Implementing President Obama’s Memorandum on Scientific Integrity

Comments submitted by
Public Employees for Environmental Responsibility (PEER)
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These comments are submitted on behalf of Public Employees for Environmental Responsibility (PEER). PEER is a service organization dedicated to protecting those who protect our environment. We provide legal defense to federal, state, local and tribal employees dedicated to ecologically responsible management against the sometimes onerous repercussions of merely doing their jobs. In addition, PEER serves as a safe, collective and credible voice for expressing the viewpoints otherwise cloistered within the cubicles.

Headquartered in Washington, D.C., PEER has a network of state and regional offices. Most of our staff and board members are themselves former public employees.

On a daily basis, public employees in crisis contact PEER. A typical federal employee request for assistance involves a scientist or other specialist who is asked to distort or hide evidence, data or factual analysis in order to support a politically pre-determined result, such as a favorable recommendation on a project. It is in this context that PEER hears from scientists working within agencies such as the Environmental Protection Agency (EPA), the U.S. Fish & Wildlife Services (FWS) and the National Oceanic & Atmospheric Administration (NOAA)

Per the suggestion of the Federal Register Notice [FR Doc. E9-9307], our comments are organized in the following order to present:

(1) Recommendations responsive to the aims of the President’s March 9, 2009 Executive Memorandum on Scientific Integrity;
(2) Suggested implementing strategies, and
(3) Measures to empirically gauge the effectiveness of strategies to promote scientific integrity.
(1) Recommendations responsive to President’s Memorandum on Scientific Integrity.
The President’s memorandum specified six aims for incorporation into policy:

“(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”

Comment:
Federal environmental agencies routinely promote or reward the very officials who perpetrate the distortions of scientific work. The reason behind this perverse dynamic seems evident – managers who dissemble to achieve a pre-determined result are simply doing the bidding of the agency’s top political appointees.

To convey just how widespread this “lie to succeed” culture has become in federal service, consider two recent examples:

- In 2005, a Commerce Office of Inspector General report found that a key NOAA biological opinion on the effects of diverting Sacramento River water from the San Francisco Bay Delta to 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 biological opinions on threatened and endangered species. He is still in that position and, this past November, was awarded a gold medal by NOAA for his work drafting a Bush presidential order removing key legal protections for whales and other marine mammals from naval operations; and

- One of the rare instances in which FWS has admitted that it committed scientific fraud involves use of skewed biology in assessing the habitat needs and population of the endangered Florida panther. The central figure in this episode was Jay Slack, the Field Supervisor of the FWS South Florida Field Office in Vero Beach. Mr. Slack fired the FWS biologist, Andrew Eller, who had challenged the fraud. Following a whistleblower complaint waged by PEER, Mr. Eller was restored to FWS in a courthouse steps settlement. Shortly thereafter, Mr. Slack received a Meritorious Service Award. Six months later in February 2006, Slack was promoted to serve as Deputy Regional Director of the FWS Mountain-Prairie Region, responsible for the eight-state area. He now heads the FWS training academy

PEER recommends that –

1. Federal managers must be held to account for their decisions which are found to foster improper scientific procedures, suppression or other practice. To the extent that these two managers suffer no negative career consequences for their documented malfeasance, then any new integrity standards will be meaningless.
2. Follow the Lawsuits. The most efficient way to identify scientific fraud is to examine federal lawsuit rulings (or forced settlements) against an agency. In matters in which a legal-scientific standard is at issue, as in most environmental lawsuits, in order to prevail, the plaintiffs must in essence demonstrate an act of scientific misconduct by agency management, under a standard that the government has been “arbitrary and capricious”. When a federal judge finds an agency guilty of violating science-based laws under the highest standard in civil jurisprudence this cannot be explained away as mistakes or misunderstandings.

For example, a long series of federal court rulings that the EPA has been derelict in protecting the water quality of the Everglades is based on agency reliance on information and standards that are palpably unrealistic. In the most recent ruling, on July 29, 2008, U.S. District Judge Alan Gold excoriated EPA, finding that the agency had shirked its duty to establish basic water quality standards and, in so doing, “violated its fundamental commitment and promise to protect the Everglades”. EPA decided not to appeal this ruling but the responsible agency managers who skewed the conclusions and concerns of EPA specialists are still in charge of its regional water program.

Federal officials responsible for making decisions so contrary to the overwhelming weight of scientific or technical information that they violate federal law should be disciplined and/or removed. Currently, these law violations are not even recorded in the manager’s personnel file.

A review of such adverse court decisions over the past decade should be followed by identifying any responsible managers still within federal service and appropriate action taken so that that person does not supervise scientists or technical specialists.

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

Comment:
The main reason the Bush administration was able to politically manipulate science was that there is no rule against it. Moreover, when there were agency protocols that might have inhibited inappropriate tampering, that stricture could be set aside without consequence.

