

APPENDIX A

UCS Climate Scientist Survey Text and Responses (FEDERAL)

Following is the text of the survey UCS mailed to 1,630 federal climate scientists at seven federal agencies and departments, along with response data for the 279 scientists who completed and returned surveys. Two numbers are listed for each response option in the survey—the number of scientists who selected that response (listed in parentheses) and the percentage of scientists answering the question who marked that response option. The results in this appendix only reflect the responses of federal scientists and do not include responses from NCAR scientists; see Appendix B for survey text and response data for NCAR. A detailed analysis of select survey questions can be found in Appendix C.

For some questions the aggregate number of responses to a given question is less than 279 because not all scientists answered the question, and for other questions the aggregate number is greater because scientists were allowed to choose more than one response to the given question. It is important to note that the percentages listed in this appendix (and in the report text) are calculated in reference to *the number of scientists answering the question*, rather than the total number of returned surveys or the aggregate number of responses to each question. Percentages listed for a given question may not total 100 percent due to

rounding or multiple responses to a question by a scientist.

For example, questions 19 through 31 provide survey respondents with the option of reporting specified types of interference as “perceived in others” and/or “personally experienced.” Respondents could also report “neither.” In this appendix, the three response options are tabulated separately, although respondents were free to mark more than one answer for a given type of interference. The report text often cites the percentage of respondents who “perceived or personally experienced” a particular form of interference. To avoid double counting those respondents who answered both “perceived” and “experienced,” this statistic is *not* obtained by summing the number of responses for those categories. Instead, it is calculated by subtracting the percentage of survey respondents reporting “neither” from 100 percent.

Questions 4, 15, and 17 include “not applicable” as a possible response and the numbers of those responses are tabulated in this appendix. However, when analyzing survey results from these questions in the report text, the “not applicable” responses are not included in the sample. This analysis results in slightly different percentages in this appendix from those quoted in the text.

2006 UCS Scientific Integrity Program SURVEY OF FEDERAL CLIMATE SCIENTISTS

The Union of Concerned Scientists (UCS) is the leading science-based nonprofit working for a healthy environment and a safer world. UCS combines independent scientific research and citizen action to develop innovative, practical solutions and to secure responsible changes in government policy, corporate practices, and consumer choices. This survey is produced by the UCS Scientific Integrity Program.

Please fill out this survey on your personal time and mail it in the enclosed postage-paid envelope as soon as possible, but before July 30, 2006. All responses will be kept anonymous and confidential. Please feel free to write comments, but restrict your writing to the additional comments area on page 4, or a separate sheet of paper. Please do not write in the margins or edit the wording of questions—we cannot tabulate responses to questions that are edited. For more information on UCS, the Scientific Integrity Program, and our previous surveys of scientists at federal agencies, please see www.ucsusa.org/scientific_integrity.

RESEARCH AND TRAINING (circle one)

1. My major field of training is:

climatology 11% (31)	meteorology 24% (67)	engineering 7% (19)	geology 7% (19)
physics 14% (40)	chemistry 6% (18)	biology 14% (39)	other 44% (123)

optional: list field of specialization _____

2. My climate science-related work primarily involves:

basic science 19% (53)	observations/measurement 50% (139)	modeling 25% (70)
impacts 13% (35)	management/policy 6% (17)	other: _____ 9% (24)

3. The percentage of my work having to do with climate-related topics is approximately:

0-25% 13% (35)	26-50% 14% (40)	51-75% 23% (64)	76-100% 50% (137)
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4. I generally seek to publish my research findings in peer-reviewed literature.

yes 88% (246)	no 4% (10)	not applicable 8% (22)
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FEDERAL CLIMATE SCIENCE (circle one)

5. U.S. federal government climate research is of generally excellent quality.

strongly agree 35% (98)	agree 53% (147)	no opinion 7% (19)	disagree 4% (12)	strongly disagree 1% (3)
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6. The U.S. government has done a good job funding climate research.

strongly agree	agree	no opinion	disagree	strongly disagree
6% (18)	31% (86)	9% (26)	42% (117)	11% (31)

7. U.S. federal climate research is independent and impartial.

strongly agree	agree	no opinion	disagree	strongly disagree
17% (46)	54% (149)	9% (25)	18% (49)	3% (9)

8. Today’s environment for federal government climate science is (better, worse, same) compared with:

• 1 year ago?	better	worse	same	no opinion
	14% (38)	42% (116)	40% (108)	4% (11)
• 5 years ago?	better	worse	same	no opinion
	13% (35)	67% (182)	15% (41)	5% (14)
• 10 years ago?	better	worse	same	no opinion
	18% (48)	64% (176)	8% (23)	10% (27)

9. My climate science-related work touches on issues that could be considered sensitive or controversial.

always	frequently	occasionally	seldom	never
6% (16)	24% (67)	47% (129)	18% (49)	5% (15)

AGENCY CLIMATE SCIENCE (circle one)

10. Climate science at my agency is moving in the right direction.

strongly agree	agree	no opinion	disagree	strongly disagree
4% (10)	44% (122)	9% (25)	34% (95)	9% (26)

11. My agency’s leadership aspires to and expects a high level of integrity and professionalism.

strongly agree	agree	no opinion	disagree	strongly disagree
30% (83)	53% (148)	9% (24)	6% (18)	2% (6)

