

The Society for Conservation Biology • Center for Biological Diversity

To

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Associate Deputy Secretary of the Interior

and

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Delivered by Email and Registered Mail:

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RE: 1) Comments from the Society for Conservation Biology (SCB), and Center for Biological Diversity (Center) on FR Vol. 75, No. 168, Doc. 2010-21591, Proposed Scientific Integrity Policy of the Department of the Interior

INTRODUCTION

The Society for Conservation Biology is taking this opportunity to submit comments in response to the Proposed Scientific Integrity Policy of the Department of the Interior.

The Society is an international professional organization dedicated to promoting the scientific study of the phenomena that affect the maintenance, loss, and restoration of biological diversity. The Society's membership comprises a wide range of professionals committed to the conservation and study of biological diversity: resource managers, educators, government and private conservation workers, and students make up over 7,500 members worldwide.

The Center for Biological Diversity is a non-profit, public interest environmental organization dedicated to the protection of native species and their habitats through science, policy, and environmental law. The Center has over 42,000 members throughout the United States.

We are pleased that Interior is pursuing a Department-wide policy addressing scientific integrity. We have several comments that we trust will be helpful in the development of the final policy. We are grateful for the opportunity to share our recommendations and look forward to the implementation of policies that enhance scientific integrity in the federal government.

Overall, we suggest that the Secretary make clear that the policy applies to all agency personnel and officials, that it is enforceable and binding with consideration for training, counseling and guidance for all so as to avoid Draconian approaches that discourage creativity and dialogue.

We also suggest that all concerned be briefed on the applicable law at all levels and that the Secretary prepare a memorandum to share with the OSTP, Justice, OGE and other offices and with OMB and Congress on improvements in whistleblower protection law, budgets and information sharing that legislation or executive action across the agencies could help bring about.

Finally, we suggest that this policy be applied, along with revised regulations to implement the Endangered Species Act, to the decisions noted in GAO and IG reports of 2007-09 on decisions by Bush Administration officials that appeared to be irregular.

Comments:

I. The Proposed Policy Does Not Adequately Address the Scientific Integrity Memorandum Issued by the President on March 9, 2009.¹

The memo includes principles a through f. Under Roman numeral I, we will address each that we believe the proposed policy does not satisfy:

(a) The selection and retention of candidates for science and technology positions in the executive branch should be based on the candidate's knowledge, credentials, experience, and integrity;

The proposed policy does not address this Administrative priority. We continue to suggest that candidates for science-related positions and their supervisors have advanced education or professional experience that is directly relevant to the majority of their anticipated work and that which they oversee.² In addition, the education and experience of current and potential senior

¹ Obama, B. Memorandum for the Heads of Executive Branch Departments and Agencies, Subject: Scientific Integrity, March 9, 2009, *available at* http://www.whitehouse.gov/the_press_office/Memorandum-for-the-Heads-of-Executive-Departments-and-Agencies-3-9-09/.

² Society for Conservation Biology, Recommendations for Actions by the Obama Administration and the Congress to Advance the Scientific Foundation for Conserving Biological Diversity, (December 2008), *available at* <http://www.conbio.org/Activities/Policy/docs/SCB2008TransitionTeamRecommendations.pdf> and appended here.

staff who are engaged in science and technology policy and management should be reviewed and adjustments in assignments or selection made accordingly.³

In addition, federal scientists in some agencies, due to varying interpretations by different agencies⁴ of a federal conflict of interest statute (18 U.S.C. §208), are currently discouraged from participating on the boards of private organizations, including nonprofit scientific societies. Leadership in scientific societies dedicated to conducting and advancing science should not be regarded as a conflict of interest. Not only does this current interpretation hamstring the opportunities of scientists currently working in the government, but it also diminishes the appeal of government service careers for talented individuals who may not agree to have their professional development so limited. Participation in scientific societies should be regarded as a key component of advancing the missions of the federal agencies, and election or appointment to a leadership position in one of these organizations should be hailed as an achievement.⁵

Therefore, the Society recommends that in conjunction with this policy the DOI and those of its agencies that have a restrictive interpretation of section 208 or any related provision substantially revise that so as to clearly encourage their staff scientists to participate on the boards and in the activities of such societies, support their membership in them and publishing in external peer-reviewed journals, and promote opportunities for professional development through scientific conferences and training.⁶ The policy can make clear that should actual circumstances presenting conflicts of interest arise, then recusal is an appropriate preventative measure.

(b) Each agency should have appropriate rules and procedures to ensure the integrity of the scientific process within the agency;

The proposed policy appears limited to an outline of the process for punishment for misconduct. It fails to address the problem of scientific findings being manipulated for what appear to be reasons that are at odds with the best available science and the purposes of the statute being implemented.

For example, the Society recommends the Administration revisit decisions under the ESA for which there is significant and credible evidence of irregular procedures or effects including those questioned by the GAO or Inspectors General.⁷ Reports by the GAO, Inspectors General, and

³ Society for Conservation Biology, Comment to the White House Office of Science and Technology Policy on President Obama's Scientific Integrity Initiative (May 2009).

⁴ The Forest Service and Fish and Wildlife Service under the previous administration chose to ignore the expert advice of the Office of Government Ethics on interpreting 18 U.S.C. Sec. 208 in order to erect high barriers to service on boards of scientific societies. Such potential over-reaching should be reviewed and corrected.

⁵ Society for Conservation Biology, Comment to the White House Office of Science and Technology Policy on President Obama's Scientific Integrity Initiative (May 2009).

⁶ Society for Conservation Biology, Comment to the White House Office of Science and Technology Policy on President Obama's Scientific Integrity Initiative (May 2009).

