

Surveying the Environmental Protection Agency

Scientist Voices under President Trump

HIGHLIGHTS

Scientists conduct work vital to fulfilling the science-based missions of federal agencies charged with protecting Americans' health and safety, yet some federal officials are sidelining science from the policymaking process, endangering the nation's health, economy, environment, and world leadership. How do scientists working for the federal government experience the state of science in their own agencies? A 2018 survey on the state of science at the Environmental Protection Agency (EPA) highlights several issues regarding the agency's science-based decisionmaking processes, including evidence of improper influence from leadership with strong ties to regulated industries, workforce reductions, and the loss of expertise on science advisory committees.

Our nation relies on government science and scientists to protect public health, public safety, and the environment. However, political, ideological, and financial interests often undermine the use of science in federal decisionmaking, harming the public good in the process. While all modern presidents have politicized science to some extent, the Trump administration has escalated the challenge in many areas in both scope and severity.

In February and March 2018, the Union of Concerned Scientists (UCS) and the Center for Survey Statistics and Methodology at Iowa State University surveyed more than 63,000 federal scientists in 16 government agencies, including the Environmental Protection Agency (EPA). The goal was to gain insight one year into the Trump administration about the state of scientific integrity in the federal government, as well as agency effectiveness and the working environment for its scientists. Survey responses from 449 EPA scientists and scientific experts were received. No EPA staff list with job titles was obtainable within six months, so all EPA employees (14,856), most of whom are not scientists, were sent a survey invitation. As a result, the response rate (3 percent) was lower relative to other agencies surveyed. Across survey items, the total number of respondents varied.

The results shed light on the level of politicization of science at the EPA, as well as the impact on the agency's effectiveness and its federal workforce. Respondents point to major challenges at the agency, which they attribute to inappropriate influence from senior decisionmakers, especially those with ties to industries the EPA regulates.

The survey follows and builds on surveys conducted by UCS since 2005 during the administrations of President George W. Bush and President Barack Obama. Detailed methodology and results from all surveys can be found at www.ucsusa.org/surveys.



In early 2018, scientists from the EPA were surveyed on issues of scientific integrity, funding and resources, censorship, top barriers to science-based decisionmaking, and more.

In principle and policy, the EPA affords scientists the right to speak publicly and without interference, grants scientists the right to review and correct public materials that rely on their work, and designates a scientific integrity officer to investigate allegations of compromised scientific integrity. However, among scientists at the 16 federal agencies who received the UCS survey, EPA scientists were most likely to report political and ideological pressure on their work.

Further, scientists reported that agency leaders diminish the role of science in policymaking with actions that are outside the scope of agency policies designed to protect scientific integrity. Responses revealed major challenges to incorporating science into decisions at the EPA under the Trump administration. These challenges include reports of a significant reduction in the EPA workforce, reductions in independent scientific expertise on advisory committees, and the removal of scientific input from EPA decisions.

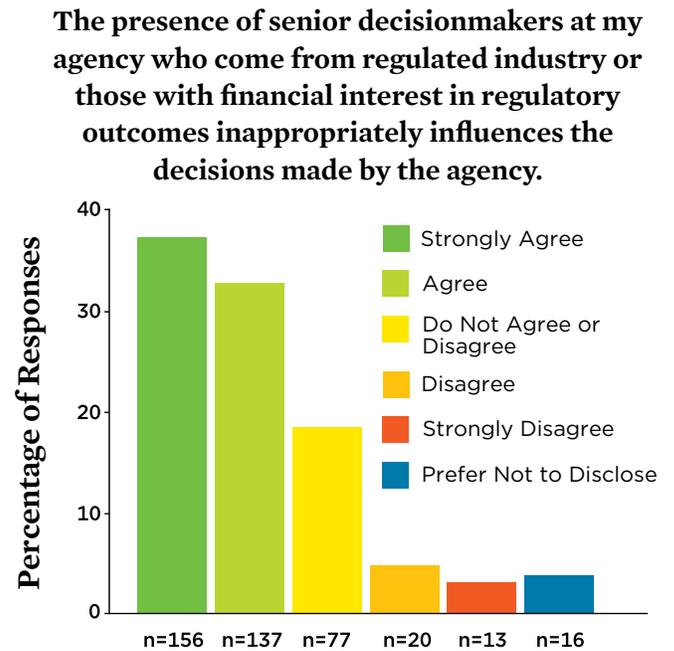
EPA scientists feel strongly that leadership from regulated industries inappropriately influences science-based decisions:

- 33 percent (137 respondents) agreed and 37 percent (156 respondents) strongly agreed that the presence of senior decisionmakers who come from regulated industries or have financial interest in regulatory outcomes inappropriately influences agency decisions (Figure 1).
- 82 percent (345 respondents) agreed that the level of consideration of political interests hinders the EPA's ability to make science-based decisions.
- 32 percent (392 respondents) listed the influence of political appointees at the EPA and the influence of the White House as major barriers to science-based decision-making.