12. My agency’s management stands behind scientific staff or managers who put forth scientifically defensible positions that may be politically controversial.

strongly agree	agree	no opinion	disagree	strongly disagree
9% (24)	40% (109)	23% (63)	25% (68)	4% (12)

13. My agency offers opportunity for advancement based on scientific expertise, not just on administrative and supervisory expertise.

strongly agree	agree	no opinion	disagree	strongly disagree
18% (49)	48% (135)	16% (44)	15% (41)	4% (10)

14. My agency has a clear policy on scientific communication with the public and the media.

strongly agree	agree	no opinion	disagree	strongly disagree	don’t know
11% (31)	51% (142)	12% (33)	16% (44)	5% (13)	5% (14)

15. Recent changes to policies pertaining to scientific openness at my agency have improved the environment for climate research.

strongly agree	agree	no opinion	disagree	strongly disagree	not applicable
3% (8)	18% (50)	34% (93)	25% (69)	12% (33)	9% (24)

16. Documents, reports, and recommendations from my agency rely upon the best available science.

always	frequently	occasionally	seldom	never
24% (65)	54% (147)	21% (57)	1% (2)	0% (0)

17. My agency helps me effectively communicate relevant research findings to the public.

always	frequently	occasionally	seldom	never	not applicable
9% (24)	24% (67)	30% (84)	18% (50)	7% (20)	12% (32)

18. My agency requires public affairs officials to monitor scientists' communications with the media.

always	frequently	occasionally	seldom	never	don't know
27% (73)	26% (71)	20% (56)	6% (17)	4% (12)	17% (46)

CLIMATE SCIENCE WORK ENVIRONMENT (Please check all that apply)

I have perceived in others and/or personally experienced the following types of activities affecting climate science:

	<i>Perceived</i>	<i>Experienced</i>	<i>Neither</i>	
19.	32% (87)	15% (41)	57% (156)	Changes/edits during review that change the meaning of scientific findings.
20.	33% (90)	21% (57)	54% (147)	Pressure to eliminate the word(s) "climate change" and/ or "global warming," and/or similar terms.
21.	18% (49)	7% (19)	77% (210)	Requests to present opposing views for "balance" even when such views would not be scientifically credible.
22.	23% (62)	22% (60)	62% (169)	Disappearance/unusual delay in the release of websites, press releases, reports, or other science-based materials.
23.	21% (56)	14% (39)	69% (187)	Self-induced pressure to change research or reporting in order to align findings with agency policy or to avoid controversy.
24.	22% (61)	13% (36)	69% (188)	Fear of retaliation for openly expressing concerns about climate change inside my agency.

25.	29% (80)	14% (39)	61% (165)	Fear of retaliation for openly expressing concerns about climate change outside my agency.
26.	8% (21)	4% (12)	89% (243)	Requests by officials for scientists to provide incomplete, inaccurate, or misleading information to the public.
27.	14% (38)	3% (8)	84% (230)	Implicit expectation by officials for scientists to provide incomplete, inaccurate, or misleading information to the public.
28.	19% (52)	36% (97)	54% (148)	New or unusual administrative requirements or procedures that impair climate-related work.
29.	23% (63)	17% (47)	63% (170)	Statements by officials at my agency that misrepresent scientists' findings.
30.	21% (55)	6% (17)	75% (200)	Situations in which scientists have actively objected to, resigned from, or removed themselves from a project because of pressure to change scientific findings.
31.	9% (4)	17% (8)	78% (36)	Other (please elaborate below in essay question #40).

32. Number of instances of any activities listed above perceived in others in the past five years:

0	1-5	6-10	11-20	More than 20
27% (69)	49% (125)	14% (35)	7% (18)	4% (10)

33. Number of instances of any activities listed above personally experienced in the past five years:

0	1-5	6-10	11-20	More than 20
42% (108)	45% (117)	9% (23)	1% (3)	3% (7)

JOB SATISFACTION (circle one)

34. I would recommend that scientists consider a career in the federal government related to climate science.

strongly agree	agree	no opinion	disagree	strongly disagree
14% (39)	47% (130)	15% (42)	17% (46)	7% (20)

35. Morale within my office is:

excellent	good	fair	poor	extremely poor	no opinion
12% (33)	34% (93)	32% (89)	15% (42)	7% (20)	0% (0)

36. Over the past few years my personal job satisfaction at my agency has:

increased	decreased	stayed the same	no opinion
20% (55)	45% (126)	30% (83)	5% (14)

37. After I received this survey, completing and returning it was:

encouraged by management	discouraged by management	not discussed by management
3% (7)	1% (2)	97% (276)

BACKGROUND INFORMATION (circle one)

38. Highest level of education:

Post Doc	Ph.D.	Master's	Bachelor's
40% (110)	41% (113)	16% (43)	4% (11)

39. Years at current agency:

less than 1 year	1-5 years	6-10 years	11-15 years	more than 15 years
2% (6)	18% (51)	21% (57)	15% (42)	44% (122)

ESSAY (Please attach extra sheets if you need more space)

40. The integrity of U.S. federal government climate science could best be improved by:

Additional comments: _____

If you have questions or would like to discuss this survey further, please contact
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