreading navarretia	Critical Habitat
Koster's tryonia snail	Critical Habitat	Tabernaemontana rotensis	12 Month Finding
Lane Mountain milkvetch	Critical Habitat	Thread-leaved brodiaea	Critical Habitat
Least tern	Biological Opinion	Topeka shiner	Critical Habitat
Loach minnow	Critical Habitat	Trumpeter Swan	
Madla cave meshweaver	Critical Habitat	vernal pool species	Critical Habitat
Marbled murrelet	5 Year Review	West Virginia northern flying squirrel	5 Year Review
Marbled murrelet	Critical Habitat	Western snowy plover	Critical Habitat
Mexican garter snake	12 Month Finding	White tailed prairie dog	90-Day Finding
Montana fluvial arctic grayling	12 Month Finding	Willowy monardella	Critical Habitat

**Appendix II: Policy on 90-Day Petition Findings Under the
Endangered Species Act, 11/8/06**



Chris Nolin/ARL/R9/FWS/DOI

11/08/2006 05:21 PM

To kurt_johnson@fws.gov@FWS, Nancy
Green/ARL/R9/FWS/DOI@FWS, Douglas
Krofta/ARL/R9/FWS/DOI@FWS, Melanie

cc

bcc

Subject State information and 90-day findings

Hi folks,

We have received a couple of adverse decisions recently on our practice of asking states for information about species in order to conduct 90-day findings. At this point we advise you to avoid gathering information from states specifically for a 90-day finding. We encourage you to regularly update the information in your files about candidate species and other species of concern. Information in our files resulting from routine data gathering should be usable although the courts have not yet ruled on that issue.

Attached is the most recent draft of the 90-day finding guidance, which now addresses this issue.

Also, a few people have noted that I need to remind everyone that the 1996 petition management guidance has been invalidated by the courts and should no longer be followed.

Thanks!



90-day petition guidance with OEL edits.doc

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In Reply Refer To:
FWS/AES/DCC 023855

Memorandum

To: Regional Director, Regions 1, 2, 3, 4, 5, 6, and 7
California Nevada Operations Office Manager

From: Director

Subject: Policy on 90-Day Petition Findings Under the Endangered Species Act

This guidance is a further explanation of previous Director's memoranda dated July 19, 1995, and rescinds the Director's memorandum dated November 30, 1995. The July 1995 memorandum announces the discontinuance of category 2 and new definition of candidate. It also establishes policy to ensure proper management of the petition process.

The July 1995 Director's memorandum states that the test at the 90-day stage of whether a petition will be judged as presenting substantial information will be whether that information is verified and whether that information supports the petition action. The November 1995 Director's memorandum elaborates on the July memorandum by further stating that a substantial finding should be made when the Service deems that adequate and reliable information has been presented *or* (emphasis added) is available that would lead a reasonable person to believe that the petitioned action may be warranted.

The petition process is the means whereby the public provides us information supporting the addition or removal of species from the lists and we respond. It is imperative that the Service manages the petition process to produce accurate findings swiftly as the petition process is an important avenue for identifying species which may be in need of protection.

Section 4(b)(3)(A) of the Endangered Species Act (Act) states that at the 90-day stage of the petition process, we shall "...make a finding as to whether *the petition* (emphasis added) presents substantial scientific or commercial information indicating that the petitioned action may be warranted." Thus it is the responsibility of the petitioner to provide substantial scientific or commercial information to support the petitioned action.

In the last two years, the Service has made substantial progress on the existing petition backlog. As we make progress on the backlog and receive petitions in the future, we will continue to prioritize petitions as follows. The highest priority is to address petitions to list or delist, our second priority is to address petitions to reclassify as threatened or endangered, and our lowest priority will be to address petitions to revise critical habitat. **[Response to comment:**

Recommend maintaining priorities as stated above so that the Service addresses revisions to critical habitat as its lowest priority.]

It is the Service's responsibility to evaluate whether the scientific and commercial information provided by the petitioner is substantial. The Service's implementing regulations at 50 CFR 424.14(b) state that "the Secretary shall make a finding as to whether the petition presents substantial scientific or commercial information indicating that the petitioned action may be warranted." The regulations define "substantial information" as "that amount of information that would lead a reasonable person to believe that the measure proposed in the petition may be warranted." A "substantial" finding can only be made by the Service if the information presented in the petition is relevant to demonstrating that one or more of the five statutory listing factors threaten or endanger the species in question.

By applying the process and standard of analysis presented in this guidance, the Service should meet the statutory deadline of 90 days for petitions that are reviewed.

90-day Finding Evaluation

The ESA's implementing regulations describe what the Service should consider when evaluating the petition. Does the petition:

- 1) clearly indicate the petitioned action and gives the scientific and common name of the species involved?
- 2) contain detailed narrative justification for the petitioned action based on available information, past and present numbers and distribution of the species involved and any threats faced by the species?
- 3) provide information regarding the status of the species over all or a significant portion of its range?
- 4) include appropriate supporting documentation in the form of bibliographic references, reprints of pertinent publications, copies of reports or letters from authorities, and maps?

Once these tests are determined to be met, the Service must evaluate whether the information presented is substantial. That is, does the information support a plausible argument for the petitioned action. Arriving at a 90-day finding involves the following steps:

Determining what information is provided in the petition to support each of the 5 factors. [Response to Comment: Recommend including summary outline as an attachment to this guidance memo and discuss its use in the section titled, Procedures for Preparing the 90-day Finding]

Once the information provided by the petition is identified readily available information sources should be identified and reviewed as part of evaluating the information contained in the petition.

2) After evaluation of the information, the reviewer should remove any unreliable information from consideration; determine the extent to which any of the reliable information in the petition is refuted by other reliable information; and determine whether the reliable information in the petition is substantial.

Regional Offices shall use the attached table at the end of this guidance memo in the 90-day analysis as it helps to organize the petitioner's claims and the extent to which the petitioner meets the statutory standard and forms the initial basis of our determination and our administrative record for our final action.

1. Scope of Information to be considered

The first step is to determine which readily available information sources should be reviewed. The Service must review all information submitted with the petition, including the petition's supporting documentation and information cited within the petition or included within the petition's bibliography. In addition the Service should review additional readily available information within the Service's files for the purpose of evaluating the reliability of the information contained within the petition (see Reliability of Information and Evaluation of Information below). The information within the Service's files is not to be used to augment a "weak" petition. If we have information independent of that provided in the petition that is sufficient to support a change in the species' listing status, it is the Service's responsibility to utilize our internal candidate, listing, and delisting priorities and processes.

[Response to Comment: We specifically want to constrain the process to the language in the Act, which places the burden of providing information clearly on the petitioner.]

What is readily available information in the Service's files? "Readily available" does not include an exhaustive literature search or solicitation of information. The petitioner is not required to provide reprints of articles cited within the petition, although the Service can request this information from the petitioner. Reference sources not typically carried by major libraries or posted on the Web, such as some foreign journals, and any not provided by the petitioner soon after requested by the Service are not considered "available" and will not be used in the evaluation. A database upon which we depend to store locational information as part of our files is considered "readily available".

Once the available information determined to be necessary for the review is obtained, the petition's claims and supporting information are further evaluated for reliability. Any readily available information we use in making our determination should also be included in the attached summary outline. Where cited information was not available, it should be so noted.

2. Reliability of Information

The second step is an examination of the reliability of the information contained within the petition. Among the most reliable sources of information are papers published in the peer-reviewed scientific literature. Information provided by individuals with demonstrated specific expertise in the relevant subject area can also generally be considered reliable. Published

documents of state and federal agencies are also generally considered reliable. Anecdotal information or information from sources without established records of subject-matter experience and expertise must be independently corroborated to be considered reliable.

An individual item of information will fall into one of two categories: 1) unreliable information which is not considered further; or 2) reliable information, either supporting or not supporting the petition, which is further evaluated. If we consider the information to be unreliable, we need to summarize this information in the 90-day finding and why it was determined to be unreliable. [Comment: Recommend deleting text as we do not make a conclusion about whether each item of information provided by the petitioner is substantial, but rather if it is reliable or not. We make a substantial determination upon evaluation of all the reliable claims presented in the petition.]

3. Evaluation of Information

The evaluation of information used to support a petition is the third step and must take into account all the information identified in the petition including any readily available information (defined in Step 1 above) within the Service's files that either supports or refutes information submitted by the petitioner. In the case where the conclusions drawn by the petitioner are shown to be based on a misinterpretation or flawed analysis of reliable information because that information was incomplete, outdated, unclear, or out of context, those conclusions, interpretations and analyses are considered inaccurate or faulty. When such misinterpretation occurs it is important to document the basis for the determination that the analysis is faulty.

It is possible for reliable information or data to be contradicted by other reliable information or data. This is sometimes true even with peer-reviewed information. If the issue has not been resolved in the literature, the Service should determine the extent to which the reliability of the information differs by taking into consideration the age of the information, whether study results have been duplicated, whether the information is based on new, potentially more reliable technology or methodology, and other factors. The number of publications supporting a conclusion may or may not be an important factor in determining relative reliabilities of information. If the reliable yet contradictory information (information provided by the petitioner and within Service files) is not reconciled through this examination, this does not mean that the contradictory information is invalid, but indicates that further analysis should be undertaken as part of a status review for the 12-month finding. Review at this stage may also result in information that is found reliable, but reduced in its value (ie. Reduced our understanding of the quality of the scientific methods or results). [Response to Comment: We recommend maintaining the process for determining whether or not to proceed with a 12 month finding/status review through the petition finding process. The Service will only proceed with a 12 month finding/status review if it makes a determination that the petition presents substantial scientific or commercial information.]

After the evaluation of information there could be three results for each item of information presented by the petition: a) refuted information, which is no longer considered; or b) reliable, information supporting the petition, which is further evaluated in the substantiality test.

[Response to Comment: Recommended revision to paragraph in response to comment]

4. Is the Information Substantial?

The final step is to determine whether the reliable information (information in the category under Step 3 b above) contained within the petition is substantial. The regulations define "substantial information" as "that amount of information that would lead a reasonable person to believe that the measure proposed in the petition may be warranted." Substantial information is more than a "mere scintilla" of information. Substantial information in support of the petition does more than raise a suspicion that the petitioned action may be warranted.

"Substantial information" refers to the value (quality of scientific methods and results) of the information and is not necessarily measured in terms of the number or aggregate size of publications or reports. The substantiality test is applied only to the reliable, unrefuted information supporting the petition. The substantiality test does not involve "weighing" the information in support of the petition against contrary information. A substantial petition is one where the petitioner has made a plausible argument and has provided reliable information to support that argument.

Listable Entity Evaluation

The first consideration when evaluating a petition is to determine if the petitioned species is actually a listable entity for which we could take action. The evaluation of the taxonomic status or validity of a potential distinct vertebrate population segment also centers on the reliability of the information (and the extent to which the information is refuted by readily available information), and then whether the information reaches the "substantial information" threshold. It is not the Service's purview to determine the ultimate appropriate taxonomic status of species in a 90-day petition evaluation, but rather to evaluate information submitted by the petitioners and readily available within our files to determine whether that information indicates that the petitioned entity may be a "listable entity" under the Act (i.e., a species, a subspecies, or a distinct vertebrate population segment). If the petitioned entity is widely recognized as a valid taxonomic entity, then the petitioned entity is likely a listable entity. However, if the petitioned entity is not widely recognized but the petitioner presents reliable, unrefuted information that the petitioned entity may be a listable entity (substantial information), we will evaluate the rest of the petitioner's claims in terms of the petitioned entity. If the petition is subsequently found to be substantial, we will include an evaluation of the taxonomic status as part of our status review in preparation of the 12-month finding. For delisting petitions asserting an invalid listed entity, the Service should evaluate the reliability of information included in the petition and the extent to which it is refuted, and then whether the information reaches the "substantial information" standard.

Procedures for Preparing the 90-day Finding

Briefing Statement for the Director - When initiating a 90-day review of a petition (either listing or delisting) prepare a 1-2 page briefing statement and the attached summary outline for the

Director describing the current evaluation of the petition. This briefing statement will be provided to the Washington Office prior to completing the petition review, but after all the applicable data has been identified, at a minimum, this should be at least two months prior to the due date of the 90-day finding, as an initial step in the review of the petition (see attached template as a guide). The Washington Office will work with the Regions and Field Offices to add these petition briefing statements to the schedule for delivery to the Assistant Director's Office.

Finding – The 90-day finding document should focus on the information that supports the petitioned action and should discuss how the petition was evaluated using the process described above. A 90-day finding should be organized in terms of whether the proposed entity qualifies for protection under the Act and by the five factors based on the information that supports each factor.

The 90-day “substantial” finding explains why the information presented in the petition was reliable, and why it leads the Service to determine that it is substantial (that amount of reliable and substantial information that would lead a reasonable person to believe that the measure proposed in the petition may be warranted). The information analyzed in the 90-day finding should be clearly identified or described as to whether it originated from the petition or was available in Service files. A “substantial” 90-day finding does not need to include a point-by-point review of the petitioner's claims since a thorough evaluation of the status of the species under the five factors will be completed in our status review and subsequent 12-month finding.

A “not substantial” 90-day finding explains why the information presented in the petition was not substantial, or why it leads the Service to determine that it does not support a determination that the proposed entity qualifies for protection under the Act. For each of the five factors, we are to identify the information provided by the petitioner that supports the petitioned action. We are then to separately identify the information readily available in our files that may determine the petitioner's information to be unreliable or refute the information. The discussion relating to each of the five factors should contain a concluding paragraph connecting the information provided by the petitioner, the information in our files, and our conclusion regarding the information's reliability and the extent to which it is refuted. After the discussion of information under all of the five factors, there should be a conclusion section that applies the substantiality standard and articulates the actual finding. Not substantial findings for petitions to list or delist based on an assertion of an invalid listable entity do not need to be organized in terms of the five factors.

Petition Supplements

When a petitioner, subsequent to filing a petition with the Service, submits additional information relevant to the petitioned action and requests that the Service consider that information in making its 90-day finding, the Service will treat the new information, together with the initial petition, as a resubmitted petition filed on the date the additional information is

received. In such a case, the Service will consider the initial petition to be withdrawn by the petitioner, but will use any information in the initial petition in its finding.

Attachments

cc: 3238-MIB-FWS/Directorate Reading File
 3242-MIB-FWS/AES RF
 420-ARLSQ-FWS/BL (Marj Nelson, Adam Zerrenner)
 420-ARLSQ-FWS/DCC RF

FWS/DCC:AZerrenner:jma:703/358-2105:1/24:06
 REVISED:MNelson:jma:3/9/06:
 S:/BL/Staff/Zerrenner/90-day petition guidance_8_3_06

The following table will be used by Regional Offices to guide the 90-day finding analysis. The table presents specific threats to the species as described in the petition, the references cited in the petition, our evaluation of the information in those citations, and our evaluation of that information against information in our files.

<i>Petition claims for Factor A. The present or threatened destruction, modification, or curtailment of its habitat or range</i>	Petition information source	How does the information contained in that source support the claim	Is there information that refutes the petitioners claim	Is the petition claim reliable or not (circle one)
				reliable not reliable
				reliable not reliable
<i>Petition claims for Factor B. Overutilization for commercial, sporting, scientific, or education purposes</i>	Petition information source	Information contained in that source	Information in Service files	Service conclusion regarding petition claim
				reliable not reliable
				reliable not reliable
<i>Petition claims for Factor C. Disease or predation</i>	Petition information source	Information contained in that source	Information in Service files	Service conclusion regarding petition claim
				reliable not reliable
				reliable not reliable
<i>Petition claims for Factor D. The inadequacy of existing regulatory mechanisms</i>	Petition information source	Information contained in that source	Information in Service files	Service conclusion regarding petition claim
				reliable not reliable
				reliable
				not reliable
<i>Petition claims for Factor E. Other natural or manmade factors affecting their continued existence</i>	Petition information source	Information contained in that source	Information in Service files	Service conclusion regarding petition claim
				reliable not reliable
				reliable not reliable

Appendix III: Relationship Between Ship Speed and Whale Mortality

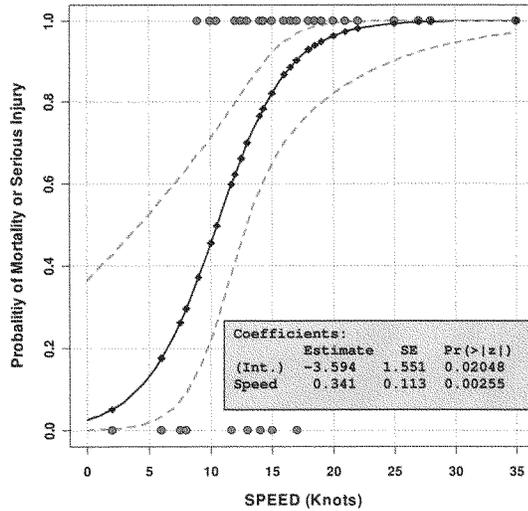
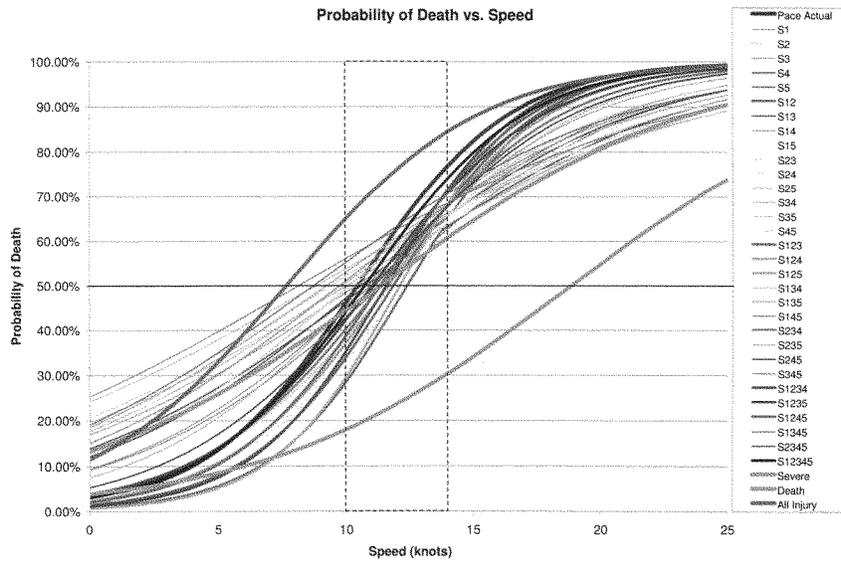


Figure 1 (left). Calculations by NOAA scientists Richard Pace and Gregory Silber show that the probability of whale death or serious injury increases rapidly with increasing ship speed. NOAA predicts a 90% chance of death or serious injury in whales struck by ships traveling at 17 knots, but only a 50% chance at 10.5 knots.

Figure 2 (bottom). Council of Economic Advisers staff concluded that the relationship between whale mortality and ship speed is not as strong as is suggested by career NOAA scientists and independent, peer-reviewed publications. A NOAA review described this analysis as "biased."



Mrs. NAPOLITANO [presiding]. Thank you very much. That was quite a statement.
 We would like to now call on Mr. Scott Hoffman Black, the Executive Director of Xerces Society for Invertebrate Conservation.

**STATEMENT OF SCOTT HOFFMAN BLACK, EXECUTIVE
DIRECTOR, XERCES SOCIETY FOR INVERTEBRATE
CONSERVATION**

Mr. BLACK. Thank you for the opportunity to provide testimony today. I very much appreciate it. My name is Scott Hoffman Black, and I am an ecologist and entomologist, and I am the Executive Director of the Xerces Society for Invertebrate Conservation.

We actually were named after the first butterfly to go extinct in the U.S. because of human activity. It was in the San Francisco area as the Presidio expanded for World War II. Not an easy name to pronounce, but a good name for an organization like ours.

For 37 years, the Xerces Society has worked with agencies, scientists, land managers and farmers to conserve habitat, habitat for invertebrates who are vitally important for our welfare. So why care about these animals that most people don't think of? Well, butterflies, bees, dragonflies, beetles, worms, starfish, mussels and crabs are but a few of the millions of invertebrates at the heart of a healthy environment.

Consider some facts. More than two-thirds of all flowering plants require insects for pollination. We wouldn't have most plants without insects. Insects and other invertebrates play a vital role in nearly every food chain. Eighty-nine percent of birds depend upon insects at some point in their lifecycle. If you fish, bird watch or hunt game birds you can thank insects for that opportunity as all of these animals need to feed on insects to survive.

