Roadmap for Science in Decisionmaking

Strengthening Scientific Integrity at Federal Agencies

Recommendations for 2021 and Beyond

Appendix: Grading Scientific Integrity Policies at Federal Agencies

www.ucsusa.org/resources/roadmap-science-decisionmaking

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Grading Criteria for Scientific Integrity at Federal Agencies

Chapter 1 **Grading Scientific Integrity Policies:** Criteria

The Union of Concerned Scientists offers recommendations on how agencies can restore, protect, and advance the role of science in government decisionmaking. Among those actions is establishing and protecting scientific integrity at government agencies. The table in the full report, called "Grading Scientific Integrity Policies at Federal Agencies," outlines the steps federal agencies have taken to establish policies and practices intended to safeguard scientific integrity. This appendix includes a key explaining the metrics behind each of the color designations and a detailed methodology for the designations each agency/department received.

Grading Criteria for Scientific Integrity Policies

Policy	Green	Yellow	Red
Explicit SI policy	Agency has SI policies that: • Are easy to access online, and • Express in detail agency's commitment to the principles of SI and science-based decisionmaking, and • Have been updated or improved in the last 8 years	Agency has SI policies that have 1-2 of the following traits: • Are not easily accessible, or • Express the agency's commitment to the principles of SI and science-based decisionmaking in vague or insufficient terms, or • Have not been updated or improved in the last 8 years	Agency appears to lack SI policies, or has policies that: • Are not easily accessible, and • Express the agency's commitment to the principles of SI and science-based decisionmaking in vague or insufficient terms, and • Have not been updated or improved in the last 8 years
Clearly designated SI officer/ office	Agency has an SI officer policy that: Has a position for a dedicated SI officer or SI office, and Demonstrates that the SI official's position is filled by listing the current officer's name and credentials	Agency has an SI officer policy that: • Has a position for an official that oversees misconduct or other violations, but not one dedicated to SI, or • Does not demonstrate that the SI official's position is filled	Agency does not have an SI officer policy, or has a policy that: • Has a position for an official that oversees misconduct or other violations, but not one dedicated to SI, and • Does not demonstrate that the SI official's position is filled

Peer review policy	Agency has a peer review policy that: Is easily accessible; and Details processes to ensure independent peer review beyond the OMB Bulletin; and Publishes a peer review agenda of highly influential scientific assessments, as dictated by the OMB 2005 Bulletin, or explains why agency is exempt; and Provides guidance on peer review for official products, and non-official products that rely on official data	Agency has a peer review policy that has 1-3 of the following traits: Is not easily accessible; or Does not detail processes to ensure independent peer review beyond the OMB Bulletin; or Neither publishes a peer review agenda of highly influential scientific assessments, nor explains why agency is exempt; or Does not provide guidance on peer review for official products, and non-official products that rely on official data	Agency does not have a peer review policy, or has a policy that: Is not easily accessible; and Does not detail processes to ensure independent peer review beyond the OMB Bulletin; and Neither publishes a peer review agenda of highly influential scientific assessments nor explains why agency is exempt; and Does not provide guidance on peer review for official products, and non-official products that rely on official data
Clearance policy	Agency has a clearance policy that: • Specifies reasonable time limits for agency clearance of unofficial scientific work that relies on nonpublic agency data, and • Permits scientists to move forward with unofficial work that relies on nonpublic agency data, if time limits are not met and adequate disclaimers are made, and • Declares that clearance is not required for unofficial scientific work that uses publicly available data	Agency has a clearance policy with 1-2 of the following traits: • Does not specify reasonable time limits for agency clearance of unofficial scientific work that relies on nonpublic agency data, or • Does not permit scientists to move forward with unofficial work that relies on nonpublic agency data, if time limits are not met and adequate disclaimers are made, or • Does not exempt from clearance unofficial scientific work that uses publicly available data	Agency does not have a coherent clearance policy, or has a policy with the following traits: • Does not specify reasonable time limits for agency clearance of unofficial scientific work that relies on nonpublic agency data, and • Does not permit scientists to move forward with unofficial work that relies on nonpublic agency data, if time limits are not met and adequate disclaimers are made, and • Does not exempt from clearance unofficial scientific work that uses publicly available data
Media policy	Agency has a media communication policy that: Is easily accessible; and Permits scientists to speak freely with media without pre-approval from public affairs staff; and Gives scientists the right to last review for press materials that report or rely on their expertise	Agency has a media communication policy with 1-2 of the following traits: Is not easily accessible, or Requires scientists to receive pre-approval from public affairs staff before speaking with media; or Does not give scientists the right to last review for press materials that report or rely on their expertise	Agency appears to lack a media communication policy, or has a policy that: Is not easily accessible, and Requires scientists to receive pre-approval from public affairs staff before speaking with media; and Does not give scientists the right to last review for press materials that report or rely on their expertise

