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Proposed Scientific Integrity Policy for the U.S. Interior Department

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), 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. 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 servants in crisis contact PEER. A typical federal employee request for assistance involves a scientist or other specialist who is asked to distort or hide 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 Interior Department (DOI) agencies such as the U.S. Fish & Wildlife Services (FWS), Bureau of Land Management (BLM), National Park Service (NPS) and the agency formerly known as the Minerals Management Service (MMS).

Summary

The proposed DOI scientific integrity policy published in the *Federal Register* on August 31, 2010 does not come close to coherently addressing the pattern of serious scientific misconduct exhibited during recent years within DOI. The DOI proposal explicitly exempts from coverage political manipulation of technical work by top officials. Despite citing President Obama's March 9, 2009 memorandum on the subject, the DOI proposal fails to incorporate nearly every critical element outlined in that presidential directive.

Agency scientists are already subject to discipline for the acts of scientific misconduct defined in the DOI proposal. Moreover, the core "Code of Scientific Misconduct" in the proposal was lifted verbatim from a proposal floated by the Interior Secretary Gale Norton (see below). In sum, the DOI proposal raises significant doubt that Interior decision-makers are sincerely interested in or genuinely understand the nature and resolution of engrained scientific integrity breakdowns within their agency.

Our comments are organized in the following order:

I. Omissions in the Draft DOI Policy of Elements Contained within the President's March 9, 2009 Executive Memorandum on Scientific Integrity;

II. Critical Flaws in the Draft DOI Policy

III. Suggested Implementing Strategies and Measures to Gauge Effectiveness

Preliminary Observation on Origin of the Proposed DOI Code of Scientific Conduct – the Great Lynx Hair Hoax

In December, 2001, the *Washington Times* ran a story about lynx biologists in Washington State. The story implied that a number of biologists, employees of the U.S. Forest Service, U.S. Fish and Wildlife Service and the Washington Department of Fish and Wildlife had conspired to defraud the public by planting lynx hairs into a wide ranging habitat survey to back a secret environmental agenda.

Before agency scientists had a chance to respond, a number of politicians – including Interior Secretary Gale Norton – jumped into the fray, demanding hearings, investigations and even termination of the scientists involved.

The biggest victim in this political quagmire has been the truth. A review of the record of this case demonstrates conclusively that this has been more a matter of political posturing than scientific wrongdoing. The biologists had sent blind samples of known lynx hairs to test the accuracy of federal laboratories, not "false samples" intended to "defraud" the public.

Subsequent investigations vindicated the scientists involved. An internal Forest Service investigation and then y an investigation by the Washington State Senate cleared the scientists of wrongdoing; a third investigation by The Wildlife Society (TWS), an international association for wildlife professionals, found that the biologists' intentions were fully "consistent with TWS Code" and fully exonerated them.

Without waiting for independent investigations, DOI officials, including the Secretary, had already stated that agency scientists were "out of control" and Secretary Norton subsequently issued a Code of Scientific Conduct – the same one that is copied in the latest DOI proposal – via a press release. Secretary Norton's code was never formally included within the departmental manual.

Nonetheless, the fact that the current DOI would look to the handiwork of Secretary Norton on the issue of scientific integrity is troubling, given the scandalous track record compiled on this issue by DOI under her tenure. While the DOI is not constrained from plagiarizing the work of earlier officials, its choice in this instance is questionable. It also suggests that current DOI officials were not inclined to undertake a fresh, thoughtful

examination of the issues and instead reached out thoughtlessly to grasp whatever was "on the shelf" and ready for rapid publication.

I. Omissions in the Draft DOI Policy of Elements Contained with the President's Memorandum on Scientific Integrity.

The President's March 9, 2009 memorandum specified six aims for incorporation into formal policy, which are quoted below in italicized bold print. Unfortunately, nearly every aspect of these enumerated elements is absent from the DOI proposal:

"(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 DOI policy does not address this topic. This omission is especially significant because it is common for DOI scientists to be supervised by non-scientists who substantively edit the scientists' work.

Further, DOI 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 culture promoting management manipulation of science has become inside DOI, consider two recent examples:

- 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.

