



# Federal Science and the Public Good

**SECURING THE INTEGRITY OF SCIENCE IN POLICY MAKING** 

# **Presidential Transition Update**

Union of Concerned Scientists
Scientific Integrity Program

**DECEMBER 2008** 

## **Executive Summary**

he United States has enjoyed prosperity and health in large part because of its strong and sustained commitment to independent science. As the nation faces new challenges at home and growing competitiveness abroad, the need for a robust federal scientific enterprise remains critical. Unfortunately, an epidemic of political interference in federal science threatens this legacy, promising serious and wide-ranging consequences.

Political interference in science has penetrated deeply into the culture and practices of federal agencies. These systemic problems cannot be resolved quickly or simply. An unwavering commitment to scientific integrity from President-elect Barack Obama, continued oversight by the 111th

Congress, and the persistent and energetic engagement of many different stakeholders are critical.

This interference in science threatens our nation's ability to respond to complex challenges to public health, the environment, and national security. It risks demoralizing the federal scientific workforce and raises the possibility of lasting harm to the federal scientific enterprise. Most important, it betrays public trust in our government and undermines the democratic principles upon which this nation was founded.

# Restoring Scientific Integrity to Federal Policy Making

The damage done to the federal scientific



Political interference in federal science endangers the health and safety of our nation's communities.

enterprise can be fixed, but executive and legislative branch leadership on several issues will be necessary to accomplish this. Specifically, policy makers should take concrete steps to restore scientific integrity in five crucial areas:

- Protecting government scientists. Federal scientists and researchers have a responsibility to the public, but to fulfill it their agencies must provide an environment free of political interference. One frontline defense against abuse of science is to explicitly extend whistle-blower protections to scientists who report such abuses. Existing whistle-blower laws should be strengthened, and the failed system to investigate claims of retaliation should be reformed.
- Making government more transparent.
  - An open government is the best safeguard against corruption, and federal officials should take concrete steps to improve transparency. The administration should enact policies that presume that government information is public knowledge, to be withheld only when essential. Specific changes to policies regarding Freedom of Information Act requests, classification of information, and reporting of meetings between government officials and outside entities could give the public greater insight into how its government is run. The public also needs greater access to federal science through smarter use of information technology and the reform of agency media and publication policies. The administration should also clarify and improve their rules regarding conflicts of interest for employees.
- Reforming the regulatory process. Congress and the executive branch created regulatory agencies to implement and enforce various laws, and a balance should therefore be struck between White House priorities and agency independence. The president should institute a regulatory process that respects the scientific expertise of the regulatory agencies, and restrains revisions of agency science by both

- the Office of Management and Budget (OMB) and other agencies. This regulatory process should repeal or reverse the three main tenets of executive order 13422. Agencies should also provide more information to the public regarding how their regulatory decisions are made.
- Ensuring robust scientific input to federal decision making. The federal system for appointing scientific advisory committees should be reformed to end political litmus tests, and to better prevent conflicts of interest from undermining the decision making of such committees. To ensure that it has access to timely and objective scientific advice, Congress should reinstate the Office of Technology Assessment. The president should appoint a cabinet-level science adviser, and should expand the network of advisers providing scientific expertise to the president.
- Strengthening monitoring and enforcement.

The president should value the information gathered by data-monitoring programs, and consider that information in decision making. Federal agencies should compile an easily searchable database of information from environmental-monitoring programs, and also investigate the need for additional programs and ways of compiling and reporting data so stakeholders can easily use the information. And Congress should investigate the ways in which reduced or eliminated enforcement and a lack of prosecution of violators undermine the integrity of science.

We will continue to engage with these stakeholders to further develop these solutions as we create a detailed plan for the 2009 presidential transition.

#### **Patterns of Abuse**

This report documents political interference in science in numerous federal scientific and regulatory agencies. This interference can take many different forms, including:



The revolving door for officials who shuttle between high-level government positions and regulated industries has harmed the integrity of federal science.