Social media policy	Agency has a social media policy that: • Is easily accessible; and • Clearly distinguishes between, and provides guidance for, personal and official use; and • Gives scientists the right to identify their employer if expressing personal views, provided adequate disclaimers are made	Agency has a social media policy with 1-2 of the following traits: Is not easily accessible; or Does not clearly distinguish between, and/or do not provide guidance for, personal and official use; or Does not explicitly give scientists the right to identify their employer if expressing personal views, provided adequate disclaimers are made	Agency appears to lack a social media policy, or has a policy that: • Is not easily accessible; and • Does not clearly distinguish between, and/or do not provide guidance for, personal and official use; and • Does not explicitly give scientists the right to identify their employer if expressing personal views, provided adequate disclaimers are made
Differing scientific opinions policy	Agency has policy that: Explicitly acknowledges and expresses the importance of differing scientific opinions, and Outlines the agency's procedure for resolving differing scientific opinions, including clear guidance for employees	Agency has policy with 1 of the following traits: Does not acknowledge and accept the value of differing scientific opinions, or Does not outline the agency's procedure for resolving differing scientific opinions, including clear guidance for employees	Agency lacks a differing scientific opinions policy, or: Does not acknowledge and accept the value of differing scientific opinions, and Does not outline the agency's procedure for resolving differing scientific opinions, including clear guidance for employees
Clear procedures for SI allegations	Agency has procedures to report allegations of SI abuses that: Provide clear, detailed instructions on how and when to submit an allegation, and Apply to a broad array of potential scientific integrity abuses, and Clearly outline the investigation process	Agency has procedures to report allegations of SI abuses that have 1-2 of the following traits: Provide vague or inaccessible instructions on how and when to submit an allegation, or Apply to a limited array of potential scientific integrity abuses, e.g., only research misconduct, or Do not clearly outline the investigation process	Agency lacks procedures to report allegations of SI abuses, or has procedures that: Provide vague or inaccessible instructions on how and when to submit an allegation, and Apply to a limited array of potential scientific integrity abuses, e.g., only research misconduct, and Do not clearly outline the investigation process
Public reporting of SI cases	The agency: Tracks and periodically releases agency-specific cases of scientific integrity violations, and Publishes in these records the details of confirmed cases of SI violations	The agency has 1 of the following traits: • Does not track and periodically release agency-specific cases of scientific integrity violations, or • Publishes in these records little or no detail of confirmed cases of SI violations	The agency: Does not track and periodically release agency-specific cases of scientific integrity violations, and Publishes in these records little or no detail of confirmed cases of SI violations
Whistle- blower certified, 2302(c)	Agency and/or its Office of Inspector General: • Has completed the U.S. Office of Special Counsel's 2302(c) certification program, and • Has a valid, non-expired certification	Agency and/or its Office of Inspector General: • Has registered for, but not completed, the 2302(c) certification program, or • Has an expired certification, but has re-registered	Agency and/or its Office of Inspector General: • Has neither registered for nor completed the 2302(c) certification program, and • Has an expired certification

Chapter 2 **Grading Scientific Integrity Policies: Details and Sources by Agency**

Department of Commerce (DOC)

Scientific Integrity Policy: Yellow

DOC scientific integrity policy relinquishes important details to its subdepartments with an interest in science and provides little detail here (Grifo 2013). In a March 2019 memo signed by Commerce Sec. Wilbur Ross, DOC agreed with scientific integrity policy recommendations submitted by the U.S. Government Accountability Office (GAO) and said it would clarify its plan for implementation 180 days after GAO's report.

Procedure for Allegations: Red

DOC scientific integrity policy does not detail the department's procedures for submitting, investigating, and resolving allegations of scientific integrity violations. No relevant information was found in its Human Resources policies.

Public Reporting of Allegations: Yellow

DOC does not appear to publicly report scientific integrity violation allegations separately from investigations reported by the Inspector General.

Scientific Integrity Official: Red

It is unclear on DOC's website if DOC has a scientific integrity official; if it does, the name of this individual is not publicly available.

Peer Review Policy: Red

Beyond a brief set of general responses to public commenters' questions about peer review, DOC does not appear to have its own peer review policy. It also does not post an easily accessible link to OMB's 2004 Final Information Quality Bulletin for Peer Review.

Clearance Policy: Yellow

DOC's public communications policy notes that non-official communications (including "publications, speeches, media coverage") do not require clearance. The policy also says that "written and audiovisual materials" that are "Non-Official Communication of Interest" (i.e., that are unofficial but rely on or relate to official agency policies or the employee's official work) must receive clearance, but that the review period cannot exceed fourteen days. This is a good start, but DOC should explicitly permit employees to move forward with unofficial work "of interest" if the 14-day deadline is missed. The policy is also unclear about the reviewer's capacity to alter or challenge the release of this work.

Media Policy: Yellow

DOC has multiple policies that address media guidance for scientists and their work. These policies are accessible but require readers to toggle between documents. DOC permits scientists to express personal views for communications that represent fundamental research or are non-official, but

not for all materials. The policies do not guarantee a scientist the last right of review on department materials that depend on their expertise.

Social Media Policy: Green

DOC's social media policy provides useful guidance to agency scientists; however, a key hyperlink to this policy is broken on a primary landing page. DOC's policy clearly distinguishes between official and personal social media use. It notes that employees may use their titles when "it is self-evident that [they] are not posting in an official capacity" and advises employees on factors to consider when deciding how to use job titles in social media.

