

# Scientific Integrity Recommendations for the National Oceanic and Atmospheric Administration

## Problem

Political interference in science at the National Oceanic and Atmospheric Administration (NOAA) over the past several years has demoralized its scientific workforce and reduced the agency's capacity to meet its mission of understanding changes in the Earth's environment and managing coastal resources.

At NOAA, press releases have been censored, scientists have been prevented from speaking freely about their research, and scientific advisory committees have been pressured to change their analysis—to the detriment of both science and the world's oceanic and atmospheric systems.

In 2005 and 2006, the Union of Concerned Scientists (UCS) sent questionnaires to nearly 1,000 NOAA scientists working on climate change issues and in the Fisheries division to get their input on a range of issues confronting the agency. Of the 220 respondents, significant numbers of agency scientists reported political interference in their scientific work.

- Twenty-six NOAA Fisheries scientists reported having been frequently or occasionally “directed, for non-scientific reasons, to refrain from making findings that are protective” of marine life.
- Twenty-five NOAA climate scientists personally experienced pressure to eliminate the words “climate change” or “global warming” from documents.
- A total of 73 NOAA scientists reported fearing retaliation for speaking out about the agency's work.

(Complete results are available at [ucsusa.org/surveys](http://ucsusa.org/surveys).)  
UCS has detailed multiple case studies of political interference in science at NOAA on its website at [ucsusa.org/atoz](http://ucsusa.org/atoz).

**These findings highlight the need for strong reforms to improve the communication of science at NOAA, make agency decision making more transparent, and protect the ability of agency scientists to do their jobs.**

*When asked how to improve scientific integrity at NOAA, agency scientists responded:*

“Scientists should be free to communicate with the media, rather than having media contacts filtered by “Public Affairs” officers. This should be official policy, not a ‘wink and nod’ policy.”

“[Provide] safe mechanisms for low-level staff to disagree with political appointees without the repercussion of job loss.”

“US Federal government climate science does not lack integrity. Science assessments, summaries, policy papers sometimes do lack integrity. The best way to improve them would be to ensure they are written by qualified scientists, not by political hacks.”

“OMB should stay out of NOAA decision making on scientific and policy issues – they should stick to budget.”

“[Make information] more publicly available – even those of us within NOAA don't always know what kind of scientific work and publications NOAA is doing.”

“Encouraging (& funding) participation in scientific societies.”



## Solutions:

### Improve the NOAA Media Policy

As an agency under the Department of Commerce (DOC), NOAA is subject to the 2007 DOC communications policy. While a recent UCS analysis (see [ucsusa.org/mediapolicies](http://ucsusa.org/mediapolicies)) found the 2007 DOC policy has led to greater scientific openness at NOAA, improvements are still needed.

- ✓ **The NOAA administrator should work with the Commerce Secretary and the administrators of the other DOC science agencies—including NIST and the Census Bureau—to improve the Department’s media policy.** Improvements should focus on streamlining the public affairs process, and clarifying and strengthening the protections given to scientists in the current DOC policy.

An improved policy should explicitly state that (1) NOAA scientists may freely express their personal views provided they make it clear they are not speaking on behalf of the agency, and (2) NOAA scientists have the right to review, amend and comment publicly on the final version of any document that significantly relies on their research, identifies them as an author or contributor, or purports to represent their scientific opinion. A model media policy can be found at [ucsusa.org/mediapolicies](http://ucsusa.org/mediapolicies).

### Greater Transparency in NOAA Decision-making

Both democracy and science are based on the free exchange of ideas. A strong democracy depends on well-informed citizens who have access to comprehensive and reliable information about their government’s activities. Similarly, science thrives when scientists are free to interact with each other, opening their ideas up to scrutiny. Improvements in transparency at the agency are inexpensive and will go a long way toward rebuilding public trust in NOAA’s public communications and decisions.

