

A Survey of Federal Scientists

**Methodology and Response Report
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Prepared for the
Union of Concerned Scientists

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A Survey of Federal Scientists
Center for Survey Statistics & Methodology
for the Union of Concerned Scientists

I. SURVEY DESIGN AND ADMINISTRATION

Background.

In November, 2017, the Union of Concerned Scientists (UCS), a nonprofit organization that conducts analysis and advocacy to advance the role of science in decision making in a range of science policy areas, contracted with the Center for Survey Statistics & Methodology (CSSM) at Iowa State University to conduct a Survey of Federal Scientists.

The 2018 Survey of Federal Scientists is part of ongoing research by the Union of Concerned Scientists (UCS) to better understand the state of scientific integrity in federal agencies and departments and government scientists' work environment. The findings are used to inform improvements in government policies and practices so that independent science can fully inform policy decisions and that federal scientists are able to do their jobs effectively.

UCS researchers from the Center for Science and Democracy, Gretchen Goldman (Research Director) and Jacob Carter (Research Scientist), consulted with CSSM project staff on questionnaire design, data collection procedures, and data analysis for the 2018 Survey of Federal Scientists. This report describes the protocol followed for project development and data collection, as well as the final survey outcomes.

Survey Design.

The 2018 Survey of Federal Scientists questionnaire was developed by UCS staff in collaboration with CSSM. Most of the questions were similar to those used by the UCS in previous surveys, with only a few revisions made to accommodate the wider range of agencies being surveyed. In addition to the core set of survey questions answered by all agencies (40 topical items and 6 demographic items), the final survey also included 5 sets of agency-specific questions that were answered based on the primary agency affiliation selected in question #1 (each set ranging from 1 to 4 additional items).

The first two questions in the survey verified the respondent's primary agency and sub-agency (office) affiliation, while the third survey question asked them to indicate what percentage of their job duties involved science. Respondents answering 1% to 100% (Q3 = 2, 3, 4, or 5) were to be routed through the remaining survey questions, while those who indicated no scientific work (Q3 = 1) were to be routed to the final open comment question (Q58) before exiting.

With the exception of the primary agency identification question (Q1) and the percentage of job duties involving science question (Q3), all other survey questions were considered response optional and (in most cases) provided a "prefer not to disclose" answer option. Approval from Iowa State University's

IRB showed that the committee found that the survey project adhered to research ethics involving human subjects. (IRB approval #18-017).

Sample Design.

In preparation for the 2018 Survey of Federal Scientists, UCS staff identified several key science-based agencies where scientific integrity is an important issue, selecting federal agencies with strong science-based missions, that implement science-based policies, or have a history of scientific integrity concerns.

The original sample, consisting of 21 agency-specific files, was prepared by UCS staff through the use of publicly available databases and through Freedom of Information Request Act (FOIA) requests and was delivered to CSSM through a secure Box account. Each sample file contained a list of email addresses for a specific agency, which in most cases were prescreened by UCS staff to only include Federal employees who were likely to have job duties involving science.

CSSM staff cleaned the sample files by identifying and deleting 87 duplicate email addresses, by removing stray blank spaces from 2429 addresses, and by correcting other errors in 11 addresses. In addition, UCS staff provided CSSM with a “Political Appointee Exclusion List” list containing 41 cases to remove from the EPA sample list and 1 from the EERE list. The cleaned email lists were then prepared for distribution by consolidating the 21 agency lists into 16 primary agency titles (as identified in question #1) and dividing them into 4 equivalent mailing groups.

The final combined sample for the 2018 Survey of Federal Scientists consisted of 63,248 contacts. The individual agency sample counts and distribution groups appear in the table below.

Table 1. Final Agency Counts and Distribution Groups

Group 1		Group 2		Group 3		Group 4	
<u>Agencies</u>	<u>Sample</u>	<u>Agencies</u>	<u>Sample</u>	<u>Agencies</u>	<u>Sample</u>	<u>Agencies</u>	<u>Sample</u>
EPA	14,899	CDC	10,552	FDA	9,392	NOAA	11,211
EERE	900	BOEM	407	ARS	2,426	FWS	4,388
		BSEE	310	ERS	309		
		NPS	1,276	NASS	755		
		USGS	2,937	NIFA	138		
		NHTSA	396	Census B.	2,952		
Total	15,799	Total	15,878	Total	15,972	Total	15,599
Final Sample Total = 63,248							

II. SURVEY PREPARATION, PROCEDURES, AND IMPLEMENTATION

Survey Preparation.

In preparation for 2018 Survey of Federal Scientists, UCS staff requested that CSSM provide a variety of completion options for survey recipients, in order to help maximize survey response. Using a multi-mode approach, survey recipients were invited to complete the questionnaire via online web survey, through downloadable PDF, or by phone interview.

To add greater credibility to the survey effort, CSSM staff created a Survey of Federal Scientists informational webpage to provide additional resources for survey recipients. This webpage contained a link to the PDF version of the survey, contact information for completing the survey by phone, and a link for the UCS “Surveys of Scientists at Federal Agencies” webpage.

In addition, UCS and CSSM co-developed a “Frequently Asked Questions” document, which provided detailed information about the purpose of the project, the organizations involved, the legal barriers to participating, as well as a variety of other related items. The FAQ document was made available on both the CSSM and UCS survey webpages, with the intent to provide clarity and help survey recipients make an informed decision to participate.

Prior to launching the 2018 Survey of Federal Scientists, UCS staff made efforts to contact each of the Federal agencies and departments included in the final survey sample, notifying them that the Survey of Federal Scientists was being conducted.

Online Web Survey.

The survey was programmed for online administration using Qualtrics software and tested for accuracy by CSSM and UCS staff. Agency names were embedded in various questions based on the agency selected in Q1. Subsequent agency-specific questions or embedded agency information were also based on the response to Q1. To ensure the integrity of the survey and its results, unique passwords were assigned to each person within the sample. Survey recipients receiving the email invitation were asked to click on an embedded survey link, taking them to the survey login page where they could enter their personal password. Both the survey and the data were stored on a secure server.

As an additional layer of security and to ensure that survey responses could not be linked to a particular respondent, CSSM also employed the use of the survey software’s “Anonymizing Responses” feature. Upon survey completion, this feature removed all identifying information for the respondent (including email address, IP address, location data, and password/external data reference codes), resulting in data that cannot be linked to a particular respondent or email address.

PDF Survey.

A PDF version of the Survey of Federal Scientists was created by CSSM, which mirrored the online version of the survey as much as possible. Agency-specific information that was embedded in the online survey was changed to be more generic for the PDF version, and routing or skip instructions were added as well. The survey email invitation provided links to both the CSSM and UCS Federal Scientists Survey webpages, which housed the PDF file for downloading. Recipients who wished to complete the PDF version were invited to print a copy and complete it on paper, with the option to either mail the completed survey to CSSM or to scan and send it via email.

For survey integrity purposes and to avoid duplicate responses, PDF respondents were asked to write their assigned password on their completed survey form. Once received, CSSM staff verified that the password hadn't previously been used and then entered the completed survey responses into the online version of the survey. Once the PDF responses were entered, paper copies were securely destroyed and scanned forms were deleted.

Phone Interview.

CSSM also provided survey recipients with the option for completing the survey via confidential phone interview. A toll-free phone number was made available in the email invitation and on both the CSSM and UCS survey webpages. Respondents were encouraged to call the number and schedule a time for the interview. CSSM's professional staff conducted the phone interviews by asking the survey questions and entering the responses into the online version of the survey.

For verification and survey integrity purposes, CSSM interviewers requested that phone respondents provide their assigned password before conducting the interview. All call records used for conducting the phone interviews were destroyed following survey completion.

Survey Invitations.

The initial email invitation and 4 email reminders for the Survey of Federal Scientists were developed in collaboration with UCS. Each invitation contained a unique assigned password for the survey, as well as instructions for each of the three survey completion modes (i.e., a link to the online survey, a link to the PDF version of the survey, and toll-free phone number for those wishing to complete the survey by phone).

In addition, each survey invitation contained information about the purpose of the project and the organizations involved, as well as information about how they were selected to participate. Invitation recipients were also informed that their agency had been notified about the survey and that they were encouraged to complete the survey on their own personal time and equipment.

