

Voices of Federal Scientific Integrity

US Geological Survey

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 the scientists working for the federal government experience the state of science in their own agencies? A 2018 survey on the state of science inside the US Geological Survey (USGS) highlights issues regarding science-based decisionmaking processes at the agency, including evidence of a shift of resources away from scientific work viewed as politically contentious, inadequate resources afforded to the professional development of scientists, and censorship of scientific language. However, USGS scientists also report that the agency adheres to its scientific integrity policy.

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. The data show that, under the current administration, science has been politicized to a significant degree.

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 US Geological Survey (USGS) in the Department of Interior (DOI). 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. At the USGS, 2,933 scientists and scientific experts were sent a survey; 561 responded, yielding an overall response rate of 19 percent. Across survey items, the total number of respondents varied.

The results shed light on the level of politicization of science at the USGS, as well as its impact on agency effectiveness and the federal workforce. While respondents generally feel that the USGS adheres to its scientific integrity policies, they also feel the agency curtails communication and steers scientists away from politically contentious research.

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.



Fred Murphy/USGS

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

Scientific Integrity at the US Geological Survey

The USGS is essential to personal and societal decisions around keeping Americans safe. Instilling a strong culture of scientific integrity at the USGS is vital for its scientists to fulfill the agency's mission to conduct the systematic and scientific classification of public lands and examine the geological structure, mineral resources, and products of the national domain. The scientific integrity policy of the USGS echoes the DOI's strong policy, establishing protections for scientists to speak to the media and clear procedures for investigating allegations of inappropriate interference in science.

USGS respondents reported communication issues such as the direct censorship of scientific work. Further, they reported actions that are outside the scope of the scientific integrity policy yet compromise science at the agency. These actions include a shift of resources away from work viewed as politically contentious and inadequate resources for professional development, such as presenting at scientific conferences. "The current administration displays a lack of understanding of the importance of science's role in society," one USGS scientist said. "Their actions display an intent to undermine and silence important research because of political interests, and because of them, portions of my agency have scrambled to rebrand themselves in order to avoid elimination."

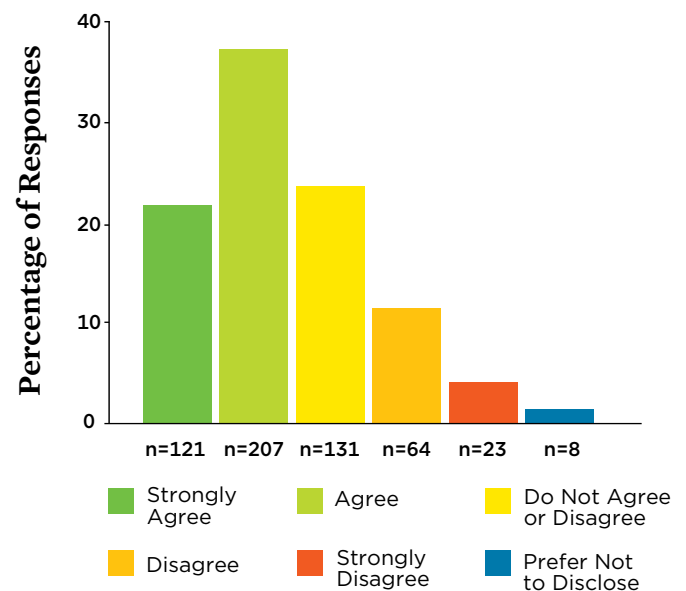
USGS scientists report a decrease in work viewed as politically contentious:

- 59 percent (328 respondents) reported that resources such as funding and staff time have been distributed away from work considered politically contentious (Figure 1).
- 22 percent (119 respondents) reported that they have been asked or told not to work on specific topics that are viewed as politically contentious.

One third of respondents reported censoring work on climate change without explicit orders to do so.

FIGURE 1. Diversion of Resources at the USGS

Over the past year, I have noticed that resource allocations (e.g., funding, staff time) have been distributed away from programs and offices whose work is viewed as politically contentious.



Responding USGS scientists reported the distribution of resources away from work viewed as politically contentious.

USGS scientists say they lack adequate resources to keep up with professional development opportunities:

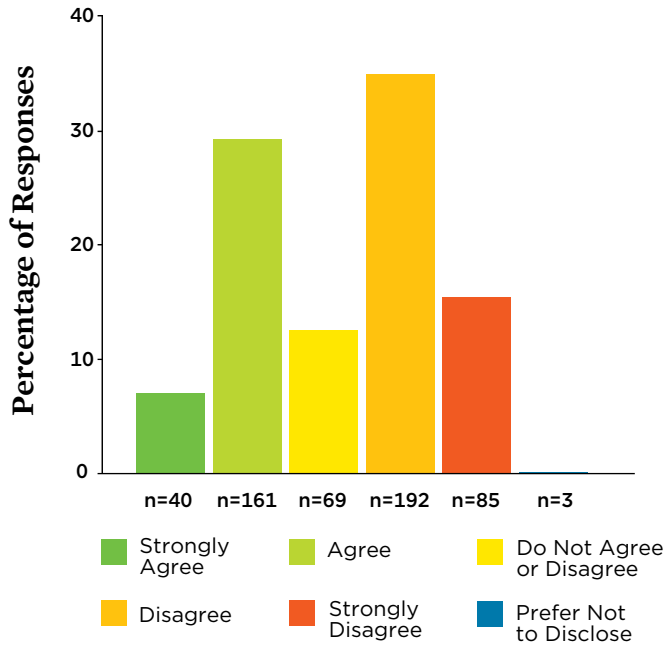
- 50 percent (277 respondents) said they lacked adequate time and resources for professional development, such as time to attend scientific conferences (Figure 2, p. 3).
- 76 percent (421 respondents) said that the number of scientific conferences attended over the past year is not similar to the number of scientific conferences attended three years ago.