- An April 2010 report by the Government Accountability Office found that MMS scientists are subjected to management practices that "hindered their ability to complete sound environmental analyses" in reviewing Alaskan offshore drilling projects. The report confirms scientists' accounts channeled through PEER that Interior managers routinely "suppressed" critical findings on issues ranging from the likelihood of oil spills to acoustic damage to whales to introduction of invasive species. Despite ample evidence of management interference in the

scientific work of the MMS Alaska office, not a single manager was disciplined or moved. In fact, the same practices are continuing today in the MMS successor agency, the Bureau of Ocean Energy Management Regulation and Enforcement (BOEM).

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

The proposed DOI policy does not apply to agency managers or bar alteration of scientific reports by non-scientists for political reasons. Nor do the rules address the integrity of the scientific process, except to threaten punishment for scientists who engage in gross misconduct that a) is already grounds for discipline; and b) does not match the threats to scientific integrity historically experienced by DOI.

The main reason the Bush administration was able to politically manipulate science was that there is no rule against it. The DOI proposal would not change that – in fact, it would codify that political rewrites of scientific material would be beyond sanction.

Moreover, when there were agency protocols that might have inhibited inappropriate tampering, that stricture could be set aside without consequence. The DOI proposal would not change this condition – political appointees and non-scientist mangers could inappropriately change technical documents or scientific processes without consequence.

In 2005, PEER in partnership with the Union of Concerned Scientists surveyed more than 1,400 FWS biologists, ecologists and botanists working in field offices across the country to obtain their perceptions of scientific integrity within the agency. The survey had a 30% rate of return and produced some of the following results:

- Nearly half of all respondents whose work is related to endangered species scientific findings (44%) reported that they "have been directed, for non-scientific reasons, to refrain from making jeopardy or other findings that are protective of species." One in five agency scientists said they have been "directed to inappropriately exclude or alter technical information from a FWS scientific document";

- More than half of all respondents (56%) cited cases where "commercial interests have inappropriately induced the reversal or withdrawal of scientific conclusions or decisions through political intervention"; and

- More than a third (42%) said they could not openly express "concerns about the biological needs of species and habitats without fear of retaliation" in public while nearly a third (30%) felt they could not do so even inside the confines of the agency. Almost a third (32%) felt they are not allowed to do their jobs as scientists.

In essays submitted on the topic of how to improve integrity at FWS, biologists wrote the following:

- "We are not allowed to be honest and forthright, we are expected to rubber stamp everything. I have 20 years of federal service in this and this is the worst it has ever been."
- "I have never seen so many findings and recommendations by the field be turned around at the regional and Washington level. All we can do at the field level is ensure that our administration record is complete and hope we get sued by an environmental or conservation organization."
- "Recently, [Interior] officials have forced changes in Service documents, and worse, they have forced upper-level managers to say things that are incorrect…It's one thing for the Department to dismiss our recommendations, it's quite another to be forced (under veiled threat of removal) to say something that is counter to our best professional judgment."

Today, many of the same FWS managers who implemented these policies and practices are still in place. With the exception of this DOI proposed policy (which, as discussed above, is a Bush-era policy), no new marching orders have been issued to change these conditions.

In order to have meaningful procedures to protect scientific integrity there must be an enforcement mechanism. PEER recommends that DOI adopt formal and enforceable rules that ban the manipulation of science – rules which at a minimum:

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"

While the proposed DOI policy references a requirement that scientists shall "welcome and participate in appropriate peer reviews" (without defining what an inappropriate peer

review might be), the policy does not require or encourage peer or other independent reviews of scientific or technical information used in departmental decision-making.

One overarching barrier to peer review of science-related information inside DOI is that its outsized deference to industry claims of proprietary information precludes outside review. In 2010, for example, MMS issued a new code of scientific conduct that promotes secrecy at the expense of scientists being able to obtain independent review of industry submittals. The "Integrity and Code of Conduct for Science, Scientific Assessment, and Other Similar Technical Activities" was unveiled by the MMS in an all-employee e-mail on January 8, 2010. It covers that agency's branch for Offshore Energy and Minerals Management and remains in effect within BOEM. The code forbids disclosure of any information by scientists contrary to –

> "agreements between MMS and its partners [i.e., oil companies] relating to use, security, and release of sensitive, confidential, proprietary, and administratively controlled, deliberative or personally identifiable information and data provided to the MMS."