They are also very important in medicine and technology. For instance, scientists recently discovered the highly endangered Hawaiian picture wing flies. These are the flies that MacDonald changed the critical habitat on and provided 18 acres of critical habitat for. These flies may possess an antibiotic previously unknown to medical science, yet there was 18 acres of critical habitat provided for these very important animals.

Indeed, according to a recent paper in the journal Bioscience, the benefits of native insects to the U.S. economy is worth more than \$57 billion a year for pollination services, pest control and for food for economically important wildlife. That is \$57 billion a year. Hopefully now you know why we care about these small animals.

While the Endangered Species Act has been successful in protecting some invertebrates, the U.S. Fish and Wildlife Service often does not take the recommendations of its own scientists in making decisions regarding ESA listing and critical habitat decisions.

Although Julie MacDonald may have provided the most egregious examples of illegal activity at the expense of these endangered species, there are cases in which she was not involved where the U.S. Fish and Wildlife scientists were overruled anyway.

Consider a couple case studies. I have more in my written testimony. Over 90 percent of the endangered Salt Creek Tiger Beetles' salt marsh habitat has been destroyed or severely degraded, and there are estimated to be less than 700 of these beetles remaining. Not 7,000. Seven hundred.

A multi-agency team of scientists initially proposed over 36,000 acres of critical habitat for the recovery of this beetle. At the prompting of the U.S. Fish and Wildlife Service, the team revised

the proposal to 15,000 acres of critical habitat. They were trying to balance science with other issues.

The team members expressed that 15,000 acres was the bare minimum amount of habitat needed in order for the species to recover. The U.S. Fish and Wildlife Service then proposed only 1,795 acres of critical habitat. One scientist on the team, in comments, has called the decrease from 15,000 to 1,700 ludicrous.

The Miami blue butterfly was mentioned earlier by the GAO. It was originally petitioned for listing when there were less than 100 butterflies left. This was a formerly very common species. The field office and region prepared an emergency rule to list the species because of its limited habitat and the multiple threats. After review, Service officials at all levels—at all levels—supported recommendation for listing.

Citing a Florida state management plan and the existence of a captive bred population which had not yet been released, however, one Interior official—not Julie MacDonald—determined that emergency listing was not warranted, and the blue butterfly was designated as a candidate instead.

Dr. Jaret Daniels, the world expert on the species and a butterfly expert at the McGuire Center for Lepidoptera at the University of Florida, believes that the current species' very small distribution, dangerously low population numbers and limited areas available for reintroduction leaves this butterfly extremely vulnerable to extinction.

As mentioned earlier by Dr. Grifo, in addition to interfering with these scientific decisions concerning endangered species, this Administration has been awful and has really failed the Endangered Species Act on new listings. As we heard, we have had the fewest new species of any Administration since the ESA was passed, and it is not for lack of species in need. We have over 281 species that are candidates waiting for decisions.

It is imperative that the U.S. Fish and Wildlife Service and the Interior fix the ESA listing process by allowing their own scientists to do their jobs unhindered by political interference and get some of these candidates who have been some of them waiting for years off this list.

In summary, we continue to see recommendations of U.S. Fish and Wildlife Service scientists overruled by their superiors. This interference I believe has a negative impact on the recovery of these species, as well as a demoralizing effect on U.S. Fish and Wildlife Service scientists who call me from their home at night.

In the long run, these decisions cost taxpayers more money as the issues need to be resolved in court. For the sake of the conservation of these species, decisions need to be based on science, not politics.

Thank you, and sorry for going a little bit over.

[The prepared statement of Mr. Black follows:]

**Statement of Scott Hoffman Black, Ecologist/Entomologist,
Executive Director, The Xerces Society for Invertebrate Conservation**

Summary

Insects and other invertebrates perform the vital services of pollination, seed dispersal, and nutrient recycling and are food for wildlife. Native insects are also worth over 57 billion dollars a year to the U.S. economy. Many invertebrates are currently

faced with extinction. While the Endangered Species Act [ESA] has been very successful in protecting and recovering some invertebrates, the U.S. Fish and Wildlife Service [USFWS] often does not follow the law or take the recommendations of its own scientists in making decisions regarding ESA listing and critical habitat. Although Julie MacDonald may have provided the most egregious examples of illegal activity at the expense of endangered species, there continue to be other, ongoing examples of the U.S. Fish and Wildlife Service violating the law and ignoring science.

Salt Creek Tiger Beetle (Cicindela nevadica lincolniana) Critical Habitat

A multi-agency team of scientists initially proposed over 36,000 acres of critical habitat for the recovery of the Salt Creek Tiger Beetle. At the prompting of the USFWS, this team revised the proposal to 15,000 acres of critical habitat. The USFWS then proposed only 1,795 acres of critical habitat. One scientist on the team has called the decrease from 15,000 acres to 1,795 acres ludicrous. This decision was not based upon the scientific information available regarding the species and the area needed for its recovery.

Miami Blue Butterfly (Hemiargus thomasi bethunebakeri) Listing

This butterfly was originally petitioned for listing when there were less than 100 individuals known to exist. The field office and region prepared an emergency rule to list the species because it was limited to one population and threats were imminent. The DC office failed to follow through on the listing even though all of the information available showed that listing was both scientifically and legally justified. The number of butterflies remains critically low yet the USFWS has not taken action to list this species.

Island Marble Butterfly (Euchloe ausonides insulanus) Listing

The USFWS denied listing this species, which has fewer than 1,000 estimated individuals left in its population. There continue to be multiple threats to the survival of this butterfly. The field office initially was preparing a rule to list the species, but the regional office failed to follow through with the listing.

In addition to interfering with scientific decisions concerning endangered species, in the tenure of this administration the USFWS has systematically failed to implement the Endangered Species Act. In particular, they have been dragging their feet in listing new species, having listed the fewest new species of any administration since the ESA was passed. To date, the administration has protected just 60 U.S. species, compared to 522 protected under the Clinton administration and 231 protected under the elder Bush's administration. Until the courts forced the U.S. Fish and Wildlife Service to protect the polar bear last week, the agency had not protected a new U.S. species for 735 days. This drought in protection of new species far surpassed the last such drought, which occurred when James Watt was Secretary of Interior and went 382 days without protecting a species in 1981 and 1982. This previous drought led Congress to amend the Endangered Species Act to include mandatory timelines for listing species.

The lack of new listings is not for a lack of deserving species. There are currently 281 species that are candidates for listing, including many invertebrates.

It is imperative that the USFWS and Department of Interior fix the ESA listing process by allowing agency scientists to do their jobs unhindered by political interference and by listing all of the candidate species in the next five years. Congress could help this process by increasing funding for listing of new species and ESA implementation overall and by providing clear direction to the agency that increased funding be used to provide protection to candidate species.

Importance of Invertebrates

Butterflies, dragonflies, beetles, worms, starfish, mussels, and crabs are but a few of the millions of invertebrates at the heart of a healthy environment. Invertebrates build the stunning coral reefs of our oceans; they are essential to the reproduction of most flowering plants, including many fruits, vegetables, and nuts; and they are food for birds, fish, and other animals.

Of the more than one million species of animals in the world, 94 percent are invertebrates. The services they perform—pollination, seed dispersal, food for wildlife, nutrient recycling—are critical to life on our planet. Indeed, without them whole ecosystems would collapse. But when decisions are made about environmental policy and land management, these vital and diverse creatures are often overlooked.

Consider the Facts

More than two-thirds of flowering plants require insects for pollination.

Insects, worms, and mites are vital in helping microbes break down dung and dead plant and animal matter.

Insects and other invertebrates play pivotal roles in nearly every food chain. Eighty nine percent of birds depend upon insects at some point in their lifecycle. Small flies are the most important food source for juvenile salmon. Even the mighty grizzly bear can eat 30,000 cutworm moths a day. Some grizzly bears get 1/3 of their yearly supply of food from these insects.

Invertebrates are also very important for medicine and technology. Horseshoe crabs are used extensively in the biomedical and pharmaceutical industries. Pharmaceutical companies use a blood enzyme from horseshoe crabs to test the safety of their products. Spider silk is being used to understand how to make better parachutes and sea stars are being studied to understand how to make better photoreceptors. Studies of the interactions among ants in a colony have led to breakthroughs in managing shipping terminals. What other discoveries await us?

Invertebrates Contribute to the Economy

According to a recent paper in the journal *Bioscience*, the benefits of insects to the U.S. economy is worth more than \$57 billion per year. Insects are a critical food source for the animals that drive a \$50-billion-per-year recreation industry (game bird hunting, fishing and bird watching). Pollination by non-honeybee insects, primarily native bees, supports \$3 billion annually in agricultural crops. Native insects that control pests save growers an estimated \$4.5 billion per year.

According to E.O. Wilson, Pulitzer Prize-winning author and renowned scientist, "So important are insects and other land-dwelling arthropods that if all were to disappear, humanity probably could not last more than a few months."

Importance of Endangered Insects

A rare and endangered species of insect or other invertebrate is unlikely to determine the fate of an ecological system, but as a group these species may have a profound effect. Ecosystem functions, such as the recycling of nutrients, often are done by specialists like the American burying beetle (a species listed as Threatened) rather than generalists.

Endangered species also can act as keystone species in small, specialized systems, such as caves, oceanic islands, or some pollinator—plant relationships. For example, some plant species rely on only one or few species of pollinators. Decreased abundance or loss of any of these pollinators can lead to the extinction of plants.

Some endangered species might provide useful products, such as new defenses against diseases and tools for studying various ecosystem or organismal processes, as well as direct material benefits. For instance, Scientists recently discovered that highly endangered Hawaiian picture wing flies (*Drosophila* spp.) may possess autoimmune system characteristics previously unknown to medical science.

Endangered invertebrates can act as "Canaries in a coal mine" and can be used as indicator species. Aquatic insects have been used for decades to assess water quality, endangered butterflies can be used to determine the condition of meadow and prairie habitats and some rare snails can be used to assess the health of old growth forests. Protecting habitat based on these small animals may also protect habitat for other more charismatic species.

Insect Extinctions and Endangerment

The Xerces blue butterfly, Antioch katydid, Tobias' caddisfly, Roberts' aloperlan stonefly, Colorado burrowing mayfly, and Rocky Mountain grasshopper all were driven extinct by humans.

In the United States, the Natural Heritage Program lists 210 insect species either as presumed extinct or as missing and possibly extinct. Many scientists believe that these numbers underestimate actual insect extinction and that many hundreds, or perhaps thousands, of species have gone extinct unnoticed in North America.

The USFWS lists 57 insects as either endangered or threatened but many more may be on the brink of extinction. To illustrate, 4.6% of the endangered animal species listed by the USFWS, are insects, yet insects make up more than 72% of global animal diversity. Of all vertebrates that are known to exist in the United States, approximately 18% are listed as threatened or endangered. If we assume that insects and vertebrates face similar destructive forces at similar levels of intensity, then one should expect to find on the order of 16,000 at-risk insect species in the United States alone. Although this assumption oversimplifies the situation, it shows that the 57 insects listed as endangered and threatened by USFWS are a significant underestimate. The Natural Heritage Program may be closer to the mark for select groups of insects for which we have more information. It estimates that 20% of stoneflies, 10% of tiger beetles 7% of butterflies, and 8% of dragonflies and damselflies are critically imperiled or imperiled in the United States. In addition,

the Xerces Society has produced a Red List of Pollinator Insects of North America. The Red List is the most complete assessment of the status of the continent's at-risk pollinators. Fifty butterflies and moths and 51 bees are listed as critically imperiled, imperiled or vulnerable.

Invertebrates and the Endangered Species Act

The first invertebrate listed under the Endangered Species Act was the Schaus swallowtail butterfly on April 28, 1976. This was followed by six California butterflies on June 1, 1976.

The Endangered Species Act has always treated vertebrates more generously than it does invertebrates. The Act authorizes the protection of species, subspecies, and "distinct population segments" of vertebrates, yet only species and subspecies of invertebrates may be protected. This provision was a compromise between the House of Representatives and the Senate in 1978 after the House voted to eliminate protection for invertebrates altogether. Insects are also singled out as the only group that cannot be protected if a particular species is determined by the Secretary of Agriculture to be an agricultural pest. However, this provision has never been used, as any serious pest would not likely be an endangered species.

Even with these restrictions, the Endangered Species Act remains one of the most important environmental laws in the world for the conservation of insects and other invertebrates, and the habitat upon which they depend. There is no other national law in the U.S. that specifically protects invertebrates and their habitats.

The Xerces Society's Efforts to Protect At-Risk Invertebrates

The Xerces Society works through all available methods to protect invertebrates and their habitats. We consult with private landowners, providing them with the information and tools to protect habitat on private lands. We join efforts with federal, state and county agencies to restore, enhance and protect habitat on public lands. The Xerces Society works on cooperative efforts with multiple stakeholders to protect the most vulnerable animals in the country. The Xerces Society has a very positive, cooperative relationship with the USFWS, other federal, state and county land management agencies as well as farmers and other landowners.

When a species is at risk of extinction, the formal listing of that species under the Endangered Species Act and the designation of critical habitat are tools that spur conservation and research on these animals and engage agencies and private landowners. In my experience, the United States Endangered Species Act is one of the most powerful tools for the conservation of these animals and their habitats in the world.

Using Science (Not Politics) to Protect Species

Over the past seven years there have been many instances of decisions at the USFWS that were based on politics rather than the available science. Many of these have involved insects and other invertebrates. One of the most egregious examples of this was in the designation of critical habitat for the Hawaiian picture-wing flies.

After pressure from conservation groups, the USFWS designated 11 species of Hawaiian picture-wing flies (*Drosophila aglaia*, *D. differens*, *D. hemipeza*, *D. heteroneura*, *D. montgomeryi*, *D. musaphilia*, *D. neoclavisetae*, *D. obatai*, *D. ochrobasis*, *D. substenoptera*, and *D. tarphytrichia*) as endangered, and one species (*D. mulli*) as threatened. But in 2006, it proposed a total of 18 acres as critical habitat for the flies. This is less than 1 1/2 acres per fly, which was not adequate for survival of the species nor was it scientifically or legally defensible.

There have also been many other cases of abuse. To see a more complete list of invertebrates where science has taken a back seat to politics in ESA decisions, please see appendix 1.

Politics Still Often Trumps Science in Listing and Critical Habitat Decisions

In our efforts to protect these animals we continue to see recommendations of USFWS scientists overruled by their superiors. This interference has a negative impact on the recovery of the species involved as well as a demoralizing effect on USFWS scientists who are trying to do their job. In the long run, these decisions cost tax payers more money as the issues will need to be resolved in court.

*Salt Creek Tiger Beetle (*Cicindela nevadica lincolniana*) Critical Habitat*

A multi-agency team of scientists initially proposed over 36,000 acres of critical habitat for the recovery of the Salt Creek Tiger Beetle. At the prompting of the USFWS, this team revised the proposal to 15,000 acres of critical habitat. The USFWS then proposed only 1,795 acres of critical habitat. One scientist on the team has called the decrease from 15,000 acres to 1,795 acres ludicrous. This decision was

not based upon the scientific information available regarding the species and the area needed for its recovery.

On October 6, 2005, the USFWS listed the Salt Creek tiger beetle as endangered under the U.S. Endangered Species Act. The beetle is only found in a few remnant saline marshes near Lincoln, Nebraska. The Salt Creek tiger beetle is one of the rarest insects in the world and occupies one of the most restricted ranges of any insect in the United States.

Since the late 1800s, over 90 percent of the Salt Creek tiger beetle's saline marsh habitat has been destroyed or severely degraded through commercial, residential, industrial, and agricultural development and road projects. Although formally much more common only three small populations of this beetle remain, and the known adult population size in over the last three years has fluctuated from a low of only 153 individuals to a high of just over 600 individuals.

The Salt Creek tiger beetle is considered an "indicator" species. Its presence signals the existence of a healthy saline marsh—the groundwater feeding these wetlands pass through rock formations containing salts deposited by an ancient sea that once covered Nebraska. Over the past century, more than 230 species of birds have been reported using eastern Nebraska saline marshes, including the least tern, piping plover, and peregrine falcon. These saline wetlands are also home to several salt-adapted plants that are found nowhere else in Nebraska. In addition, a healthy saline marsh provides numerous benefits for people, including water purification and flood control, as well as an area for bird watching and other outdoor recreation.

On May 4, 2005 a team of scientists from the University of Nebraska-Lincoln, Nebraska Game and Parks Commission, Lower South Platte Natural Resource District and the Nebraska Field Office of the U.S. Fish and Wildlife Service produced an "Advance Concept Paper" proposing 36, 906 acres of critical habitat for the Salt Creek tiger beetle.

USFWS staff at the regional office subsequently asked the authors of the Advance Concept Paper to revise their paper and reduce the acreage of the critical habitat proposal. The authors revised their recommendation to 15,000 acres of critical habitat, distributed across six recovery areas. Team members expressed that 15,000 acres was the bare minimum amount of habitat needed in order for the species to recover.

The USFWS then proposed a total of only 1,795 acres of critical habitat in four areas (Proposed Rule Federal Register / Vol. 72, No. 238 / Wednesday, December 12, 2007). There was no scientific rationale for the USFWS to cut over 13,000 acres from the previous proposal. The USFWS has not provided any scientific justification for how 1,795 acres would allow the recovery and long term maintenance of the Salt Creek tiger beetle. One of the scientists who co-authored the Advanced Concept Paper has called the decrease from 15,000 acres to 1,795 acres "ludicrous".

The best available scientific evidence as presented in the Advanced Concept Paper clearly shows that the current proposed critical habitat is woefully inadequate for the recovery and long term maintenance of the Salt Creek Tiger Beetle.

Miami Blue Butterfly (Hemiargus thomasi bethunebakeri) Listing

This butterfly was originally petitioned for listing when there were less than 100 individuals known to exist. The field office and region prepared an emergency rule to list the species because it was limited to one population and threats were imminent. The DC office failed to follow through on the listing even though all of the information available showed that listing was both scientifically and legally justified. The number of butterflies remains critically low yet the USFWS has not taken action to list this species.

The Miami Blue is endemic to Florida. The range of this butterfly, which once occurred along the Florida coast (from about St. Petersburg to Daytona) as well as several western barrier islands including Sanibel, Marco Island, and Chokoloskee south through the Florida Keys to Key West and the Dry Tortugas, has been shrinking for many years. Ever-expanding urbanization and the associated loss of coastal habitat have all but eliminated the Miami blue from the south Florida mainland. In recent years, this alarming trend of decline has continued in the Florida Keys. Once widespread and locally abundant, the butterfly has become considerably rarer and was thought to have been extinct with no verified records for the period from March 1992 to October 1999. The species was rediscovered on 29 November 1999 as part of a small breeding colony within the boundaries of Bahia Honda State Park on Bahia Honda Key.

In June of 2000 the North American Butterfly Association petitioned the USFWS to list the Miami Blue as a federally endangered species on an emergency basis. The petitioners cited habitat loss and fragmentation, mismanagement of existing habitat

(e.g. fire suppression), unethical collecting, and the influence of mosquito control chemicals as threats to this butterfly's continued survival.

On January 3, 2002, the USFWS announced a positive 90-day finding for the petition to list the Miami blue, initiated a status review, and sought data and information from the public. In this finding, the USFWS indicated that the Miami blue appeared to be in danger of extinction, but did not believe the threats to be so great that extinction was imminent. However, the USFWS indicated that they could issue an emergency rule when an imminent threat posed a significant risk to the well-being of the species.

In June 2002, the USFWS initiated a contract with the McGuire Center for Lepidoptera and Biodiversity at the University of Florida to conduct a one-year status survey of the Miami blue throughout its historic Florida range and to monitor the known population at Bahia Honda State Park. Although extensive field surveys were conducted, no additional wild populations of the Miami blue were discovered. A detailed assessment of the Bahia Honda State Park population confirmed a series of small breeding colonies with a total estimate of less than 100 individuals at any time.

As the USFWS dragged their feet the State of Florida took action. On December 10, 2002 the State of Florida declared the Miami blue to be an endangered species on an emergency basis. This was one of the very few times that the State of Florida had taken emergency action for any reason, and the first time it had done so on behalf of an endangered species. Although this was a good step state listing does not provide the comprehensive protection of the ESA. On November 19, 2003, the State of Florida unanimously approved the species management plan and the resulting addition of the Miami blue to Florida's endangered species list. The listing by the State of Florida did provide increased protection for this species and provided some funding for a captive breeding program. In February 2003, under consultation of the USFWS, Florida DEP, and the State of Florida (Florida Fish and Wildlife Conservation Commission), a captive colony of the Miami blue was initiated at the University of Florida in Gainesville from wild eggs collected at Bahia Honda State Park.