⁷ SCB, Transition Recommendations, *Recommendation #2*.

numerous court decisions have documented at least 18 potential instances of political interference with decisions on listing of species and designation of critical habitat in recent years.⁸

(c) When scientific or technological information is considered in policy decisions, the information should be subject to well-established scientific processes, including peer review where appropriate, and each agency should appropriately and accurately reflect that information in complying with and applying relevant statutory standards;

We would recommend that an agency-wide policy be in place which specifically addresses peer review.⁹ While the USGS has a peer review policy, there must be a way to ensure that all science that is performed at DOI is reliable and of the highest caliber, and it is important that scientific findings be subjected to an independent, external peer review process unless there are sound reasons for making an exception, in which case the agency should err of side of caution and resolve any doubt in favor of protecting the resources in question.¹⁰

In addition to benefiting federal scientists, submission of work for publication in peer-reviewed journals may encourage collection and synthesis of higher quality data. The peer review process encourages careful study design, rigorous analysis of data, and reliability of the information published. This information could also become more readily available to the public and can benefit the greater scientific community with the appropriate agreements between the Government and the journals.

Further, memberships, attendance, and participation in professional conferences, continuing professional education, and subscriptions to journals should be paid for by the agencies for its' professional employees in order to retain and build their skills and networks. The free flow of information is one of the bedrock principles supporting the entire discipline of science, and federal scientists must be allowed to engage openly in this community. In order to maintain the highest caliber of scientists, the federal agencies must endorse scientific collaboration with the public and private sector and actively support the professional advancement of government scientists.¹¹

⁸ SCB, Transition Recommendations, *Recommendation #2*. See also Witness testimony before the House Natural Resources Committee, including representatives of the Union of Concerned Scientists and other organizations, who have posted evidence that may support further review; See

http://www.ucsusa.org/scientific_integrity/abuses_of_science/oversight-of-endangered.html and http://www.biological_diversity.org/publications/papers/PoliticizingExtinction.pdf

⁹ American Fisheries Society, Society for Conservation Biology, Society of Wetland Scientists, The Wildlife Society, Letter to Department of Interior Secretary Ken Salazar at 2 (May 2010).

¹⁰ American Fisheries Society, Society for Conservation Biology, Society of Wetland Scientists, The Wildlife Society, Letter to Department of Interior Secretary Ken Salazar at 2 (May 2010).

¹¹ Society for Conservation Biology, Comment to the White House Office of Science and Technology Policy on President Obama's Scientific Integrity Initiative (May 2009).

(d) Except for information that is properly restricted from disclosure under procedures established in accordance with statute, regulation, Executive Order, or Presidential Memorandum, each agency should make available to the public the scientific or technological findings or conclusions considered or relied on in policy decisions;

Without a transparent and ethical process for dealing with scientific research and scientific conduct, the science that is performed at DOI may continue to be called into question.

We therefore recommend that DOI use a transparent process to inform the public when there are disagreements between science and preferred natural resource policies so that the public and Congress are informed of the risks to natural resources that they care about.¹²

Further, we recommend DOI make available draft documents and scientific reports for public review, and allow scientists to publicly comment on any final version to which they contributed. Short of classified or proprietary information, scientists should be able to offer their scientific opinions as private citizens without fear of retaliation.¹³

Finally, the Society suggests that the docket for an agency decision should include the following:

- The scientific rationale for the decision.
- All scientific documents and data used to support the final decision.
- An indexed summary of all materials received from outside parties, including other federal agencies. If all communication was oral, a memo should be prepared and entered into the docket summarizing the information discussed.
- If relevant, a minority report voicing any significant dissenting scientific views and the evidence on which they are based, and an explanation of how the agency resolved such differences.
- The names and roles of each official and employee who participated in the decisions.

Increasing the availability of federal scientists to media, congressional, and public inquiries will go a long way towards dispelling the effects of widespread political interference. However, this must be done under a central, official communications policy that clearly defines the role of public affairs officers as facilitators of, not guards against, open communication.¹⁴

(e) Each agency should have in place procedures to identify and address instances in which the scientific process or the integrity of scientific and technological information may be compromised;

¹² American Fisheries Society, Society for Conservation Biology, Society of Wetland Scientists, The Wildlife Society, Letter to Department of Interior Secretary Ken Salazar at 2 (May 2010).

¹³ Union of Concerned Scientists, Draft Comments on the Department of the Interior Proposed “Scientific Integrity” Policy, September 10, 2010 at 3.

¹⁴ Society for Conservation Biology, Comment to the White House Office of Science and Technology Policy on President Obama’s Scientific Integrity Initiative (May 2009).

The proposed policy does not address this Administrative priority. Again, the proposed policy is more a tool to punish misconduct as opposed to supplying proactive processes to prevent scientific information from being compromised.

For example, any alterations in scientific findings by or at the direction of political appointees should be documented and made publicly available along with the reasons and scientific basis for the change; this should deter changes that lack substantiation.¹⁵

(f) Each agency should adopt such additional procedures, including any appropriate whistleblower protections, as are necessary to ensure the integrity of scientific and technological information and processes on which the agency relies in its decision-making or otherwise uses or prepares.

(i) The Proposed Policy Inappropriately Excludes Decision Makers and Political Appointees

The proposed policy will not apply to decision makers.¹⁶ The proposed policy states the following definition:

B. Decision Makers

Departmental employees who:

- (1) Are not engaged in scientific activities;
- (2) Communicate, recommend, or decide policy or management;
- (3) Communicate, recommend, or decide expenditure of Departmental funds; and
- (4) Rely in part on scientific products, or on documents compiled and translated from scientific products, to ensure that agency actions are supported by evidence and have a rational basis, and are not arbitrary or capricious.