This scientific code leaves the oil industry in charge of what information the public may see about development of the Arctic, since the vast majority of data consists of industry submittals, estimates and monitoring reports.

This problem is aggravated by the proposed DOI policy which requires that all scientists accord deference to the "confidential and proprietary" status of any material "to the fullest extent…."

As the BP spill in the Gulf of Mexico demonstrates, DOI is inappropriately and dangerously dependent upon the oil and gas industry for technical information and DOI is unable to verify the accuracy of this critical information. PEER recommends that DOI, as part of any scientific integrity policy, redefine proprietary information to a) greatly reduce the scope of any such claims; and b) allow outside review of critical industry safety and environmental technical material, regardless of its proprietary status.

Peer review and other normal processes for scientific integrity are also problematic in DOI, 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 DOI 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 Secretary should make explicitly clear that DOI 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 DOI 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 or administrative finding concerning misapplication of scientific material or a scientific standard, the Interior Office of Inspector General should prepare a report concerning which scientific or technical information has been misapplied against a statutory standard. Following that report, each DOI 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"

The DOI proposed policy makes no provision to increase the transparency of or public access to scientific information.

Over the past decade, PEER has surveyed and interviewed thousands of DOI 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 this outreach is that DOI scientists are 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.

The net effect of these explicit and implicit constraints is that dialogue among scientists, both within and outside government, is stunted and furtive. The DOI policy should address this aspect of integrity.

During the Bush administration, Julie MacDonald, a DOI deputy assistant secretary with no scientific training, routinely rewrote FWS scientific studies on endangered species. After her role generated scandal, congressional hearings and lawsuits (some of which is still ongoing), on August 19, 2009 FWS announced a new policy:

- Articles and papers by FWS scientists will no longer have to undergo "policy review" by agency management prior to being submitted for publication either inside or outside the Service. The announcement states that the reason for the change is "to get our employees out from underneath an ill-defined, cumbersome, and potentially stifling process of 'policy review'";

- Studies not officially endorsed by the Service must bear a simple one-sentence disclaimer that their contents "do not necessarily represent the views of the U.S. Fish and Wildlife Service"; and

- FWS started two peer-reviewed journals as outlets for publishing scientific and technical articles relating to agency decisions.

While this effort aimed at "encouraging and empowering employees to publish and to do so using their official agency and office affiliation" should itself be encouraged, there remain gray areas of danger for scientists:

- It is not clear whether previous FWS directives barring disclosure of "draft" documents have been rescinded, meaning that scientists could be punished for prematurely submitting unapproved manuscripts;

- Conflict of interest strictures restraining interaction between agency scientists and professional societies or conservation groups remain in place; and

- Most significantly, scientific disclosures do not enjoy any legal protection against agency retaliation and so scientists who publish articles not favorably received could find their careers derailed.

Disturbingly, the proposed DOI policy may undo this recent FWS publication rule. The proposed policy states in section F4 of the Appendix that:

> "Public release of a scientific product without the required level of review or without the inclusion of appropriate disclaimers could be considered misconduct."

Apart from the fact that the black letter of the proposed rules contains no such prohibition, it is precisely the opposite direction that a cogent scientific integrity policy should take as it undermines transparency, peer review and other features that deter actual misconduct.

Rather than retard the FWS free publication effort, DOI should extend and expand this important FWS transparency initiative:

1. **Un-Gag the Scientists**. The rights of DOI scientists to speak or write should not vary from agency to agency. The Secretary should ban any DOI agency from adopting gag orders and allow all departmental scientists to freely communicate and argue about science – both on the job and off;

2. **Secure Agency Scientists' Ability to Publish.** Non-FWS 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 DOI specialists to write articles, for peer-reviewed journals, books and other media;

3. **Open Communication with Congress**. If DOI 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 Secretary should provide the enforcement mechanism by adopting rules which explicitly allow DOI 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"

This is yet another facet of President Obama's directive that is largely ignored by the DOI proposed policy. DOI makes no effort to empirically identify where its scientific processes break down, let alone address how to fix those breakdowns.