The field office and region prepared an emergency rule to list the species because it was limited to one population and threats were imminent. The DC office failed to follow through on the listing even though all of the information available showed that listing was both scientifically and legally justified. In December 2004 the USFWS acknowledged that the butterfly merited protection, but declined to add it to the federal list of endangered species citing lack of funding. They subsequently put it on the candidate list.

Although the state of Florida became involved, the recovery of the Miami Blue is anything but certain. Initial areas slated for reintroduction and recovery were disallowed because of the perceived need for mosquito control. As a result, initial reintroductions were delayed and divided into Phase I and Phase II areas-making aggressive recovery actions more challenging.

In 2006, a small number of additional Miami Blue colonies were discovered in the Key West National Wildlife Refuge. The University of Florida is currently working with the State of Florida and the Refuge biologists to determine the exact colony locations and estimates of the population sizes.

Dr. Jaret Daniels, a butterfly expert with the McGuire Center for Lepidoptera and Biodiversity (University of Florida), suggests that although the captive propagation program has gone well, the current species' distribution, dangerously low wild population numbers, limited areas available for reintroduction, and limited funding leaves the butterfly extremely vulnerable to extinction. He believes that federal listing would benefit the recovery of this species because of access to additional funding and better protection from threats such as mosquito control.

Island Marble Butterfly (Euchloe ausonides insulanus) Listing

The USFWS denied listing this species, which has fewer than 1,000 estimated individuals left in its population. There continue to be multiple threats to the survival of this butterfly. The field office initially was preparing a rule to list the species, but the regional office failed to follow through with the listing.

The Island Marble butterfly was historically found in British Columbia, on Gabriola Island and on Vancouver Island from Nanaimo in the north, southward along the eastern edge of the island to Beacon Hill Park, Victoria. It appears that this butterfly inhabited coastal grasslands, and may have taken advantage of forage in adjacent prairies associated with Garry Oak woodlands. It had not been seen since 1908 and was believed to be extinct. In 1998, one small population of the Island Marble was found on San Juan Island in Washington State.

In 2005, two hundred twenty-five surveys were conducted at 110 potential Island Marble sites by staff from the Washington Department of Fish and Wildlife, USFWS, Washington Department of Natural Resources, the Xerces Society, and local volunteers. As a result of these searches, Island Marble butterflies were found at eleven new locations, although none of the sites had more than five individuals. The surveys also helped determine the extent of the original population at San Juan Island National Historical Park American Camp. The vast majority of the butterflies—and the only viable populations—are located at American Camp. Many of the individuals found at the new locations are likely strays from this main site. The total estimated population for the butterfly was under 1,000 individuals.

Responding to pressure from conservation groups in February 2006, the USFWS issued a positive 90-day finding for the Island Marble Butterfly, determining that protection may be warranted and initiating a status review of the species.

The field office initially was preparing a rule to list the species, but the regional office failed to follow through with the listing. Until September 2006, in conversations with the USFWS biologists preparing the 12 month finding they routinely stated that the species met all of the criteria for listing. A few weeks before the decision on the listing was to be announced, the same biologists informed me that they were no longer allowed to discuss the Island Marble butterfly. In November of 2006 the USFWS denied protection to this butterfly with no legal or scientific justification.

To the credit of the USFWS, they have done some work to conserve this species since the listing decision was made (the Xerces Society is part of an Island Marble working group). However their effort falls short of real protection under the Endangered Species Act. As of 2007, the population numbers were still low and possibly declining.

Conclusion

The Xerces Society for Invertebrate Conservation has worked for more than 37 years to conserve habitat for our most vulnerable animals. We often work with the U.S. Fish and Wildlife Service to protect these animals. However, the USFWS has been ignoring science in many of its endangered species decisions. For the sake of the conservation of many important species, decisions need to be made based on science not politics.

All statements made in this testimony are mine alone. That said I would like to thank Dr. Jaret Daniels, McGuire Center for Lepidoptera and Biodiversity (University of Florida), Steve Spomer (University of Nebraska, Lincoln), and Noah Greenwald and Bill Snape, (Center for Biological Diversity) for clarification on issues regarding the species mentioned above and on the ESA process.

Appendix 1.

The USFWS has violated the critical habitat provisions of the Endangered Species Act in the following invertebrate species:

Peck's Cave Amphipod (Stygobromus pecki) Critical Habitat

The final critical habitat designation included just 38.5 acres (72 Fed. Reg. 39247, July 17, 2007) which is much less than the total extent of habitat identified as essential to the conservation of the species by USFWS scientists.

Comal Springs Riffle Beetle (Heterelmis comalensis) Critical Habitat

The final critical habitat designation included just 30.3 acres (72 Fed. Reg. 39247, July 17, 2007) which is much less than the total extent of habitat identified as essential to the conservation of the species by USFWS scientists.

Comal Springs Dryopid Beetle (Stygoparnus comalensis) Critical Habitat

The final critical habitat designation included just 39.5 acres (72 Fed. Reg. 39247, July 17, 2007) which is much less than the total extent of habitat identified as essential to the conservation of the species by USFWS scientists.

Pecos Assiminea Snail (Assiminea pecos) Critical Habitat

The critical habitat rule for this species dramatically reduced acreage protection from 1,523 acres to 396.5 acres. 70 Fed. Reg. 46303 (August 9, 2005).

Koster's Tryonia Snail (Juturnia kosteri) Critical Habitat

The critical habitat rule for this species dramatically eliminated acreage protection from 1,127 acres to zero acres. 70 Fed. Reg. 46303 (August 9, 2005).

Noel's Amphipod (Gammarus desperatus) Critical Habitat

The critical habitat rule for this species dramatically eliminated acreage protection from 1,127 acres to zero acres. 70 Fed. Reg. 46303 (August 9, 2005).

Roswell Springsnail (Pyrgulopsis roswellensis) Critical Habitat

The critical habitat rule for this species dramatically eliminated acreage protection from 1,127 acres to zero acres. 70 Fed. Reg. 46303 (August 9, 2005).

Helotes Mold Beetle (Batrissodes ventyivi) Critical Habitat

The final rule in question was finalized for this Bexar County (TX) karst cave species on April 8, 2003 (68 Fed. Reg. 17155). Although the proposed critical habitat rule sought to protect 958 acres, the final rule shrunk this to just 164 acres.

Robber Baron Cave Spider (Cicurina baronia) Critical Habitat

The final rule in question was finalized for this Bexar County (TX) karst cave species on April 8, 2003 (68 Fed. Reg. 17155). Although the proposed critical habitat rule sought to protect 395 acres, the final rule shrunk this to just 57 acres.

Madla Cave Meshweaver (Cicurina madla) Critical Habitat

The final rule in question was finalized for this Bexar County (TX) karst cave species on April 8, 2003 (68 Fed. Reg. 17155). Although the proposed critical habitat rule sought to protect 1,811 acres, the final rule shrunk this to just 201 acres.

Braken Bat Cave Meshweaver (Cicurina venii) Critical Habitat

The final rule in question was finalized for this Bexar County (TX) karst cave species on April 8, 2003 (68 Fed. Reg. 17155). Although the proposed critical habitat rule sought to protect 481 acres, the final rule shrunk this to just 85 acres.

Government Canyon Bat Cave Meshweaver (Cicurina vespera) Critical Habitat

The final rule in question was finalized for this Bexar County (TX) karst cave species on April 8, 2003 (68 Fed. Reg. 17155). Although the proposed critical habitat rule sought to protect 116 acres, the final rule eliminated all critical habitat and protected zero acres.

Government Canyon Bat Cave Spider (Neoleptoneta microps) Critical Habitat

The final rule in question was finalized for this Bexar County (TX) karst cave species on April 8, 2003 (68 Fed. Reg. 17155). Although the proposed critical habitat rule sought to protect 304 acres, the final rule eliminated all critical habitat and protects zero acres.

Ground Beetle (Rhadine exilis) Critical Habitat

The final rule in question was finalized for this Bexar County (TX) karst cave species on April 8, 2003 (68 Fed. Reg. 17155). Although the proposed critical habitat rule sought to protect 7,557 acres, the final rule shrunk this to just 644 acres.

Ground Beetle (Rhadine infernalis) Critical Habitat

The final rule in question was finalized for this Bexar County (TX) karst cave species on April 8, 2003 (68 Fed. Reg. 17155). Although the proposed critical habitat rule sought to protect 5,083 acres, the final rule shrunk this to just 686 acres.

Cokendolpher Cave Harvestman (Texella cokendolpheri) Critical Habitat

The final rule in question was finalized for this Bexar County (TX) karst cave species on April 8, 2003 (68 Fed. Reg. 17155). Although the proposed critical habitat rule sought to protect 395 acres, the final rule shrunk this to just 57 acres.

Riverside Fairy Shrimp (Streptocephalus woottoni) Critical Habitat

The final rule in question was finalized on April 12, 2005 (70 Fed. Reg. 19153) and protects just 306 acres despite earlier proposed rules that protected anywhere from 5,795 acres to 12,060 acres. Without rational explanation, or even acknowledgement, it contradicts the Riverside fairy shrimp's recovery plan, scientific peer reviewers, and USFWS scientists. It falsely identifies many essential habitat areas as not essential.

Mrs. NAPOLITANO. Thank you.

The reason I am a little bit antsy is we are going to be having votes in a few minutes it looks like. In fact, they may be calling for them now, so we will take possibly one more speaker and then we will have to recess.

We can finish? OK. We may be able to finish, but only if we hold to our five minute limit if you wouldn't mind.

Mr. BLACK. I apologize.

Mrs. NAPOLITANO. No problem.
 Mr. David Parsons, Science Fellow from the Rewilding Institute?
 Thank you for being here, sir.

**STATEMENT OF DAVID R. PARSONS,
 SCIENCE FELLOW, REWILDING INSTITUTE**

Mr. PARSONS. Yes, ma'am. Thank you, Madam Chairman. It is a high honor to be testifying before this Committee.

I have some supporting documents for my written testimony that I would like to enter into the record with your permission.

Mrs. NAPOLITANO. Without objection. So ordered, sir.

Mr. PARSONS. Thank you.

I have one quick rebuttal to a comment that was made by the Ranking Republican Member. I believe that was Congressman Smith. He stated that the law requires the killing of all Mexican wolves that attack livestock.

I am the primary author of the Federal regulation that applies to all of the Mexican wolves that live in the wild today. That regulation was written to allow us the flexibility to manage conflict, but not at the expense of conserving the species, the Mexican wolf. I can assure you there is no provision in that regulation that requires the killing of Mexican wolves that attack livestock.

Thirty-two years after being listed as endangered under the Endangered Species Act, the Mexican gray wolf remains the most endangered mammal in North America and the most endangered subspecies of gray wolf in the world. Less than 50 are known to exist in the wild, and around 300 live in captivity.

Under the Bush Administration, the U.S. Fish and Wildlife Service has failed to conserve and recover the Mexican wolf as mandated by the Endangered Species Act because it has abandoned the application of science and mismanaged the program. Since March of 1998, a total of 99 wolves have been released through the end of the year 2006, yet less than 50 survive today.

The approved objective for this initial reintroduction project was the establishment of a viable, self-sustaining wild population of at least 100 Mexican wolves by the end of 2006. That was to happen in the 7,000 square mile Blue Range Wolf Recovery Area in southwest New Mexico and southeastern Arizona. The Service has failed to meet this objective by all measures, and there is no evidence that the population is on a growth trajectory.

Twenty-six years after adoption of a recovery plan and 10 years following the initial reintroduction, the total wild population of Mexican wolves is only 52 animals and three successful breeding pairs at the end of the year 2007. The population is lower now than it was at the end of 2003.

In my opinion, the recovery of the Mexican wolf cannot succeed under the current policies and management practices of the Service and a body called the Adaptive Management Oversight Committee to which the Service has delegated its decision authority under a memorandum of understanding for the reintroduction project.

The complex web of bureaucratic, multi-agency authority sharing, deference to special interests that oppose recovery, mismanagement of public lands, the promulgation of operational procedures that cause excessive management removal of wolves, inattention to

science and the indefinite suspension of the recovery planning process are precluding the Service from meeting the Endangered Species Act mandate for recovery of the Mexican gray wolf.

The poster child of mismanagement is the draconian wolf control policy formerly implemented as Standard Operating Procedure 13 by the Adaptive Management Oversight Committee and approved by the Service. This procedure requires the permanent removal or killing of any wolf that is known to or likely to have killed three head of livestock over the span of a year regardless of the consequences to wolf recovery.

This may be what the Congressman was referring to, but it is a discretionary authority, not a hardwired provision of the rule.

The Service releases wolves with one hand and kills wolves with the other. It is my professional opinion that the Service and its cooperating agencies are prioritizing wolf control over wolf recovery to the point of threatening the second extrication of the critically endangered Mexican wolf in the wild. Ultimately this may result in the complete extinction of the Mexican wolf subspecies since the captive breeding program is intended only as a temporary measure to achieve recovery in the wild.

I will briefly outline some solutions that can correct these problems. We need to abolish Standard Operating Procedure 13 and establish benchmarks for population growth to meet the conservation standard of the Act. The Service should reclaim its decision authority from the Adaptive Management Oversight Committee because they are not getting the job done.

We should reinstate recovery planning, which the Service has put into permanent suspension as far as we can tell. We need to I think develop and introduce legislation that might help resolve some of these problems, such as

-
- perhaps legislation that would allow the compensation of ranchers to voluntarily retire Federal grazing permits in the Wolf Recovery Area.

Thank you very much for this opportunity to comment.

[The prepared statement of Mr. Parsons follows:]

**Statement of David R. Parsons, Carnivore Conservation Biologist/
Science Fellow, The Rewilding Institute**

OVERVIEW OF THE ISSUE

The Mexican gray wolf (*Canis lupus baileyi*) was completely extirpated from the wild by a United States government eradication program throughout its historical range in the U.S. and Mexico and rescued from the brink of extinction through the captive breeding of just 7 survivors.

Thirty-two years after receiving protection under the Endangered Species Act (ESA), the Mexican gray wolf remains the most endangered mammal in North America and the most endangered subspecies of gray wolf in the world.

The U.S. Fish and Wildlife Service (FWS) has failed in its duty under the ESA to conserve and recover the Mexican wolf because it has abandoned the application of science and consequently mismanaged the program.

Twenty-six years after adoption of a recovery plan and 10 years following initial reintroductions, the total wild population of Mexican wolves was only 52 animals and 3 successful breeding pairs at the end of 2007 (Figure 1).

The approved objective for this initial reintroduction project is the establishment of a viable, self-sustaining wild population of at least 100 wolves and 18 breeding pairs by the end of 2006 in the 7,000 square mile Blue Range Wolf Recovery Area in SW New Mexico and SE Arizona (Figure 2). The FWS has failed to meet this

objective by all measures; and there is no evidence that the population is on a growth trajectory.

Under current policies and management practices it appears unlikely that recovery of the Mexican wolf will succeed. A complex web of bureaucratic multi-agency authority sharing, deference to special interests that oppose recovery, mismanagement of public lands, the promulgation of operational procedures that cause excessive management removal of wolves, inattention to science, and the indefinite suspension of the recovery planning process are precluding the FWS from meeting the Endangered Species Act (ESA) mandate for recovery of the endangered Mexican wolf.

It is my professional opinion that the FWS and its cooperating agencies are prioritizing wolf control over wolf recovery of the endangered Mexican gray wolf to the point of threatening the second extirpation of the Mexican wolf in the wild; ultimately, this may result in the complete extinction of the Mexican wolf since the captive-breeding program is intended as a temporary measure to achieve recovery in the wild.

BACKGROUND

The FWS approved the Mexican Wolf Recovery Plan in 1982 which called for re-introduction of Mexican wolves, using the rescued captive stock of certified pure Mexican wolves, to at least two areas within their historic range. Following the preparation of an Environmental Impact Statement (EIS), the Secretary of the Interior signed a Record of Decision in early 1997 authorizing the release of one experimental non-essential population (per Section 10(j) of the ESA) into the Blue Range Wolf Recovery Area (BRWRA; Figure 2).

Section 10(j) of the ESA allows the Secretary of the Interior to authorize such releases of experimental populations only “if the Secretary determines that such release will further the conservation of such species.” The ESA defines “conservation” as: the use of all methods and procedures which are necessary to bring any endangered species or threatened species to the point at which the measures provided pursuant to this Act are no longer necessary—in other words, recovery and delisting of the species.

The BRWRA comprises all of the Gila National Forest in southwestern New Mexico and all of the Apache portion of the Apache-Sitgreaves National Forest in southeastern Arizona—an area of about 7,000 square miles (Figure 2). Ninety-five percent of the area consists of public national forest lands.

The release of wolves began in 1998, and 99 wolves were released to the BRWRA by the end of 2006. None were released in 2007.

A special rule (50 C.F.R. § 17.84(k)), promulgated under provisions of Section 10(j) of the ESA, specifies circumstances under which Mexican wolves in the BRWRA population may be harassed, killed, or removed:

- Wolves may be harassed when in proximity to people, livestock, and pets.
- Wolves may be killed in self defense or in defense of the lives of other humans; when wolves are in the act of attacking livestock on private or tribal property; and when wolves are killed by livestock guarding dogs.
- The rule authorizes, but does not require, the FWS to implement management measures for additional taking (including killing) of wolves for various purposes specified in the rule, primarily to resolve conflicts between wolf restoration and human activities, especially livestock grazing. But this additional taking must not preclude progress toward recovery of Mexican wolves (ESA § 10(j)(2)(A)).

The final EIS (page 2-16) affirms the FWS’s recognition, in 1996, of its duty to conserve and recover Mexican wolves by stating that it will use the “greatest degree of management flexibility” granted through discretionary rule provisions to achieve “the least impact on private activity **consistent with wolf recovery**” (emphasis added).

Project authorizing documents mandate the use of an “adaptive management” process for project decisions. Under adaptive management, actions and policies are to be treated as scientific experiments where certain outcomes are hypothesized. Anticipated outcomes are compared with actual outcomes and adaptations are guided by what has been learned through research, monitoring, and data assessment.

Since October 31, 2003, management of the BRWRA wolf population has been carried out by a six-agency decision-making body, the Mexican Wolf Adaptive Management Oversight Committee (AMOC), established by a Memorandum of Understanding.

The most notable management measure authorizing the killing and permanent removal of wolves is Standard Operating Procedure 13 (SOP 13), a discretionary management measure adopted by the AMOC and approved by the FWS which requires

the removal or killing of wolves involved in three fatal livestock depredation incidents in the span of one year, even if recovery is precluded by its implementation.

STANDARD OPERATING PROCEDURE 13

In October 2005, the AMOC, with FWS approval, formally adopted SOP 13.

Under provisions of SOP 13, “Wolves known or likely to have committed three depredation incidents within a period of 365 days shall be permanently removed from the wild as expeditiously as possible.” Permanent removal includes live capture with subsequent placement in captivity and shooting wolves in the wild. Wolf removals under SOP 13 are punitive and mandatory.

SOP 13 requires permanent removal of each offending wolf regardless of important biological factors such as population numbers, genetic value, reproductive status, or the presence of dependent pups.

SOP 13 places no cap on the number of wolves that will be permanently removed from the BRWRA and establishes no population floor below which its provisions would be suspended.

Since its implementation, Mexican wolf removals have spiked, undoing all progress towards their recovery in the wild (Figures 1 and 4).

FWS approved SOP 13 despite warnings from experts in the Three-Year Review (2001; “Paquet Report”) that progress towards recovery would not occur without a reduction in wolf mortalities and management removals.

MEXICAN WOLF REINTRODUCTION PROJECT—STATUS REVIEW

The objective of the authorized reintroduction project is to establish a viable, self-sustaining wild population of at least 100 Mexican wolves in the BRWRA by the end of 2006—nine years following the initial releases in 1998. Such a population was predicted to include 18 breeding pairs.

The FWS has failed to meet this objective by all measures; and there is no evidence that the population is on a growth trajectory.

The estimated population at the end of 2007 was 52 wolves and only 3 breeding pairs. The population has actually declined since the end of 2003, and the number of breeding pairs has not increased over this 4-year period (Figure 1).

Permanent removal and lethal control by agency managers of wolves that depredate livestock is the most significant cause of the population decline and lack of progress toward the reintroduction objective (Figure 3).