Lastly, recipients were told that the survey would take approximately 15-20 minutes to complete and that if their work did not involve science, there was a place in the survey where they could indicate that. Survey recipients were also provided with an “opt-out” link if they preferred not to participate or be contacted again.

Data Collection.

Email invitations for the first distribution group (n = 15,799) were sent on Monday, 2/12/2018, with reminder notifications sent to non-responders on 2/20, 2/26, 3/7, and 3/19.

Email invitations for the second distribution group (n = 15,878) were sent on Tuesday, 2/13/2018, with reminder notifications sent to non-responders on 2/19, 2/27, 3/8, and 3/20.

Email invitations for the third distribution group (n = 15,972) were sent on Wednesday, 2/14/2018, with reminder notifications sent to non-responders on 2/22, 2/28, 3/12, and 3/21.

Email invitations for the fourth distribution group (n = 15,599) were sent on Thursday, 2/15/2018, with reminders notifications sent to non-responders on 2/21, 3/1, 3/13, and 3/22.

During data collection CSSM staff received and responded to approximately 101 emails and 12 telephone calls from individuals with questions, comments, or concerns about the survey. In many cases, people wanted to verify that the survey was legitimate and that it was safe to click on the survey link, whereas in other cases survey recipients requested additional information about who was conducting the survey and why. CSSM staff responded to these inquiries by providing additional verification and information, which often included references to the materials found on the Federal Scientists project websites, as well as occasional referrals to UCS staff.

Other contacts received by CSSM included several survey recipients who indicated that their work did not involve science and who wished to be removed from the contact list, while a smaller number indicated that they were retired or had received the email invitation in error.

In addition, several individuals who contacted CSSM indicated that they could not complete the survey without official permission from a supervisor or department administrator, while others refused participation, citing agency policies regarding unauthorized/unapproved surveys. In many cases, CSSM responded to these recipients by highlighting the fact that UCS was encouraging them to complete the survey in their “unofficial” capacity, on their own time and using their own equipment. In other cases, CSSM referred these contacts directly to UCS staff for further clarification.

Lastly, CSSM received and responded to a handful of technical support requests from respondents who were having difficulty accessing the online survey. In several of these cases, the access error related to survey recipients inadvertently entering blank spaces with their assigned survey password, while in other cases the password itself was entered incorrectly. CSSM also encountered a few cases where a recipient’s VPN or web browser settings prevented them from accessing the survey.

Throughout the data collection period, respondents were allowed to access their online survey as often as they wished by using their assigned password, until the survey was completed or data collection ended. Once a survey was completed, it could no longer be accessed by the respondent and the data was stripped of all personal identifiers, including email address, IP address and password.

Data collection for the Survey of Federal Scientists ended on March 26, 2018, which included the closure of all partially complete surveys that had not been submitted. In addition, CSSM received two additional PDF copies of the survey by mail (on March 29, 2018 and April 2, 2018), which were also included in the final data. The resulting data file was edited and cleaned in Excel. The final UCS data delivery consisted of an Excel data file (including open text), a corresponding data code manual, a frequency file for the entire data set, a separate frequency file for each of the 16 individual agencies, a file containing crosstabs across all agencies, and a Word document containing survey outcomes and response rates.

III. SURVEY OUTCOMES AND RESPONSE RATES

Of the 63,248 email invitations sent, 1843 resulted in bounce notifications due to an invalid or undeliverable email address. The bulk of these notifications were received from the CDC and EERE portions of the sample, which may have resulted from either a larger proportion of out-of-date contact information or email inaccuracies at those agencies.

In addition to bounce notifications received, 122 individuals were classified as not eligible to complete the Survey of Federal Scientists. Most of these individuals indicated that they were not employed by their agency in a scientific capacity. Of the 122 ineligible cases, 98 indicated no scientific work within the survey itself (question #3), whereas 20 contacted CSSM Technical Support staff directly to indicate no scientific work. Of the remaining ineligible cases, 2 contacted CSSM Technical Support staff to indicate that they were retired from their agency, while another 2 indicated that they had received the survey invitation in error.

An additional 1909 scientists refused participation by selecting the “opt-out” link at the bottom of their email invitation, while 42 contacted either ISU or UCS directly to refuse to participate. Of these direct-contact cases, most indicated that their refusal was based on agency-specific policies that forbid participation in unauthorized/unofficial surveys. Both ISU and UCS staff attempted to address these concerns by emphasizing that the survey was intended to be completed by scientists outside of work hours, on personal equipment, and in their “unofficial” capacity.

Of the remaining sample, 480 scientists left their survey partially complete, while 55,069 made no response. CSSM determined that 428 of the partially completed surveys moved beyond the initial screening questions and answered enough questions to be included in the final data. The remaining 52 surveys with partial completion status contained no data beyond question #3 and were considered too incomplete to be included in the final data set.

Data from 4211 surveys appears in the final data set, including 3783 complete and 428 partially complete surveys. Of the 4211 surveys in the data set, 4178 were completed online, 23 were

completed on paper (mailed or scanned), and 10 were completed by phone. In addition, 4203 of the 4211 respondents indicated an affiliation with one of the 16 Federal agencies sampled, whereas 8 selected "Other" Federal agency.

The overall response rate for the 2018 Survey of Federal Scientists was 6.67%, based on 4211 surveys out of 63,126 eligible contacts. Final survey outcomes and response rates by agency appear in Table 2 and Table 3 below.

Table 2. Survey of Federal Scientists Outcomes, 2018.

Agency	Final Sample	Not Eligible	Eligible Sample	Bounced	OptOut/ Refuse	Partials Removed	Completed Surveys
ARS	2426	0	2426	6	58	0	210
BOEM	407	0	407	0	27	1	63
BSEE	310	1	309	0	17	0	32
CDC	10552	21	10531	1655	322	11	605
EERE	900	3	897	150	46	0	44
EPA	14899	43	14856	1	390	4	449
ERS	309	2	307	0	8	0	23
FDA	9392	14	9378	0	281	6	354
NASS	755	3	752	0	40	0	20
NIFA	138	0	138	0	3	0	5
NOAA	11211	16	11195	7	313	11	1158
FWS	4388	5	4383	0	179	5	360
USGS	2937	3	2934	1	139	8	561
US CENSUS BUREAU	2952	5	2947	0	29	0	64
US National Park Service	1276	2	1274	0	64	3	231
NHTSA	396	4	392	9	35	0	24
Other Agency/Unknown*	0	0	0	14	0	3	8
Totals	63248	122	63126	1843	1951	52	4211

*Cases recorded as Other Agency or Unknown were sampled in the agencies above, but their agency was recorded as "Other" in the survey, or their agency was not identifiable from their bounced email.

Table 3. Survey of Federal Scientists Response Rates, 2018.

Agency	Eligible Sample	Completed Surveys	Response Rate
ARS	2426	210	8.66%
BOEM	407	63	15.48%
BSEE	309	32	10.36%
CDC	10531	605	5.74%
EERE	897	44	4.91%
EPA	14856	449	3.02%
ERS	307	23	7.49%
FDA	9378	354	3.77%
NASS	752	20	2.66%
NIFA	138	5	3.62%
NOAA	11195	1158	10.34%
FWS	4383	360	8.21%
USGS	2934	561	19.12%
US CENSUS BUREAU	2947	64	2.17%
US National Park Service	1274	231	18.13%
NHTSA	392	24	6.12%
Other Agency*		8	N/A
Totals	63126	4211	6.67%

* Cases recorded as Other Agency were sampled in the above agencies but recorded their agency as "Other" in their completed survey.


APPENDICES

The following Appendices are included at the end of this report:

- A. 2018 Survey of Federal Scientists (Paper version)
- B. Email Invitation (All groups)
- C. Email Reminder 1 (Group 1, 2, 3)
- D. Email Reminder 1 (Group 4)
- E. Email Reminder 2 (All groups)
- F. Email Reminder 3 (All groups)
- G. Email Reminder 4 (All groups)
- H. 2018 Federal Scientists Survey FAQ

APPENDIX A.
2018 Survey of Federal Scientists (Paper Version)

Iowa State University Center for Survey Statistics & Methodology
Union of Concerned Scientists
Survey of Federal Scientists
2018



Thank you for your willingness to complete this anonymous survey of scientists affiliated with the federal agencies listed below. Approximately 63,000 scientists have been invited to complete this survey. Please write legibly and respond thoughtfully and honestly to each question. Unless it is otherwise noted, circle one response for each item. Return your completed survey to the address provided after the final question. For more information about this survey, please visit www.ucsusa.org/2018survey.