During the conduct of Departmental business, decision makers may be involved in editing of documents for clarification of major points to aid decision making. Such editing is beyond the scope of this chapter.

¹⁵ This suggestion was made by biologist Mike Kelly, formerly of the National Marine Fisheries Service, protected species division, in his testimony before the House Natural Resources Committee in July of 2007 in which he stated that NOAA official Jim Lecky had reversed Kelly's jeopardy opinion under pressure from the White House, leading to the largest Klamath River salmon die-off on record. This suggestion has also been made by others including SCB on page 5 of our Recommendations to the Obama Administration of December 2008.

¹⁶ Department of the Interior, Proposed Scientific Integrity Policy of the Department of the Interior, Part 3.10B.

We find this a troubling provision. It is at the higher levels of the Department, under the pressure of politics, that manipulation of science can do significant damage. Not only do we recommend that decision makers be held to the same standards, we recommend the following:

1. That decision makers reveal all conflicts of interest and recuse themselves from influencing decision-making on the issues on which they have a financial conflict of interest.¹⁷
2. To the extent possible, create an institutional firewall between those compiling scientific information and those crafting policy to ensure that policy makers do not have the opportunity to edit, influence, manipulate or otherwise interfere with the scientific content. (This precaution is not intended to limit collaboration aimed at developing better legal and scientific standards and further research.)¹⁸
3. In order to ensure that each agency has appropriately and accurately considered scientific information in its compliance with statutory standards, a system of accountability must be established. Senior authors should sign their initial assessments and opinions. In addition, political appointees should be required to sign all changes they make and cite the science justifying the change in a draft or final biological opinion under legislation such as the ESA.¹⁹

(ii) *A Responsible Official Must Be Charged with Guiding the Policy*

We propose that a responsible official must be designated to guide the implementation, development, and application of such a policy across the agency. This should make the science more transparent, protect DOI scientists, and improve the objectivity and reliability of the DOI scientific enterprise as a whole.²⁰

II. We Suggest the Proposed Policy Should Be Tested Against Past Suspect Decisions, including those noted by the GAO or IG that have not yet been fully and publicly reviewed in a Transparent Process to Establish Whether the Proposed Policy Would Have Prevented the Transgression and Whether the Past Decision Should Be Changed.

As noted above there are numerous questionable ESA decisions not yet reviewed that Secretary Salazar promised Senator Ron Wyden, chair of the Public Lands Subcommittee of the Senate Energy Committee during his confirmation hearing that he would review.

¹⁷ SCB, Transition Recommendations, *Recommendation #5*.

¹⁸ SCB, Transition Recommendations, *Recommendation #5*.

¹⁹ SCB, Transition Recommendations, *Recommendation #2, page 5, under Consultation*.

²⁰ American Fisheries Society, Society for Conservation Biology, Society of Wetland Scientists, The Wildlife Society, Letter to Department of Interior Secretary Ken Salazar at 2 (May 2010).

As stated by Mr. Ruch, discussing the Commerce Office Inspector General Report:

In 2005, a Commerce Office of Inspector General report found that a key NMFS biological opinion on the effects of diverting Sacramento River water from the San Francisco Bay Delta to thirsty Southern California had been improperly altered to find no adverse effects. The responsible party identified by the Inspector General was one James Lecky, a regional official. Shortly thereafter Mr. Lecky was promoted to become the agency's Director of Protected Resources, in which position he oversees production of all the biological opinions on threatened and endangered species;

Using this transgression (and subsequent promotion) as an example, we ask, under the proposed policy as it stands now, how this transgression and subsequent promotion would have been prevented, discovered or addressed and how they will be addressed now if upon review they are found to be in need of further correction?

III. We Suggest the Policy Contain Concrete Processes for Reviewing and Reversing Questionable Decisions

Scientists should be able to bring to the attention of an independent body that a decision may have been made based on non-scientific criteria. Further, the scientist should be able to make this appeal without fear of retaliatory action.²¹

IV. We Recommend the Policy Contain Strong Whistleblower Protections

To ensure that the science is being used properly to implement natural resource decisions, science that contradicts these decisions should not be suppressed, and scientists who report suppression or other scientific misconduct should be afforded whistleblower protections.²²

We incorporate by reference here, the full testimony of Jeff Ruch, Executive Director of Public Employees for Environmental Responsibility (PEER), before the House Natural Resources Committee on May 9, 2007, entitled "Endangered Species Act Implementation: Science or Politics?".²³

²¹ SCB, Transition Recommendations, *Recommendation #5*.

²² American Fisheries Society, Society for Conservation Biology, Society of Wetland Scientists, The Wildlife Society, Letter to Department of Interior Secretary Ken Salazar at 1 (May 2010).

²³ Available at

http://resourcescommittee.house.gov/index.php?option=com_jcalpro&Itemid=32&extmode=view&extid=50

We highlight in particular the following testimony from Mr. Ruch:

...

In the federal civil service, scientists risk their jobs and their careers if they are courageous enough to deliver accurate but politically inconvenient findings. For openers, the practice of “good science” is not recognized as protected activity under the federal Whistleblower Protection Act, unless 1) the scientist is reporting a falsification or other distortion that violates a law or regulation; or 2) the scientific manipulation creates an imminent danger to public health or safety.

Absent those unusual circumstances, a disclosure of a skewed methodology, suppression of key data or the alteration of a data-driven recommendation is treated as if it were a policy dispute, for which the disclosing scientist has no legal protection or standing.