Given that all Mexican wolves stem from only 7 founders, management of population genetics is critically important. Recent peer-reviewed research has documented genetic deficiencies and reduced reproductive fitness in the wild population and recommended measures to restore the genetic integrity and fitness of the wild population—a process referred to as “genetic rescue.” Yet, the FWS has established no formal objectives or procedures for managing and improving the genetic composition of the wild population.

The Association of Zoos and Aquariums, which manages the captive population of Mexican wolves, requested that the FWS implement “**a moratorium on lethal control and permanent removal** (rescind or suspend SOP13) of Mexican wolves in the Blue Range Wolf Recovery Area until an expert taskforce on genetic issues can be convened to provide guidance to these actions.” (Letter to Dr. Benjamin Tuggle, SW Regional Director, January 2, 2008; emphasis added).

A formal resolution unanimously passed by the American Society of Mammalogists at its 2007 annual meeting calls upon the FWS to expedite a revision of the Mexican Wolf Recovery Plan; suspend all predator control directed at Mexican gray wolves (currently carried out under SOP 13) at least until the 100-wolf goal of the current reintroduction program has been achieved; and protect wolves from the consequences of scavenging on livestock carcasses, which can habituate wolves to preying on stock causing preventable conflicts.

New Mexico Governor Bill Richardson has called for the immediate suspension of and ultimately revising SOP 13, but his request has not been acceded to. In his July 6, 2007, statement, the Governor said: “**The lethal removal of a female wolf, that leaves pups with a single parent, is a setback to the Mexican Gray Wolf Recovery Program**, and signals that it is time to reexamine the protocols under which wolves are removed from the wild” (emphasis added). Recent peer-reviewed research has confirmed the Governor’s judgment.

The wild population of Mexican wolves is not “self-sustaining.” In fact, the population is lower now than at the end of 2003.

The FWS contracted with the International Union for the Conservation of Nature (IUCN) for the required three-year review of the BRWRA reintroduction project. A team of scientists led by world-renowned wolf ecologist Dr. Paul C. Paquet issued their report in June 2001; they concluded that “Survival and recruitment rates are

far too low to ensure population growth or persistence. Without dramatic improvement in these vital rates, the population will fall short of predictions for upcoming years.”

The FWS took no action on the substantive recommendations of the three-year review or any of the many subsequent requests to rescind SOP 13, and the Paquet Report’s prediction became the current reality.

THE BRWRA POPULATION OF MEXICAN WOLVES IS “ESSENTIAL” TO THEIR RECOVERY

Mexican wolf recovery will ultimately require the establishment of at least three or more viable, self-sustaining “core” populations with habitat connectivity among the core populations.

An analysis of five potential reintroduction areas presented in the final EIS found the BRWRA to be the most suitable site capable of meeting the 100+ wolf objective within the probable historic range of the subspecies. The Paquet Report estimated that the BRWRA could support 200 to 400 Mexican wolves.

A recent peer-reviewed analysis of areas suitable for wolf recovery in western U.S. confirms the high importance of the BRWRA to the recovery of the Mexican wolf in the Southwest.

Given that the BRWRA is arguably the best place to initiate wolf recovery in the Southwest and that restoration of a viable, self-sustaining population of Mexican wolves in the BRWRA is arguably a critically essential component to any future recovery plan for the Mexican wolf, the FWS can no longer justify an “experimental non-essential” classification for the BRWRA population.

In the final rule, the FWS states: “This reintroduction will establish a wild population of at least 100 Mexican wolves and reduce the potential effects of keeping them in captivity in perpetuity. **If captive Mexican wolves are not reintroduced to the wild within a reasonable period of time, genetic, physical, or behavioral changes resulting from prolonged captivity could diminish their prospects for recovery**” (emphasis added).

Recent peer-reviewed research has confirmed genetic deterioration of captive populations over time and recommends the return of captive animals to the wild as rapidly as possible.

Endangered species recovery takes place in the wild, not in captivity. There is absolutely no legal or biological basis for asserting that a captive breeding program alone satisfies the mandate of the ESA. Clearly, the existing BRWRA population or any future wild population of Mexican gray wolves can no longer be considered “nonessential” to the continued existence of the subspecies. If there ever is a case to be made for the first ever designated “essential” experimental population under Section 10(j) of the ESA, this is it.

RECOVERY PLANNING

The ESA (Section 4(f)(1)) mandates that the Secretary “shall develop and implement...recovery plans’ for the conservation and survival of endangered species.” The Mexican Wolf Recovery Plan was approved and adopted in 1982. FWS policy requires that recovery plans be reviewed every five years and updated or revised if they are out of date or not in compliance with the ESA. The 1982 Mexican Wolf Recovery Plan has never been updated or revised even though it does not contain “objective, measurable criteria which, when met, would result in a determination...that the species be removed from the list” (ESA Section 4(f)(2)(B)(ii)) nor a detailed plan for fully recovering Mexican wolves throughout a significant portion of their historic range to a population status that warrants delisting from the ESA.

The FWS initiated a recovery plan revision process in October 2003 but suspended that effort in January 2005. The FWS has shown no intent to reinstate the recovery planning process for the critically endangered Mexican wolf.

The FWS has indefinitely suspended recovery planning that would apply the best available science to future decisions for achieving recovery of the Mexican wolf.

SELECTED EXAMPLES OF MISMANAGEMENT BY FWS

Genetics:

The unnecessary government killing of the alpha male of the Saddle Pack (AM574) illustrates the punitive management that imperils this population and the subspecies as a whole. This wolf killed four head of cattle by mid April 2004 and plans were made to remove him from the wild. The FWS was aware that he was the sixth most genetically valuable Mexican wolf for his genetic attributes among the combined wild and captive populations. He was the single most genetically valuable wolf in the wild; and was, in fact, irreplaceable genetically. This important information was documented in internal FWS communications. If captured alive, he

could have been bred in captivity, and would have perpetuated his valuable genetic heritage. Over the next three months this wolf ceased killing cattle, and was observed feeding on an elk; it may be that, like other wolves that switch prey preferences, he would never have killed another cow. Nevertheless, on July 11, 2004, he was shot and killed as per FWS instructions.

Adaptive Management:

On February 12, 2005, Congressman Steve Pearce (NM) convened two meetings, in Glenwood and Socorro, New Mexico, to hear constituents' concerns about Mexican wolf recovery efforts in New Mexico. Invited participants were primarily members or supporters of the livestock industry in New Mexico. At the Congressman's request, senior staff from FWS's Southwest Region attended the meetings. Conservation stakeholders' requests for similar access to FWS officials through formal public hearings were denied.

On April 22, 2005, the AMOC proposed a moratorium on new releases of Mexican wolves into the BRWRA, and the new Standard Operating Procedure 13. The Rewilding Institute concluded that the proposed release moratorium and new wolf control procedures "will likely increase mortality and removal of wolves while reducing population supplementation." Following public review, AMOC issued a final release moratorium and a final SOP 13 with no substantive changes from the proposed procedures, despite the fact that project monitoring had documented a population decline of about 20% at the end of 2004.

The Rewilding Institute found that "[t]he proposed moratorium on releases and translocations appears politically motivated, premature, and unjustified on the basis of findings of the 3-year review and preliminary findings of the 5-year review". We fail to find any compelling justification in support of the necessity or urgency of the proposed moratorium and we recommend that it be rescinded immediately." (Letter to FWS and Arizona Game and Fish Department dated May 25, 2005). The Rewilding Institute's comments were formally endorsed by several prominent (some world renowned) conservation scientists, including Dr. Paul Paquet. Neither the FWS nor the AMOC paid any heed to our science-based and expert-endorsed comments.

LITIGATION

Frustrated over the FWS's failure to conserve and recover the federally endangered Mexican gray wolf, twelve conservation organizations filed two lawsuits in the United States District Court for the District of Arizona on April 30, 2008. Complaints are summarized below.

WildEarth Guardians and the Rewilding Institute vs. United States Fish and Wildlife Service and United States Forest Service. [2:08-cv-00820-ECV]

- FWS has failed to meet the conservation standard of the ESA § 10(j). Since the beginning of 2005, permanent wolf removals under SOP 13 have precluded progress towards recovery.
- FWS has acted, and is acting, unreasonably and with clear error of judgment by adopting and continuing to implement its SOP 13 wolf removal campaign in the face of a crashing wolf population.
- FWS has arbitrarily and capriciously overstepped the bounds of management flexibility and entered into the realm of unlawful endangered species predator control.
- FWS's management strategy of killing and trapping its way to recovering the Mexican gray wolf, as manifested by its adoption and implementation of SOP 13, has not—and cannot—further the conservation of the subspecies.
- The Forest Service has failed to meet the conservation duty of ESA § 7(a)(1).
- Permanent wolf removals directly resulting from conflicts with Forest Service permitted livestock are precluding the attainment of recovery benchmarks for the only wild population of Mexican gray wolves.
- The Forest Service has unlawfully refused or unreasonably delayed developing and implementing a program for the conservation of this endangered subspecies.

Defenders of Wildlife; Center for Biological Diversity; Western Watersheds Project; New Mexico Audubon Council; New Mexico Wilderness Alliance; University of New Mexico Wilderness Alliance; The Wildlands Project; Sierra Club; Southwest Environmental Center; and Grand Canyon Wildlands Council vs. Benjamin Tuggle, Region 2, USFWS; Dale Hall, Director, USFWS; Dirk Kempthorne, Secretary U.S. Department of The Interior; U.S. Fish and Wildlife Service. [4:08-cv-00280-DCB]

- Defendants failed to carry out environmental analysis and public review, as required under NEPA, 42 U.S.C. § 4331 et seq., of its decision or decisions to es-

establish the Adaptive Management Oversight Committee under a Memorandum of Understanding.

- Defendants' decision or decisions to delegate FWS's statutory duties and responsibilities to administer the Mexican gray wolf reintroduction project will and have harmed the environment and will and has caused adverse impacts to the Mexican gray wolf and the reintroduction project.
- Defendants failed to carry out environmental analysis and public review, as required under NEPA, 42 U.S.C. § 4331 et seq., of its decision or decisions to approve and implement SOP 13.
- Defendants' decision or decisions to establish SOP 13 will and have harmed the environment and will and have caused adverse impacts to the Mexican gray wolf and the reintroduction project. Further, because there is no other Mexican gray wolf population in the wild, the harm extends not just to the reintroduction project but to the prospects for the ultimate recovery of the subspecies.
- By the AMOC MOU, Defendants unlawfully subdelegated to the other AMOC lead agencies their statutory duty and responsibility to "implement...the objectives and strategies" of the most central facets of the Mexican gray wolf recovery.
- The Defendants' decision or decisions to establish the Adaptive Management Oversight Committee under a Memorandum of Understanding and to approve and implement SOP 13 are counter to the FWS's reintroduction environmental impact statement and record of decision, final ESA § 10(j) rule, the 1998 Inter-agency Management Plan, and Defendant's overriding ESA obligation to recover the species in the wild.

RECOMMENDATIONS

Direct FWS to abolish SOP 13.0 and develop management protocols for addressing wolf conflicts in ways that take into account population genetics, demographics and other factors important for making progress towards recovery of the critically endangered Mexican gray wolf. Benchmarks for population growth must be established. We recommend an annual population increase of at least 15% and an annual increase of at least 2 breeding pairs.

Direct FWS to abolish the AMOC and establish a new model for interagency participation, reclaim full decision authority for the BRWRA reintroduction project, and carry out its duty to conserve Mexican gray wolves per the ESA.

Direct FWS to prepare a legally sufficient recovery plan, under the 1988 revisions to the ESA, based on modern conservation science within the next year.

Develop and introduce legislation to compensate livestock operators within the BRWRA, on a voluntary basis, in exchange for the permanent retirement of the public grazing allotments they lease.

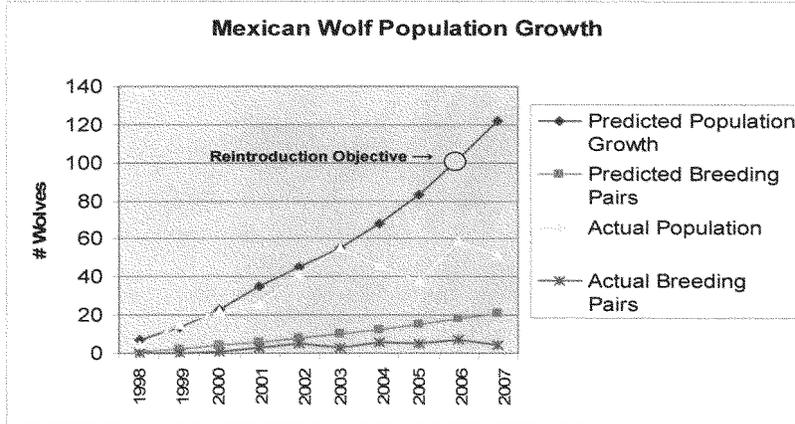


Figure 1. Predicted versus actual growth of the reintroduced population of Mexican gray wolves in the Blue Range Wolf Recovery Area of SW New Mexico and SE Arizona (Final EIS).



Figure 2. The Blue Range Wolf Recovery Area (BRWRA) consists of all of the Gila National Forest in southwestern New Mexico and all of the Apache National Forest in southeastern Arizona. Mexican wolves are initially released in the Primary Recovery Zone and are allowed to disperse or be translocated throughout the BRWRA. Wolf packs are not allowed to establish permanence residence outside the boundaries of the BRWRA, except when landowners agree to accept wolves. Such is currently the case with the White Mountain Apache Tribe on the Fort Apache Indian Reservation.

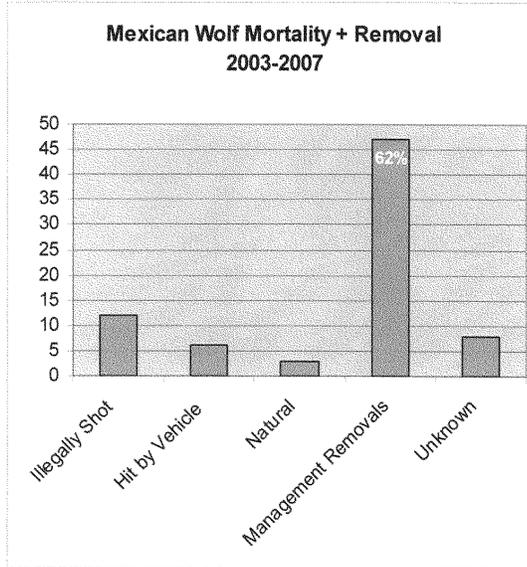


Figure 3. Causes of Mexican wolf removals and mortality in the BRWRA from 2003-2007. Removal or lethal control of wolves by agency managers accounts for 62% of all causes combined. Response to livestock depredation incidents accounts for 91% of all management removals.

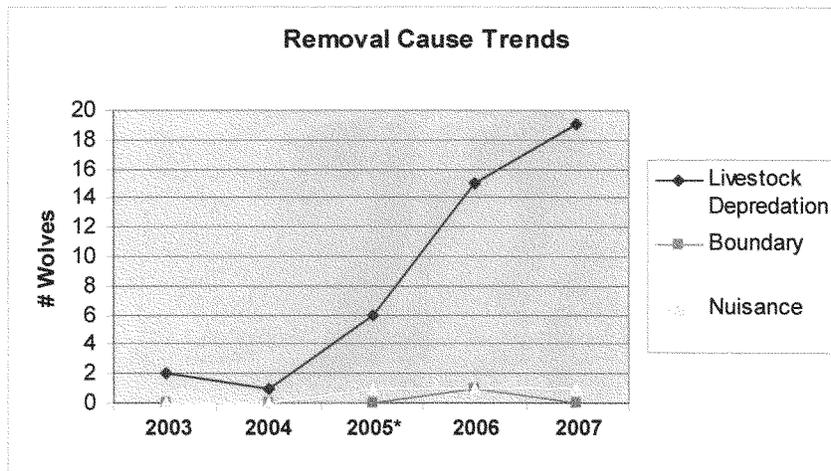


Figure 4. Trends in causes of removal of wolves from the BRWRA by agency managers from 2003 through 2007.

Mrs. NAPOLITANO. Thank you so much, Mr. Parsons. We appreciate that.

We have now Mr. Larry Irwin, Principal Scientist, National Council for Air & Stream Improvement. Thank you for being here, sir.

STATEMENT OF LARRY L. IRWIN, PH.D., PRINCIPAL SCIENTIST, NATIONAL COUNCIL FOR AIR & STREAM IMPROVEMENT, INC.

Mr. IRWIN. Thank you, Madam Chairman. It is really a delight for me to be here today. Like Jerry Franklin, I have been involved with the spotted owl for over 20 years and involved in providing scientific information to most of the governmental deliberations on behalf of that species.

As most everyone knows, many species that are listed under the Endangered Species Act are listed largely because of habitat loss and associated population declines. Making progress toward recovery therefore involves reliable answers to two primary questions. How many animals are needed, and how much habitat is needed to support them? Valid answers to those questions require a predictive link between habitat and population performance.

In the case of the northern spotted owl and the recovery plan released last week, maps of late successional and old growth forests form the backbone of the recovery strategy. That is important and reasonable, but it may well surprise you that maps of late successional and old growth forests do not predict barred owl abundance or their distributions or their population performance very well.

As a result, there are no confident estimates of how much habitat is necessary. The same is true for estimating consequences to the owl populations from habitat changes from implementing Federal forest management plans, such as the BLM's whopper. Maps of late successional and old growth forests fail the basic scientific litmus of reliability. There remains then an unsettling amount of scientific uncertainty for recovery planning.

Now, I concur with the primary elements, the nuts and bolts of the recovery plan, but in my view the picture is incomplete, and some parts of the picture are underemphasized. I think this Committee can do something about that.

Two primary topics I want to talk about are risk assessment and adaptive management. I would like to elaborate just a little bit. The threat to recovery from uncharacteristically intense wildfires has been raised in this hearing two or three times today. I think it remains underestimated.

Since the 1994 Northwest Forest Plan was implemented, unnaturally intense wildfires destroyed several dozen spotted owl sites and degraded many more. Certainly climate changes portend additional severe fires in the future that would disrupt the recovery network and be a problem for recovery.

Concern for these fires is even elevated because the most productive spotted owls occur in the forests that are at the highest degree of risk. Recurring drought, forest insect and disease epidemics and, as we heard, invading barred owls exacerbate those risks.

The final recovery plan identified them certainly, but recommended qualitative or informal analyses of risks within the fire prone landscapes. I believe the need for management of these land-

scapes is higher than that, and doing so requires formal, quantitative assessments of risk.

Certainly chronic changes in these forests have created negative consequences for the owls that are not well accounted for in the final recovery plan. These sites have been classified as suitable. The owls are abandoning them. They look to us because they have large trees and dense cover as suitable habitat. The owls are saying otherwise.

Something is happening internally, so there is a difficult problem we have to attend and, in fact, it is a paradox in that the treatments that might improve the habitat for these owls and reduce the risk of fire could also degrade habitat quality for the owl. That is a first order paradox that requires formal attention.

We have learned recently that habitat for the owl is indeed more than late successional and old growth forests. Details of forest stand structure, tree species composition, density of the vegetation on the ground matter.

The final plan described adaptive management as a means of identifying what those features are and how to apply them in management. My concern here is that adaptive management was first identified in 1990 to be applied to spotted owls. It has yet to be applied, even after three Administrations have gone by the wayside.

So I ask that this Committee provide the funding for the appropriate research and the appropriate technical personnel to, in fact, do formal risk assessments and truly apply adaptive management.

Thank you very much.

[The prepared statement of Mr. Irwin follows:]

Statement of Larry L. Irwin, Ph.D., Principal Scientist, National Council for Air and Stream Improvement, Inc., Stevensville, Montana

Chairman Rahall and distinguished committee members. I am truly honored to speak to you today. I am Larry Irwin, Principal Scientist and Western Wildlife Program Manager for the National Council for Air and Stream Improvement, Inc., or NCASI. NCASI is a non-profit, 501(c)6 environmental management and research organization with headquarters in Research Triangle Park, North Carolina. Since 1986, I have conducted research and contracted other scientists to conduct research on topics associated with forestry and various wildlife species, including the threatened Northern Spotted Owl, or NSO. Approximately half of our research funding comes from member companies; the remainder comes from collaborating private, state, or federal natural resource organizations.