Introduction.

Note: Please enter the access code from your email:  _____

1. What is your primary affiliation?

- 1 = ARS USDA Agricultural Research Service
- 2 = BOEM Bureau of Ocean Management
- 3 = BSEE Bureau of Safety and Environmental Enforcement
- 4 = CDC Centers for Disease Control and Prevention
- 5 = EERE US Department of Energy Office of Energy Efficiency & Renewable Energy
- 6 = EPA US Environmental Protection Agency
- 7 = ERS USDA Economic Research Service
- 8 = FDA US Food and Drug Administration
- 9 = NASS USDA National Agricultural Statistics Service
- 10 = NIFA USDA National Institute of Food and Agriculture
- 11 = NOAA National Oceanic and Atmospheric Administration
- 12 = USFWS US Fish and Wildlife Service
- 13 = USGS US Geological Survey
- 14 = US Census Bureau
- 15 = US National Park Service
- 16 = NHTSA National Highway Traffic Safety Administration
- 17 = Other (Please explain: _____)

2. What division do you work in within your agency? _____

3. Approximately what percentage of your job duties involves science?

(Note: Scientific work may include, but is not limited to, basic research, laboratory testing, data collection, risk assessment, veterinary medicine, economic analysis, science policy and other topics.)

- 1 = None → [IF NONE, PLEASE GO TO QUESTION 58, PAGE 14.]
- 2 = 1-25% scientific work
- 3 = 26-50% scientific work
- 4 = 51-75% scientific work
- 5 = 76-100% scientific work

Agency Mission and Effectiveness.

Preamble: The following questions aim to understand federal scientists’ attitudes regarding the mission and effectiveness of your agency. Effectiveness is defined in this survey as the ability to meet intended or expected outcomes as per the agency’s mission.

4. Compared to one year ago, the effectiveness of your division or office has:

Increased 1	Stayed the Same 2	Decreased 3	Don't Know 4	Not Applicable 5	Prefer Not to Disclose 6
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5. Over the past year, your personal job satisfaction at your agency has:

Increased 1	Stayed the Same 2	Decreased 3	Don't Know 4	Not Applicable 5	Prefer Not to Disclose 6
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6. How would you rate morale within your center/office/service?

Excellent 1	Good 2	Fair 3	Poor 4	Extremely Poor 5	Don't Know 6	Prefer Not to Disclose 7
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Please indicate the extent to which you agree or disagree with the following statements.

7a. In the last year, I have noticed workforce reductions at my agency due to staff departures, retirements, and/or hiring freezes.

Strongly Disagree 1	Disagree 2	Do Not Agree or Disagree 3	Agree 4	Strongly Agree 5	Prefer Not to Disclose 6
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7b. [IF Q7a = Agree or Strongly Agree:]

Such workforce reductions have made it more difficult for my agency to fulfill its science-based mission.

Strongly Disagree 1	Disagree 2	Do Not Agree or Disagree 3	Agree 4	Strongly Agree 5	Prefer Not to Disclose 6
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8. Thinking about the past year, the mix of tasks I am asked to perform is relevant to my expertise and job description.

Strongly Disagree 1	Disagree 2	Do Not Agree or Disagree 3	Agree 4	Strongly Agree 5	Prefer Not to Disclose 6
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9. 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.

Strongly Disagree		Disagree	Do Not Agree or Disagree	Agree	Strongly Agree	Prefer Not to Disclose
1		2	3	4	5	6

10. In your opinion, what are the greatest barriers to science-based decisions at your agency?

(Circle up to 3.)

- 1 = Delay in leadership making a decision
- 2 = Absence of leadership with needed scientific expertise
- 3 = Uncertainty or disagreement with the science
- 4 = Influence of political appointees in your agency or department
- 5 = Influence of the White House
- 6 = Influence of Congress
- 7 = Influence of other agencies
- 8 = Influence of industry stakeholders
- 9 = Influence of non-governmental interests (such as advocacy groups)
- 10 = Inefficient decision-making process within the Agency
- 11 = Potential discrepancy with existing rules or regulations
- 12 = Uncertainty of Agency jurisdiction
- 13 = Complexity of the issue
- 14 = Limited staff capacity
- 15 = Other (Please describe: _____)
- 16 = Prefer Not to Disclose

Employee Working Environment.

Please indicate the extent to which you agree or disagree with the following statements.

11. My direct supervisor consistently stands behind scientists who put forth scientifically defensible positions that may be politically contentious.

Strongly Disagree		Disagree	Do Not Agree or Disagree	Agree	Strongly Agree	Prefer Not to Disclose
1		2	3	4	5	6

12. 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.

Strongly Disagree		Disagree	Do Not Agree or Disagree	Agree	Strongly Agree	Prefer Not to Disclose
1		2	3	4	5	6

13. The number of scientific conferences attended by agency scientists in the past year is similar to the number attended three years ago.

Strongly Disagree		Disagree	Do Not Agree or Disagree	Agree	Strongly Agree	Prefer Not to Disclose
1		2	3	4	5	6

14. Currently, I can openly express any concerns about the mission-driven work of my agency without fear of retaliation (i.e., inappropriate criticism or consequences).

Strongly Disagree	Disagree	Do Not Agree or Disagree	Agree	Strongly Agree	Prefer Not to Disclose
1	2	3	4	5	6

15. I have been asked or told to omit certain words in my scientific work products because they are politically contentious.

Strongly Disagree	Disagree	Do Not Agree or Disagree	Agree	Strongly Agree	Prefer Not to Disclose
1	2	3	4	5	6

16a. I have been asked or told to avoid work on specific scientific topics because they are politically contentious.

Strongly Disagree	Disagree	Do Not Agree or Disagree	Agree	Strongly Agree	Prefer Not to Disclose
1	2	3	4	5	6

16b. [IF Q16a = Agree or Strongly Agree:]

This has adversely impacted my effectiveness at my job at my agency.

Strongly Disagree	Disagree	Do Not Agree or Disagree	Agree	Strongly Agree	Prefer Not to Disclose
1	2	3	4	5	6

17. I have avoided working on certain scientific topics or using certain scientific terms because they are politically contentious, though I was not explicitly told to avoid them.

Strongly Disagree	Disagree	Do Not Agree or Disagree	Agree	Strongly Agree	Prefer Not to Disclose
1	2	3	4	5	6

18. Currently, I am allowed to publish work in peer-reviewed scientific journals regardless of the level of controversy of the topic.

Strongly Disagree	Disagree	Do Not Agree or Disagree	Agree	Strongly Agree	Prefer Not to Disclose
1	2	3	4	5	6

19. Currently, I am allowed to speak to the public and the news media (including at conferences and professional meetings) about my scientific research findings, regardless of the level of political contentiousness of the topic.

Strongly Disagree	Disagree	Do Not Agree or Disagree	Agree	Strongly Agree	Prefer Not to Disclose
1	2	3	4	5	6

Science.

Please indicate how often you feel each of the following statements is true.

20. My agency collects the scientific and monitoring information needed to effectively meet its mission.

Always 1	Frequently 2	Occasionally 3	Seldom 4	Never 5	Don't Know 6	Prefer Not to Disclose 7
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21. My agency's determinations and actions are consistent with the scientific findings contained in agency documents and reports.

Always 1	Frequently 2	Occasionally 3	Seldom 4	Never 5	Don't Know 6	Prefer Not to Disclose 7
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22. Expert advice from scientific advisory committees is heeded and incorporated into agency decisions.

Always 1	Frequently 2	Occasionally 3	Seldom 4	Never 5	Don't Know 6	Prefer Not to Disclose 7
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Please indicate the extent to which you agree or disagree with the following statements.

23. I feel that my scientific work and opinions consistently inform policy decisions.

Strongly Disagree 1	Disagree 2	Do Not Agree or Disagree 3	Agree 4	Strongly Agree 5	Prefer Not to Disclose 6
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24. In the past year, I have been excluded from discussions or decisions related to my scientific work that I normally would expect to be a part of.

Strongly Disagree 1	Disagree 2	Do Not Agree or Disagree 3	Agree 4	Strongly Agree 5	Prefer Not to Disclose 6
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25. I have been pressured or directed by supervisors or senior level officials to NOT attend professional meetings or give public talks on my scientific work.