The only body of law that protects government scientists is the handful of environmental statutes, The ESA, however, has no such whistleblower provision. Moreover, the Bush administration has recently ruled that all but two of the six environmental laws with such whistleblower provisions are off-limits to federal employees under the doctrine of sovereign immunity—based on the old English common law maxim that “The King Can Do No Wrong.”

“Endangered Species Act Implementation: Science or Politics?” Before the H. Comm. on Natural Resources, 110th Cong. (2007) (statement of Jeff Ruch, Executive Director, Public Employees for Environmental Responsibility).

We are concerned that there are no provisions in the policy for protecting scientists who want to do the right thing by reporting abuse and unethical activities. Currently all the proposed policy provides is how one may be punished; hardly endorsement that the Department is concerned for the personal integrity of its scientists. As we stated in our joint letter to Interior dated May 28, 2010, “[T]o ensure that the science is being used properly to implement natural resource decisions, science that contradicts these decisions should not be suppressed, scientific misconduct should be punished, and scientists who report suppression or other scientific misconduct should be afforded whistleblower protections.”²⁴ Given the weak state of the general law, the policy should provide for protections by contract and by regulation.

²⁴ The Wildlife Society, American Fisheries Society, Society for Conservation Biology, Society of Wetland Scientists, Letter to Interior Secretary Salazar *regarding* the April 28, 2010 Inspector General Report on Interior’s Lack of a Scientific Integrity Policy, (May 28, 2010), *available at* http://www.conbio.org/activities/policy/docs/InteriorIntegrity_sigon.pdf

We suggest that Interior further offer whistleblower protection to outside vendors and contractors. Interior should also provide regular training and post information to ensure that employees and contractors of government agencies are fully aware of their rights regarding publication of their research, communication with the media, and freedom to anonymously report waste, fraud, and abuse.²⁵

V. The Definitions for Research and Scientific Misconduct Are Incomplete

The proposed policy states the following in the Definitions section:

I. Research Misconduct

Fabrication, falsification, or plagiarism in proposing, performing, or reviewing research, or in reporting research results. Research misconduct does not include honest error or differences of opinion. (This definition is quoted from The Federal Policy on Research Misconduct (65 FR 76260–76264).)

....

N. Scientific Misconduct

Fabrication, falsification, or plagiarism in proposing, performing or reviewing scientific activities and their products.

We suggest that these definitions include anyone who induces, or tries to induce in others, any of the above.

VI. The Policy Must Provide Those Accused of Misconduct Are Not Deprived of Due Process²⁶

The Definitions state the following:

B. Disciplinary Action

(1) Once a supervisor has verified an employee's misconduct under section 3.8A, the supervisor will administer disciplinary action in accordance with DOI personnel policies and using for guidance the Departmental Manual chapter on “Discipline and Adverse Actions” 370 DM 752. Supervisors should:

(i) Select the penalty they believe necessary to correct the misconduct and to discourage repetition; and

²⁵ SCB, Transition Recommendations, *Recommendation #5*.

²⁶ The Ornithological Council, Draft Comments on the Department of the Interior Proposed “Scientific Integrity” Policy, September 16, 2010.

(ii) Evaluate each situation to ensure that the actions proposed and taken are reasonable.

(2) When there is a significant unauthorized departure from accepted practices, or repeated violations of a less serious nature, supervisors may propose and decide on appropriate penalties, including termination of employment.

This provides that a supervisor, at her or his sole discretion, can take disciplinary action against an employee. There are no provisions for a hearing on the record in front of an impartial party; the ability for the accused to call witnesses or mount a defense. In short, there must be due process.

Further, employees accused of misconduct should have the right to appeal their penalty, once exhausted administratively, to Article III courts.

We thank you for this opportunity to comment on the proposed scientific integrity policy. We suggest that you consider ways in which you can improve it after a period of interim application if it is implemented without extending the comment period.

Sincerely,

John M. Fitzgerald, J.D., Policy Director
We for Conservation Biology

Noah Greenwald, M.S., Endangered Species Program Director
Center for Biological Diversity

APPENDIX




Recommendations for actions by the
Obama Administration and the Congress
to advance the scientific foundation for
conserving biological diversity



Society for Conservation Biology

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*Recommendations for actions by the Obama Administration
and the Congress to advance the scientific foundation for
conserving biological diversity.*

December 2008, Society for Conservation Biology

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Recommendations for actions by the Obama Administration and the Congress to advance the scientific foundation for conserving biological diversity

December 3, 2008
Society for Conservation Biology

The Society for Conservation Biology is a global community of conservation professionals concerned with the conservation of biological diversity. We strongly support the use of science to inform conservation policy. We are encouraged by indications that the new Congress and Obama Administration will establish a high standard of scientific literacy for nominees and staff and will protect the integrity and transparency of science in management and decision-making processes. Key actions that will increase the Administration's ability to realize this vision are:

- 1 enhancing the use of science in developing policy and management practices;
- 2 strengthening fundamental environmental policies and practices by fully implementing and enforcing existing laws such as the National Environmental Policy Act, the National Forest Management Act, the Clean Air Act, the Clean Water Act, and the Endangered Species Act;
- 3 enhancing the federal role in conserving biological diversity and maintaining or increasing the ability of ecosystems to mitigate and adapt to climate change;
- 4 promoting international cooperation to address invasive and other potentially injurious species and achieve other conservation goals; and
- 5 restoring scientific integrity in the decision-making process.