More than at any other agency surveyed, EPA scientists report workforce reductions—and they say it affects their ability to do critical scientific work:

- Over 90 percent (403 respondents) reported workforce reductions due to hiring freezes, departures, or retirements (Figure 2).
- Of those respondents who noticed workforce reductions, 80 percent (325 respondents) reported that these reductions have made it difficult for the EPA to fulfill its science-based mission.

FIGURE 1. Industry Influence at the EPA



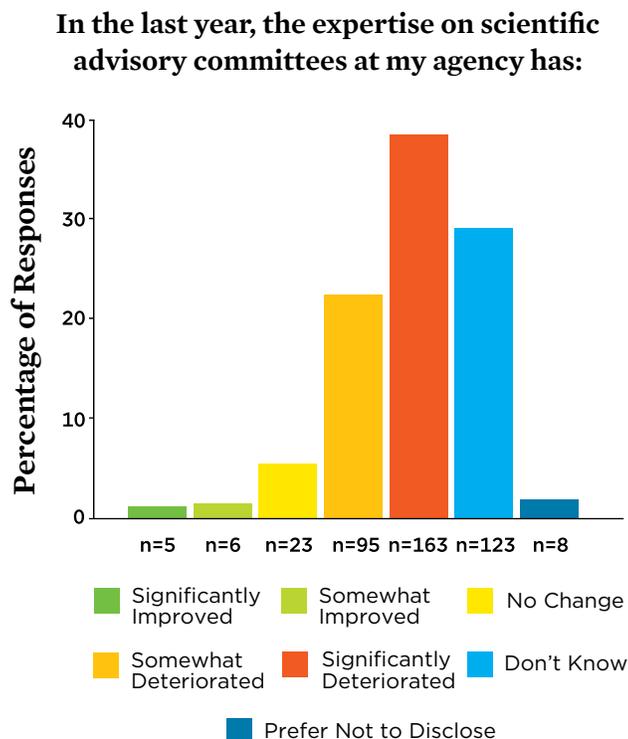
EPA scientists largely agreed that the presence of senior decisionmakers who came to the agency from a regulated industry or those with financial interest in regulatory outcomes inappropriately influences agency decisions.

FIGURE 2. Workforce Reductions at the EPA



EPA respondents overwhelmingly agreed that they have noticed workforce reductions at their agency.

FIGURE 3. Expertise within Scientific Advisory Committees at the EPA



The majority of EPA respondents reported that the level of expertise on the agency’s scientific advisory committees has deteriorated over the past year.

EPA scientists report that the agency’s scientific advisory committees are losing expertise:

- 61 percent (258 respondents) reported that the expertise of EPA scientific advisory committees has deteriorated over the past year (Figure 3).
- 35 percent (148 respondents) disagreed or strongly disagreed that EPA advisory committees are comprised of individuals with appropriate expertise and who can provide independent science advice.
- In a 2007 UCS survey, only 37 percent (560 respondents) reported that the advice of EPA scientific advisory committees was frequently heeded and incorporated into regulatory decisions; this year, an even lower proportion of respondents (24 percent; 101 respondents) agreed with that statement (Figure 4, p. 4).

Scientists Speak Out

Anonymous survey respondents from the EPA cited industry influence and lack of funding among their concerns. Here are some examples of what they had to say:

