



May 12, 2009

Society for Conservation Biology
Comments
To The White House
Office of Science and Technology Policy
On President Obama's
Scientific Integrity Initiative
By
John M. Fitzgerald, J.D.¹
Ryan Richards

Executive Summary

On March 9, 2009, President Barack Obama issued a memo to the heads of executive departments and agencies stating that science must guide and inform agency decisions within the federal government.² The memo included six principles to guide the development of specific recommendations by the Office of Science and Technology Policy that will ensure scientific integrity in the federal government. Public comment on these principles and the goals introduced in the Presidential memo will be accepted until May 13, 2009.

The Society for Conservation Biology (SCB) has prepared comments for each of the Principles introduced in the memo and has added recommendations on related matters.³ These comments include recommendations for respecting, supporting, and retaining scientists in the federal government; transparency policies that enable public participation in the development of scientific material and policy documents; and improved whistleblower protection to ensure the quality of policy decisions and the protection of those who develop them. In some cases we repeat recommendations that are pertinent to more than one question posed by the Office. 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.

¹ Policy Director, jfitzgerald@conbio.org 202-234-4133 x 107; Ryan Richards is a Policy Associate.

² **Federal Register** / Vol. 74, No. 46 / Wednesday, March 11, 2009 / Presidential Documents **10671**

³ Our December recommendations and these were developed in consultation with an informal coalition of scientific societies and organizations concerned with science in agency decision-making. This is sometimes reflected in common themes and even common language.



Principle (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;

Framing Question: What are the best metrics for the four listed criteria?

First, we would like to ensure that this dedication to quality and integrity applies to every candidate for Federal service from the highest-level nominees to entry-level positions. In our December 2008 “Recommendations for actions by the Obama Administration and the Congress to advance the scientific foundation for conserving biological diversity”, section one, we recommended the following:

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 submission of work for publication in refereed journals.



Metrics to evaluate candidates' knowledge, credentials, and experience:

These differ somewhat depending on the field and the position in the federal government, but active participation in scientific societies, publications in peer-reviewed journals, recognition and honors conferred by scientific societies, and convening of symposia or delivering scientific presentations at professional meetings are all associated with knowledge, credentials, and experience not only with respect to scientific research but in effectively communicating the results thereof to an audience within the sciences and beyond.

Integrity:

Candidates for professional, managerial, and policy positions in the executive branch should be required to have advanced education or professional experience that is directly relevant to the majority of their anticipated work.⁴ In addition, the education and experience of current and potential senior staff who are engaged in science and technology policy and management should be reviewed and adjustments in assignments or selection made accordingly.

Retention and enhancement of Federal employees, contractors, and officials:

They should be encouraged to participate in the activities and governance of professional scientific societies, and to submit their work for publication in refereed journals. Memberships, attendance, and participation in professional conferences, continuing professional education, and subscriptions to journals should be not only should be paid for by the agencies, but expected of professional employees in order to retain and build their skills and networks. In 2005, the Union of Concerned Scientists and Public Employees for Environmental Responsibility surveyed US Fish and Wildlife Service and National Marine Fisheries Service scientists.⁵ Those surveyed were given a free response section and a prompt to discuss how best to improve science at their agency. Many complained of limited opportunities to attend scientific conferences and training sessions, to publish in peer-reviewed journals, and generally to stay on top of the advancements in their field. 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.

⁴ Society for Conservation Biology. "Recommendations for Actions by the Obama Administration and the Congress to Advance the Scientific Foundation for Conserving Biological Diversity" - *Recommendation #1*.

⁵ See testimony of SCB member and UCS Program Director, Dr. Francesca Grifo, and Jeff Ruch, J.D., Director of Public Employees for Environmental Responsibility, before the House Committee on Natural Resources' hearing on political interference in the administration of the Endangered Species Act, May 9, 2007. See also that of SCB member and President Elect of SCB's North America Section, Dr. Dominick DellaSala, at the same hearing addressing several of the issues raised in President Obama's OSTP Directive.



Federal scientists in some agencies, due to varying interpretations by different agencies⁶ 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.

As stated in our 2008 recommendations:

...

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 report anonymously waste, fraud, and abuse.

...

⁶ 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.



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

Framing Question: How can the integrity of scientific processes be assured? What are some good examples to learn from?

SCB addressed most of the issues raised by OSTP in our recommendations to the transition team.⁷ Several of our points are relevant not only to issue (b) but to the remaining issues.

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.

⁷ The full text of SCB's recommendations are attached as an appendix and available on our Web site – www.conbio.org/resources/policy



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.⁸

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.)

⁸ The “invasive interagency review” process noted here has often appeared to have occurred when the Office of Management and Budget has seemed not just to provide policy guidance within authorized limits but to substitute the political preferences of the party or president for the scientific findings and/or evidence or agency action required by law.