ENHANCE THE USE OF SCIENCE IN SELECTING NOMINEES, AND IN DEVELOPING POLICIES AND PRACTICES

The President and Congressional leadership have an opportunity to set a new and higher standard for senior staff and nominees to departments, agencies, and the judicial system. This standard might become an Executive Branch precedent that could endure in the form of an Executive Order or joint guidance issued by the White House, Attorney General, Office of Government Ethics, and Office of Personnel Management. A Senate counterpart could become part of the committees' or Senate rules implementing the "advice and consent" powers set out in the Constitution. Accordingly, we recommend the following actions:

Recommended actions

- Require that candidates for each Executive Branch position have advanced education or professional experience that is directly relevant to the majority of their anticipated work.
- Require that all candidates for judicial positions provide explicit information on their education and experience on issues of the role of science in law, and related concepts like the precautionary principle.
- Provide all nominees, new Members of Congress, Members newly assigned to committees, and new staff with an orientation and continuing education coordinated by the Congressional Research Service in the scientific disciplines relevant to their positions.
- Review required education and experience for senior staff in the executive service and civil service who are engaged in biological sciences and conservation policy and management.
- Encourage participation of federal staff in the activities and governance of professional scientific societies, including publication in refereed journals.

STRENGTHEN FUNDAMENTAL ENVIRONMENTAL POLICIES AND PRACTICES

Implementation of our nation's fundamental environmental laws, such as the National Environmental Policy Act (NEPA), National Forest Management Act (NFMA), and Endangered Species Act (ESA), would benefit from new rule making and direction to ensure scientific integrity in policy decisions affecting natural resources. At the outset, the new Administration should order an across the board review of recent natural resource decisions by the outgoing Administration to correct and curtail the effects of those not based on the best available science.

National Environmental Policy Act (NEPA)

Implementation of the Act would benefit from the following actions by the Council on Environmental Quality (CEQ).

- Issue guidance to all federal agencies on rigorous, scientifically credible analysis of the effects of climate change and the effects of alternative proposed programs, projects, and other actions in mitigating net greenhouse gas emissions and adapting to climate change within the context of NEPA compliance.
- Reestablish NEPA at the programmatic level to facilitate early assessment of impacts and alternatives that can improve the ability of science to inform decision-making.
- Initiate a government-wide review of conflict of interest and ethics policies that pertain to federal agencies' selection of contractors for preparation of environmental impact statements and exclude any contractors that have conflicts of interest, financial or otherwise.
- Review the categorical exclusions of resource management, transportation, and other agencies to ensure that the only proposed federal actions excluded from documented analysis are those that would not, individually or cumulatively, have significant environmental effects.
- Consider expanding the scope of NEPA guidance and expanding cooperation with states to capture earlier in the process actions that eventually will entail Federal actions or support, such as adding sources for interstate electric supplies in order to identify and better control significant sources of greenhouse gas emissions.

Additionally, we recommend that the Administration reexamine NOAA's NEPA procedures to ensure that they involve the fishery management councils created under the Magnuson-Stevens Act while leaving government functions in the control of the agency. We recommend that NOAA be directed to evaluate biological and economic impacts related to changes in biological diversity, alteration of species' habitats, introduction of non-native species, and ecosystem resilience when developing risk assessments, such as when evaluating aquaculture projects. We also recommend that the administration reevaluate the exclusion of EPA decisions and rulemaking from NEPA review. This exclusion is often incompatible with the goals of NEPA and reduces the transparency of government decision making.

National Forest Management Act (NFMA)

In 2008, the U.S. Forest Service published new regulations for managing national forests and grasslands under NFMA that virtually eliminated the requirement to maintain viable populations of all vertebrate species on each planning unit of the National Forest System. The existing regulations are not scientifically sound and therefore we recommend the following actions:

- Issue a moratorium on the use of the 2008 National Forest Management Act (NFMA) regulations (36 CFR Part 219) and clarify that national forests and grasslands may proceed with forest and grassland plan revisions and amendments pursuant to the 1982 NFMA regulations (as amended in 1983).
- Publish a proposed rule to rescind the 2008 NFMA regulations and the categorical exclusion for forest and grassland plans, and reinstate the 1982 NFMA regulations (as amended in 1983) pending a full review by the new administration.
- Support new and additional sources of funding for the inventory and conservation of biological diversity (on all public lands).

Endangered Species Act (ESA)

Over the years the implementation of the ESA has been limited in many ways. For example, reports by the Government Accountability Office (GAO), Inspectors General, and numerous court decisions have documented at least 18 potential instances of political interference with decisions on listing of species and designation of critical habitat in recent years. There is also reason to believe that political interference may have unduly affected a larger set of decisions¹. We recommend the following actions to restore scientific integrity and the full application of the law in ESA implementation.

- Revisit decisions for which there is significant and credible evidence of irregular procedures or effects including those questioned by the GAO or Inspectors General. Subject resource-allocation decisions that might influence species affected by these decisions to a reinitiation of consultation or other formal review to ensure that takings and habitat alterations are scientifically and legally defensible.
- Propose amendments to an ESA reauthorization bill that would provide more-specific whistleblower protection for those enforcing and implementing all aspects of the ESA.

Listing

- Request additional appropriations and program funds to ensure that warranted listings of candidate species are not precluded.
- Formally withdraw the Solicitor's Opinion of 16 March 2007, the distinct population policy affecting cross border populations (61 FR 4722), and propose an approach to both the "significant portion of range" and "distinct vertebrate population segments" that provides a more cautious approach to managing species at risk.
- Estimate the economic benefits as well as the costs of critical habitat determinations.