USGS scientists self-censor scientific language, especially on climate change:

- 32 percent (169 respondents) reported that they avoid working on climate change or using the phrase "climate change" even without explicit orders to do so (Figure 3, p. 3).

FIGURE 2. Professional Development at the USGS

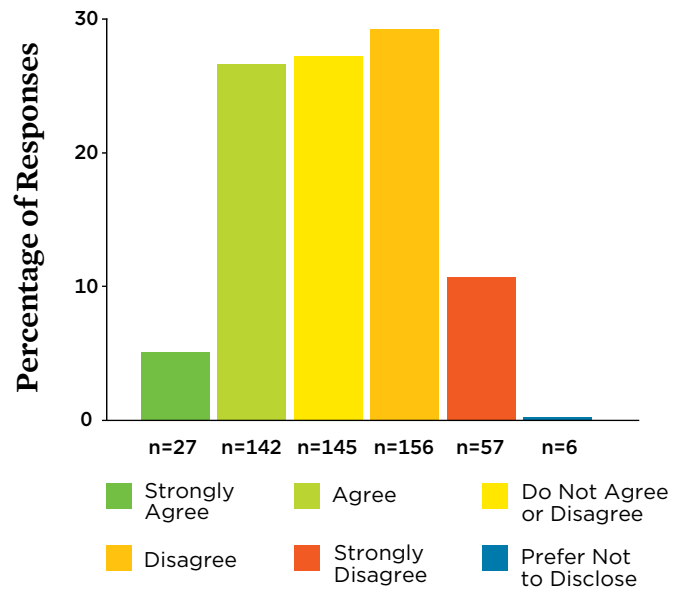
I am provided adequate time and resources to keep up with advances in my profession, such as attending conferences and trainings, and participation in scientific or professional societies.



USGS respondents largely disagreed that the agency provides them with adequate time and resources to pursue professional development opportunities.

FIGURE 3. Self-Censorship at the USGS

I have avoided working on climate change or using the phrase “climate change,” though I was not explicitly told to avoid them.



Many USGS respondents said that they self-censor work and language related to climate change.

Scientists Speak Out

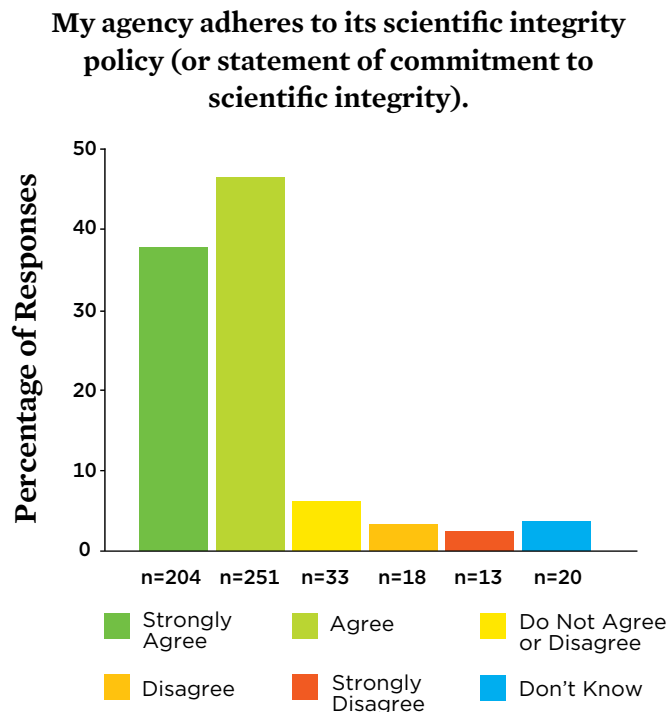
Anonymous survey respondents from the USGS cited censorship and lack of funding among their concerns. Here are some examples of what they had to say:

- “If there are no funds, we don’t do climate science. No one says ‘don’t do climate science.’ We just don’t get money to do that work. Simple as that. One colleague of mine tried to stay in climate science, and he was let go from the agency.”
- “We are being told not to use the words ‘climate change’ in any memos that require clearance, and press releases are not being approved. This

really hinders our ability to communicate with the public and lowers morale.”

- “Travel to scientific conferences has been restricted and scrutinized. Travel to research sites has also been restricted. Red tape has increased dramatically.”
- “In spite of continuing reductions in funding, reductions in staff, and reductions in leadership and vision, we continue to be a community of scientists who care very much about the work we are doing and who remain committed to advancing science in our respective disciplines.”

FIGURE 4. Adherence to Scientific Integrity Policy at the USGS



Career-level USGS scientists reported that they adhere to their agency's scientific integrity policy.

- 21 percent (112 respondents) reported having been asked or told to omit the phrase “climate change” from their work.

USGS scientists feel that their agency adheres to its scientific integrity policy:

- 85 percent (455 respondents) agree that the USGS adheres to its science integrity policy (Figure 4).
- 56 percent (303 respondents) agree, and 35 percent (187 respondents) strongly agree, that they have received adequate training on the scientific integrity policy at USGS.

Recommendations

With respondents noting some restrictions on communicating their work, agency leaders could best improve scientific integrity at the USGS by reaffirming scientists' freedom to pursue and communicate openly about their scientific work without asking for permission, regardless of whether it is politically contentious. Moreover, managers at all levels should discourage self-censorship by clearly informing scientists about guidelines for communicating about their work internally and externally. Further, the USGS should strive to create a work environment in which scientists thrive, which includes providing employees with the resources they need to work effectively and continue their professional development.

Union of Concerned Scientists

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

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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
2000 Elridge Avenue NW
Washington, DC 20009-1227
Phone: (308) 841-6481
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