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.

...

The persistence of scientific integrity in federal agencies is largely dependent upon three factors:

- 1) the professional culture within the agency,
- 2) the opportunity for public scrutiny and comment, and
- 3) the extent to which laws and regulations provide effective guidance and remedies for interference with the integrity of science in federal decision-making. This in turn requires both education and active enforcement.

The decision-making process was damaged by political interference on numerous occasions during the previous administration. One of the first actions that should be taken by agencies is to work with other stakeholders to identify decisions that were subject to political interference and systematically reexamine and modify those decisions.

Several examples of political interference have occurred in decisions related to the Endangered Species Act (ESA), for example. The OSTP should instruct agencies to revisit decisions for which there is significant and credible evidence of irregular procedures or effects.

SCB noted in our transition recommendations:

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 decisions. 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.

Decisions related to the National Environmental Policy Act have also been affected by instances of interference, especially in the selection of contractors for the preparation of environmental impact statements. SCB addressed this in its transition recommendations:

National Environmental Policy Act (NEPA)

- 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.



(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;

Framing Question: What are the most effective processes and organizational structures for assuring that scientific and technological information is reliable? How can the processes and structures used in each case best be disclosed as part of the public record?

Federal agencies must maintain the reliability of scientific information used in the decision-making process. Achieving this goal requires the institution of several processes and organizational structures that will influence decision-making, from agency developed research to policy design. Since a great deal of information that the agencies depend on is collected and synthesized within the agencies themselves, it is important that they encourage rigorous peer-reviewed science. To ensure the production of top quality research the federal agencies must recruit and retain talented and committed scientists.⁹ There is significant competition for these valuable minds, and in recent years, opportunities for professional development within the government have fallen short of those available in the private sector or academia. According to a survey conducted by the Union of Concerned Scientists, 46% of scientists at NOAA have responded that their job satisfaction had decreased in recent years and 30% feel they are not allowed to do their jobs as scientists.¹⁰ Encouraging federal scientists to participate in the activities and governance of professional scientific societies and to publish their work in peer-reviewed journals provides recognition for their high-quality work, and ensures that working for the federal government enhances, rather than limits, career development.

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.

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.¹¹

⁹ See our comments under Principle (a) of this document

¹⁰http://www.ucsusa.org/assets/documents/scientific_integrity/NOAA_Fisheries_Full_Survey_Results_1.pdf

¹¹ SCB. "Recommendations for Actions by the Obama Administration and the Congress to Advance the Scientific Foundation for Conserving Biological Diversity" - *Recommendation #2*



Additional SCB recommendations to the transition team speak to this:

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 August 11, 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. 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.¹²

¹² 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.

<http://openlibrary.org/b/OL14879924M/Funding-public-participation-in-Department-of-Energy-proceedings>. Resuming and expanding this practice might require or be expedited by the repeal of a provision added, not many years after the Executive Order, to an appropriations bill by Rep. Mollohan (D-W.Va.) which provision sought to ban the practice authorized by the Executive Order. It is also worth noting that President Reagan repealed Executive Order 12044 with his own Executive Order 12291. This was again modified by Executive Order 12866. In addition, the EPA now has a Technical Assistance Grant (TAG) program that provides funds for the public to hire their own experts during public interest NEPA review. Programs such as this one should be enhanced and publicized. OSTP and the Office of Management and Budget should review these Executive Orders, the Mollohan provision, and the EPA TAG program and similar programs to determine the best approach to ensuring public participation and agencies’ consideration of scientific data and analysis from the non-governmental community.



(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;

Framing Questions: What are the best ways to maximize the legitimate public release of scientific and technological information relied upon by agencies?

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.

As an example, an investigation by the Union of Concerned Scientists in 2007 found that the US Fish & Wildlife Service did not have a central, official communications policy but instead a patchwork of regional policies combined with an overarching policy at the Department of the Interior.¹³ As a result, scientists, and even public affairs officers, often rely on local policies transmitted verbally or by email from supervisors. Some scientists felt free to speak with the media and simply notify their press officer, whereas others were restricted from making any media contacts. There was a widespread sense that political appointees have interfered with science-based decisions in recent years and that scientific openness had suffered as a result.