¹Witnesses before the House Natural Resources Committee including representatives of the Union of Concerned Scientists, and other organizations, have posted evidence that may support further review. For examples, see http://www.ucsusa.org/scientific_integrity/abuses_of_science/oversight-of-endangered.html and <http://www.biologicaldiversity.org/publications/papers/PoliticizingExtinction.pdf>

Recovery

- Strengthen existing guidance that recovery plans must be based on the best available scientific information and add guidance that a majority of members on recovery teams must be experts on the species and ecosystems in question.
- Post Section (4) (f) (3) recovery reports to Congress on the Web and in the Federal Register.
- Limit incidental takings for species awaiting recovery plans and publish for comment any proposed findings that a plan will not promote the conservation of a species.
- Revise recovery plans and related critical habitat determinations where political interference with science and scientific peer review was not adequately addressed (e.g., decisions concerning the northern spotted owl, *Strix occidentalis caurina*).
- Require recovery plans to take affirmative measures to consider climate change and create mechanisms to increase the probability of species recovery under projected future climatic conditions.

Consultation

- Restore the global reach of the consultation process as directed in the 8th Circuit Court Opinion in *Defenders v. Lujan* (1990) with assistance from agencies with significant international programs related to endangered species or their ecosystems.
- Require that the senior authors sign initial assessments and opinions. Require political appointees to sign all changes they make and cite the science justifying the change in a draft or final biological opinion.
- Reject proposed rule changes that would allow action agencies to avoid consultation with the Services.
- Clarify in consultation policies that federal actions that substantially reduce probability of recovery by their modification of critical habitat are deemed “adverse modifications.”
- Clarify that biological assessments and opinions will address each agency’s (Section 7(a)(1)) affirmative recovery responsibilities as well as responsibilities to avoid takings to the extent possible, jeopardy, and adverse modifications.
- Include input from Federal agencies involved in relevant climate change research and policy development in interagency consultations to evaluate how climate change might be addressed in species assessments, recovery planning, consultations and management.

Permits and Habitat Conservation Plans

- Include in incidental take permits (including habitat conservation plans) and statements limits on habitat modification and likely takings to ensure that they result in no net loss of occupied habitat or important corridors for movement of affected species.
- Provide a scientifically transparent evaluation of the efficacy of habitat conservation plans (HCPs) before considering proposals to streamline the HCP application process.
- Ensure that Habitat Conservation Plans are designed and implemented to increase the probability of species recovery under changing climatic conditions.

Enforcement

- Work with the departments of Justice, Agriculture, Commerce, the Coast Guard, and other agencies to create enforcement teams involving takings or other violations of the ESA and related

laws such as the Lacey Act, and reward success using the reward provisions of Section 11(d).

- Promulgate Animal and Plant Health Inspection Service regulations to implement the Farm Bill provisions that added plants to the Lacey Act to prevent interstate trade in illegally harvested timber and other plant products. Promulgate complementary Interior regulations concerning import reports, ports, and permits under Section 9(d-f) of the ESA and use existing authorities to address other issues such as new threats that may be posed by importing live animals.
- Work with Congress if necessary to authorize stronger controls on imports of non-native species and potential vectors of disease.

ENHANCE THE FEDERAL ROLE IN CONSERVING BIOLOGICAL DIVERSITY AND ADDRESSING CLIMATE CHANGE ADAPTATION AND MITIGATION

Global climate change, which is triggering environmental, social, and economic disruptions, is perhaps the greatest challenge the President and the nation will face in conserving natural resources. Thus, we recommend that the President elevate this issue as a top priority not only for the environment but with regard to its implications for national and economic security and human health. This elevation could be accomplished in part through a national summit, attended by the President, his advisors, agency heads, congressional leaders, leaders of the associations of governors and mayors, scientific and legal experts, and possibly heads of state from Mexico, Canada, and other countries to establish a process for responding to climate change in cooperation with state and local governments. We further recommend the following actions:

Recommended actions

- Form an interagency team charged with developing options for use of and modest amendments to existing laws, including but not limited to NEPA, Clean Air Act, ESA, and the Internal Revenue Code, to minimize net greenhouse gas emissions and maximize the ability of ecosystems to sequester and convert greenhouse gases.
- Aggressively use existing authorities to address both the drivers and consequences of climate change, such as review under NEPA and full consideration under the Endangered Species Act
- Issue an Executive Order on climate change with a timetable for domestic and international action that comprehensively incorporates adaptation, sequestration, and mitigation strategies into the greatest possible proportion of plans for federal projects and programs.
- Instruct each agency to assess its authorities and to recommend budgetary and operational changes to enhance its role in addressing climate change. Further instruct each agency to work with Congress to incorporate conservation of biological diversity and mitigation of and adaptation to climate change into all major stimulus, stabilization, and other economic support measures. For example, require beneficiaries of emergency financial support to complete environmental audits and publicly disclose those findings and actions taken as a result on an annual basis.
- Require that CEQ and EPA develop and implement a programmatic assessment process for proposed energy, transportation, and agriculture developments and other climate-related actions in consultation with the Department of Energy, National Aeronautics and Space Administration, Department of Agriculture, Department of Transportation, National Oceanic and Atmospheric Administration, scientific societies, scientific research centers, and the National Academy of Sciences.
- Develop, in consultation with like-minded governments, a new strategic approach to international negotiations that is not limited to the scope and instruments advanced by the previous administration.

Cohesive management policies for public lands and waters are increasingly important as climate changes, urban and suburban areas expand, and pressures for energy development on public lands increase. We recommend establishment of a strong, unified standard for resource management on lands managed by the Forest Service and Bureau of Land Management and a similar standard for other federal primary purpose lands as exemplified by the actions below. We also recommend working with state governments to address different impacts, such as sea-level rise in coastal states.