Strongly Disagree 1	Disagree 2	Do Not Agree or Disagree 3	Agree 4	Strongly Agree 5	Prefer Not to Disclose 6
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26. Advisory committees at my agency are constituted by individuals with appropriate expertise and who are able to provide independent scientific advice.

Strongly Disagree 1	Disagree 2	Do Not Agree or Disagree 3	Agree 4	Strongly Agree 5	Prefer Not to Disclose 6
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27. In the last year, the expertise on scientific advisory committees at my agency has:

Significantly Improved	Somewhat Improved	No Change	Somewhat Deteriorated	Significantly Deteriorated	Don't Know	Prefer Not to Disclose
1	2	3	4	5	6	7

Outside Influence & Political Interference.

Please indicate the extent to which you agree or disagree with the following statements.

28a. The level of consideration of political interests hinders the ability of my agency to make science-based decisions.

Strongly Disagree	Disagree	Do not agree or disagree	Agree	Strongly Agree	Prefer Not to Disclose
1	2	3	4	5	6

28b. The level of consideration of business interests hinders the ability of my agency to make science-based decisions.

Strongly Disagree	Disagree	Do not agree or disagree	Agree	Strongly Agree	Prefer Not to Disclose
1	2	3	4	5	6

28c. The level of consideration of non-governmental organization interests hinders the ability of my agency to make science-based decisions.

Strongly Disagree	Disagree	Do not agree or disagree	Agree	Strongly Agree	Prefer Not to Disclose
1	2	3	4	5	6

28d. The level of consideration of public opinion hinders the ability of my agency to make science-based decisions.

Strongly Disagree	Disagree	Do not agree or disagree	Agree	Strongly Agree	Prefer Not to Disclose
1	2	3	4	5	6

29. The presence of senior decision makers in my agency who come from regulated industry or those with financial interest in regulatory outcomes inappropriately influences the decisions made by the agency.

Strongly Disagree	Disagree	Do Not Agree or Disagree	Agree	Strongly Agree	Prefer Not to Disclose
1	2	3	4	5	6

Interaction with the Public and the Press.

30. Are you able to review, prior to publication, the final drafts of agency communications that are being published under your name and/or that substantially rely on your research?

- 1 = Yes
- 2 = No
- 3 = Don't Know
- 4 = Prefer Not to Disclose

31a. Are you required to obtain agency pre-approval to communicate with journalists?

- 1 = Yes
- 2 = No
- 3 = Don't Know
- 4 = Prefer Not to Disclose

31b. [IF Q31a = Yes:] Has this affected your ability to communicate your science externally?

- 1 = Yes
- 2 = No
- 3 = Don't Know
- 4 = Prefer Not to Disclose

32. In the past year, how has your ability to communicate your scientific work to the public and to the media, including the use of social media, changed?

Significantly Improved	Somewhat Improved	No Change	Somewhat Deteriorated	Significantly Deteriorated	Don't Know	Prefer Not to Disclose
1	2	3	4	5	6	7

Agency Scientific Integrity and Whistleblower Policies.

Each agency included in this survey has a scientific integrity policy that is intended to safeguard the integrity of agency science by setting clear standards for employees and the use of scientific information, and institutes a process for resolving disputes. Please indicate the extent to which you agree or disagree with each of the following statements.

33. My agency adheres to its scientific integrity policy.

Strongly Disagree	Disagree	Do Not Agree or Disagree	Agree	Strongly Agree	Don't Know	Prefer Not to Disclose
1	2	3	4	5	6	7

34. I have received adequate training regarding the contents and procedures in my agency's scientific integrity policy.

Strongly Disagree	Disagree	Do Not Agree or Disagree	Agree	Strongly Agree	Prefer Not to Disclose
1	2	3	4	5	6

Among other protections, federal whistleblower laws (including the Whistleblower Protection Act and the Whistleblower Protection Enhancement Act) protect federal scientists from retaliation who report information they reasonably believe displays:

- A violation of law, rule or regulation;
- Gross mismanagement;
- A gross waste of funds;
- Abuse of authority;
- A substantial and specific danger to public health and safety; or
- Censorship related to research, analysis or technical information that is, or will cause, any of the above forms of misconduct

To what extent do you disagree or agree with the following statement?

35. I have been adequately trained on whistleblower rights and protections.

Strongly Disagree	Disagree	Do Not Agree or Disagree	Agree	Strongly Agree	Prefer Not to Disclose
1	2	3	4	5	6

36. If I were to obtain knowledge about a scientific integrity issue, I would most likely:

(Examples of scientific integrity issues include political appointees changing data in a scientific report, scientists being restricted from talking to the media/public, suppression of scientific information that could result in public harm, undue influence of outside stakeholders on agency scientific decisions, etc.)

- 1 = Be willing to come forward. I trust that the agency would fairly assess and address the issue.
- 2 = Be willing to come forward, although I do not trust that the agency would fairly assess and address the issue.
- 3 = Not feel comfortable coming forward. I do not trust that the agency would fairly assess and address the issue.
- 4 = Not feel comfortable coming forward, although I do trust that the agency would fairly assess and address the issue.
- 5 = Not feel comfortable coming forward because I would fear suffering retaliation for reporting the violation.
- 6 = Don't Know
- 7 = Prefer Not to Disclose

NOTE:

FDA SCIENTISTS: Skip to Q40a, next page.

NHTSA SCIENTISTS: Skip to Q45, page 12.

CENSUS BUREAU SCIENTISTS: Skip to Q50, page 13.

ALL OTHERS CONTINUE BELOW.

Please indicate the extent to which you agree or disagree with each of the following statements.

37. I have been asked or told to omit the phrase “climate change” from my work.

Strongly Disagree	Disagree	Do Not Agree or Disagree	Agree	Strongly Agree	Prefer Not to Disclose
1	2	3	4	5	6

38a. I have been asked or told to avoid work on climate change.

Strongly Disagree	Disagree	Do Not Agree or Disagree	Agree	Strongly Agree	Prefer Not to Disclose
1	2	3	4	5	6

38b. [IF Q38a = Agree or Strongly Agree:]

This has adversely impacted my effectiveness at my job at my agency.

Strongly Disagree	Disagree	Do Not Agree or Disagree	Agree	Strongly Agree	Prefer Not to Disclose
1	2	3	4	5	6

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

Strongly Disagree	Disagree	Do Not Agree or Disagree	Agree	Strongly Agree	Prefer Not to Disclose
1	2	3	4	5	6

Agency Specific Questions: FOR FDA SCIENTISTS ONLY. (All others, go to next page.)

Please indicate the extent to which you agree or disagree with each of the following statements.

40a. Rules and regulations supported by scientific evidence that were final or near final have been delayed.

Strongly Disagree	Disagree	Do Not Agree or Disagree	Agree	Strongly Agree	Prefer Not to Disclose
1	2	3	4	5	6

40b. [IF Q40a = Agree or Strongly Agree:] Which rules and regulations have been delayed?
(Please explain below.)

41. I have felt pressure to lower or relax scientific, clinical reviews, or inspection standards.

Strongly Disagree	Disagree	Do Not Agree or Disagree	Agree	Strongly Agree	Prefer Not to Disclose
1	2	3	4	5	6

42a. Time pressures have undermined the scientific rigor of my work.

Strongly Disagree	Disagree	Do Not Agree or Disagree	Agree	Strongly Agree	Prefer Not to Disclose
1	2	3	4	5	6

**42b. [IF Q42a = Agree or Strongly Agree:]
Is this related to deadlines and user fee requirements?**

- 1 = Yes
- 2 = No
- 3 = Don't Know
- 4 = Prefer Not to Disclose

**Agency Specific Questions: FOR USDA (ARS, ERS, NIFA, NASS) SCIENTISTS ONLY.
(All others, go to next page.)**

Please indicate the extent to which you agree or disagree with each of the following statements.

43a. My agency has received input or guidance on its scientific work or other information about cross-departmental scientific coordination from the USDA’s Office of the Chief Scientist (OCS) during the past year.

Strongly Disagree	Disagree	Do Not Agree or Disagree	Agree	Strongly Agree	Prefer Not to Disclose
1	2	3	4	5	6

43b. [IF Q43a = Disagree or Strongly Disagree:]

This lack of input/feedback about cross-departmental scientific coordination is a departure from previous OCS practice.