The communications policy issued in 2007 by the Department of Commerce¹⁴ was a step in the right direction, although more safeguards are needed to ensure that past abuses do not recur. Commendably, over three-quarters of NOAA respondents to a Union of Concerned Scientists' questionnaire were aware of their fundamental rights and there has been a decline in incidents of censorship. Still, the Department of Commerce's policy

¹³http://resourcescommittee.house.gov/images/Documents/20070509/testimony_grifo.pdf

¹⁴http://www.commerce.gov/s/groups/public/@doc/@os/@opa/documents/content/prod01_002841.pdf



adds layers of bureaucracy to routine media communications that are confusing and burdensome.¹⁵

Federal agencies should all establish clear and unambiguous communications policies, and proactively engage their scientific staff in media training. The policies should clearly grant federal scientists the fundamental right to express their personal views, if they specify that they are speaking as private citizens and not agency representatives. Agency scientists should also have the right of last review for any agency communication that references them personally or represents their research.

¹⁵ http://www.ucusa.org/scientific_integrity/abuses_of_science/press-releases-controlled-for.html



(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;

Framing Question: How can agencies best ensure that they will know when scientific or technological integrity has been compromised?

(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.

Framing Question: What are the best ways to make sure that the science and technology an agency relies on is reliable?

The framing questions posed and these two principles are so interrelated that we will answer them jointly.

Preventing the integrity of an agency process from being compromised:

An agency that seeks even a reasonable compromise must never allow the record of decision or the process for making decisions to be compromised by improper exclusions, knowing inclusion of false assertions, or comparable disregard for the truth.

Compromise of scientific information due to waste, fraud, or abuse of authority jeopardizes the validity of the entire decision-making process. Every agency is vulnerable to this expression of professional misbehavior, and we believe there are several simple strategies that will reduce its effect on the executive branch.

The most powerful step would be to for OSTP and the Attorney General acting together to issue guidance to emphasize three sections of the criminal code that were overlooked in recent years. These are described below along with other recommendations arising from three hearings into the abuse of the Endangered Species Act.

Background—

On May 9, 2007, Dr. Francesca Grifo and Jeff Ruch, J.D. testified concerning polls and multiple cases indicating that the integrity of the decision-making process in the natural resource agencies was compromised. Their testimony includes several strong suggestions for reform.

On July 31, an additional witness described another reform to help protect endangered species:



Mike Kelly's Reform Proposals of July 31, 2007:

"Currently, only the final BiOps (Biological Opinions) signed by an administrator are routinely entered into the administrative record. This practice makes it relatively easy for administrators to alter the conclusions of biologists without leaving a trace. Allowing the lead biologist(s) to co-sign the final BiOp as acknowledgement of support for the conclusions/reasoning could greatly decrease the ability of administrators to alter conclusions for non-scientific reasons. Alternatively, a "biologist's draft" BiOp could be entered into the record to allow comparisons with the final version, and administrators would be required to explain any changes they made.

A second/additional remedy could be to have the lead agency attorney for the consultation sign the final BiOp as an indication of legal approval. In my experience, and in the experiences of my colleagues, agency attorneys have always provided excellent guidance during our development of BiOps. Guidance supplied to biologists and administrators is protected by attorney/client privilege, so the guidance does not appear in the record. I suspect that legal guidance is often ignored by administrators when the guidance does not support predetermined outcomes. I also suspect that this is the reason that administrations lose so many ESA law suits."

The Interior Inspector General's Proposed Extended Scientific Code of Ethics

The Deputy Inspector General of Interior recommended on July 31, 2007, in her testimony before the Natural Resources Committee that a revised DOI Scientific Code of Ethics be applied to policy level officials as well as career employees.

The Congress may want to review and revise the Standards of Conduct for Federal Employees in general. These are actual regulations rather than guidance or advice.

A Set of Regulations Requiring Referrals to Appropriate Authorities

As the Deputy Inspector General was reminded at the Natural Resources Committee's May 9, 2007, hearing, a violation of regulations is an illegal act. OSTP could suggest that each agency, in consultation with the Solicitor General, the Office of Special Counsel, the Merit Systems Protection Board, and the Office of Government Ethics, promulgate new regulations delineating:

- when matters should be referred by Inspectors General and others in these agencies to other authorities such as the Attorney General, and
- what current law prohibits, including but not limited to civil and criminal provisions controlling obstructing or defrauding the normal functions of government, agreements and attempts to do so, and using false statements or withholding material facts, such as 18 U.S.C. 371, 1001, and 1505.



Process for Implementing Reforms

The OSTP and the White House could require agencies or work with Congress for such a requirement to designate funds for the purpose of

- a) implementing the cosigning requirements described above,
- b) promulgating a revised code of ethics that covers all officials, and
- c) completing the review and revision of decisions noted in a report by an Inspector General or General Accounting Office as irregular or suspect.

In the longer term, committees of jurisdiction could address these issues in additional hearings. The Government Affairs and Judiciary Committees could consider amending the Ethics in Government Act, and restoring a reformed version of the independent counsel process with help from the OSTP regarding abuses of scientific procedures and evidence.