I have conducted scientific studies involving habitat relationships and population dynamics among Spotted Owls throughout the 3 affected states, emphasizing the NSO. I have published over 30 scientific papers on NSOs, some 2 dozen of which appeared in peer-reviewed publications. Also, I am currently conducting three cooperative studies that involve measuring details of habitat conditions for Barred Owls and NSOs that occupy the same areas. Barred Owls recently invaded the Pacific Northwest and are strongly implicated in ongoing declines of NSO populations via competitive interactions.

By invitation from Dr. Jack Ward Thomas, now an Emeritus Chief of the U.S. Forest Service, I served as an observer/advisor to the Interagency Committee of Scientists who proposed the primary conservation strategy for the NSO in 1990. I wrote the chapter on adaptive management for that conservation strategy. The fundamental premises of that strategy have endured through subsequent iterations, including the recovery plan that was released late last week.

Like many species, habitat loss and associated population declines were among the major reasons the NSO was listed under the ESA. Recovery for the Northern Spotted Owl is predicated on preserving and restoring late-successional and old-growth forests (LSOG). Yet, a recurring challenge with recovering the Northern Spotted Owl and many other species in peril involves reliable answers to questions regarding how many animals and how much habitat are needed.

No one questions that LSOG forests are highly important to the ecology of NSOs. Yet, it may surprise you that after at least \$50million of investment in research and monitoring over the past 30 years, maps of LSOG forests do not predict NSO distributions very well. Perhaps more surprising, there are no strong correlations between NSO demographic performance and LSOG forests that would allow confident predictions of NSO population response to the recovery plan or to federal forest management plans based upon amounts and distributions of such habitat. Make no mistake, enormous scientific progress has been made, but an unsettling amount of scientific uncertainty remains.

Therefore, my purposes today are to address two topics described within the Final Recovery Plan for the Northern Spotted Owl that could be boosted by this Committee:

1. Risk Assessment as a means of responding to threats to NSO populations in fire-prone forests; and
2. Adaptive Management as a means of rapidly reducing scientific uncertainty by improving the ability to predict owl demographic performance in response to habitat provided through the recovery strategy.

A major take-home message is that there is a great deal of ecological variability within and among various forest types occupied by the NSO. Much of that variability was acknowledged but incompletely described in the Recovery Plan. Ecological variability means that a sustainable recovery strategy for NSOs must be multi-faceted and specifically orchestrated to learn from experience. I illustrate my points by briefly reporting on examples from research on NSOs.

I. RISK ASSESSMENT FOR SPOTTED OWLS IN FIRE-PRONE FORESTS

I concur with recent views expressed by Courtney et al. (2008) that the threat to NSO populations from uncharacteristically intense wildfires was been widely underestimated in the draft recovery plan, and I find that remains true in the Final Recovery Plan as well. That may have occurred because habitat loss via clearcut logging was considered to be a greater and more immediate concern. Also, a significant portion of the geographic range of the NSO involves moist forests less prone to uncharacteristic fires. Or, it may have occurred because NSOs have been observed persisting through some wildfires. Moreover, it might have seemed logical that wildfires are natural and therefore perhaps an important part of sustaining some forest ecosystems. I share the latter view to a limited extent.

However, dry fire-prone forests comprise perhaps as much as 40% of the geographic range of the NSO, so their contributions to recovery are paramount. And we know that intense wildfires destroy habitats. For example, unnaturally intense fires, such as the Tye fires in the eastern Washington Cascades in 1994 and the Biscuit fires in southwestern Oregon in 2002, destroyed several dozen NSO sites. The NSOs in the most intensively burned areas either died or emigrated. With ongoing climate changes, we can expect more such severe fire events in the future.

The Final Recovery Plan, acknowledging significant threats to NSOs in dry, fire-prone forests, calls for a “landscape management” strategy for the eastern Cascades through the California Cascades part of the range of the owl, and recommended informal analyses of associated risks. Below, I use examples to summarize the need for pre-emptive management and scientific support for formal risk assessments associated with active management of NSO habitat. After that, I end my presentation with a section describing options for reducing scientific and management uncertainty via adaptive management experiments.

A majority of NSO nesting sites in Washington’s eastern Cascades was selectively harvested several decades ago. These sites now support dense pole-sized thickets under the remaining, often disease-ridden trees. Such small-diameter thickets in the sub-canopies of Douglas-fir forests mixed with Ponderosa pine trees are consistent with changes that occurred after the onset of fire suppression. The combination of selective harvesting and fire suppression most likely inadvertently resulted in suitable NSO habitat. However, those owl sites are now at great risk of extensive habitat loss to uncharacteristic wildfires. The risk is of high concern because those forests include the areas where NSO reproductive rates are highest, a point left out of the Final Recovery Plan. An extended insect epidemic exacerbates the risk of intense wildfires.

The result is a “wicked” ecological problem in that the most productive NSOs exist in forests at greatest risk to uncharacteristic wildfires, yet fuel reduction treatments could conceivably reduce habitat quality for the owls, at least in the short run. That is a paradox of the first order.

It gets worse. Natural, late-successional dry forests in the eastern side of the Cascades and parts of the Klamath region contained frequent gaps in the forest canopies and patches of forest-floor shrubs. These features apparently resulted from fre-

quent light- to moderate intensity fires. Now, after decades of fire suppression combined with recurring drought and epidemics of insects and forest diseases, the old Douglas-fir trees are gradually being replaced by grand fir or white fir trees, which are more shade-tolerant. Forest ecologists have labeled that process “fragmentation in reverse”. It might also be labeled retrogressive succession.

These subtle and chronic changes resulted in negative consequences to NSOs that were not considered in the Final Recovery Plan. In a recent publication, we documented reduced reproductive performance by NSOs as well as site abandonment in such forests. Those events occurred even though the predominant overstory grand fir trees are old and large and no logging occurred during our study (the sites are in Late Successional Reserves, or LSRs, under the 1994 Northwest Forest Plan). Now, the increasing populations of Barred Owls seem likely to exacerbate the situation.

The negative effects of this subtle and chronic phenomenon of fragmentation in reverse or retrogressive succession on NSO population performance in dry grand fir or white fir forests are not widely understood or accepted. Possibly that has occurred because it runs counter to the preponderance of scientific research in the moist Douglas-fir/Western Hemlock zone that demonstrated the strong association between NSOs and pristine, late-successional and old-growth forests. The west-side paradigm has been extrapolated to dry-forests that are not pristine. Many of these eastside forests have features that characterize old forests, so they are deemed to be high-quality habitat. However, the owls are telling us otherwise. There, a custodial strategy for such forests is sub-optimal. The internal quality of those habitats has eroded over time and many owls (50 pairs in our study) have abandoned the affected stands.

The consequences of such chronic habitat quality loss to NSOs are seriously under-estimated. In the section below on relative risk assessment, I provide additional information that supports my view that the details of tree species composition and density matter greatly to NSOs, in addition to trees of large size and old age. To date, however, conservation planning and recovery for NSOs has made little or no distinctions among the species of trees that may dominate a forest. Fortunately, the Final Recovery Plan does acknowledge the possibility that composition may matter, and if so, it would be determined via adaptive management activities. I will get to that later.

It is important to note here that, in addition to providing for NSO recovery, the LSR network was developed to support other species that are associated with late-successional and old-growth forests. However, research by other scientists recently demonstrated that such unnaturally dense conditions and related compositional changes in dry grand fir forests are associated with reduced songbird species diversity and abundance, even though large old trees are present.

Both forest conditions that I’ve described—that is, forests at-risk to uncharacteristically intense wildfires and those in retrogressively advanced situations—are not sustainable. The decision to be made for such forests is not whether or not to manage them; the decision involves how to manage.

A. BUT WHAT SHOULD THE ACTIVE MANAGEMENT LOOK LIKE?

Aldo Leopold, the father of modern wildlife management, developed the central thesis of wildlife management, which holds that the same factors that historically destroyed wildlife and their habitats—logging, livestock grazing, farming, hunting, and wildfire—can be used judiciously and creatively to restore them. Many participants in endangered species recovery have forgotten that axiom. On the other hand, and in accordance with Leopold’s view, many forest-wildlife scientists do suggest that careful harvesting of trees can emulate some spatial fire patterns, or can approximate stand structures and composition similar to those created by fires.

Mind you, judicious logging alone cannot be expected to replicate all aspects of natural fires, due, among other things, to multiple successional trajectories that depend upon a variety of ecological processes associated with soils, moisture, activities of herbivores and post-disturbance weather patterns. Therefore, it seems reasonable to anticipate that prescribed burning might well be part of the NSO recovery toolbox, at least in areas with natural fuel loads. Here, I emphasize forests where prescribed fires constitute an unacceptable risk of growing into catastrophic fires until distribution and abundance of forest fuels, both live and dead, are treated mechanically.

As noted in the 2008 Final Recovery Plan, there is indirect evidence to support silvicultural programs that emphasize fuel reductions in the Eastern Cascades ecological province. For example, we found that understory hardwood (shrubs) were comparatively abundant around NSO nest sites in fire-prone Douglas-fir/Ponderosa pine forests. These hardwood species all increase after forest thinning as well as

burning. In addition, group seed-tree and patch-cut systems have been demonstrated to maintain the abundance, species richness and diversity of many small mammals, suggesting that important prey species can be maintained. In one eastern Washington Cascades study densities of northern flying squirrels, the NSO's primary prey, increased after partial harvesting that left large snags and downed woody debris.

B. EMBRACING RISK AND UNCERTAINTY: TECHNOLOGY EXISTS TO SUPPORT FORMAL COMPARATIVE RISK ASSESSMENTS

Recent assessments of the status of the NSO, such as the draft and final recovery plan and federal forest planning activities such as the BLM's Western Oregon Plan Revision (WOPR), included informal assessments of risks of uncharacteristic wildfire in fire-prone forests. To my knowledge, no assessments for the NSO have attempted formal risk analyses that might balance short- and long-term risks and benefits to NSOs of ecological restoration relative to minimizing uncharacteristically intense wildfires or reversing successional retrogression.

Fortunately, a special issue in *Forest Ecology and Management* in 2005 (vol. 211) illustrated analytical tools and decision-making procedures that can provide land and resource managers, and Congress, greater confidence in displaying short and long-term consequences of proposed actions. The special issue summarized the discipline of relative risk assessment, described state-of-the-art methods for predicting hazards and risks of uncharacteristic wildfires, and provided several case-histories for conservation of important ecosystems or species in peril that are subject to uncharacteristic wildfire. Two case-study examples were illustrated for spotted owls.

A lack of necessary and reliable analytical tools is often invoked by federal regulatory agencies to justify short-term custodial management (i.e., "preservation") over long-term restoration and dismiss formal risk assessment. NCASI, several federal and state agencies, and several private companies have been working since 1998 to develop new decision-support tools that can better quantify the relative risks of short-term preservation versus actively addressing long-term risks of uncharacteristic disturbances. In that endeavor, we asked a different question: "Do details for forest-stand structure and tree- and understory species composition matter to NSOs?" Such a question must be answered for describing habitat in terms understood by forest ecologists and managers. That effort, which I supervise, includes 9 individual study areas in western Oregon and northern California where over 250 spotted owls have been radio-tagged. That information has been combined into a model that now can be linked with established tools used by foresters for formal relative risk assessments: forest growth models, fire-risk models, and harvest scheduling with spatial constraints.

During that research we learned that habitat for spotted owls is more than late-successional and old-growth conifer forests. Hardwoods, particularly in forest stands near riparian zones in small-order watersheds are very important to spotted owls. In fact, habitat for the NSO is even broader than forests: in winter, some NSOs in the Medford, Oregon area descend to lower-elevations where they forage at night within south-slope manzanita brushfields. These brushfields contain only a few scattered trees and are maintained by frequent fires. There, they acquire woodrats, a major prey item.

We have also learned in early analyses that the likelihood of an owl using a forest stand varies with increases in basal area of Douglas-fir trees. As shown in the attachment graphics, the pattern is hump-backed, which means that Douglas-fir stands can be either too sparse or too dense. Other important factors include distance from nest sites, snag density, downed woody debris, understory shrubs, and tree species composition. For example, in mixed conifer stands, Ponderosa pine seems to exert a negative influence on NSOs. That suggests that ecological restoration that removes small-diameter Douglas-fir trees to promote old-growth Ponderosa pine is likely to work against recovery of the NSO. Importantly, densities of large trees and overstory canopy cover, 2 primary factors often used to map suitable NSO habitat, were not strong predictors.

In my opinion, deeper understanding and stronger technology for formal comparative risk assessments that include active management will help promote recovery of the NSO. It will also result in more-informed natural resource plans regarding treatments that provide satisfactory protection while also reducing risk of catastrophic wildfire.

Because of high variation among physiographic provinces, these topics are best addressed at the level of a national forest or BLM district. Thus, I encourage this committee to consider promoting and funding the necessary personnel and additional risk-assessment technology that could accelerate both the recovery efforts and

judicious federal land management planning in forests occupied by NSOs that also are prone to uncharacteristic wildfires.

II. REDUCING SCIENTIFIC UNCERTAINTY: ADAPTIVE MANAGEMENT CAN PROMOTE A MORE SUSTAINABLE FOREST AND MORE EFFECTIVE RECOVERY

Prior to widespread application in site-specific or watershed planning for silvicultural intervention within or near NSO sites, models such as that described above should properly be considered as “working hypotheses” for testing and refinement via well-designed adaptive management experiments. Such ideas about utilizing adaptive management were emphasized in the Final Recovery Plan, but only for the Klamath region in southwestern Oregon and Northern California. However, I believe the Plan may have been overly optimistic in presuming that adaptive management will truly serve NSO recovery.

The Interagency Scientific Committee (ISC), the Forest Ecosystem Management and Assessment Team (FEMAT), and previous recovery plans all recognized and promoted adaptive management as a means for identifying silvicultural practices on federal lands that might hasten re-growth of LSOG forests and thereby sustain species such as NSOs. And 10 federal Adaptive Management Areas were established via President Clinton’s Northwest Forest Plan in 1994. Unfortunately, recent reviews point out that adaptive management has become a buzzword and its promises have not been fully realized.

For example, it is now nearly 15 years since adoption of the Northwest Forest Plan, and no federal research has been undertaken to evaluate how NSOs might respond to habitat manipulation in an adaptive management framework. Wildlife scientists have repeatedly demonstrated the negative consequences clearcutting within owl habitats, but know almost nothing about the effects of numerous combinations of other forest management practices such as thinning, selection, or shelterwood systems of silviculture.

Further, the 1994 Northwest Forest Plan assumed that the interim no-touch, “default buffers” along stream courses would be altered and some management allowed once watershed assessments were completed. That would have afforded additional opportunities for “adaptive management tests”. However, these redundant buffers remain in place, and are predicted to lose their hardwoods over the next 50 years. As stated above, this could have negative effects on NSO recovery because hardwoods are important to them via their prey.

The crucial aspects of the Northwest Forest Plan related to “adaptive management”, that is, the 10 adaptive management areas, thinning or partial harvesting in stands in LSRs, and adjustments in widths and silvicultural practices related to riparian buffers, have not been aggressively utilized to provide practical insights and new technical information. There is little to suggest that yet another recommendation for adaptive management, as indicated in the Final Recovery Plan, will actually be implemented.

I remain firmly convinced that new scientific information is crucial to developing responsive management to promote recovery of NSOs over the long run, while taking into account the dynamic nature of their habitats. The “static habitat” approach has dominated and the risk of loss of those habitats from catastrophic fire or degradation of habitat quality via successional replacement, has progressively increased.

Diverging a bit from the Final Recovery Plan, I believe that the success of innovative forest management strategies for dry, fire-prone forests requires research and monitoring within an adaptive management framework in the eastern Cascades as well as the Klamath region. Success depends upon integrating the knowledge of forest managers and scientists. A complete agenda must address landscape-scale effects on northern spotted owls as well as other wide-ranging species.

However, some observers have wondered if it is truly possible that adaptive management, in concert with collaborative and social natural resource management, can account adequately for real and perceived risks and scientific uncertainty in addition to environmental and social values over long- and as well as the short term. The biggest challenge could well lie in promoting the public will for implementing active forest management programs that seek to balance short-term conservation needs with long term forest ecosystem sustainability. Yet, in practice, most of these “collaborative” efforts have not held together for long. To date, little interest has been forthcoming among federal regulatory wildlife biologists and scientists for conducting adaptive management experiments on behalf of the Northern Spotted Owl.

This Committee can do something about that. I concur with the Recovery Plan’s recommendation for a panel of wildlife ecologists, forest ecologists and forest managers to generate the salient questions and appropriate designs that can address

them ways that maximize effective communications among what traditionally has been somewhat disparate disciplines. Basically, that requires significant investments in research funding. Active adaptive management requires simultaneously implementing more than one recovery option in areas such as the 10 federal Adaptive Management areas, the Klamath or eastern Cascades. Those options that demonstrably provide greater success can be refined and applied more broadly.

SOME POTENTIAL TOPICS FOR ADAPTIVE MANAGEMENT

The predictive relation between NSOs and habitat conditions is weak and must be improved if we are ever to use habitat as a surrogate for monitoring progress toward recovery. Doing so will require manipulative experiments within an adaptive management framework. Maps of LSOG forests provided a useful and commonsense place to begin designing a sustainable recovery strategy and articulating that strategy to Congress and the public. Yet, LSOG is a categorical description of a particular forest successional stage, and successional stages have never been demonstrated to have reliable predictive relationships with demography of any wildlife species. In fact, a habitat modeling effort in northwestern California that included only LSOG ranked about 50th among a suite of more than 100 candidate models that were tested against field data on NSO locations. In my opinion, habitat for the NSO, at least in fire-prone mixed composition coniferous forests, has been measured and modeled poorly, whereas NSO demography has been well-captured by sophisticated statistical models.

It is oft-stated that the “devil lurks in the details”. In the case of the Northern Spotted Owl recovery, details that matter greatly to the owl were overlooked in our zeal to protect LSOG forests. As noted above, details of composition of forest trees, tree density, understory vegetation and abiotic conditions must be accounted for. Linking those features with measures of NSO population performance involves detailed forest inventories, which generally have not been available to federal researchers at a spatial scale that has been matched temporally with information on the owl. Therefore, in addition to supporting formal relative risk assessments, I urge this committee to identify and allocate the necessary resources for improved forest inventories on federal lands. Such details also provide an important means for blending wildlife science with forest ecology.

Finally, a note about the invading Barred Owl. As reported in the Final Recovery Plan, some observers believe, with some limited supporting evidence, that the Barred Owl is now the biggest threat to NSO recovery. As a result, some believe that lethal control of Barred Owls is necessary, at least in the short term. There is also evidence that the Spotted Owl might be better able to exploit drier, mixed conifer forests than Barred Owls. If that is so, it places an even greater premium on active management to restore dry, fire-prone forests at risk to uncharacteristic wildfires and those degraded by retrogressive succession. This will require adaptive management experiments to determine if forest restoration may tilt the balance in favor of the NSO.

The Northern Spotted Owl stands a good chance of recovery if the right questions are asked, if the habitat features that matter to owls are measured and provided, and if Congress directs regulatory and land management agencies in ways that can embrace and reduce scientific uncertainty. Without such direction and without adequate funding, I fear a legacy of benign neglect will prevail. We’ve made outstanding strides. Yet there is much work, good work, still to be done.

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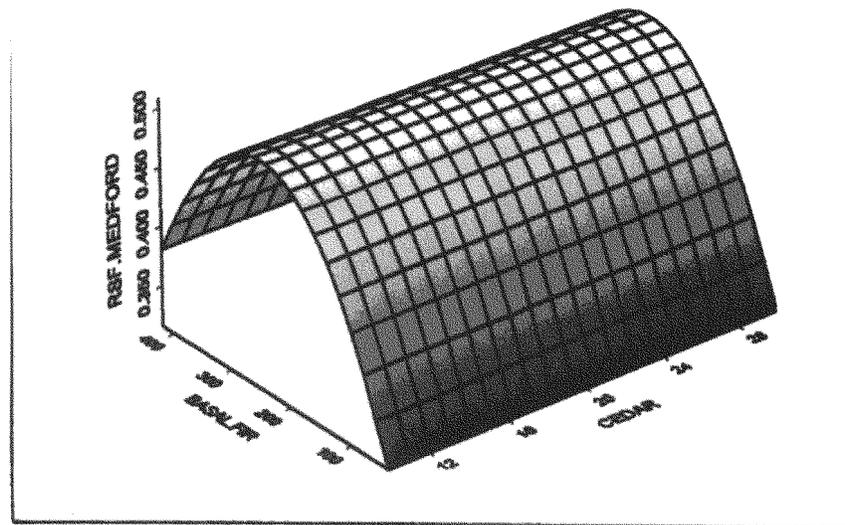
ATTACHMENT 1

This attachment provides graphics that display a portion of a computer-based model that summarizes factors influencing habitat selection by Northern Spotted Owls at Medford, Oregon (A), and by California Spotted Owls near Chico California (B). The data came from following radio-tagged spotted owls for up to 5 years in each area. The model is known as a "resource selection function, or RSF. The graphs show that forest stands can be too dense for optimal use by spotted owls, and also that different tree species have different effects on spotted owls.