Strongly Disagree	Disagree	Do Not Agree or Disagree	Agree	Strongly Agree	Prefer Not to Disclose
1	2	3	4	5	6

44a. Over the past year, the OCS has convened the USDA Science Council about as regularly as in previous years.

Strongly Disagree	Disagree	Do Not Agree or Disagree	Agree	Strongly Agree	Prefer Not to Disclose
1	2	3	4	5	6

44b. [IF Q44a = Disagree or Strongly Disagree:]

This has hampered cross-departmental scientific coordination and collaboration and made it more difficult for my agency to fulfill its science-based mission.

Strongly Disagree	Disagree	Do Not Agree or Disagree	Agree	Strongly Agree	Prefer Not to Disclose
1	2	3	4	5	6

Agency Specific Questions: FOR BOEM, BSEE, & NHTSA SCIENTISTS ONLY.
(All others, go to next page.)

Please indicate the extent to which you agree or disagree with each of the following statements.

45. Current procedures for assessing the environmental impacts of my agency's actions are adequate.

Strongly Disagree	Disagree	Do Not Agree or Disagree	Agree	Strongly Agree	Prefer Not to Disclose
1	2	3	4	5	6

46. Current procedures for assessing the climate change impacts of my agency's actions are adequate.

Strongly Disagree	Disagree	Do Not Agree or Disagree	Agree	Strongly Agree	Prefer Not to Disclose
1	2	3	4	5	6

47a. In the past year, rules and regulations supported by scientific evidence that were final or near final have been delayed or overturned.

Strongly Disagree	Disagree	Do Not Agree or Disagree	Agree	Strongly Agree	Prefer Not to Disclose
1	2	3	4	5	6

47b. [IF Q47a = Agree or Strongly Agree:] Which rules and regulations have been delayed or overturned?
(Please explain below.)

48a. In the past year, I have felt pressure or was directed to lower or relax scientific or analytic standards.

Strongly Disagree	Disagree	Do Not Agree or Disagree	Agree	Strongly Agree	Prefer Not to Disclose
1	2	3	4	5	6

48b. In recent years, increasing time pressures have undermined the scientific rigor of my work.

Strongly Disagree	Disagree	Do Not Agree or Disagree	Agree	Strongly Agree	Prefer Not to Disclose
1	2	3	4	5	6

49. [NHTSA scientists only:] Current practices for assessing the impacts of my agency's actions on consumers adequately consider scientific evidence.

Strongly Disagree	Disagree	Do Not Agree or Disagree	Agree	Strongly Agree	Prefer Not to Disclose
1	2	3	4	5	6

Demographic Background. (For all respondents.)

<p>50. What is your current grade level?</p> <ul style="list-style-type: none">1 = GS-11 or lower2 = GS-12 and above3 = Commissioned Corps4 = Student5 = Fellow6 = Visiting Scientist7 = Contractor8 = Other (<i>Please specify:</i> _____)9 = Prefer Not to Disclose <p>51. How long have you been working at your agency?</p> <ul style="list-style-type: none">1 = Less than 3 years2 = 3-5 years3 = 6-10 years4 = 11-15 years5 = More than 15 years6 = Prefer Not to Disclose <p>52. Have you ever worked for regulated industry or a group representing them?</p> <ul style="list-style-type: none">1 = Yes2 = No3 = Prefer Not to Disclose	<p>53. What is the highest level of education you have completed?</p> <ul style="list-style-type: none">1 = Bachelor's Degree2 = Master's Degree3 = PhD4 = MD5 = JD6 = DVM7 = Other (<i>Please specify:</i> _____)8 = Prefer Not to Disclose <p>54. To which racial or ethnic group(s) do you most identify? (<i>Circle all that apply.</i>)</p> <ul style="list-style-type: none">1 = White, Caucasian2 = Hispanic or Latino/a3 = Black or African American4 = Native American or American Indian5 = Asian / Pacific Islander6 = Other7 = Prefer Not to Disclose <p>55. What is your gender?</p> <ul style="list-style-type: none">1 = Male2 = Female3 = Nonbinary4 = Prefer Not to Disclose
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Open-Ended Questions.

Preamble: The following questions are open-ended to allow respondents to share further details regarding scientific integrity at their agency. For confidentiality purposes, please refrain from including any identifying information in your responses such as names of current career employees. You can also choose to contact UCS outside of this survey to share information about anything that inhibits the role of science in policymaking. (See <https://www.ucsus.org/2018survey> .)

56a. How have actions taken or changes made by the current administration related to science (positive or negative) helped or harmed your agency's mission?

56b. In particular, have you observed any potential impacts of policy actions on low-income communities, sensitive subpopulations and people of a minority race/ethnicity?

57. Please describe any specific problems related to scientific integrity or examples where scientific integrity was upheld, that deserve more public attention.

(e.g. inappropriate interference by commercial, political, or nongovernmental interests, selective or incomplete use of data, significant edits that change the meaning of findings, new or unusual administrative policies that impair your work, requests to use data or methods that are not credible, etc.)

58. Is there anything else you would like to share with us regarding scientific integrity at your agency?

Thank you!

Your cooperation and assistance is greatly appreciated!

You may email your scanned completed survey to csmqualtrics@iastate.edu or mail your completed survey to:

Center for Survey Statistics and Methodology
Iowa State University
2401 Osborn Drive
112 Office and Lab Building
Ames, Iowa 50011

**APPENDIX B.
E-Mail Invitation (All groups)**

UCS Federal Scientist Survey – Email Invitation

E-mail Sending Name: Iowa State University
E-mail Sending Address: isu-cssm@qualtrics-research.com

Subject Line: UCS Scientific Integrity Study

Dear Federal Scientist,

Researchers at the Iowa State University Center for Survey Statistics and Methodology (CSSM) and the Union of Concerned Scientists (UCS) are conducting a survey of over 63,000 science professionals from 16 science-based US government agencies. Your agency is included in this study. You were chosen to receive a survey invitation because your office and/or job title indicated your work deals with science in some capacity.

With your help, we hope to better understand the role of science and scientific integrity at your agency and the contributions of scientists in fulfilling their agency's science-based mission during the past year.

For quality control, you will need the following access code to complete the survey: XXXXXXXX. We assure you that your privacy is of the utmost concern to us. Any personally identifying information will be destroyed immediately when your survey responses are submitted.

The survey is available to you in three ways.

Option 1: Access the survey online by clicking [HERE](#).

Option 2: Complete the survey on paper by downloading a .pdf version available by clicking [HERE](#), or by visiting either the UCS website (www.ucsusa.org/2018survey) or the CSSM website (www.cssm.iastate.edu/federal-scientists-survey).

Option 3: Complete the survey via telephone by calling 877-578-8848 (toll-free) to schedule a time with Iowa State University's CSSM project staff.

Completing the survey should take approximately 15-20 minutes of your time. If your work does not involve science, there is a place to indicate this near the beginning of the survey, and you will not be contacted again after submitting this response.

If you choose to opt out of the survey, please click [HERE](#) to remove your email address from future notifications.

Your participation in this project is voluntary, and you may decline to answer any questions you choose. However, your participation is extremely important since a high response rate is essential to high quality data.

Because this survey is not part of your official duties, we recommend that you complete the survey outside of work hours and on your personal computer. The online survey is smartphone compatible but easier to complete on a larger device.

For more than 13 years, UCS (a 501(c)3 nonprofit that works on a variety of science policy issues) has conducted surveys of scientists at federal agencies, including the Food and Drug Administration, the Fish and Wildlife Service, and the Environmental Protection Agency. To learn more about prior surveys conducted by UCS, please visit www.ucsusa.org/surveys.

Thank you in advance for your important and highly valued contribution to this research. If you have questions about the survey topic/purpose, please email ScientistSurvey@ucsusa.org or call 202-331-6942. For technical assistance, please email CSSM at casmqualtrics@iastate.edu.

Sincerely,

Jacob Carter, Ph.D., Research Scientist, Union of Concerned Scientists
Gretchen Goldman, Ph.D., Research Director, Union of Concerned Scientists
Charise Johnson, M.S., Research Associate, Union of Concerned Scientists
Zhengyuan Zhu, Ph.D., Professor of Statistics and Director of Center for Survey Statistics and Methodology, Iowa State University

This study has been approved by the Iowa State University Institutional Review Board (IRB #18-017) to ensure confidentiality and data security.

To opt out of the survey, click [HERE](#).