One overarching problem is that DOI agencies often fail to spell out scientific processes, as the GAO report this year on the MMS Alaska office underlined. In the absence of firm processes, science can easily be manipulated without recourse.

Here is a glaring example of "gaming" the DOI scientific system to achieve a pre-ordained result. On January 27, 2005, FWS Southwest Regional Director Dale Hall issued a policy forbidding agency biologists from using wildlife genetics to protect and aid recovery of endangered and threatened species. The policy, in essence, sought to

prevent listing recommendations under the Endangered Species Act for several species by changing the scientific processes that allow consideration of unique genetic lineages.

In a March 11, 2005 letter, Ralph Morgenweck, the FWS Mountain-Prairie Regional Director, wrote to Hall sharply rebuking the policy for contradicting the purposes of the Endangered Species Act and running counter to best available science, stating:

> "I have concerns that the policy could run counter to the purpose of the Endangered Species Act to recover the ecosystems upon which endangered and threatened species depend. It also may contradict our direction to use the best available science in endangered species decisions in some cases."

In his letter, Morgenweck cited several examples where genetic diversity has been critical to species' survival because it allows wildlife to adapt to emerging threats, diseases and changing conditions. By prohibiting consideration of individual or unique populations, Hall's policy allows FWS to declare wildlife species secure based on the status of any single population. The agency can then pronounce species recovered even if a majority of populations were on the brink of extinction and authorizes the agency to approve development projects that extirpate individual populations.

Shortly thereafter, Dale Hall was nominated and confirmed as FWS Director. Ralph Morgenweck was removed from his position, internally exiled and ultimately retired. The Hall no-genetics rule was never rescinded.

DOI agencies need to adopt specific scientific protocols by regulation, subject to the provisions of the National Environmental Policy Act, so that scientific processes cannot be altered or suspended at management whim.

Moreover, to prevent inappropriate alteration or suppression of DOI scientific reports, 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 changes to scientific conclusions must be explained in the clear light of day, many distortions should be deterred. 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."

The DOI proposed policy does not come close to addressing legal protections for its scientists. To the contrary, the proposed policy takes a punitive approach in spelling out how they may be better punished, rather than protected.

The need for such protections is clear. DOI scientists who disclose information that is at odds with agency policy risk career-ending reprisal. Compounding the risks is the relative delicacy of scientific careers, which may be derailed by agency actions that would not trouble other professionals.

In some scientific disciplines (particularly those within DOI), the "publish or perish" dynamic means that if an agency prevents the submission of manuscripts to peer reviewed journals the scientist is put at a (sometimes fatal) competitive disadvantage. Being denied permission to attend a professional conference or present a paper at such a conference can cause grievous career harm. When administered as punishments these tactics can be quite devastating, but they do not rise to the legal standard of a "personnel action" within federal civil service law and thus are very difficult to challenge or review.

On the other hand, some agency tactics for punishing scientists who disclose inconvenient truths are far from nuanced:

- One Bureau of Reclamation biologist represented by PEER was sent home on paid administrative leave for nine months. His supposed offense was sending e-mails to federal agencies and an environmental group pointing out problems in Bureau filings and reports. The biologist was also the agency NEPA (National Environmental Policy Act) coordinator whose job it is to keep stakeholders informed. Originally, Reclamation proposed to fire him for being "subversive" and revealing "administratively controlled information" but ultimately the Bureau withdrew those charges and instead proposed dismissal on the grounds of causing "embarrassment" for putting the agency in a "negative light." For good measure, the Bureau also dismissed his wife from her temporary clerk-typist position. This case was settled before it went to hearing.

- A FWS biologist who protested diversion of critical habitat found her e-mail privileges "suspended" until the end of the fiscal year; and

- A BLM biologist who raised concerns about growing damage caused by off-road vehicles was abruptly removed from that program and re-assigned to a position with no duties in an office that had no phone or computer.

Unfortunately, wronged federal scientists who seek vindication face steep challenges. Under the current federal civil service law, federal scientists have scant legal protection. 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 that 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 Secretary should adopt department-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 DOI employees who report accurate information by making honesty an official policy of federal service; and

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 of 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.