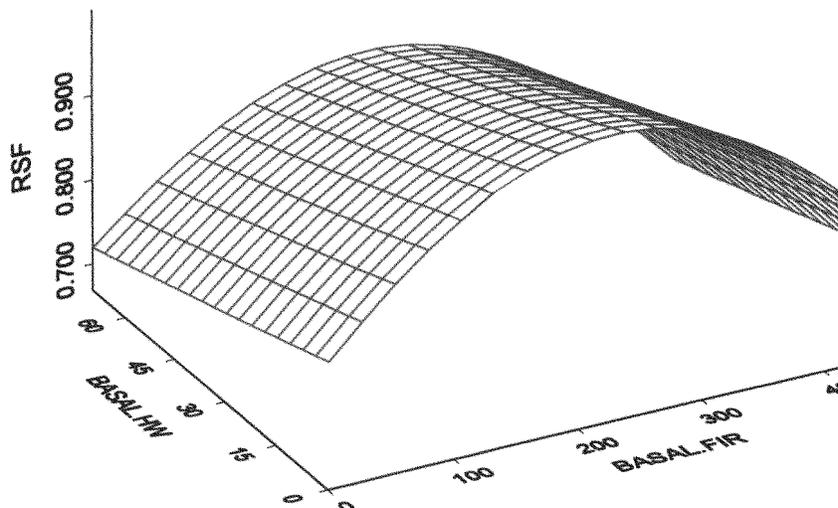
The vertical Y-axis in each graph represents the relative likelihood of a forest stand being used by a spotted owl for nocturnal foraging. The BASAL.FIR X-axis in each graph indicates likelihood of use of an individual forest stand by an owl is highest at intermediate levels of basal area of Douglas-fir trees, and suggests an optimal range of approximately 150-225 square feet of basal area per acre. Basal area is the sum of the cross-sectional area occupied by individual trees. In A, the CEDAR X-axis indicates that basal area of Incense cedar trees has a weak, but positive influence.

In B, the likelihood of use of a forest stand by a spotted owl increased with increasing basal area of hardwoods, exemplified in the graph by the axis labeled BASAL.HW. Hardwoods are known to be important to the owl's small mammal prey.

The overall computer models include other factors, such as distance to streams and basal areas of other tree species. They can be used in conjunction with forest managers' tools such as forest-growth and fire-risk models to estimate the relative effects on spotted owls in the short- and long runs from thinning or partial harvests that reduce tree densities or fuel loads. Both graphs indicate relatively high values for forest stands with high basal areas, which often characterize old-growth forests.



A.
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B.

Response to questions submitted for the record by Larry L. Irwin,
Principal Scientist, NCAS

Questions from Congressman DeFazio

- 1. Do you agree with Dr. Franklin's testimony that the science in the Draft Plan on habitat goals was flawed, and the Final Plan largely remedies these flaws?**

Scientists are risk averse by nature, and it is easy for a scientist to identify sections of forest management or recovery plans that may not apply all of the relevant science. Despite that, I generally agree with Dr. Franklin, although I would describe the science in both Plans as more or less incomplete rather than flawed.

- 2. Do you agree that it is in the public interest for science-based plans such as Recovery Plan and WOPR to be evaluated and reviewed by eminent scientists?**

No. I would agree to the question if the eminent scientists chosen for reviewers are thoroughly aware of the crucial and locally important details. The scientific record on spotted owls, for example, is not entirely complete, clean or clear, and the details matter greatly. In such cases, general scientific knowledge cannot replace intimate personal familiarity.

- 3. Do you agree that there are still uncertainties as to whether the Final Plan is as effective as the Northwest Forest Plan at protecting owl habitat?**

Of course, there will always be scientific uncertainty as well as management-decision uncertainty. I believe the Northwest Forest Plan was deficient in several topics relative to owl habitat, and its implementation relative to question 4 below was lacking. The new Recovery Plan makes a reasoned attempt to remedy some important uncertainties, yet it remains to be seen if those suggestions can be fully implemented.

4. The plan relies heavily on “adaptive management”, which is a science-based approach. Given the answers to 1, 2, and 3, should we leave implementation of WOPR and the Recovery Plan in the hands of government agencies?

Of course, both the WOPR and the Recovery Plan are government constructs and therefore should be implemented by cooperating government agencies. Yet, I believe that scientists should be closer to the proverbial driver’s seat in informing land manager’s decision making. I continue to encourage both the BLM and U.S. Fish and Wildlife Service managers to skillfully engage academic and other scientists in formally identifying, managing, and implementing forest management in ways that reduce the attendant risks, as stated in my testimony. In fact, I remain hopeful that Congress can accelerate the direct application of science as part and parcel of land management policy as a continuous learning process, which is true adaptive management. Adaptive management was proposed by the ISC in 1990, included in the Northwest Forest Plan, and promoted in the Final Recovery Plan for the Northern Spotted Owl. It was applied passively to a rather limited extent, via trail-and-error. It has yet to be executed actively—doing so involves embracing uncertainty in a formal manner.

5. Dr. Irwin, Dr. Franklin’s testimony expresses the concern that fire represents a great threat to spotted owls in dry forests and in southern Oregon. Do you share this concern?

Yes. One needs to look no further than the 2002 Biscuit fires, which apparently forced some 50 pairs of spotted owls to seek other habitat, which, of course, doesn’t exist or is already occupied.

Mrs. NAPOLITANO. Thank you very much for your testimony, sir.

I have a question to pose to all of you. Are you in a hurry to return to where you came from? We are going to be voting for about 45 minutes to possibly an hour. I would like to come back and continue a line of questioning for the record. If you are with me, I would like to know if you can be back. Those that can, fine.

I will return then and be with you, so I will recess until we have votes. We have about six votes. It may take about 45 minutes, and then we will be back and resume the line of questioning. Thank you.

This will be for the record. Thank you.

[Recess.]

Mrs. NAPOLITANO. The oversight hearing on “Deception: Do Endangered Species Have a Chance?” will reconvene. I apologize for the delay and thank you very much for standing by and coming back.

This is a matter of great importance to this Committee, especially to people like me who have a great concern about some of the Administration’s findings or nonfindings, if you will, over the last few years that have placed some of our protected species in the endangered area and how do we work cooperatively, both the farmers, the business, the fishermen, with the environmentalists and the scientists to be able to ensure that we do not lose any more species forever.

I have children and grandchildren and a great-grandson, and to me it is important that they are able to enjoy and, if you will, see these species that still are with us, so with that I will move on to the questions. Part of what I would like to do, and I hope some of the other Members will come in shortly. Most of them that I talked to have meetings, so we will accept them as they come in.

First, to Mr. Scott Kraus. In regard to NOAA, they have raised concerns with the sensitivity analysis conducted by the White House Council of Economic Advisors. Apparently, the Council

changed the National Marine Fisheries Service findings that five endangered right whales were seriously injured by ship strikes to “not serious.” What is the significance to this change, and what can happen?

Mr. KRAUS. Well, it is perplexing at very best. Normally when you run a sensitivity analysis on any kind of model like this you want to select your data randomly, and they didn’t do that. They selected five animals. They changed their status.

I don’t really understand the reasoning behind it because it doesn’t follow any accepted statistical procedures. I don’t understand the rationale. We don’t understand it.

Mrs. NAPOLITANO. Was there any explanation? Was anything questioned?

Mr. KRAUS. Not to my knowledge.

Mrs. NAPOLITANO. Was this brought up to them at one point or another about being too focused and not using normal and standard procedure?

Mr. KRAUS. I only have secondhand information, which indicates that the NOAA scientists challenged the analysis as inappropriate. That is all I know. I don’t know.

You know, the scientific review that is being challenged by the Council on Economic Advisors, we are not privy to that external. There is no external peer review by scientists who actually work in the field, so we don’t know what they are doing.

Mrs. NAPOLITANO. There were no findings revealed, none shared?

Mr. KRAUS. There is no call for public review of the findings, and there is no information that we are aware of in the public domain.

Mrs. NAPOLITANO. What would benefit? If there were a change, what would you feel would be necessary to be able to have that information shared so that there would be more—how would I say—openness and—

Mr. KRAUS. Well, transparency would help, but it also helps to have expertise in the field in which you are being critical, you know.

The whole field of biostatistics is quite complex and sophisticated. It is not something that you pick up overnight, and it is certainly not something that nonbiostatisticians should be challenging without a comprehensive understanding of the questions.

Mrs. NAPOLITANO. I am assuming the economic advisors do not have qualified scientists or scientists working for them?

Mr. KRAUS. I honestly don’t know but, if I were a biostatistician, that is not the first place I would look for a job.

Mrs. NAPOLITANO. Thank you for your honesty, sir.

Mr. Parsons, you stated that the current management practices and Agency policies may cause the extinction of the Mexican wolf in the wild. Are we at the point principally because of political calculations favoring special interests? A failure of leadership? A lack of resources? All of the above or any other reasons?

Mr. PARSONS. Madam Chairman, I believe probably all of those reasons have some application. I can give you a specific example of how politics might have influenced some decisions back in February of 2005.

This would have been at a period when the population had just been documented by the Agency to have declined by 20 percent

over the previous year. Congressman Pearce held some meetings in the region for constituents who were opposed to the wolf recovery program, primarily livestock interests, and invited high level Fish and Wildlife Service officials to attend those meetings.

Within three months of those meetings, new procedures were proposed. One was a moratorium against any new releases of wolves. The other was this Standard Operating Procedure 13, which we have shown as clearly the cause for the population decline.

So if you are applying science to an adaptive management process and you are looking at a declining population you would want to implement measures that would give wolves more protection and reduce the amount of taking by the Agency because that is the primary cause for the population decline. Rather, the Agency issued these new procedures that would have the opposite effect.

Now, interestingly they issued these procedures while they were in the middle of a broader public review, an open public comment period on their internal five-year review of the program where they had made 37 recommendations for changes that would be looked at in a proposed rule revision process.

In the middle of that public process, the purpose of which was to provide the Agency with the data they needed to make appropriate changes to the program, they interrupted that with this process within a process to implement these new rules that we clearly pointed out to them in our comments, which I have submitted for the record, would cause further decline in the population. So that is a political, I think, example.

Mrs. NAPOLITANO. Are you aware, sir, if this interruption, this new process that was injected in between, was added to the review for a review of those that were supposed to—

Mr. PARSONS. It was not. It was carried out as a wholly separate process. We pointed that out in our comments that it seems kind of odd to have a process within a process, particularly when the overarching process is the one that is providing you with the information to make well-considered changes in the program.

Mrs. NAPOLITANO. Is that five-year review a mandate?

Mr. PARSONS. It is not a mandate, but it is published and accepted now.

That was finished in I think July of 2006 with 37 specific recommendations—these are internal—from this Adaptive Management Oversight Committee which the Service adopted exactly as presented, even though there was a large body of science-based public comment that countered many of those. Those are now adopted and will actually guide the Service internally in this rule revision process.

Mrs. NAPOLITANO. So, in essence, the recall for a five-year review is not something that they are going to be utilizing. Rather, they will use the new process?

Mr. PARSONS. Well, they should be utilizing it. It is actually required in the regulation that reviews be done at three and five years and so that is why they were doing that review. It was a legal requirement.

Mrs. NAPOLITANO. Well, that is why I asked initially if it was a mandate, a legal requirement.

Mr. PARSONS. Sorry, I misunderstood. Yes.

Mrs. NAPOLITANO. OK.

Mr. PARSONS. Resources you asked about, if I may. So far there have been 26 wolves taken illegally by nongovernment personnel—poaching, if you will. Only one of those cases has been resolved from a law enforcement perspective.

In other words, there has only been one arrest and conviction on 26 cases and so that might suggest that from a resource standpoint they could use some more law enforcement help out there to try to catch these poachers.

Turnover in the personnel in the program both at the Federal and the state level is rampant. There is constant turnover, and right now they are in the middle of catching up again and staffing up to adequately run the program.

Mrs. NAPOLITANO. OK. So there are other inherent issues involved in being able to protect the Mexican wolf I am hearing?

Mr. PARSONS. Yes. Law enforcement is a big one, but I should point out that the amount of wolves being taken out by the Agency through these management measures that I think are out of line is three times those that have been taken out by illegal activities.

Mrs. NAPOLITANO. Are you aware of any instances where the wolves may have been enticed or baited into situations resulting in livestock depredations?

Mr. PARSONS. Yes, ma'am. There was an article published in the High Country News late last year, late December, where a rancher in the area, according to the reporter, explained to him how he conducted a branding operation within a half mile of a known den site for the Mexican wolves and then later that evening left a pregnant cow who was expected to give birth that night out unprotected on the open range in the vicinity of that den with the idea that it would cause a depredation.

This was a situation where the wolves in the area had two depredations already. A third would mean that the Agency took them out. In fact, that depredation did occur that night. The Agency, not knowing that it was a set-up, went in and actually killed a wolf, the alpha female of a pack there called the Durango pack.

As a result, the rancher submitted claims to the Defenders of Wildlife for compensation for those animals and received I believe \$2,400—\$2,000 for the mother cow and \$400 for the calf as if it would have grown up and be sold at market.

Whether it is true or not, because the rancher has since denied having said those things once the article came out. Whether it is true or not it illustrates the perverse incentive of having a wolf control program operating simultaneously with a wolf compensation program.

You know, I in my own mind predicted that such a scenario might play out, and it looks like it has.

Mrs. NAPOLITANO. OK. Thank you very much.

For Mr. Scott Hoffman Black. GAO's review found that someone besides Julie MacDonald overrode scientists' recommendations to list the Miami blue butterfly. Scientists had found that three of the five factors determining whether the listing is warranted were met.

Does the Endangered Species Act allow listing officials to ignore scientists' recommendations to list a species because a state management plan or captive bred population exists?

Mr. BLACK. No, it does not. The Endangered Species Act does not allow for the Federal government to pass off responsibility to the states, which is basically what that official in this case was saying that he did. He was passing off responsibility for management of this species from the Federal government to the state.

Also, I would contend that even though the state—and I want to commend the state—the state stepped in where the Federal government would not, and has actually tried to be a good actor in protecting the species. That said, their Endangered Species Act is not nearly as strong as the Federal endangered species statute, so they are not able to truly protect this animal.

When the U.S. Fish and Wildlife Service made this decision, or one official it seems made this decision, there were less than 100 butterflies out there. I mean, we are talking about 100 butterflies. They are almost gone, yet the Federal government said that this species did not meet the definition of being endangered under the Endangered Species Act.

Mrs. NAPOLITANO. Based on what findings?

Mr. BLACK. Well, they based it—and we have been seeing more of this—they have based it on what state government was going to do for the species. They based it on a future projection that the state would be able to manage and protect this species and recover it is basically what they did.

Mrs. NAPOLITANO. But was there consultation with the state to be able to come to that decision?

Mr. BLACK. I wasn't in between them and the state, but as far as I know, no. The state moved forward on their own because the Federal government was not moving forward. The state stepped up. They were a good actor. They listed the species. They funded a captive rearing program.

As we know from Dr. Jaret Daniels, who is the world expert on this species, that has not been enough. We really needed the Federal listing of the species so that we could really come up with good recovery areas, have the funding to actually recover the species.

Also a big issue has been mosquito control. We are all concerned about mosquitos and mosquito borne diseases, but in Florida mosquito control trumps their endangered species law so there are areas that you cannot recover this butterfly under the state statute because there is mosquito control going on at those sites, so an endangered species listing was truly warranted, and they should have taken action.

Mrs. NAPOLITANO. But did the mosquito control abatement possibly hurt the butterfly?

Mr. BLACK. Undoubtedly. One of the stated reasons for the decline in this butterfly is pesticide use for mosquito abatement. They think that largely losses on the mainland were due over decades to mosquito control.

Mrs. NAPOLITANO. That is interesting because in my area, back in my former days, we worked with vector control, and part of that was mosquito abatement. What they did was they sterilized mosquitos and released them.

That seemed to be very, very effective at that point. This is I am talking 10 or 12 years ago. I am not sure whether any technology is being used, but certainly there are predatory animals for mosquitoes that possibly could be bred to be maybe more—I don't know. I am just reaching. Besides using pesticides that are going to harm other species.

Mr. BLACK. There are many other options for mosquito control other than broad spectrum insecticides. The problem often is county governments who often run the vector control boards want to look like they are taking action, and having spray out there looks like they are taking action, even when oftentimes the efficacy, the effectiveness, of that spraying program nobody has even seen whether they are working or not. So that said, there are other options.

Mrs. NAPOLITANO. Yes. I think you go beyond that because some of those pesticides are going to go into your groundwater.

Mr. BLACK. Yes, undoubtedly in the future. You know, it is an interesting conundrum because we have ramped up pesticide use for mosquitoes. We are getting a little off the Endangered Species Act, but for mosquitoes because of West Nile virus.

I feel really bad for anybody whose family member has died of West Nile. I have two children. I would not want to see that happen. That said, we really don't know the ramifications of this ramped up pesticide use on our water quality, on cancer rates or on the decline in species.

Mrs. NAPOLITANO. Has the state done any research, done any kind of R&D, to be able to determine whether or not that has hurt more than helped?

Mr. BLACK. Most states do not, and I don't know if the State of Florida has done that research on that efficacy, but the problem usually is that most of these mosquito abatement boards are county so that it is this diffuse network of county boards that do mosquito abatement, oftentimes communicating some with other counties, but there is usually not an umbrella in many states, and again in Florida.

But the main issue is the Fish and Wildlife Service had jurisdiction over that species. It was truly endangered. Everybody in the Agency from the field office to the regional office to the national office agreed that it should be listed, and it sounds like one person made a decision that it shouldn't.

Mrs. NAPOLITANO. Thank you very much.

I would like to call on my colleague, Mr. Holt. Thank you for coming, sir.

Mr. HOLT. Thank you, Madam Chair. I thank the witnesses for coming today on this serious issue.

There is so much to talk about regarding science and environmental protection in general, but let me begin in the limited time I have to direct a couple questions at Scott Kraus if I may.

In documents we have, NOAA has raised concerns with the sensitivity analysis conducted by the Council of Economic Advisors. Evidently the Council changed the determinations made by the National Marine Fisheries Service from a category of "seriously injured" for whales to "not serious."

I would like to know what is the assessment of the process that the National Marine Fisheries Service uses to determine the seriousness of an injury and whether this change was appropriate or how it came about. It seems a little puzzling to me that someone within the Beltway would somehow change the designation of something that happened in the field.

Mr. KRAUS. Well, the serious injury determinations are made by a panel of veterinarians and biologists familiar with the animals, and they have a pretty rigorous review process that goes on as animals are being assessed. It is actually an on-line process.

It is pretty much informed by the science. That is to say because we track all right whales in the North Atlantic individually, we know a lot about the outcome of injuries that happened in the 1990s or earlier and so we actually know quite a bit about when an injury is serious or not, and all that information is fed into the assessment that NMFS makes about whether an injury is serious or not.

As for the way the Council looked at or pulled out or changed the assessment, it appears to be wholly inappropriate.

Mr. HOLT. How did the change actually take place? Do you know?

Mr. KRAUS. I don't have that information. I understand they changed five animals from "considered to be seriously injured" to "nonserious injuries," but the rationale for that is not clear.

Mr. HOLT. Am I correct that this seemed to be a change that was made inside the Beltway?

Mr. KRAUS. I believe that is correct.

Mr. HOLT. OK.

Mr. KRAUS. It was done by the Council.

Mr. HOLT. Not many whales come up the Potomac, I guess.

Mr. KRAUS. Probably a limited amount of expertise in that area, yes.

Mr. HOLT. OK. Thank you, Madam Chair. If I may, I will proceed with some other questions.

Let me turn if I may to Francesca Grifo. Your organization and others have published a great deal about the perversion or misuse or abuse of science and a good process for answering questions about endangered species and a number of other things.