Administrative Law Options

Improving the basis of injunctive relief for natural resources:

The OSTP could work with Justice, Office of Management and Budget, and Congress to update the Administrative Procedures Act or other laws to lower the burden for obtaining a preliminary injunction in the case of threatened natural resources, dangerous substances, or serious public health risks. Rather than “irreparable harm” the court might be required to find only substantial risk to a natural resource or public health before granting a temporary restraining order or preliminary injunction if there were considerable evidence that improper use of scientific evidence had led to an illegal action posing a risk to such a natural resource.

Additional Civil Remedies

False Claims Act – OSTP could work with the Department of Justice to clarify that direct monetary or other personal benefit to the accused or respondent is not necessary to show a violation. It could clarify that a showing of additional benefit to a third party based on the knowing or grossly negligent use of false or misleading statements or findings of fact in a federal proceeding would be sufficient to allow the citizen or organization acting as a “private attorney general” to proceed with the case. This would help to allow such persons or groups to challenge the decision, and collect the appropriate portion of funds or value of the resource secured for or restored to the federal government or its contractor or other partner organization that may have been defrauded. Such a change would ensure that the record of decision is strong.

One basic step towards reducing the likelihood of compromised information in federal agencies is a commitment to disclosing potential conflicts of interest. Financial incentives for abusing authority have been revealed in many instances of compromising scientific information in previous administrations. Given our understanding of this threat to scientific integrity, the government should require its employees and members of



advisory or stakeholder committees to disclose all conflicts of interest and recuse themselves from influencing decision-making on the issues on which they have a financial conflict of interest.¹⁶

The Ethics in Government Act requires high level officials to file publicly available forms disclosing potential financial conflicts of interest, but the Administration could review the act, require additional disclosure, and seek congressional help in changing the Act.

For example, in 1984 a Federal appeals court overturned a district court decision that if any citizen presented specific and credible evidence that a serious crime had been committed by a high ranking Federal official, the Attorney General would be obligated to ask a special panel of judges to appoint an independent counsel to investigate further and decide whether to take the case to a grand jury for an indictment. The underlying portion of the Ethics Act pertaining to appointments of independent counsels has since been dropped, but the traditional practice of appointing independent counsels for cases with potential for political conflicts of interest within an administration continues. The OSTP could recommend specific guidance on cases involving misdirection of scientific evidence and work with Congress to make statutory changes so that scientists could more effectively present evidence of serious scientific fraud.

Agencies within the executive branch are staffed by some of the most knowledgeable individuals in their given field. They are professionals who understand when the information or technology they are using or preparing has been jeopardized by inappropriate behavior. If they do not feel adequately protected when expressing their concerns, however, the agency and its work will be damaged. This highlights the need for better whistleblower protection.

Several environmental statutes, including the ESA, do not have built-in whistleblower protections. While there are broader whistleblower protection laws on the books, court decisions over the years have eroded those laws and stifled Congressional intent to protect federal workers who expose waste, fraud, and abuse of authority in the government. When a federal employee steps forward to protect the public from harm or to expose the waste of taxpayer dollars, that worker often is harassed, demoted, or fired.¹⁷

Scientists who wish to receive whistleblower protections face challenges, because laws have not specifically addressed situations where agency managers attempt to distort or suppress federal research or technical information. As a result, scientists who have attempted to disclose political interference with science have been found ineligible for whistleblower protection.

¹⁶ SCB. "Recommendations for Actions by the Obama Administration and the Congress to Advance the Scientific Foundation for Conserving Biological Diversity" - *Recommendation #5*

¹⁷ For more information on deficiencies in whistleblower law, see the Web sites of the Union of Concerned Scientists, Government Accountability Project, and Project on Government Oversight, for example.



The Administration would do well to support a form of whistleblower legislation that provides specific protections for federal scientists who blow the whistle on the suppression or distortion of federal research or technical information.

Furthermore, given the extended delays many have suffered, whistleblowers who seek redress for retaliation must be allowed to sue in U.S. District court as a last resort if they have not received a response to their claim through an administrative process, such as the Merit Systems Protection Board (MSPB), within 180 days of filing that claim, or if they want to appeal an MSPB decision.

Reliability

The reliability of the scientific method is critical to agency decision-making. We have recommended peer review, transparency, and assistance to scientists in providing reliable data for agency decision making.

Ensuring the creation of highly reliable scientific and technological information may require procedural guidelines that establish appropriate scientific practices and accountability. OSTP could help or direct each agency to develop a set of guidelines that presents definitions or thresholds of reliability for scientific information for the missions of each agency and lays out standards for acquiring this knowledge. These guidelines could include accountability standards that require government employees to sign assessments and opinions and to cite the science justifying their decisions. In the absence of an acceptable level of certainty, OSTP should direct agencies to use the precautionary principle concerning natural resources and public health.