II. Critical Flaws in the Draft DOI Policy

Initially, it should be stressed that DOI and other federal scientists are already subject to discipline for "fabrication, falsification or plagiarism" (the actions the proposed policy defines as "scientific misconduct.") In some circumstances, federal employees may also be subject to criminal prosecution for falsification or fabrication, for example submitting a false official statement in violation 18 U.S.C. § 1001.

In light of the fact that this new policy fails to provide meaningful new protections for scientific integrity, its flaws should be judged with an extra degree of criticality because the proposed policy carries the potential to be counterproductive in the following ways:

A. Exempting Political Appointees and Senior Managers Confers Immunity for Misconduct

Significantly, the rules do not apply to agency managers or bar alteration of scientific reports by non-scientists for political reasons. In fact, the DOI goes farther by stating that "editing of documents…to aid decisionmaking…is beyond the scope of this chapter." This exemption appears to provide backhanded legitimization of political manipulation of science.

Given its recent history, the failure by DOI to recognize political alteration of scientific documents by agency managers is staggering.

B. Punishing Whistleblowers

The thrust of the proposed DOI policy is to punish scientists. For example, the proposal makes aspirational standards such as "I will welcome constructive criticism" into a code provision that serves as the basis for discipline under section 3.5 C.

Scientific whistleblowers who defend their concerns can then be faulted for not backing down in the interests of being "constructive" or failing to "differentiate between facts, opinions, hypotheses, and professional judgments" or some other value-laden, imprecise criteria contained within the new code.

The net effect of making vague subjective standards the basis for discipline is that this code can be used by managers to silence or punish scientists who are considered to be going off the reservation.

Similarly, the proposed code will leave controversial agency scientists vulnerable to petty charges concerning equipment usage and other non-integrity related issues that are also covered in the code.

In addition, section 3.5 B requires scientists to report any "serious integrity matter that affects the integrity of the Department" – a circular directive that is enforced by disciplinary penalties. Yet, the policy does not provide any protection for scientists who report integrity problems with their superiors against later retaliation by those superiors.

These sweeping provisions place actual or suspected whistleblowers at risk for being charged as accessories for conduct they opposed but did not oppose loudly enough.

C. Prohibiting Disclosures of Imminent Dangers and Environmental Damages

The proposed policy prohibits disclosure of "confidential and proprietary information" (terms it does not define) and bars reporting of this information "to the fullest extent permitted by law." This curious wording appears to forbid any disclosure under any circumstances, even if otherwise protected by the Whistleblower Protection Act.

At the same time, the proposed code requires scientists to "fully disclose all…available data," leaving the scientist to resolve yet another conflicting directive that subjects him or her to discipline at either prong of the dilemma.

D. Putting Scientists in an Impossible Situation

As a matter of course, DOI scientists are required to abide by DOI procedures and directives as well as obey lawful orders from the agency's chain of command. Yet, the proposed DOI policy requires scientists to "place quality and objectivity of scientific activities and reporting of their results ahead of personal gain or allegiance to individuals or organizations" – individuals or organizations which include DOI managers and agencies.

In the event of a conflict between a scientist's chain of command and scientific objectivity, what is the scientist supposed to do? On one hand, he or she risks discipline for insubordination for defying supervisors and on the other risks discipline for subjugating objectivity to institutional loyalty.

Federal service is hard enough, especially in scientific disciplines, without being subjected to conflicting mandates without clear procedures for distinguishing the proper course.

E. Imposing Unrealistic Reporting Requirements

Under section 3.5 B of the proposed policy all DOI covered employees "must immediately report through official channels or directly to the Office of Inspector General (OIG)" any "suspected or alleged fraud, waste, abuse or mismanagement affecting the Department" (emphasis added). This reporting standard is so sweeping that it would cause any half-way observant scientist to spend half his or her time on the OIG hotline. However, given that a scientist would be subjected to discipline for not reporting any alleged abuse or waste, no matter how trivial or improbable, this overly inclusive provision cannot lightly be ignored.

Moreover, in the event that a problem arises, all scientists who were not involved but "suspected" the existence of a problem would be in danger of disciplinary action. This would create the perverse result of one rotten apple getting the entire barrel punished.