APPENDIX C.
E-mail Reminder 1 (Groups 1, 2, 3)

UCS Federal Scientist Survey – Email Reminder 1 (Groups 1, 2, 3)

E-mail Sending Name: Iowa State University
E-mail Sending Address: isu-cssm@qualtrics-research.com

Subject Line: UCS Scientific Integrity Study

Dear Federal Scientist,

Recently we sent you an email about a survey being conducted with over 63,000 science professionals from 16 science-based US government agencies. Your agency has been notified that it is included in this study; and you were chosen to be contacted because your office and/or job title indicated your work deals with science in some capacity. With your help, we hope to better understand the role of science and scientific integrity at your agency and the contributions of scientists in fulfilling their agency's science-based mission during the past year.

If you have already completed the survey, we thank you. If not, please do so at your earliest convenience. **For quality control, you will need the following access code to complete the survey: XXXXXXXX.**

This survey is being conducted by researchers at the Iowa State University Center for Survey Statistics and Methodology (CSSM) and the Union of Concerned Scientists (UCS). Your privacy is of the utmost concern to us, so any personally identifying information will be destroyed immediately when your survey responses are submitted.

The survey is available to you in three ways.

Option 1: Access the survey online by clicking [HERE](#).

Option 2: Complete the survey on paper by downloading a .pdf version available on the UCS website (www.ucsusa.org/2018survey) or the CSSM website (www.cssm.iastate.edu/federal-scientists-survey).

Option 3: Complete the survey via telephone by calling 877-578-8848 (toll-free) to schedule a time with Iowa State University's CSSM project staff.

Because this survey is not part of your official duties, we recommend that you complete the survey outside of work hours and on your personal computer. The online survey is smartphone compatible but easier to complete on a larger device. Additional project information (FAQ) is available at the UCS and CSSM websites.

Completing the survey should take approximately 15-20 minutes of your time. If your work does not involve science, there is a place to indicate this near the beginning of the survey, and you will not be contacted again after submitting this response.

If you choose to opt out of the survey, you may click the link at the bottom of this email to remove your email address from future notifications.

Your participation in this project is voluntary, and you may decline to answer any questions you choose. However, your participation is extremely important since a high response rate is essential to high quality data.

Thank you in advance for your important and highly valued contribution to this research. If you have questions about the survey topic/purpose or its legitimacy, please email ScientistSurvey@ucsusa.org or call 202-331-6942. For technical assistance, please reply to this email.

Sincerely,

Jacob Carter, Ph.D., Research Scientist, Union of Concerned Scientists
Gretchen Goldman, Ph.D., Research Director, Union of Concerned Scientists
Charise Johnson, M.S., Research Associate, Union of Concerned Scientists
Zhengyuan Zhu, Ph.D., Professor of Statistics and Director of Center for Survey Statistics and Methodology, Iowa State University

For more than 13 years, UCS (a 501(c)3 nonprofit that works on a variety of science policy issues) has conducted surveys of scientists at federal agencies, including the Food and Drug Administration, the Fish and Wildlife Service, and the Environmental Protection Agency. To learn more about prior surveys conducted by UCS, please visit www.ucsusa.org/surveys.

This study has been approved by the Iowa State University Institutional Review Board (IRB #18-017) to ensure confidentiality and data security.

To opt out of the survey, click [HERE](#).

**APPENDIX D.
E-Mail Reminder 1 (Group 4)**

UCS Federal Scientist Survey – Email Reminder 1 (Group 4)

E-mail Sending Name: Iowa State University
E-mail Sending Address: isu-cssm@qualtrics-research.com

Subject Line: UCS Scientific Integrity Study

Dear Federal Scientist,

Recently we sent you an email about a survey being conducted with over 63,000 science professionals from 16 science-based US government agencies. We would like to reiterate that this survey is asking you to respond in your personal capacity. We are aware that government employees cannot respond to this survey in their official capacity; however, you are free to take the survey on your personal time and equipment. Finally, we would like to note that your government email will not be affiliated with your response.

Your agency has been notified that it is included in this study; and you were chosen to be contacted because your office and/or job title indicated your work deals with science in some capacity. With your help, we hope to better understand the role of science and scientific integrity at your agency and the contributions of scientists in fulfilling their agency's science-based mission during the past year.

If you have already completed the survey, we thank you. If not, please do so at your earliest convenience. **For quality control, you will need the following access code to complete the survey: XXXXXXXX.**

This survey is being conducted by researchers at the Iowa State University Center for Survey Statistics and Methodology (CSSM) and the Union of Concerned Scientists (UCS). Your privacy is of the utmost concern to us, so any personally identifying information will be destroyed immediately when your survey responses are submitted.

The survey is available to you in three ways.

Option 1: Access the survey online by clicking [HERE](#).

Option 2: Complete the survey on paper by downloading a .pdf version available on the UCS website (www.ucsus.org/2018survey) or the CSSM website (www.cssm.iastate.edu/federal-scientists-survey).

Option 3: Complete the survey via telephone by calling 877-578-8848 (toll-free) to schedule a time with Iowa State University's CSSM project staff.

Because this survey is not part of your official duties, we recommend that you complete the survey outside of work hours and on your personal computer. The online survey is smartphone compatible but easier to complete on a larger device. Additional project information (FAQ) is available at the UCS and CSSM websites.

Completing the survey should take approximately 15-20 minutes of your time. If your work does not involve science, there is a place to indicate this near the beginning of the survey, and you will not be contacted again after submitting this response.

If you choose to opt out of the survey, you may click the link at the bottom of this email to remove your email address from future notifications.

Your participation in this project is voluntary, and you may decline to answer any questions you choose. However, your participation is extremely important since a high response rate is essential to high quality data.

Thank you in advance for your important and highly valued contribution to this research. If you have questions about the survey topic/purpose or its legitimacy, please email ScientistSurvey@ucsusa.org or call 202-331-6942. For technical assistance, please reply to this email.

Sincerely,

Jacob Carter, Ph.D., Research Scientist, Union of Concerned Scientists
Gretchen Goldman, Ph.D., Research Director, Union of Concerned Scientists
Charise Johnson, M.S., Research Associate, Union of Concerned Scientists
Zhengyuan Zhu, Ph.D., Professor of Statistics and Director of Center for Survey Statistics and Methodology, Iowa State University

For more than 13 years, UCS (a 501(c)3 nonprofit that works on a variety of science policy issues) has conducted surveys of scientists at federal agencies, including the Food and Drug Administration, the Fish and Wildlife Service, and the Environmental Protection Agency. To learn more about prior surveys conducted by UCS, please visit www.ucsusa.org/surveys.

This study has been approved by the Iowa State University Institutional Review Board (IRB #18-017) to ensure confidentiality and data security.

To opt out of the survey, click [HERE](#).

APPENDIX E.
E-Mail Reminder 2 (All groups)

UCS Federal Scientist Survey – Email Reminder 2

E-mail Sending Name: Iowa State University
E-mail Sending Address: isu-cssm@qualtrics-research.com

Subject Line: UCS Scientific Integrity Study

Dear Federal Scientist,

We would like to remind you of the opportunity to share your opinions and experiences by completing an online survey being conducted with over 63,000 science professionals from 16 science-based US government agencies. Our hope is to better understand the role of science and scientific integrity at your agency and the contributions of scientists in fulfilling their agency's science-based mission during the past year. This survey effort is being coordinated by the Union of Concerned Scientists (UCS) and researchers at Iowa State University's Center for Survey Statistics and Methodology (CSSM).

Your agency has been notified that it is included in this study; and you were chosen to be contacted because your office and/or job title indicated your work deals with science in some capacity. You are being asked to respond in your personal capacity, not in your official capacity. Because of this, we recommend that you complete the survey outside of work hours and on your personal computer. Your government email will not be affiliated with your response; therefore, you will not be responding on behalf of your agency.

If you have already completed the survey, we thank you. If not, please consider completing it at your earliest convenience. **For quality control purposes, you will need the following access code to complete the survey: XXXXXXXX.**

The survey is available to you in three ways.

Option 1: Access the survey online by clicking [HERE](#).

Option 2: Complete the survey on paper by downloading a .pdf version available on the UCS website (www.ucsusa.org/2018survey) or the CSSM website (www.cssm.iastate.edu/federal-scientists-survey).

Option 3: Complete the survey via telephone by calling 877-578-8848 (toll-free) to schedule a time with Iowa State University's CSSM project staff.