What steps should the Department of the Interior and the Fish and Wildlife Service take to ensure scientific integrity? Do you have specific recommendations that we should somehow codify, whether in law or in procedure?

Ms. GRIFO. Thank you for that question. I like to say that this is a very depressing and disheartening problem, but it certainly is not a problem without a solution, and I think it is important to talk solutions.

Mr. HOLT. And if I may say, in asking the question really what I meant is how we can get both good process for good decisions, but also good support and protection for those making the decisions so that we can get good decisions.

Ms. GRIFO. Absolutely. We have solutions that I will get to in a second that are very specific to Interior and this particular problem, but I do want to say, because I think what you are referring

to are these broader issues that really affect Federal science as a whole.

As you say, we have published a lot, and I would just refer you to "Federal Science and the Public Good," which really does have a very extensive solution section that cuts across agencies and gets at some of the issues that have come up here, issues of protecting scientists, issues of transparency, issues of the way science gets into the decision-making process and so on, all of which are very important.

Specifically in terms of Interior, I guess it is particularly disheartening to be here a year later, having made a lot of these same claims and allegations and provided a lot of evidence a year ago, and yet what have we seen? My mind goes to something that perhaps we can do immediately.

I mean, one is obviously the Whistleblower Protection Act is sitting right now in a conference committee. The House version, which was passed by a great majority, has specific protections for scientists who want to allow the world to know that this kind of interference is taking place.

The Senate version does not, and obviously it is very important that that House language stays in the Senate version. I realize I am speaking to the converted here, but nonetheless that is happening right now.

Another thing that could happen right now is that each of these bad decisions has enumerable consequences down the line, biological consequences for the species that we are talking about, as well as land use decisions that are made, so when you start with non-robust science the consequences just explode outward in large, concentric circles, and so I guess I would hope that perhaps this Committee could work closely with the Appropriations Committee to say, "Let's stop funding the consequences that are coming out of these decisions that we know are tainted."

I mean, we have presented a list of 80 species that are just a compilation of many different investigations, so we know there are a large number of things happening, a lot of species that were interfered with in Interior, and it seems that perhaps that tool might help us to slow down those consequences while we systematically and systematically go back in and take away the causes.

But in addition to that, obviously the ethics policies that are out there are not working. There are problems with both the Professional Code of Conduct at Fish and Wildlife in that it is only Fish and Wildlife. It doesn't extend to Interior. It doesn't extend to those very important conversations between Interior and Fish and Wildlife and so on.

Mr. HOLT. Would you say that code of conduct is worth extending?

Ms. GRIFO. Yes. I believe there is a basis in there of a good first step. I mean, as in all of these things, it would be great if there was a process that involved stakeholders and comment on what these policies should look like, but it is a very good first step I would say.

Mr. HOLT. Would any of the other witnesses care to comment on that request?

Ms. GRIFO. Yes. I mean, it is not perfect. Don't get me wrong. Yes.

Mr. HOLT. Yes, sir?

Mr. IRWIN. Thank you very much for the opportunity. As a scientist, you should know that science isn't pure. There is good science and there is not so good science. The process of delivering good science is fraught with human frailty because some people don't like the new science that might be coming out.

I just want to point out to you that it is a brutal process. We muddle through much like the attorneys do and our lawmakers, but it is not perfect.

Mr. BLACK. I would just like to concur.

Mr. HOLT. Of course, I must say part of the point of science is to have a process to protect our ourselves from self-deception and imposed deception. It is that process that allows fallible scientists to do excellent work. It is the process that appears to me to have been compromised and contaminated in a number of instances.

Yes, sir?

Ms. GRIFO. Go ahead.

Mr. BLACK. I just wanted to concur with Dr. Grifo that it is a good first step, but even within the U.S. Fish and Wildlife Service I am a scientist. We are not an organization that—you know, we are not one of the legal eagles out there. We work science-based to try to work with scientists on land management issues.

I get calls from Fish and Wildlife Service scientists from their home because they don't want to speak out—they feel they can't speak out—on some of these issues, and we really do need to extend that code of conduct and maybe even make the code of conduct more rigorous so that doesn't happen.

I should never get a call at night from somebody who is concerned about their job to tell me something that they should be able to tell everybody in the light of day. That is all I wanted to say.

Mr. HOLT. Have you looked at the whistleblower protections that are currently in conference here? Do you think that would provide enough protection so that the scientists wouldn't have to call you at home and interrupt your weekend?

Mr. BLACK. From what I know and from the House version, I believe that it would. Of course, Dr. Grifo can speak to that much better than I can.

Mr. HOLT. OK. Thank you.

Ms. GRIFO. I just want to add that in my testimony there are some concerns about that Fish and Wildlife code. It is not perfect. I just don't want to leave that impression.

Mr. HOLT. Yes. Thank you.

Mr. PARSONS. If I may briefly? We heard this morning in the Agency's testimony common reference to a term called adaptive management, which in fact is a very rigorous, science-based process for making decisions where you obtain data through monitoring and research, and then you feed that back into the front end of the process and make decisions that make sense based on the science.

Just a brief example from the Mexican wolf program is this five-year review that resulted in 37 internal recommendations for improvements to the program. When we analyzed those through the

Rewilding Institute, and I should add we have a cadre of Fellows, some of whom are world-renown scientists like Dr. Michael Soulé, for example, who look at our comments and sign onto them.

We found that none of those 37 recommendations would have any identifiable positive effect on the status of the Mexican wolf for years to come, two to three to perhaps several more years. In fact, there were four of those provisions that we expect would have such a negative influence on the program that within our community we dubbed them the four poison pill provisions of the 37 recommendations for how the project should be changed.

Now, this is guiding at least the internal process of a rule revision that is now in a NEPA process. The scoping is done, and they are going to be developing a draft EIS. They use that term “adaptive management” a lot, but I think it is being used very loosely and more as a buzz word to make us think they are doing that when, in fact, they are not.

Mr. HOLT. Thank you.

Thank you, Madam Chair.

Mrs. NAPOLITANO. Thank you.

Mr. Wittman? Thank you for coming, sir.

Mr. WITTMAN. Thank you, Madam Chair. I have a question for Mr. Irwin.

I am curious if you could explain to us the concept of adaptive management and just kind of give us a brief overview of that concept?

Mr. IRWIN. We just heard a comment on that from my compatriot here, but I would broaden it a little bit in that true adaptive management, as it might apply to forest management, links researchers and scientists with managers to identify possible solutions to various problems, implement more than one solution or one feasible solution simultaneously, evaluate the consequences perhaps on a relatively small area and choose which of those options seem to work, discard those that do not. That is the true concept of active adaptive management.

The way it has been practiced is passive adaptive management, which is what Mr. Parsons just described to you, where learned people get together, decide the best direction to take, determine later whether that was right or maybe needs some adjustment with new information. That is the passive process.

The active process implements more than one option simultaneously, gathers scientific data and proceeds accordingly.

Mr. WITTMAN. Another question. You state that in certain forest types, such as mixed conifer stands with Ponderosa pines, density of large trees and overstory canopy are not strong indicators of northern spotted owl preference.

Has anybody identified what those strong indicators might be within certain forest types? Would adaptive management aid in discovering accurate indicators? If so, maybe can you explain how?

Mr. IRWIN. Well, indeed we have been working cooperatively with the Forest Service, the BLM, two state forestry agencies and a number of private companies who asked that very question. We know now that the details matter.

It turns out that when you examine where spotted owls spend their time and compare that to random positions on the landscape

you find that a number of factors influence their decisions on where they go, particularly where they feed. It turns out that large trees are not one of those. Canopy cover of overstory trees is also not one. Those two are two factors that are used in decision making.

The owls don't make their decisions on that basis. They use understory vegetation, shrubs primarily because that is where they find their small mammals prey, and they know the difference between apparently whether the tree is an old growth Ponderosa pine or an old growth Douglas fir. They don't like the pine.

One of the difficulties in forest restoration, particularly in the pine/fir zone, is that many folks would like to see these large, old growth Ponderosa pine trees with a grassy understory. That is wonderful old growth Ponderosa pine. It is very poor spotted owl habitat.

Part of the distinction regarding adaptive management is to understand what those details are and then implement them in management practices.

Mr. WITTMAN. When you talk about forest management activities and spotted owl populations, do you believe that they are mutually exclusive?

Didn't some of the science used by the draft recovery plan which has since been shelved show some scientific support for owls responding positively to a forest management prescription that develops these different types of habitats so that you have some diversity there with habitat as it relates to forest management and owl habitat?

Mr. IRWIN. Very much so. That is especially true in mixed conifer zones, on the east slope of the Cascades and Oregon and Washington down to the California Cascades and the conifer forests in Oregon and Washington Klamath zone as well.

We know that a mixture of conditions is important, and I think it is going to take adaptive management, monitoring and research to identify what the optimal situation is. From our own work through the past 10 years, it appears that an intermediate density of forest is best for the owl. It allows for the prey to propagate, and it allows for the owls to actually capture the prey.

Most people believe that similar silvicultural applications do not apply in the Douglas fir/hemlock zone, the so-called moist forests that occur in western Oregon and Washington. I do not agree with that. There is strong information now that demonstrates that riparian zones all over the range of the owl are very important. These are moist sites close to small streams. Not to major rivers, but to small streams.

In those sites all across Oregon and Washington our custodial management strategy—that is no-touch riparian management—is not the right thing to do for owls because new research for the Forest Service demonstrates that we will lose hardwoods. Hardwoods have been demonstrated to be important to spotted owls and their prey, so these sites have to be managed.

They were, in fact, intended to be managed under the Pacific Northwest Plan in 1994, and they were ranged as interim riparian zones. The adaptive management never happened.

Mr. WITTMAN. One more question for Mr. Parsons. When you talk about issues with wolves in talking about what role humans need to play with wolves, in a situation where a wolf may be jeopardizing a human's life do you think in that particular situation that a taking of a wolf is substantiated?

Mr. PARSONS. Absolutely. That is written into the Act. It is written into our regulation.

In fact, one person has used that provision for taking a wolf when he thought—it remains to be known for sure if he truly was threatened, but he thought he and his family were being threatened when they were camping. It was the very first wolf shot in the program. He shot the wolf, and he was not prosecuted for that.

Mr. WITTMAN. Very good. Just one additional question. In a situation with a rancher, if he has a situation where a Mexican gray wolf is killing his livestock, in that situation should that rancher be allowed to take that wolf in that situation?

Mr. PARSONS. There is a provision in the regulation for that as well that applies to private property. If the rancher observes a wolf attacking livestock on his private property he can kill that wolf under the provisions of the rule, no questions asked other than there has to be evidence, of course, that that was the situation.

There is another provision that moves that opportunity onto public grazing lands when and if there are six or more breeding pairs present. Then the Fish and Wildlife Service is allowed to issue a permit, a limited duration permit, to a rancher to have the same opportunity to protect his livestock.

We have not gotten to the stage where we have enough breeding pairs to trigger that regulation for more than just a few months.

Mrs. NAPOLITANO. All right. Thank you very much for your questions.

I would like to introduce into the record testimony from an oversight hearing of July 31, 2007, from Mary Kendall, Deputy Inspector General. I would like to quote line numbers 1631 to 1647, and I would like to ask the questions based on this.

This states that: More than five years ago, following our investigation into allegations of tampering in a scientific field samples and findings related to an Endangered Species Act study, we recommend that the Secretary ask the Department's Chief Scientist to convene a working group consisting of internal and external scientists to review and make recommendations on how to restore rigorous science to the Endangered Species Program and to design and implement a Department of Interior scientific code of ethics.

Has that been accomplished? Does anybody know?

Mr. BLACK. Not to my knowledge. It has not.

Mrs. NAPOLITANO. OK. Then the next one, continuing on Line 1640: "While an effort was undertaken to develop a draft code of scientific conduct, it has never been finalized or issued Department-wide. While we believe that this code needs to be revived in its present form applicable primarily to employees and volunteers who participate in the hands-on scientific activity, we also believe that it needs to be expanded to specifically include policymakers like Ms. MacDonald."

Has that draft code been started, implemented or otherwise worked on that you know of?

Ms. GRIFO. Actually I think the bigger issue here is that there are a number of these codes that have come and gone, but none of them have been publicly available.

We have been able to get bits and pieces by FOIA and so I think that as this procedure happens we need to have a way that when these things are in draft, when these things are finalized, they come out to the community at large so that we can know. I mean, there is a reason why we are not able to really answer these questions because those things have not been broadly shared.

Mrs. NAPOLITANO. My understanding is that the Inspector General has indicated that they have not been given or implemented Department-wide. Is that correct?

Ms. GRIFO. I am sorry. You know, not over the whole Department of the Interior.

Mrs. NAPOLITANO. OK.

Ms. GRIFO. Right. Yes. I mean, within Fish and Wildlife we know that one is out, but in terms of Kempthorne's 10 point—I can't remember the name of it, but the 10 point thing that he came out with. I mean, that one has major problems. It came out and then a month later a lot of it was withdrawn in terms of there were lots and lots of issues with it.

As I say, I mean, the key point here is that drafts are not easily available. The process is not transparent. I mean, that is the key take-home message.

Mrs. NAPOLITANO. And that is the message from—?

Ms. GRIFO. Well, from I think those of us on the outside that want to understand how Fish and Wildlife works, how Interior works, those of us who are taxpayers, citizens, fishermen, hunters. I mean, any of the stakeholders or constituencies.

I think in order for us to do our jobs as being a stakeholder and a constituent of this Department and the agencies within that Department, transparency is what allows us to know what is going on and be a part of these processes and weigh in.

Mrs. NAPOLITANO. Thank you. Thank you very much.

Mr. Wittman, any other questions?

Mr. WITTMAN. No.

Mrs. NAPOLITANO. Panel, we want to thank you wholeheartedly for your patience and indulgence and for your very insightful testimony.

We will follow up with questions. We have up to 10 business days to submit any additional questions, and I believe I have a statement from The Honorable Doug Lamborn for the record dated May 21 and also it is a report from the Hoopa Valley Tribal Council for the record.

Without objection, I will so order.

With that, you have 10 business days to provide any additional information.

Anybody in the audience who has information to submit or questions to submit, we would appreciate that.

I appreciate all your participation and your being again so patient with us. With that, this hearing is adjourned.

[Whereupon, at 2:43 p.m., the Committee was adjourned.]

[Additional material submitted for the record follows:]

[A letter submitted for the record by Craig Manson, Former Assistant Secretary for Fish and Wildlife and Parks, U.S. Department of the Interior, follows:]

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May 29, 2008

Gene L. Dodaro
 Acting Comptroller General
 Government Accountability Office
 441 G St., NW
 Washington, DC 20548

Subject: GAP Report 08-6881, U.S. Fish & Wildlife Service, Endangered Species Act Decision Making, May 21, 2008

Dear Mr. Dodaro:

I am alive. As far as I know, I have been continuously alive since the autumn of 1954; that would mean that I was alive, and available for consultation during the time that your staff was putting together the above-referenced report.

I served as Assistant Secretary of the Interior for Fish and Wildlife and Parks during most of the time of the events mentioned in that report; therefore, I found it remarkable that your staff did not contact me before making the inaccurate and ill-informed statements contained in that report. My present whereabouts are publicly available in many sources.

I was outraged to read in the press that your staff member Robin Nazzaro told the Committee on Natural Resources of the House of Representatives that I and three other individuals as officials of the Department of the Interior, as The Associated Press reported the matter, "may have put political pressure on lower-ranking employees who were deciding endangered species cases." Having absolutely no evidence of such a conclusion, Ms. Nazzaro eructed this disgusting innuendo and let it hang before the Committee and the public, not having had the good manners to tell me or the other individuals that she was going to do so. Even in what passes for etiquette in official Washington, her action was unprofessional.

The Endangered Species Act is, by its own terms, the responsibility of the Secretary of the Interior. As Assistant Secretary for Fish and Wildlife and Parks, a Presidential appointee confirmed by the Senate, I exercised authority delegated by the Secretary. Furthermore, the Assistant Secretary has the statutory responsibility to supervise the Director of the United States Fish and Wildlife Service. 16 USC § 742b(b). In carrying" the statutory mandates and the delegated powers of the secretary, I alone was responsible for decisions made under the Endangered Species Act from February 19, 2002 to December 31, 2005. Your staff either did not know this (which would be bad enough) or deliberately disregarded it for reasons I cannot fathom.

There is no "political interference" when a duly appointed official performs his or her statutory duties and exercises discretion under the law. As Justice Stevens noted in *Chevron USA, Inc., v. Natural Resources Defense Council*, 467 U.S. 837 (1984), "an agency to which Congress has delegated policymaking responsibilities may, within the limits of that delegation, properly rely upon the incumbent administration's views of wise policy to inform its judgments." There is a reason that we have elections in America.

Your staff's report focuses on several determinations under the Endangered Species Act that allegedly were improperly influenced by my deputy, Julie MacDonald. In fact, in each of those actions, I either took the final decision or endorsed to the Secretary the decision of the Director of the Fish and Wildlife Service. Ms. MacDonald had no power in law or in fact to "make decisions" under the ESA and she did not do so.

Ms. MacDonald's role, for which I hired her in 2002, was to insure that the Fish and Wildlife Service presented credible and reliable data upon which decisions could be taken under the law. She did that very well. Indeed, the report illustrates the success of her work by this comment:

Service staff described a climate of “Julie-proofing” where, in response to continual questioning by Ms. Mac Donald about their scientific reasoning, they eventually learned to anticipate what might be approved and wrote their decisions accordingly.

Anyone with a liberal education will immediately recognize in that comment the successful application of a Socratic approach, which in this case yielded documents based on better data and led to decisions ultimately based on the best scientific data.

Your staff’s report sets out eight actions in which apparently there was concern about “political interference.” All but two of those actions were critical habitat determinations. In most of these, Ms. MacDonald’s involvement is described as “reducing” the acreage for the critical habitat. This is incorrect and misleading.

First, as I have noted, I, and not Ms. MacDonald, made the decision to “reduce” the critical habitat acreage. My signature is to be found on those rules. And I did not simply rubber-stamp the work of others; that is not my style. I examined the rules myself.

Second, the Endangered Species Act requires that the Secretary take into account “the economic impact, the impact on national security, and any other relevant impact,” before designating critical habitat for a species. The statute gives the Secretary discretion to “exclude any area from critical habitat if [the Secretary] determines that the benefits of such exclusion outweigh the benefits of specifying such area as part of the critical habitat,” unless extinction of the species would otherwise result. 16 USC § 1533 (b) (2). In exercising the delegated powers of the Secretary, I followed the statutory mandate to consider economics, national security, and other relevant factors, and then I exercised discretion in to determine whether certain areas should be excluded from critical habitat. This exercise of discretion was informed by the statutory factors, including the best available scientific and commercial data. There is no “political interference” when an official acts within the terms of the law and exercises discretion that Congress has granted.

I must comment also on the case of the Palos Verdes blue butterfly which is mentioned in the briefing annexed to the report. This was the very first ESA matter that I handled as Assistant Secretary. Within days of my arrival, I was summoned to a meeting with the Member of Congress who represented the district wherein the Palos Verdes blue butterfly is found. The Member had also summoned an Assistant Secretary of the Navy. The Member was concerned that the Navy’s plans to close a facility in that district were being thwarted by the insistence of the Fish and Wildlife Service that a “consultation” under Section 7 of the ESA was required and that the Service could require mitigating conditions if the closure action and subsequent transfer of the property to the Department of Housing and Urban Development was found to “jeopardize the continued existence” of the Palos Verdes blue butterfly. The Member’s interest was that the Member wanted to see a program for the homeless moved into the soon-to-be vacated Navy facility.

The Navy disagreed with the requirement for a section 7 consultation and so did the Member of Congress. However, it seemed clear to me that there had to be a consultation, and I said so. The issue then became whether HDD or the Navy had to do the consultation. After conferring with Interior lawyers, I determined that HUD was the party responsible for the consultation on the facts of this matter. HUD resisted doing the consultation and there followed an extended period of negotiations and discussions with HUD and the Fish and Wildlife Service. In the meantime, I continually received telephone calls from the Member or the Member’s staff urging that the issue be resolved. By the time I hired Ms. MacDonald, the issue was still outstanding and the Member had grown quite frustrated. The Member blamed the Fish and Wildlife Service for insisting on the consultation, which to me was required by the law.

Having little time to devote to the matter personally, I turned the matter over to Ms. MacDonald, who handled it efficiently and brought to a satisfactory conclusion, in that conclusion, we did not accede to many of the demands of the Member, some of which clearly would have put politics before science.