- Falsifying data and fabricating results.
   Federal officials with little or no scientific background have misrepresented scientific data and presented scientific results not based on actual research.
- Selectively editing reports and creating false uncertainty. Political appointees have selectively deleted evidence from scientific documents, and exaggerated uncertainty in scientific findings.
- Tampering with scientific procedures.
   Federal agencies have replaced standard scientific procedures with flawed methodologies,
   biased toward finding predetermined results.
- Intimidating and coercing scientists.
   High-level administration officials have directly pressured researchers at federal agencies to

alter scientific findings, threatening reprisal if they refuse.

- Censoring and suppressing scientists.
   Federal officials have prevented scientists from communicating with their colleagues, the media, and the public.
- Hiding, suppressing, and delaying release of scientific findings. Federal officials have buried scientific findings and prevented their public release.
- Disregarding legally mandated science.
   Federal agencies have repeatedly ignored scientific research that, by law, must form the basis for certain policy decisions.
- Allowing conflicts of interest. Officials with clear conflicts of interest have held key positions throughout the federal government, from which they have made decisions harming the integrity of federal science.
- Corrupting scientific advisory panels.
   Political interests have manipulated the process for selecting members of independent scientific advisory panels.

#### **Changing the Rules**

Beyond the system-wide epidemic of interference, the Bush administration has instituted deeper changes in the structure and policies of the executive branch. Without a strong commitment to scientific integrity from the president and Congress, these changes may ensure that politicization of science will continue after President Bush leaves office.

 Centralizing decision making and the unitary executive. The Bush administration has invoked the theory of the "unitary executive" to justify tight White House control over federal agencies. For example, President Bush has greatly expanded the use of signing statements. He has used them to assert his right to ignore or disobey any laws or requests he considers unconstitutional, including congressional requests for scientific information and whistle-blower rights for federal employees. Executive order 13422 dramatically expands the role of the OMB in reviewing all agency regulations, including the scientific basis for regulations.

- Homogenizing agency decision making.
   The White House has sought to replace the policies of individual agencies regarding peer review of scientific findings, risk assessment, and cost-benefit analysis with inappropriate government-wide standards, ignoring the reality that each federal agency requires different tools to best fulfill its mission.
- Reducing transparency. The Bush administration has limited government transparency and accountability by preventing public disclosure of information on the internal workings of the federal government. New policies regarding Freedom of Information Act requests and classification of government documents have created a "presumption of secrecy." In this approach, agencies automatically keep

- information from public view unless someone specifically requests it, or the law requires them to disclose it.
- Adding unnecessary bureaucracy. New demands, including interagency review and excessive legal challenges from industry, have prevented federal agencies from acting promptly to protect public health and safety.
- Retaliating against whistle-blowers. The Bush administration's penchant for secrecy and centralizing executive power has increased the vulnerability of federal employees who blow the whistle on government waste, fraud, or abuse.
- Foxes guarding the henhouse. The revolving door for officials who shuttle between highlevel government positions and regulated industries has harmed the integrity of federal science. The legacy of political appointees with conflicts of interest lives on in the agencies after their departure—through both the flawed policies they helped enact and the erosion of public trust in agency integrity.
- Removing science from decision making.
   Administration officials have often simply shut out scientists and scientific information from the policy discussion.
- Weakening enforcement and monitoring.
   Many federal agencies have seen their ability to enforce the nation's laws decline under the Bush administration. In many cases, agencies are simply not collecting the data they need to ensure robust enforcement.

### **The First 100 Days**

During the first 100 days of his administration, we urge President Obama to:

- Appoint a widely respected scientist to be a cabinet-level assistant to the president for science and technology.
- Instruct agency heads to refrain from retaliating against whistle-blowers.
- Publicly commit to the principles of open government and create policy-making processes that presume all government information is public knowledge, to be withheld only when necessary.
- Instruct the heads of scientific and regulatory agencies to issue memos to their staffs indicating their commitment to open government and stating that scientific integrity is a crucial component to achieving their missions.
- Issue an executive order outlining his regulatory process that reverses the three major tenets of executive order 13422 and restricts the role of the OMB in reviewing the scientific work of the executive branch agencies.

#### **Concluding Thoughts**

Implementing these recommendations will be difficult but not impossible. Strong leadership at the top of the executive branch and federal agencies will go a long way toward ensuring progress. Although incremental changes can improve the culture of these agencies, the leadership of President-elect Obama will be essential in creating significant and lasting reform.