In order to have meaningful procedures to protect scientific integrity there must be an enforcement mechanism. PEER recommends –

The President should adopt formal, enforceable and government-wide rules that ban the manipulation of science:

1. Forbid alteration of the substance of technical documents for non-technical reasons unless the basis is included as a part of the document;
2. Ensure that the originating scientist or technical specialist is allowed to see and comment upon “final” work product; and

3. Display any changes in the original work with an explanation for those changes as part of the official record.

The transparency aspects of these rules will also deter political manipulations of scientific findings and conclusions.

“(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”

Comment: Peer review and other normal processes for scientific integrity are problematic in federal service, in part because official policies generally restrain agency scientists from interacting with outsiders. For example, the FWS on May 5, 2004 held an all-staff “Town Meeting” to tout its “scientific excellence”. That afternoon, all employees were supposed to take part in an “interactive discussion” via telephone conference, Internet connection or satellite download with then-Director Steve Williams. At that meeting, Mr. Williams announced that FWS would begin concerted interaction with professional societies. He was then asked by a participant whether he would address the Interior ethics guidelines which still discourage agency scientists from more than passing involvement with associations dedicated to raising and protecting scientific standards. The ethics guidelines classify these professional societies as the sources of potential conflict of interest. Ironically, agency lawyers are free to participate in state bar or legal association activities but scientists have no comparable freedom.

PEER recommends that –

- **Participation by Federal Scientists in Professional Societies Should be Allowed and Encouraged.** Anything that increases the transparency of agency scientific decision-making, particularly by involving knowledgeable, credible and disinterested outside specialists contributes to the factors safeguarding scientific integrity. The President should make explicitly clear that federal employee involvement with professional organizations dedicated to improving the quality of science is not a real or apparent conflict of interest but is just the opposite – an activity which furthers the agency mission. The stillborn 2005 FWS initiative on professional openness should be revived and applied to all federal science-based agencies by a) directing agency ethics offices to encourage rather than discourage staff involvement in professional societies; and b) promoting, through resolution, appropriation language or other mechanism, federal participation and partnerships with outside scientific bodies.
As discussed above, many of the breaches in scientific integrity during the past administration were intended to circumvent statutory requirements in environmental and other laws. In order for agencies to “appropriately and accurately reflect that information in complying with and applying relevant statutory standards”, there must be sanctions against officials, including political appointees, who deviate from that standard.

PEER recommends that —

- Following an adverse court ruling, administrative finding, Inspector General report or other credible indicia that scientific or technical information has been misapplied against a statutory standard, each agency should be required to identify the responsible official and take appropriate disciplinary action.

If there is no punishment for deviating from established standards, those standards will be of questionable worth.

“(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”

Comment:
PEER in partnership with the Union of Concerned Scientists surveyed thousands of federal biologists, ecologists and botanists working in field offices across the country to obtain their perceptions of scientific integrity within their agencies. One of the most disturbing findings from those surveys was that federal scientists were generally unsure about what they could or could not say or write to colleagues in academia or other agencies. As a result, the natural give-and-take of scientific development is stunted by politically-inspired public communication policies that require that all communications be officially vetted.

Other agency constraints on scientists are not as subtle. For example, on March 29, 2007, the Commerce Department posted a new administrative order on “Public Communications” requiring that agency climate and marine scientists obtain agency pre-approval to speak or write, whether on or off-duty, concerning any scientific topic deemed “of official interest.” This order repealed a more liberal “open science” policy adopted by the NOAA on February 14, 2006. The agency also rejected a more open policy adopted that same year by the National Aeronautics and Space Administration. This Commerce policy was rushed to print despite an ongoing Commerce Office of Inspector General review of communication policies that was undertaken at congressional request.

Although couched in rhetoric about the need for “broad and open dissemination of research results [and] open exchange of scientific ideas”, Commerce forbade agency scientists from communicating any relevant information, even if prepared and delivered
on their own time as private citizens, which has not been approved by the official chain-of-command:

- Scientists must give the Commerce Department at least two weeks “advance notice” of any written, oral or audiovisual presentation prepared on their own time if it “is a matter of official interest to the Department because it relates to Department programs, policies or operations”; and

- Any “fundamental research communication” must “before the communication occurs” be submitted to and approved by the designated “head of the operating unit”. While the directive states that approval may not be withheld “based on policy, budget, or management implications of the research,” it does not define these terms and limits any appeal to within Commerce.

While claiming to provide clarity, the new Commerce order gives conflicting directives, on one hand telling scientists that if unsure whether a conclusion has been officially approved “then the researcher must make clear that he or she is representing his or her individual conclusion”. Yet, another part of the order states non-official communications “may not take place or be prepared during working hours”. This conflict means that every scientist who answers an unexpected question at a conference puts his or her career at risk by giving an honest answer.

The net effect of these explicit and implicit constraints is that dialogue among scientists, both within and outside government, is stunted and furtive. The President should extend his directives promoting transparency to embrace openness among federal scientists and specialists.