F. Conflating Serious Misconduct and Trivial Actions

Section 3.10 N defines "scientific misconduct" as "fabrication, falsification or plagiarism" yet the policy covers a broad range of other conduct, including loss of equipment or unintentional financial paperwork errors. As drafted, all covered conducted could be punished as a breach of "scientific integrity" rules, thus creating the prospect that DOI scientists could be stigmatized for petty actions with no bearing on the person's integrity.

G. Inappropriately Including Volunteers
Incredibly, the proposed DOI policy exempts political appointees and top managers but includes unpaid volunteers (section 3.2B). It is not clear why volunteers are included or how their violations would be punished.

III. Suggested Implementing Strategies and Measures to Gauge Effectiveness

Since the proposed DOI policy is a punitive approach directed against its non-management employees, the only strategy it puts forth is investigation followed by disciplinary action when charges are "verified."

This narrow, misdirected approach should be replaced by affirmative measures that encourage transparency and integrity and whose contributions can be measured. PEER recommends that DOI –

A. Follow the Lawsuits
The most efficient way to identify scientific misconduct 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, when federal courts rule that DOI managers have acted in an "arbitrary and capricious manner" in failing to implement the Endangered Species Act or acted unreasonably in violation of the National Environmental Policy Act, once DOI decides not to appeal that ruling and it becomes final, DOI should conduct a scientific integrity autopsy of the overruled federal action. At the root of these court rulings is scientific misconduct by DOI managers. A review of such adverse court decisions over the past decade should be followed by identifying any responsible mangers still within federal service and taking appropriate action so that they do not supervise scientists or technical specialists.

Departmental 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.

B. Evaluate Managers by Their Promotion of Scientific Integrity
Federal managers must be held to account for their decisions which are found to foster improper scientific procedures, suppression or other practice. Achievement of improved scientific integrity should be integrated into the official performance evaluation s for all relevant DOI managers, including non-scientists who oversee scientists.

To the extent that managers suffer no negative career consequences for their documented malfeasance, then any new integrity standards will be meaningless.

C. Go to the Top
It is also vital that the Secretary make clear that DOI political appointees will not be immune from discipline for violating scientific integrity procedures.

Even under its current Secretary, DOI tends to want to sweep scientific problems or disagreements under the rug. A telling example involves Grand Canyon Nation Park and the flow regime of the Colorado River. In a scathing January 15, 2009 memo, Grand Canyon Superintendent Steve Martin assails Reclamation's Environmental Assessment (EA) and misrepresentations by the government in defending it against a lawsuit filed by the Grand Canyon Trust, a non-profit seeking to restore Colorado River flows to more closely resemble the river's natural rhythms to benefit Grand Canyon wildlife.

Martin, a former NPS Deputy Director, called Reclamation's work "perhaps the worst EA I have seen for an action of this importance" because it finds no significant environmental impact for a course of action which, among other defects –

- Is rooted in a "lack of scientific veracity" that "continues to misinterpret key scientific findings related to the humpback chub, [and the] status of downstream resources in Grand Canyon";

- Suffers from a "failure to address NPS concerns that actions under the EA's five-year plan would impair the resources of Grand Canyon"; and

- Based the DOI position in court upon a "mistreatment and disregard of science" that "significantly impairs Grand Canyon resources."

Interior Secretary Ken Salazar has promised that agency "decisions are based on sound science and the public interest" and will reflect "high ethical standards" but has ignored this controversy. If Secretary Salazar really means to improve scientific integrity within DOI, he needs to start right here. Further avoidance of squarely taking on these public scientific integrity controversies makes a mockery out of this DOI proposed policy and its successors.

D. Gauge the Effectiveness of Strategies to Promote Scientific Integrity.
DOI must do more than simply promulgate a code. The Department needs to change its culture and create a new ethic of transparency and open scientific debate.

In order to bring about these institutional changes PEER recommends that DOI begin to implement scientific processes to measure how well the department fosters scientific integrity, including steps whereby –

- DOI should 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 Office of the Solicitor should be asked to provide annual analysis of court rulings involving DOI application of science-based statutes. After first establishing a baseline, it would be possible to see if DOI 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.

- DOI 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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