Completing the survey should take approximately 15-20 minutes of your time. If your work does not involve science, there is a place to indicate this near the beginning of the survey, and you will not be contacted again after submitting this response.

We assure you that your privacy is of the utmost concern to us. Any personally identifying information will be destroyed immediately when your survey responses are submitted.

If you choose to opt out of the survey, you may click the link at the bottom of this email to remove your email address from future notifications.

Your participation in this project is voluntary, and you may decline to answer any questions you choose. However, your participation is extremely important since a high response rate is essential to high quality data.

Thank you in advance for your important and highly valued contribution to this research. If you have questions about the survey topic/purpose or its legitimacy, please email ScientistSurvey@ucsusa.org or call 202-331-6942. For technical assistance, please reply to this email.

Sincerely,

Jacob Carter, Ph.D., Research Scientist, Union of Concerned Scientists
Gretchen Goldman, Ph.D., Research Director, Union of Concerned Scientists
Charise Johnson, M.S., Research Associate, Union of Concerned Scientists
Zhengyuan Zhu, Ph.D., Professor of Statistics and Director of Center for Survey Statistics and Methodology, Iowa State University

For more than 13 years, UCS (a 501(c)3 nonprofit that works on a variety of science policy issues) has conducted surveys of scientists at federal agencies, including the Food and Drug Administration, the Fish and Wildlife Service, and the Environmental Protection Agency. To learn more about prior surveys conducted by UCS, please visit www.ucsusa.org/surveys.

This study has been approved by the Iowa State University Institutional Review Board (IRB #18-017) to ensure confidentiality and data security.

To opt out of the survey, click [HERE](#).

APPENDIX F.
Email Reminder 3 (All groups)

UCS Federal Scientist Survey – Email Reminder 3

E-mail Sending Name: Iowa State University
E-mail Sending Address: isu-cssm@qualtrics-research.com

Subject Line: Scientific Integrity Study – Deadline March 26

Dear Federal Scientist,

Last month you were contacted about an important survey of over 63,000 science professionals from 16 science-based US government agencies. This survey effort has been coordinated by the Union of Concerned Scientists (UCS) and researchers at Iowa State University's Center for Survey Statistics and Methodology (CSSM), with a hope for better understanding the role of science and scientific integrity at your agency and the contributions of scientists in fulfilling their agency's science-based mission during the past year.

Your agency was notified that it would be included in this study; and you were chosen to be contacted because your office and/or job title indicated your work deals with science in some form. You are being asked to respond in your personal capacity, not in your official capacity. To that end, we recommend that you complete the survey outside of work hours and on your personal computer or mobile device. We assure you that your government email will not be affiliated with your response; therefore, you will not be responding on behalf of your agency.

The survey will be closing on March 26th. If you have already completed it, we thank you. If you have not, please take this remaining opportunity to do so. **For quality control purposes, you will need the following access code to complete the survey: XXXXXXXX.**

The survey is available to you in three ways.

Option 1: Access the survey online by clicking [HERE](#).

Option 2: Complete the survey on paper by downloading a .pdf version available on the UCS website (www.ucsusa.org/2018survey) or the CSSM website (www.cssm.iastate.edu/federal-scientists-survey).

Option 3: Complete the survey via telephone by calling 877-578-8848 (toll-free) to schedule a time with Iowa State University's CSSM project staff.

Completing the survey should take approximately 15-20 minutes of your time. If your work does not involve science, there is a place to indicate this near the beginning of the survey, and you will not be contacted again after submitting this response.

We assure you that your privacy is of the utmost concern to us. Any personally identifying information will be destroyed immediately when your survey responses are submitted.

If you choose to opt out of the survey, you may click the link at the bottom of this email to remove your email address from future notifications.

Your participation in this project is voluntary, and you may decline to answer any questions you choose. However, your participation is extremely important since a high response rate is essential to high quality data.

Thank you in advance for your important and highly valued contribution to this research. If you have questions about the survey topic/purpose or its legitimacy, please email ScientistSurvey@ucsusa.org or call 202-331-6942. For technical assistance, please reply to this email.

Sincerely,

Jacob Carter, Ph.D., Research Scientist, Union of Concerned Scientists
Gretchen Goldman, Ph.D., Research Director, Union of Concerned Scientists
Charise Johnson, M.S., Research Associate, Union of Concerned Scientists
Zhengyuan Zhu, Ph.D., Professor of Statistics and Director of Center for Survey Statistics and Methodology, Iowa State University

For more than 13 years, UCS (a 501(c)3 nonprofit that works on a variety of science policy issues) has conducted surveys of scientists at federal agencies, including the Food and Drug Administration, the Fish and Wildlife Service, and the Environmental Protection Agency. To learn more about prior surveys conducted by UCS, please visit www.ucsusa.org/surveys.

This study has been approved by the Iowa State University Institutional Review Board (IRB #18-017) to ensure confidentiality and data security.

To opt out of the survey, click [HERE](#).

APPENDIX G.
Email Reminder 4 (All groups)

UCS Federal Scientist Survey – Email Reminder 4

E-mail Sending Name: Iowa State University
E-mail Sending Address: isu-cssm@qualtrics-research.com

Subject Line: Final Notice: Scientific Integrity Study ending March 26

Dear Federal Scientist,

The survey will be closing on March 26th. As you know, researchers at the Union of Concerned Scientists (UCS) have collaborated with Iowa State University's Center for Survey Statistics and Methodology (CSSM) to conduct a survey of over 63,000 science professionals from 16 science-based US government agencies. The goal of this survey effort has been to better understand the role of science and scientific integrity at your agency and the contributions of scientists in fulfilling their agency's science-based mission during the past year.

Your agency was notified about being included in this study; and you were chosen to be contacted because your office and/or job title indicated your work deals with science in some form. We ask that you please complete the survey in your personal capacity, rather than in your official capacity, and that you do not disclose any classified or sensitive information. We also recommend that you complete the survey outside of work hours on a personal device. Your government email will not be affiliated with your responses; therefore, you will not be responding on behalf of your agency.

Please take this remaining opportunity to complete the survey and share your valuable input. **For quality control purposes, you will need the following access code to complete the survey: XXXXXXXX.**

The survey is available to you in three ways.

Option 1: Access the survey online by clicking [HERE](#).

Option 2: Complete the survey on paper by downloading a .pdf version available on the UCS website (www.ucsusa.org/2018survey) or the CSSM website (www.cssm.iastate.edu/federal-scientists-survey).

Option 3: Complete the survey via telephone by calling 877-578-8848 (toll-free) to schedule a time with Iowa State University's CSSM project staff.

Completing the survey should take approximately 15-20 minutes of your time. If your work does not involve science, there is a place to indicate this near the beginning of the survey, and you will not be contacted again after submitting this response.

We assure you that your privacy is of the utmost concern to us. Any personally identifying information will be destroyed immediately when your survey responses are submitted.

If you choose to opt out of the survey, you may click the link at the bottom of this email to remove your email address from future notifications.

Your participation in this project is voluntary, and you may decline to answer any questions you choose. However, your participation is extremely important since a high response rate is essential to high quality data.

Thank you for your important and highly valued contribution to this research. If you have questions about the survey topic/purpose or its legitimacy, please email ScientistSurvey@ucsusa.org or call 202-331-6942. For technical assistance, please reply to this email.

Sincerely,

Jacob Carter, Ph.D., Research Scientist, Union of Concerned Scientists
Gretchen Goldman, Ph.D., Research Director, Union of Concerned Scientists
Charise Johnson, M.S., Research Associate, Union of Concerned Scientists
Zhengyuan Zhu, Ph.D., Professor of Statistics and Director of Center for Survey Statistics and Methodology, Iowa State University

For more than 13 years, UCS (a 501(c)3 nonprofit that works on a variety of science policy issues) has conducted surveys of scientists at federal agencies, including the Food and Drug Administration, the Fish and Wildlife Service, and the Environmental Protection Agency. To learn more about prior surveys conducted by UCS, please visit www.ucsusa.org/surveys.

This study has been approved by the Iowa State University Institutional Review Board (IRB #18-017) to ensure confidentiality and data security.

To opt out of the survey, click [HERE](#).

APPENDIX H.
2018 Federal Scientists Survey FAQ



2018 Federal Scientists Survey FAQ

Why is UCS surveying government scientists?