Forest Service

- Implement ecological sustainability [as defined by the USFS Committee of Scientists Report (1999)²] and principles for adaptation to climate change on all national forests.
- Suspend road building in inventoried roadless areas while a consistent policy on roadless areas is developed, and in the meantime restore the 2001 Roadless Conservation Rule.
- Suspend logging of mature and old-growth forests in the Pacific Northwest while new conservation strategies that build on the Northwest Forest Plan are examined.
- Conduct assessments of carbon sequestration potential, develop management plans for long-term sequestration, and manage ecosystems to build resistance and resilience to climate change.
- Analyze costs and benefits of alternative types of biofuels, agriculture, and silviculture, including their contributions to controlling greenhouse gases.
- Mitigate fragmentation of wildlife habitat by energy corridors before projects are authorized.

Bureau of Land Management

- Conduct assessments of carbon sequestration potential, develop management plans for long-term sequestration, and manage ecosystems to build resistance and resilience to climate change.
- Analyze costs and benefits of biofuel utilization, including net effects on the levels of atmospheric greenhouse gases.
- To the extent possible, promulgate regulations defining BLM's sustained yield mandates to ensure conservation of biological diversity and work with Congress to codify into law strong wildlife-protection standards such as those found in NFMA's implementing regulations promulgated in 1982.
- Require assessment of potential future impacts from energy development on natural resources before issuing leases. Refrain from issuing new oil and gas leases on public lands until landscape-level management plans are completed and cumulative impacts and contributions to climate change are mitigated.
- Correct or suspend resource allocations based on decisions or recovery plans that are likely to be reversed. For example, issue a Supplemental Environmental Impact Statement for the BLM Western Oregon Plan Revision requiring the agency to abide by the Northwest Forest Plan.
- Provide full funding for the National Landscape Conservation System and consider new designations of national monuments and similar areas to expand the system in the face of climate change. Conduct an inventory of roadless areas – similar to that on national forests – and include these lands in an expanded system.

National Wildlife Refuge System

- Participate in developing a national strategy for adaptation to and mitigation of climate change

²www.fs.fed.us/news/science

and issue other guidance to maintain the viability of the nation's native species.

- Review and revise existing initiatives on non-native invasive species with the aim of preventing the establishment of new non-native invasives and reducing the impacts of existing populations of non-native invasives in the refuge system and beyond.

Landscape-Level Conservation Across Jurisdictions

The Secretaries of Interior and Agriculture should plan and begin to assemble a connected system of lands and waters (public and appropriate private areas) to be managed for conservation of biological diversity while working to reduce barriers to dispersal of native species. In this process, create incentives for private land stewardship to provide corridors for native species. In developing this process they should consider the Natura 2000 European Network of Biodiversity Areas. For western lands we recommend that the lead agencies consider the recommendations of the Western Landscapes Conservation Series of Northern Arizona University (<http://westernconservation.org/>).

PROMOTE INTERNATIONAL COOPERATION TO ACHIEVE CONSERVATION GOALS

Convention on Biological Diversity (CBD)

Only the United States, Somalia, Andora, the Vatican, and Iraq have failed to ratify the CBD and thus have no vote in its deliberations. We recommend that the United States ratify the CBD, possibly as part of a package of widely accepted treaties (*e.g.*, the Law of the Sea and the Convention on Migratory Species).

Convention on International Trade in Endangered Species (CITES)

- Better elucidate and enforce the requirements of Article IV to ensure that Appendix II species are legally taken and sustained throughout their ranges.
- Better elucidate and enforce the requirements for Appendix III species listed by individual governments that need enforcement assistance in conserving species that are likely to be subject to harvesting and trade.
- Review and revise the measures required by the Secretary under Subsections 9(d-f) of the Endangered Species Act concerning imports of unlisted wildlife and plants.

Globally Endangered Species (Endangered Species Act)

We recommend that the Secretary of the Interior restore the original pre-1986 coverage requiring interagency consultation on agency actions affecting species outside the United States that are on the U.S. list of threatened and endangered species.

International Trade and Non-Native Invasive Species

- Explore cooperation with other nations and ensure that future agreements expressly require that trade and aid comply with national and international conservation standards through the application of the best available science and technologies.
- Consider more active use of the Fisherman's Protective Act and the "Pelly" and Driftnet Act (Studds) Amendments to it (22 USC 1978), which created a range of trade sanctions against nations whose citizens are diminishing the effectiveness of an international conservation agreement.
- Convene a task force on Biological Security to make detailed recommendations to the President and the Congress on how to improve our understanding of and defenses against potential undesirable effects of non-native invasive and genetically engineered species, and control the import and export of both illegally and unsustainably harvested animals and plants.

International Financial Institutions Act (IFIA)

- Comply fully with Title 13 of the IFIA, which requires that U.S. agencies that are considering proposals of multilateral development banks establish a system for sharing information with other

countries and the public in a timely manner so that others need not rely primarily on the banks' own environmental assessments. Adjust energy development by bilateral and multilateral aid and export agencies to rapidly halt subsidies for enterprises that emit greenhouse gases at significant rates, substantially reduce net emissions of greenhouse gases, and improve forest conservation and reforestation.

- Funding Compliance with Conservation Laws and Treaties – Use Sections 1504 and 1505 of the International Financial Institutions Act to require that loans and country assistance strategies set out in detail the conditions necessary to ensure compliance with conservation laws and treaties that are applicable to the undertaking and borrower.

RESTORING SCIENTIFIC INTEGRITY

Political interference in science has penetrated deeply into the culture and practices of our federal resource agencies. By selecting a science advisor to ensure separation of science from politics, the new president can make a clear statement early in his tenure that our country intends to base federal decisions on the best science available and to develop additional information when the law requires it and whenever it is practicable to do so without delaying precautionary management steps, even when not required by law.