PEER would recommend several measures:

1. **Un-Gag the Scientists.** The rights of federal scientists to speak or write should not vary from agency to agency. The President should ban the Commerce Department and other agencies from adopting gag orders and allow federal scientists to freely communicate and argue about science – both on the job and off;

2. **Secure Agency Scientists’ Ability to Publish.** EPA, FWS and other agencies lack clear guidelines for how scientists may publish on their own in peer reviewed journals or other publications. Every agency should have uniform, clear and non-restrictive guidelines that allow federal specialists to write articles, for peer-reviewed journals, books and other media;

3. **Open Communication with Congress.** If federal scientists and other specialists are allowed to speak with reporters or outside colleagues, they certainly should be able to communicate with Congress. Congress already prohibits the executive branch from using any appropriated funds to gag or restrain communication between Congress and civil servants. But this prohibition lacks any enforcement
mechanism. The executive branch should provide the enforcement mechanism by adopting rules which explicitly allow its scientists and technical specialists to communicate findings directly to Congress.

“(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”
Comment: PEER strongly recommends adoption of policies which require that –

Any internal alterations of agency scientific or technical reports should become part of the public record, so that the evolution of official findings can be traced. In particular, alterations by political appointees of scientific documents should be reported to the Congress with a required written explanation for the basis of the alteration.

If these changes to scientific conclusions must be explained in the clear light of day, it should deter many distortions. Conversely, if agency leaders believe that the changes their political appointees make are appropriate, they should not mind sharing that justification.

“(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 prepare.”
Comment:
In the federal civil service, scientists risk their jobs and their careers if they are courageous enough to deliver accurate but politically inconvenient findings. Under current law, federal scientists have scant legal protection. 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 or difference of opinion, for which the disclosing scientist has no legal protection.

On top of that, constitutional free speech protections are now unavailable for scientists who speak as government employees. On May 30, 2006, Justice Samuel Alito cast his first deciding vote in Garcetti v. Ceballos (126 S. Ct. 1951) which held that public servants have no First Amendment rights in their role as government employees. The central premise of this ruling is public employees per se have no free speech status because their speech is owned by the government.
The court held that civil servants enjoy First Amendment rights only when they act outside their work role and go public. Thus, under the Supreme Court’s formulation, pursuing scientific integrity at work is afforded no constitutional defense against on-the-job retaliation.

The only protection the Court identified for public servants is whistleblower legislation. Unfortunately, the federal Whistleblower Protection Act has also been interpreted to exclude disclosures made within the scope of duty. Thus, internal agency communications often lack any legal protection whatsoever – constitutional or statutory.

The only body of law that protects government scientists is the handful of environmental statutes, such as the federal Clean Air Act, that protect disclosures made by any employee, public or private sector, that further the implementation of those acts. However, several key laws, such as the Endangered Species Act and the National Environmental Policy Act, have no such whistleblower provision. Moreover, the Bush administration has 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”.

PEER recommends that the President should adopt government-wide rules that –

1. Prohibit adverse personnel actions or other discrimination in retaliation for voicing a reasonable scientific or technical finding, disagreement or distinction;

2. Protect government employees who report accurate information by making honesty an official policy of federal service;

3. Extend coverage of the Whistleblower Protection Act to scientists by ensuring that rules promoting scientific integrity and disclosures of deviations are official policies. The Whistleblower Protection Act protects reports of any violation agency policy – thus, policies which cover scientists and specialists who are doing their jobs of generating or ensuring accurate scientific and technical information must be codified as a rule, regulation or, optimally, law; and

4. Waive sovereign immunity so that the whistleblower protection provisions of all the environmental statutes will apply to federal employees.

(2) Suggested Implementing Strategies.
It is essential that procedures to protect scientific integrity and data quality be designed to survive the current administration. Thus, any implementation strategy cannot depend on ad hoc, agency-by-agency initiatives.

PEER recommends that the President –
• Adopt formal, government-wide rules by Executive Order or other means which result in binding policies put into effect; and

• Seek legislative codification of key provisions, such as whistleblower protections, as soon as practicable.

It is also vital that the President make clear that his own political appointees will not be immune from discipline for violating scientific integrity procedures.

(3) Measures to empirically gauge the effectiveness of strategies to promote scientific integrity.

PEER recommends that –

• The Office of Personnel Management or other agency regularly survey government scientists and specialists to determine their perceptions about the effectiveness of quality control policies. In addition, employee unions or other representatives of specialists should be allowed input into the survey instrument to ensure that the questions posed touch upon actual concerns of subject employees; and

• The Department of Justice or other agency should provide annual analysis of court rulings involving government application of science-based statutes. After first establishing a baseline, it would be possible to see if the government was winning or losing a higher percentage or number of cases – and by which agencies. This analysis of court rulings and the underlying information on which it is based should be made public in a way to facilitate independent review, critique and re-analysis of the data.

• The administration should partner with scientific professional societies to review and, where appropriate, participate in processes designed to promote scientific integrity and data quality.

Above all, the key measure of effectiveness will be the willingness of this administration to publicly call out deviations in scientific integrity committed under its own watch.

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