The 2018 survey of government scientists is part of ongoing research by the Union of Concerned Scientists (UCS) to better understand the state of scientific integrity in federal agencies and departments and government scientists' work environment. The findings are used to inform improvements in government policies and practices so that independent science can fully inform policy decisions and that federal scientists are able to do their jobs effectively. Since 2005, UCS has surveyed thousands of federal scientists across multiple federal agencies under both the Obama and George W. Bush administrations. Our past survey work can be found here: www.ucsusa.org/surveys.

Who are the Union of Concerned Scientists?

The Union of Concerned Scientists (UCS) is a 501(c)(3) nonprofit organization founded in 1969 that conducts analysis and advocacy to advance the role of science in decision making in a range of science policy areas. The Center for Science and Democracy at UCS conducts research on how science is used and misused in government policymaking and advocates for the full and transparent use of independent science in our democracy. Our funding comes from individual donors and private foundations; we do not seek government or corporate funding. You can learn more about the Union of Concerned Scientists at ucsusa.org.

Who is conducting and funding this survey?

The survey ideas, questions, and concepts were initiated by researchers at the Union of Concerned Scientists. A significant majority of funding for this study was provided through UCS members and foundation grants. UCS is contracting with the Center for Survey Statistics and Methodology (CSSM) at Iowa State University because of their deep expertise in the technical and operational aspects of sample surveys through research, support, and operational services since 1938. CSSM partnered with UCS on some prior surveys of federal scientists. See CSSM's project webpage for this survey at <https://www.cssm.iastate.edu/federal-scientists-survey>. Additionally, the scientific society the American Geophysical Union and other nonprofit organizations including the Government Accountability Project, Greenpeace, and Friends of the Earth, are providing funding or expert input into elements of the survey.

How were survey participants identified?

UCS identified several key science-based agencies where scientific integrity is an important issue. Given resources available, we chose federal agencies with a strong science-based mission, that implement science-based policies, or have a history of scientific integrity concerns. For the 2018 survey the following agencies are being surveyed:

- US Department of Energy Office of Energy Efficiency & Renewable Energy
- US Environmental Protection Agency
- National Oceanic and Atmospheric Administration
- US Food and Drug Administration
- Centers for Disease Control and Prevention
- US Fish and Wildlife Service
- US Geological Survey
- US National Park Service
- Bureau of Ocean Management
- Bureau of Safety and Environmental Enforcement
- US Department of Agriculture Agricultural Research Service
- US Department of Agriculture Economic Research Service
- US Department of Agriculture National Institute of Food and Agriculture
- US Department of Agriculture National Agricultural Statistics Service
- Department of Transportation National Highway Traffic Safety Administration
- US Census Bureau

UCS researchers accessed staff names, email addresses, and job titles at these federal agencies via publicly available databases or through Freedom of Information Request Act (FOIA) requests. From these staff lists, employees were identified, where possible, as scientific positions or nonscientific positions based on job title. For the purpose of this survey, scientists were considered as anyone whose job involves a significant level of science, including but not limited to research, operations, modeling, inspection and oversight, and science policy. All survey participants are then asked what percentage of their work is related to science.

For the US Environmental Protection Agency, the US Census Bureau, and the Department of Energy, we were unable to obtain comprehensive job title information. Further, we are only including one component of the Department of Energy because the department has refused to grant us access to its employee list; a FOIA request has languished at the department since March 2017.

How will personal information be kept confidential?

Potential survey participants receive a randomized identification number (access code) that is associated with their email address. The purpose of this code number is to limit access to the survey, as much as possible, to only those who are invited with no more than one completed survey per person. As soon as participants submit the online survey, their responses are stored in a separate file with no email address, access code, or any other identifying information. As a result, all submitted responses are completely and permanently anonymous. This will ensure that no one, not even the survey administrator, will be able to associate a particular completed

survey to a specific individual. Further, after the survey closes, email addresses will be deleted from the survey software (Qualtrics) so nobody will be able to determine whether a particular survey recipient took the survey.

Participants are cautioned not to use personally identifying information in open response questions. Any survey responses that do contain personally identifying information on agency career staff will have such information redacted before being publicly released. Numeric survey responses will be reported publicly in aggregate only. Open-ended responses may be released with personally identifying information redacted and without attribution to individuals. Any agency, office, or division with fewer than 100 responses will not be reported separately in order to protect identities.

How can the survey be accessed?

Participants receive an email with a link that will take them to the online survey. If participants prefer not to click on a link in an email, they may instead access a pdf version of the survey here: www.ucsusa.org/2018survey, that can be printed, completed, and mailed to Iowa State University's CSSM. You may also call Iowa State University's CSSM at 877-578-8848 (toll-free) to schedule a time with a staff member to conduct the survey via phone until March 15, 2018.

Note: Participants will need their access code from the email in order to mail in a paper survey or complete the survey by phone. Only surveys that include the participant's access code will be counted.

Are there legal barriers to participating?

Federal agency staff lists are considered publicly available information. Federal agency staff are free to fill out surveys provided they:

- Fill out the survey on their own personal time.
- Do not disclose on the survey any classified information

Most federal agencies have adopted policies that allow staff limited use of government computers when they are off duty (for example, to check a personal email account). All of the federal agencies and departments that are included in the survey have been notified by UCS that the survey is being conducted.

How will the information collected from the survey be used?

Survey data will be analyzed by statistical experts at Iowa State University's CSSM and UCS researchers. Results will allow the media, the public, and agency leadership to better understand the state of scientific integrity at science-based agencies, and how agencies compare to each other and to themselves across different time periods by comparing to past UCS surveys. Working with Iowa State University's CSSM and funding partners of the survey, UCS will publish the aggregate results of the survey as a publicly available document. The aggregate results and unattributed quotes from open response questions will be shared with decisionmakers in Congress, at federal agencies, the media, the scientific community and the public. The results will be used to build awareness of any scientific integrity challenges identified by the survey and to advocate for changes in policies and practices that would better ensure that science and scientists are able to inform policy decisions across the federal government.

How will you ensure impartiality?

UCS has worked with multiple survey and science policy experts to ensure impartiality in our current survey. UCS is conducting this survey for research purposes and has developed questions with corresponding Likert scales to measure a wide range of either agreement or disagreement. Questions were developed to assess the status of various scientific integrity issues and are not intended to sway the survey participant towards any particular direction on the corresponding Likert scale. Additionally, UCS understands that scientific integrity is an important issue regardless of presidential administrations and has, therefore, conducted similar scientific integrity surveys since 2005 under both Democratic and Republican administrations. Many questions are identical to questions in surveys implemented in past years. Because the survey cannot be sent to a random, stratified sample, the results represent the views of those who fill out the survey, and do not represent the views of scientists across the agency as a whole.

Does the study have institutional review board approval?

An institutional review board (IRB) is a type of academic committee that reviews proposed research methods involving human subjects to ensure that these methods are ethical. The boards are formally designated by their university or other research institution to approve, or reject, proposed research projects, or to monitor approved projects. A key goal of IRBs is to protect human subjects from both physical or psychological harm. Approval from an IRB shows that the committee has found that the proposed research project adheres to research ethics involving human subjects. We have received Iowa State University IRB approval for the current survey (IRB approval #18-017).

What if participants don't want to answer certain questions?

The only required survey questions pertain to the level of science in one's job and federal agency of employment. These questions are required to ensure that we are capturing only scientists and other technical staff at the agencies included. All other questions can be left blank if participants do not feel comfortable responding and most questions also include a "Prefer not to disclose" option. However, in order to get a more comprehensive window into conditions at federal agencies, it is crucial that respondents fill out as many of the survey questions as possible.

When will the results of the survey be released?

The results of the survey will be released publicly in summer of 2018.

When will you be administering another scientific integrity survey and for what agencies?

UCS administers scientific integrity surveys approximately every 2-3 years. Provided resources and organization priorities continue, we expect to continue to do so. Choices about what agencies to survey are based on available resources and level of interest and applicability to agencies.

Can I share information about scientific integrity in my agency in other ways?

We are unable to add additional participants after the survey is in the field. If you are a federal scientist who was not identified for participation in the survey but would like to share your thoughts and views with UCS, learn how to connect with us with the level of confidentiality and anonymity that is most appropriate to your situation here: <https://www.ucsusa.org/scienceprotection>. You can also contact us using the methods described in the link above if you have participated in the survey and would like to share additional information with UCS.