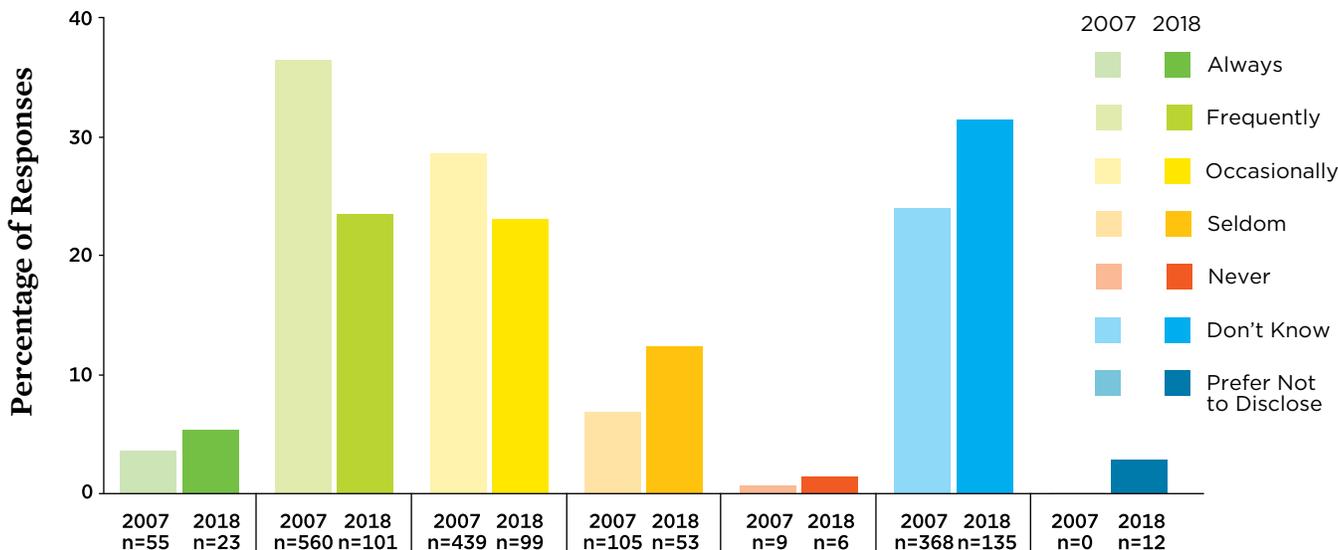
- “Changing the composition of [the Scientific Advisory Board] to exclude academic scientists receiving EPA grants harms the agency’s mission by reducing panel diversity.”
- “The current administration sees protecting industry as part of the agency’s mission and does not want to consider information that would encourage taking action that might reduce industry profit, even if it’s based on sound science. We are not fulfilling our mission to protect human health and the environment as a result.”
- “This administration has not funded us well. Our office still does not have enough financial resources to fulfill its mission: not enough staff for the heavy workload, not enough money for training/travel, not enough admin support staff. Sometimes, we are missing office supplies like calendars.”
- “There is so much fear and anxiety that my co-workers and management are afraid to make a decision or those above them are afraid for us to make a decision.”

Some EPA scientists are concerned about the capacity of the agency to address scientific integrity violations fairly and protect those who report violations:

- Regardless of whether or not respondents said they would come forward with a scientific integrity issue, 52 percent (216 respondents) reported they would not trust all parts of the EPA to assess and address the issue fairly.
- 12 percent (50 respondents) said they would not feel comfortable reporting an issue because they would fear retaliation.

FIGURE 4. Influence of Scientist Advisory Committees at the EPA

Expert advice from scientific advisory committees is heeded and incorporated into agency decisions.



In 2018, fewer scientists than in 2007 reported that advice from EPA scientific advisory committees is heeded and incorporated into agency decisions. A chi-square test between survey results found that these results were significantly different at a 95-percent level ($p < 0.0001$). A Mantel-Haenszel chi-square test found that results skewed significantly more negative (seldom, never) in 2018 relative to 2007 responses ($p = 0.0008$).

Recommendations

Responses to the 2018 UCS survey suggest major challenges at the EPA as it seeks to fulfill its science-based mission of protecting public health and the environment. It appears that the challenges often lie with inappropriate influence from senior decisionmakers, especially those with ties to industries that the EPA regulates.

EPA leaders should affirm that scientists must be free to conduct and communicate science without undue and inappropriate influence from decisionmakers. The EPA should work to ensure that the agency’s scientific advisory committees are comprised

of scientific experts who can provide independent advice on science-based policy issues. And the EPA should strive to create a work environment in which scientists feel supported by and trust agency leadership, and where their expertise and advice is fully and transparently considered throughout the policymaking process. These are prerequisites to being effective public servants and to the ability of staff to report scientific integrity violations without fear of retaliation. Creating such an environment will likely increase job satisfaction, morale, and effectiveness, all of which respondents reported as low.



FIND THIS DOCUMENT ONLINE: www.ucsusa.org/2018survey

The Union of Concerned Scientists puts rigorous, independent science to work to solve our planet’s most pressing problems. Joining with people across the country, we combine technical analysis and effective advocacy to create innovative, practical solutions for a healthy, safe, and sustainable future.

NATIONAL HEADQUARTERS

Two Brattle Square
Cambridge, MA 02138-3780
Phone: (617) 547-5552
Fax: (617) 864-9405

WASHINGTON, DC, OFFICE

1825 K St. NW, Suite 800
Washington, DC 20006-1232
Phone: (202) 223-6133
Fax: (202) 223-6162

WEST COAST OFFICE

500 12th St., Suite 340
Oakland, CA 94607-4087
Phone: (510) 843-1872
Fax: (510) 451-3785

MIDWEST OFFICE

One N. LaSalle St., Suite 1904
Chicago, IL 60602-4064
Phone: (312) 578-1750
Fax: (312) 578-1751