The next NOAA administrator should:

- ✓ **Issue a memo to all NOAA employees declaring that the NOAA will strive to be as transparent as possible and conduct its operations in a “fishbowl.”** In 1983, to restore the credibility of the agency after multiple scandals, then EPA Administrator William Ruckelshaus issued such a memo—which was affirmed by each subsequent administrator through the Clinton administration. In a memo issued shortly after being confirmed by the Senate, current EPA administrator Lisa Jackson reaffirmed the agency’s commitment to transparency by referencing Ruckelshaus’s earlier statement. Other federal agencies should follow suit.
- ✓ **Institute a transparency policy for official meetings with outside entities.** This policy should require that the agency post on its website a complete record of all meetings with outside entities including for-profit and not-for-profit organizations, other agencies, and individuals.
- ✓ **Publish a summary statement discussing the scientific basis for any regulatory decisions informed by science.** The statement should be available in a timely fashion, and clarify on what evidence officials made the final decision. The statement should include: (1) the rationale for the decision, including all scientific documents and data used to make it, (2) a minority report including any dissenting opinions and how the agency resolved such differences of opinion, and (3) identification by name of each official and employee who participated in the decision.

- ✓ **Review agency policies on the clearance of official and non-official publications, presentations, and other information.** The agency should affirm that scientific peer review, not policy or political review, is the appropriate standard for approving the quality of agency scientific information. For non-official scientific papers, the authors should have the option of bypassing any policy review and publishing with a disclaimer stating the paper does not represent official agency policy.

## Protecting and Supporting NOAA Scientists

By protecting scientists, encouraging their professional development, and increasing ethics and accountability at NOAA, the agencies can once again recruit and retain the best and brightest scientists. 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 billions in taxpayer dollars, that worker often is harassed, demoted or fired.

- ✓ **The NOAA Administrator should communicate publicly that retaliation against whistleblowers through reassignments, demotions or terminations or other acts of retribution will not be tolerated.** These whistleblower protections should cover not only waste, fraud and abuse, but also misuse of science. NOAA employees should feel empowered to speak out when they feel that science has been manipulated, suppressed or distorted. Adverse personnel actions should be prohibited in retaliation for voicing a reasonable scientific or technical finding, disagreement, or distinction. Reporting of deviations from these policies should be explicitly encouraged.
- ✓ **The NOAA administrator should issue a memo stating that the agency values staff input and staff is encouraged to speak out internally about concerns.** Measures should be taken to restore bottom-up communications with agency scientists on matters that affect them and their work or working conditions. The views of scientists and their findings should be part of the decision-making process.
- ✓ **NOAA should develop comprehensive ethics policies that explicitly define and forbid financial conflicts of interest and political interference in science.** Policies should include strong penalties and rigorous enforcement. Several scientists mentioned conflicts of interest at the Fisheries Management Council as a significant impediment to restoring scientific integrity at NOAA.
- ✓ **Agencies should allow and encourage scientists to publish in external peer-reviewed journals, promote opportunities for professional development through scientific conferences and training, and stimulate participation in scientific societies.**
- ✓ **NOAA should regularly and proactively educate government scientists and researchers regarding their rights and protections.** These efforts shall include mandatory briefings for new hires, requirements for posting educational information in workplaces, and in-service trainings.

## Restoring Scientific Integrity to Endangered Species Decisions

Decisions regarding endangered or threatened species made by NOAA scientists have been subject to political interference, as have similar decisions at the Fish & Wildlife Service (in the Department of the Interior). Steps should be taken to restore scientific credibility to these processes and ensure that such abuses do not recur.

- ✓ **Review tainted decisions.** Wildlife agencies should initiate a stakeholder-inclusive process to compile a list of decisions where there is evidence of political interference. Where inappropriate misuse or manipulation of science has been identified, the decisions should be systematically reexamined and modified.
- ✓ **Limit inappropriate interagency review.** As a measure of protection against invasive interagency review, wildlife agencies should provide open and complete dockets for scientifically based decisions. This should include the release of scientific documents before they enter the interagency review process so that any changes to the scientific underpinnings can be identified.
- ✓ **Create an institutional firewall.** The science that enters the rulemaking process should be created, synthesized and peer reviewed by qualified, unbiased experts in the relevant field. As much as is possible, there should be an institutional firewall between those preparing the scientific information and those crafting the policy, to ensure that policy makers do not have the opportunity to edit, influence, manipulate or otherwise interfere with the scientific content.

For more recommendations from the Scientific Integrity Program, please see our report, *Federal Science and the Public Good*, available at: [www.ucsusa.org/federalscience](http://www.ucsusa.org/federalscience)



*Union of Concerned Scientists, January 2009*