In conclusion, there is not a single example in your report of “political interference” with decision-making under the Endangered Species Act. Instead, the report illustrates that some people plainly were unaccustomed to the required rigor that my office brought to the decision-making process. This rigor actually improved the scientific aspects of the Department’s responsibilities under the Act.

I find it regrettable that your staff was so easily misled by the uninformed views of largely anonymous sources. That creates an impression of sloppy and partisan work in contravention of the high regard usually accorded your office.

Sincerely,

CRAIG MANSON

[A statement submitted for the record by Doug Robertson, Commissioner, Douglas County, Oregon, follows:]

Statement of Doug Robertson, Commissioner for Douglas County, Oregon, and President, Association of O&C Counties

The Association of O&C Counties represents the interests of 17 Counties in Western Oregon within which lie 2.1 million acres of BLM managed O&C Lands. This Association has represented County interests in the management of these lands for over 80 years and was a participant in efforts to secure passage of the O&C Act of 1937. The Association is pleased to provide Chairman Rahall and the Committee information about this unique category of lands.

The O&C Lands provide habitat for Northern Spotted Owls and other species listed under the Endangered Species Act (ESA). At the same time, communities are very reliant on the O&C Lands for jobs and other economic benefits. County funding traceable to the O&C Lands is critically important, in several cases representing half or more of all funding for general fund budgets and the many public services provided through general fund expenditures. No discussion about the administration of the ESA is complete without consideration of the community impact—the human impact—that results from strategies for the protection and restoration of listed species.

Most of the O&C Counties are located in an economically troubled part of the region, where the unemployment rate exceeds the Oregon and the National unemployment rates. This region is dominated by public land ownership that is not subject to property taxes. Douglas County, for example, has more than 50 percent of its land in public ownership. Some of the O&C Counties have more than 60 percent of their land in public ownership. The principal industry in these areas was once the timber and wood products industry, which has been in a decline corresponding to the period of increasing protections on Federal forest lands for ESA listed species.

Douglas County is at the center of the O&C region. In 2006, while most of the nation was booming and enjoying unparalleled prosperity, Douglas County saw an increase in the number of people living in poverty, from 11.8 percent of the population, to 16 percent of the population. During this period, there was a corresponding increase in the number of children living in poverty. By 2007, fully 25 percent of all children in Douglas County were living in poverty. This is a shocking and disturbing statistic that ought to generate a sustained outcry. It is particularly disturbing in light of a small increase in the median income in Douglas County during the same period, clearly illustrating that younger families most in need of family wage jobs are the ones being left behind. And as the economic conditions in the rest of the country have declined over the last year, the conditions in Douglas County have declined further as well.

The need for services provided by County governments increases as the economic stresses in the private sector increase. Unfortunately, the decline in private sector economic activity attributable to withdrawal of Federal timber resources has been paralleled by a decline in shared timber receipts available to County governments to pay for health services, law enforcement and corrections, services for veterans, drug treatment and prevention programs, libraries, programs for at-risk youth, and all the other many services paid for from County general fund budgets reliant on O&C shared timber receipts. Federal safety net programs have been much appreciated and are the only way many Counties are avoiding insolvency, but the future of the safety net is uncertain, at best. The only hope many of the O&C Counties have of sustaining themselves is restoration of a reasonable level of timber harvest on the O&C Lands.

The O&C Counties do not ask that the needs of ESA listed species be ignored. To the contrary, we support protection and restoration of ESA listed species as a national priority. We ask, however, that those responsible for development of strategies for species protection and recovery reciprocate, acknowledge the unique legal mandate applicable to the O&C Lands, and be willing to fully consider the needs of local communities, so that adverse impacts are minimized. Any Federal wildlife policy that ignores human impacts may succeed in protecting individual species in

the short term, but it compromises the legitimacy of government and imperils the long-term viability of the law driving the policy.

The importance of the O&C Lands to Counties and communities is best understood in light of the unique history of these lands, which uniqueness is illustrated by the differences between BLM managed O&C Lands and National Forests and other categories of Federal lands. To summarize the key differences:

—The O&C Lands were once in private ownership, but were taken back into Federal ownership after being on the property tax rolls for decades. National Forest lands have never been privately owned.

—The O&C Lands are dedicated by Federal law to the dominant use of sustained yield timber production for the benefit of local communities. National Forests are multiple use lands with no one use being dominant, and are managed for the benefit of the nation.

—The O&C Lands are scattered in small parcels in a checkerboard pattern interspersed with private lands across western Oregon. National Forests are typically very large, contiguous blocks of land.

—50 percent of the revenue from the O&C Lands is shared directly with all the O&C Counties based on a formula, regardless of where the timber harvest occurs. An additional 25 percent of revenues to which the Counties were entitled under the O&C Act have been voluntarily returned to the federal government to invest in improvements intended to enhance the land's productivity. Shared revenues from National Forests are limited to 25 percent, which is paid to the State for redistribution to the Counties in which the National Forest having the timber harvest occurs.

—Shared revenue from the O&C Lands is unrestricted and can be used by a County for any purpose as part of a County's general fund. Shared National Forest revenue can be used only for roads and schools.

A. History of the O&C Lands.

Between 1866 and 1870, Congress provided for grants of nearly 4,000,000 acres of land in Oregon to the Oregon and California (O&C) Railroad Company. The land grants were given in exchange for a commitment to build a railroad through Western Oregon from Washington to the California border. The lands were conveyed to the Railroad Company with the proviso that they be sold in 160-acre parcels to "actual settlers" for \$2.50 per acre. The purpose of the land grants under these conditions was to promote the settlement and development of Western Oregon.

The railroad was built, but the Railroad Company failed to honor its obligation to sell O&C Lands to "actual settlers," in many cases selling the lands in large blocks to speculators, or retaining the land itself. After decades of controversy, including action by the U.S. Attorney General and the U.S. Supreme Court, Congress responded with the Chamberlain-Ferris Act of June 9, 1916, ch. 137, 39 Stat. 218, which declared that all grant lands still held by the Railroad Company were re-vested in the United States, and provided for compensation to the Railroad for the O&C Lands thus re-vested. After decades in private ownership and on tax rolls, the lands reverted once again to Federal ownership.

Had the lands not been taken back by the Federal government, they would have remained in private ownership, providing an economic base for private industry and a tax base for local governments. Congress recognized that re-vestment deprived much of Western Oregon of an important part of its economic foundation. The Chamberlain-Ferris Act therefore established the "Oregon and California Land-Grant Fund" within the United States Treasury, and provided a method for distribution of income from the lands. Once certain debts were paid, funds were to be distributed 25 percent to the O&C Counties, 25 percent to the State of Oregon and the remainder to the United States. The distribution method was designed to compensate the state and county governments for the fact that they derived no tax benefits from the re-vested lands. See, *Clackamas County, Oregon v. McKay*, 219 F.2d 479, 483 (9th Cir. 1954), judgment vacated as moot 349 U.S. 909 (1955). The policy at the time was to continue to dispose of the re-vested lands, so that they would be returned again to private ownership.

The Chamberlain-Ferris Act distribution method did not work. Between 1916 and 1926, very little revenue was derived from the O&C Lands. The disposal policy was a failure, as the rugged, heavily timbered lands were not attractive for farming or for homesites. As a result, payments to the O&C Counties and the State of Oregon never materialized. To assist the O&C Counties, Congress passed the Stanfield Act of July 13, 1926, 44 Stat. p. 2, 915, which provided for payments from the general fund of the U.S. Treasury to the O&C Counties. The payments were in lieu of taxes which the O&C Counties could have collected had the O&C Lands been privately owned.

The Stanfield Act provided that payments would be reimbursed from the O&C Counties' share of funds in the previously-established O&C Land-Grant Fund. To the extent that the Stanfield Act payments exceeded the O&C Counties' share of the Fund, the excess became a reimbursable charge against the O&C Counties' share of the Fund. Between 1926 and 1936, the O&C Counties' share of revenues from the O&C Lands was insufficient to reimburse the United States for its Stanfield Act payments. There was therefore an ever-increasing reimbursable charge against the O&C Counties' share of the Fund. The system was not working to provide the Counties with revenues on a long term basis the way it was intended. Congress tried again.

In 1937, largely at the urging of the Association of O&C Counties and Oregon's Congressional delegation, Congress passed the O&C Act, 43 USC §§1181a et seq. Prior inconsistent legislation was repealed and the system for distributing revenues from the O&C Lands was restructured. Once certain debts were satisfied, the O&C Counties were entitled to a total of 75 percent of all revenues from the O&C Lands. The remaining 25 percent was to be available for the costs of administering the sustained-yield program under which the lands were to be managed by the predecessor agency of the Department of the Interior.

In 1953, the O&C Counties began to receive their full 75 percent share. After 1953, varying amounts to which the O&C Counties were otherwise entitled were retained by the Federal government with the cooperation of the O&C Counties under annual Department of Interior appropriation acts. After 1957, the O&C Counties received 50 percent of the revenues. An additional 25 percent was voluntarily relinquished by the O&C Counties and used for the administration and improvement of the O&C Lands. The remainder was deposited in the U.S. Treasury. By "plowing back" a portion of the revenue to which they were otherwise entitled, the O&C Counties raised the productivity of the lands. This plowback was intended as an investment that would return future dividends to the Counties in the form of a dependable and increased revenue stream from shared timber receipts. The present value of the Counties' "plowback" investment exceeds \$2.5 billion.

Counties received their 50 percent share of revenues and active management of the O&C Lands continued until the early 1990s, when timber harvests declined radically due to changing policies, environmental concerns and litigation. The Counties have, since the early 1990s been the recipients of "safety net" payments under several temporary federal programs designed to replace lost timber receipts. The last of the safety net programs expired September 30, 2007. Efforts are being made to reauthorize another temporary safety net program, but the Counties have been told that, at best, they will have to return to reliance solely on shared timber receipts within a few years.

B. Statutory Language and Federal Judicial Decisions.

The purpose of the O&C Act is reflected in the statutory language, which provides that any of the lands classified as timberlands

"...shall be managed...for permanent forest production, and **the timber thereon shall be sold, cut and removed in conformity with the principal [sic] of sustained yield** for the purpose of providing a permanent source of timber supply, protecting watersheds, regulating stream flow, and contributing to the economic stability of local communities and industries, and providing recreational facilities..." 43 USC § 1181a. (Emphasis added.)

The O&C Act goes on to require that "timber from said lands in an amount not less than one-half billion feet board measure, or not less than the annual sustained-yield capacity when the same has been determined and declared, shall be sold annually..." 43 USC § 1181a. The O&C Act requires that administration of the lands is to "provide, insofar as practicable, a permanent source of raw materials for the support of dependent communities and local industries of the region." *Id.* The O&C Act further warns that "[d]ue consideration shall be given to establishing lumbering operations in [administering] such lands when necessary to protect the economic stability of dependent communities." *Id.*

The O&C Act has been interpreted many times by the courts as making timber production the dominant use for the O&C Lands. The other uses for the lands identified in the O&C Act (protecting watersheds, regulating stream flows, etc.) are secondary uses, to be achieved through sustained-yield timber management. The O&C Lands are unlike other Federal lands, which are managed under multiple-use mandates where all possible uses are to receive equal consideration in the planning process. The O&C Act provides for a dominant use, timber production, not unlike legislation setting aside other lands for particular purposes such as wilderness, parks, scenic areas or historic preservation.

A 1990 Ninth Circuit Court of Appeals case states clearly and unambiguously that the overriding purpose of the O&C Act is to provide the O&C Counties with revenues through the sale of timber:

“...**First, the O&C Act was intended to provide the counties in which the O&C land was located with the stream of revenue which had been promised but not delivered** by the Chamberlain-Ferris Revestment Act....The counties had failed to derive appreciable revenue from the Chamberlain-Ferris Act primarily because the lands in question were not managed as so to provide a significant revenue stream; the O&C Act sought to change this.” **Headwaters, Inc. v. BLM, Medford Dist.**, 914 F2d 1174, 1183-84 (9th Cir. 1990) (citations omitted, emphasis added).

In **Headwaters**, the Ninth Circuit made clear that timber production and harvest was the way Congress intended to achieve the goals of a sustained revenue stream to the counties and support of local economies and industries. In responding to the plaintiffs’ argument in that case that the O&C lands should be managed for the discretionary protection of owl habitat, the court stated that:

“...Nowhere does the legislative history suggest that wildlife habitat conservation or conservation of old growth forest is a goal on a par with timber production, or indeed that it is a goal of the O&C Act at all.” **Headwaters**, 914 F2d at 1184.

The Court went on to conclude that “**exempting certain timber resources from harvesting to serve as wildlife habitat is inconsistent with the principle of sustained yield.**” *Id.* (Emphasis added.) **Headwaters** is not the only case in which the Ninth Circuit emphasized that the O&C lands have been dedicated to timber production. See also, **O’Neal v. U.S.**, 814 F2d 1285, 1287 (9th Cir. 1987); **Skoko v. Andrus**, 638 F2d 1154, 1156 (9th Cir. 1979); **United States v. Weyerhaeuser Co.**, 538 F2d 1363, 1364-65 (9th Cir. 1976).

The focus of the O&C Act on providing benefits to local communities is confirmed by historic interpretations given the O&C Act by the BLM itself. For example, in a 1939 press release, less than two years after the O&C Act became the management mandate, the BLM’s predecessor agency had a Chief O&C Forester, the equivalent of the BLM State Director, who described the newly adopted sustained yield forestry program in these words:

“This assures the continuous production of timber for the employment of Oregon industries without the danger of exhausting the timber supply and without the danger of destroying the tax base of the counties. **The General Land Office administers these lands as a vast estate held in trust.**” Press Release, March 31, 1939, W. H. Horning, O&C Chief Forester. (Emphasis added.)

In 1940 the O&C Chief Forester elaborated, saying that “[a]ll the lands best suited for the growing of timber will be retained in public ownership and kept at work producing crops of timber. Continuous production of timber of commercial quality in the largest possible amount is the goal.” W. H. Horning, *The O&C Lands and their Management, an Important Advance in Forest Conservation* (1940). (Emphasis added.)

The dominance of timber production under the O&C Act was preserved by Congress as recently as 1976, when Congress passed the Federal Land Policy and Management Act (“FLPMA”), which redefined the management direction for nearly all lands in the United States under the jurisdiction of the BLM, with the telling exception of lands managed under the O&C Act. FLPMA, P.L. 94-579, is a multiple use statute under which all uses for the land are given equal consideration, and the BLM has broad discretion in choosing the mix of uses it will adopt for lands managed under FLPMA. But, Congress specifically preserved the dominance of timber production on the O&C lands by enacting section 701(b) of FLPMA, which says that “[n]otwithstanding any provision of this Act [FLPMA], in the event of conflict with or inconsistency between this Act and the...[O&C Act and Coos Bay Wagon Road Acts], insofar as they relate to management of timber resources, and the disposition of revenues from lands and resources, the latter Acts shall prevail.”

In 1986, the Interior Solicitor was asked if the BLM had authority to implement a plan for the protection of spotted owls, prior to that species being listed under the ESA. The legal opinion differentiated between lands managed by the BLM pursuant to FLPMA, and lands managed pursuant to the O&C Act. The Solicitor’s opinion describes the difference as follows:

“The freedom conferred on the Secretary under FLPMA is limited in one important way on certain federally-owned timberlands in western Oregon. There, any decision about managing northern spotted owls must be measured against the dominant use of timber production....In deciding whether to establish a program for managing northern spotted owls on O&C

timberlands, the Secretary, then, must decide if it is possible to do so without creating a conflict with the dominant use there—timber production. If the Secretary can manage northern spotted owls and still produce timber on a sustained yield basis in the O&C timberlands, the O&C Act in no way will preclude him from making that choice....The converse, of course, also obtains. If a program for managing northern spotted owls conflicts with producing timber on a sustained yield basis in O&C timberlands, the O&C Act will preclude the program's application to that reality." Gale Norton and Constance Harriman, Associate Solicitors, Memorandum to James Cason, Deputy Assistant Secretary for Land and Minerals Management (October 28, 1986).

C. Conclusion.

The O&C Lands are clearly very different from any other lands managed by the Federal government, especially National Forest lands managed by the Forest Service. The agencies responsible for strategies for the protection and recovery of ESA listed species should acknowledge the unique history and purposes for these lands, and devise strategies that minimize conflicts with the mandates of the O&C Act.

In every case, throughout the country, implementation of the ESA must take into account the human impacts. Long term preservation of threatened and endangered species depends on the political willingness of the citizenry to accommodate the needs of those species, and if the human price over time is too high and too widespread, the will of the people to support wildlife protections will diminish.

The Association of O&C Counties thanks Chairman Rahall and all Members of the Committee for considering our concerns.

The following documents submitted for the record have been retained in the Committee's official files.

List of documents retained in the Committee's official files

- American Society of Mammalogists—Document entitled "Reintroduction and Conservation of the Mexican Gray Wolf."
- Carroll, Carlos, Ph.D., Klamath Center for Conservation Research—May 27, 2008—USFWS. 2008. Final Recovery Plan for the Northern Spotted Owl, *Strix occidentalis caurina*.
- Carroll, Carlos and Devin S. Johnson, contributed paper: "The Importance of Being Spatial (and Reserved): Assessing Northern Spotted Owl Habitat Relationship with Hierarchical Bayesian Models"—*Conservation Biology*.
- Diamond, John, and Family—Statement submitted for the record.
- Durkin, Barbara—Letter submitted electronically via email regarding Cape Wind Draft EIS / MA Audubon.
- Haynie, Leigh—Documents submitted electronically via email:
- Civil Action Suit—U.S. District Court—Eastern District of Kentucky, Heartwood, Inc. vs. Charles L. Myers.
 - Article—"All Bats Are in Trouble."
- Hoopa Valley Tribe—Testimony submitted for the record by Congresswoman Napolitano.
- Luce, Dr. Julia Martin—Statement submitted for the record.
- Olson, Steve, Association of Zoos and Aquariums—Letter submitted for the record dated January 2, 2008, addressed to Dr. Benjamin Tuggle, Duane Shroufe, Bruce Thompson regarding A request for a moratorium on lethal control and permanent removal (rescind or suspend SOP13) of Mexican Wolves in the Blue Range Wolf Recovery Area until expert task force on genetic issues can be convened to provide guidance to these actions.
- Parsons, David R.—Documents submitted for the record:
- March 15, 2005—The Rewilding Institute letter addressed to U.S. Fish and Wildlife Service regarding Comments on Mexican Gray Wolf Project Five-Year Review.
 - May 25, 2005—The Rewilding Institute letter addressed to Terry B. Johnson regarding Comments on Mexican Wolf Blue Range Reintroduction Project Adaptive Management Oversight Committee Proposed 1-year Moratorium on New Releases and Proposed Standard Operating Procedure 13.
 - October 10, 2005—Document entitled Mexican Wolf Blue Range Reintroduction Project Adaptive Management Oversight Committee Moratorium for Calendar Year 2006 (Standard Operating Procedure 0.D).

- Article by Society for Conservation Biology on “The Bureaucratically Imperiled Mexican Wolf”—2006.
 - April 17, 2006—The Rewilding Institute letter addressed to Dr. John Morgart, FWS.
 - December 24, 2007—Article from High Country News on “Last Chance for the Lobo.”
 - December 26, 2007—The Rewilding Institute letter addressed to John Slown, FWS.
 - March 7, 2008—The Rewilding Institute letter addressed to Dr. Benjamin Tuggle.
 - May 16, 2008—Letter addressed to Terry B. Johnson from Elisabeth A. Jannings, etc., regarding Comments on SOP’s.
- Richardson, Hon. Bill, Governor—Press release—“Governor Richardson Seeks to Change Protocols for Mexican Wolf Recovery Program”—dated July 6, 2007.
- Schneberger, Laura—Testimony submitted for the record.
- Smith, Adrian, Congressman—Documents submitted for the record:
- May 6, 2007—Julie MacDonald letter addressed to Secretary Dirk Kempthorne, DOI.
 - May 7, 2007—Julie MacDonald letter addressed to Inspector General Earl Devaney, DOI, plus attachments
- Wehrheim, Ed, Catron County Commission—Letter addressed to Dr. Benjamin Tuggle on April 26, 2007 regarding Notice of Finding of Imminent Danger, Wolf Durgano F924.
- Wehrheim, Ed, Catron County Commission—Letter addressed to the Natural Resources Committee.