Depoliticizing federal science in the resource agencies will require these basic principles:

Increasing Transparency

- Disclose outside meetings, ensure the fullest possible public participation consistent with the law, and post records and documents online.

Open Communications Policies

- Clearly define the role of public affairs officers as facilitators of free and open communication among scientists, the media, policy makers, and the public.

Disclose Records

- Configure agency Web sites to be searchable, accessible, and user friendly. Whenever possible adopt consistent metadata standards, use open standards, preserve electronic records, increase digitization of information, and respond fully and promptly to Freedom of Information Act requests.

Reveal Conflicts of Interest

- Require all government employees and members of advisory or stakeholder committees to reveal all conflicts of interest and recuse themselves from influencing decision-making on the issues on which they have a financial conflict of interest.

Preventing Abuses of Science

Reverse Policies that Weaken Scientific Input

- Suspend, review, and replace regulatory changes and formal and informal guidance limiting the role of scientific advice in conservation of biological diversity.

Review Tainted Decisions

- Direct resource agencies to initiate a stakeholder-inclusive process to compile a list of decisions for which there is evidence of political interference. Where misuse or inappropriate manipulation of science has been identified, systematically reexamine and modify the decisions.

Limit Inappropriate Interagency Review

- As a measure of protection against invasive interagency review, direct resource agencies to provide open and complete dockets for scientifically based decisions. This should include the release of scientific documents before they enter the interagency review process so that any changes to the scientific underpinnings can be identified.

Create an Institutional Firewall

- Ensure that the science that enters the rulemaking process is synthesized and peer reviewed by

qualified, unbiased experts in the relevant field. To the extent possible, create an institutional firewall between those compiling scientific information and those crafting policy to ensure that policy makers do not have the opportunity to edit, influence, manipulate or otherwise interfere with the scientific content. (This precaution is not intended to limit collaboration aimed at developing better legal and scientific standards and further research.)

Creating a Culture that is Conducive to Science – By protecting scientists, encouraging their professional development, and increasing ethics and accountability, the agencies will maximize their ability to recruit and retain excellent scientists.

Promote the Freedom to Warn

- Direct resource agencies to encourage scientists to speak out about abuse of science and vow to protect scientists who do so from retaliation.

Enhance Ethics Policies

- Develop and enforce comprehensive ethics policies that explicitly define and forbid political interference in science.

Encourage Participation in the Scientific Community

- Direct agencies to encourage their staff scientists to publish in external peer-reviewed journals, promote opportunities for professional development through scientific conferences and training, and stimulate participation in scientific societies, including service as officers.

Fully Inform Scientists About their Rights

- Provide regular training and post information to ensure that employees and contractors of government agencies are fully aware of their rights regarding publication of their research, communication with the media, and freedom to anonymously report waste, fraud and abuse.

Strengthening the Law that Supports Science Across the Agencies

- Work with Congress to allow Federal whistleblowers who seek redress for retaliation to sue in U.S. District Court if they have not received a response to their claim through an administrative process within 180 days of filing that claim, or if they wish to appeal a Merit Systems Protection Board decision.
- Repeal Executive Order 13422, which emphasized economic over environmental concerns, and consider a new executive order clarifying that the regulatory oversight and coordination role of the Office of Management and Budget does not include the right to politicize scientific results or delay regulations.
- Direct the heads of the resource agencies to reverse any regulations or guidance that may minimize or improperly interfere with the role of science in federal decision-making. An example is the 11 August 2008 proposed regulatory changes to the Section 7 consultation process for the Endangered Species Act.
- Direct the Attorney General to rank the enforcement of environmental laws and laws ensuring factual accuracy in federal decisions among the highest priorities in civil, criminal, and appellate considerations and in the work of the Public Integrity Section of Justice in its focus on the behavior of elected and senior officials.
- Resume the practice developed under Executive Order 12044, which directed all agencies to ensure that opportunity exists for early public participation in the development of agency

regulations.³ This included paying not-for-profit organizations and individuals for providing substantial scientific evidence in administrative proceedings that would be unlikely to be available but for that compensation. Expand this practice with regard to science used in successful litigation to uphold or improve environmental and scientific standards.

³ The Federal Energy Regulatory Commission adopted such procedures to ensure balanced representation and a full evidentiary record. Related recommendations for notice, selection of witnesses, and so forth were presented in reports commissioned by DOE and developed by the Energy Policy Task Force of the Consumer Federation of America and the law firm Boasberg, Hewes, Finklestein and Klores, including “Funding public participation in Department of Energy proceedings: a report prepared by the Energy Policy Task Force.” Berman, E., Boasberg, T., 1 September 1978.



About the Society

Dedicated to advancing the science and practice of conserving the Earth's biological diversity, the Society for Conservation Biology is a global community of conservation professionals with more than 12,000 members world-wide and representatives from over 140 countries. The Society's membership comprises a wide range of people interested in the conservation and study of biological diversity: resource managers, educators, government and private conservation workers, and students.

Publications and Programs

SCB publishes the flagship peer-reviewed journal of the field, *Conservation Biology*, the award-winning magazine, *Conservation* and the new journal, *Conservation Letters*. Its Annual Meeting, ranging in location from Chattanooga to China, is recognized as the most important global meeting for conservation professionals and students. The Society provides many benefits to its community, including local, regional, and global networks, free online access to publications for members in developing countries, and a very popular online job board. SCB also administers the prestigious David H. Smith Conservation Research Fellowship Program, sponsored by the Cedar Tree Foundation.