Differing Scientific Opinions: Red

DOC's SI policy does not appear to address procedures for handling scientific disagreements or differences of opinion.

Whistleblower Protections: Green

DOC's Office of Inspector General has been 2302(c) certified. DOC more broadly is neither registered nor certified.

Department of Energy (DOE)

Scientific Integrity Policy: Green

DOE updated its scientific integrity policy in January 2017. This new policy represents a dramatic improvement from DOE's previous secretarial order by forbidding employees from censoring or altering scientific findings, explicitly protecting the ability of scientists to share personal opinions, and giving scientists the right to review and correct public materials that rely on their work.

Procedure for Allegations: Red

DOE's SI policy does not detail the department's procedures for submitting, investigating, and resolving allegations of scientific integrity violation. It discusses research misconduct, a subset of SI violations, but DOE's SI policy lacks any reference to broader allegations of SI.

Public Reporting of Allegations: Yellow

DOE does not appear to publicly report SI violation allegations separately from the investigative outcomes reported in its semiannual reports to Congress.

Scientific Integrity Official: Yellow

DOE's SI policy explicitly calls for the Secretary of Energy to designate a Scientific Integrity Official. As of this report's publication, however, no scientific integrity official has been publicly identified.

Peer Review Policy: Yellow

In December 2019, DOE updated its Information Quality Act guidelines, which discuss general principles of peer review. DOE also provides accessible links to OMB's 2004 Final Information Quality Bulletin for Peer Review. However, DOE does not have an easily accessible peer review agenda; a web page labeled "Published Peer Reviews" has broken links, or directs users to documents dating back a decade or more.

Clearance Policy: Red

DOE's clearance policies for scientists' unofficial work does not appear to be available.

Media Policy: Green

DOE's media guidance improves over earlier iterations. It explicitly acknowledges the rights of scientists to review and correct errors in "scientific and technical information" that relies on their research, including all institutional public communication. It also has a clear personal-views exception and notes its commitment to the "free flow of scientific information," including between scientists and the public.

Social Media Policy: Yellow

DOE has an accessible social media policy, but it discusses only official use and does not provide guidance to scientists on personal use. Another policy, DOE's 2017 SI policy, builds on this by adding a personal-views exception for covered personnel, but it is not explicitly linked to social media. These policies should be better integrated.

Differing Scientific Opinions: Green

DOE has guidance on "Differing Professional Opinions," which legitimizes differing opinions and offers a clear process for employees, contractors, and subcontractors to follow. The policy would benefit from a more explicit connection to scientific integrity and scientific disagreements.

Whistleblower Protections: Yellow

DOE is registered for 2302(c) certification but has not yet been certified. DOE's Office of Inspector General is neither registered nor certified.

Department of Health And Human Services (HHS)

Scientific Integrity Policy: Yellow

The only accessible SI policy at HHS is a document, published in 2012, that describes "the overall principles" of scientific integrity and addresses topics like public communications and federal advisory committees. This is a start, but the document is vague and defers heavily to sub-departments, which have policies of varying strength.

Procedure for Allegations: Yellow

The HHS Office of Research Integrity has a comprehensive site on policies and procedures for investigations, but it deals only with research misconduct. The HHS scientific integrity policy does not outline procedures for submitting, investigating, and resolving allegations of scientific integrity violations.

Public Reporting of Allegations: Yellow

The HHS Office of Research Integrity separately reports cases relating to research misconduct. However, there is no reporting of broader SI violation allegations separate from investigations reported by HHS Inspector General.

Scientific Integrity Official: Red

It is unclear on HHS's website if HHS has a scientific integrity official; if it does, the name of this individual is not publicly available.

Peer Review Policy: Red

HHS does not appear to have easily accessible, comprehensive peer review guidelines; one web page, called "HHS Information Quality Peer Review," dates to 2004 and does not include a functioning link to the OMB guidelines. Some web links to sub-agencies' peer review agendas (e.g., FDA's) work, but HHS itself appears to have neither an agenda nor clear peer review policies.

Clearance Policy: Yellow

HHS notes that its information quality guidelines "do not apply to the large proportion of extramural scientific research activity supported by HHS whose dissemination is the sole responsibility of the academic researcher rather than HHS." Elsewhere, though, HHS policy notes that employees must obtain written approval before they "engage in teaching, speaking, writing, or editing that ... [relates] to the employee's official duties," but provides no timeline for this approval.

Media Policy: Yellow

In its 2017 media policy, HHS has a brief section on employees interacting with media "in a personal capacity," but it is not clear about preapproval requirements. It does not appear to give scientists the right of last review for materials relying on their work; rather, it notes that its public affairs office is responsible for "clearing" public releases and "maintaining the integrity" of the scientific information.

Social Media Policy: Red

HHS's social media policy is not clear, even on its "Social Media Policies" page, which does not mention the difference between personal and official views on social media. HHS's 2017 media policy notes that it applies to "other Internet or social media postings," but it prohibits employees from using their official titles when communicating personal views. The link to social media guidelines is broken.

Differing Scientific Opinions: Yellow

The HHS Handbook for Office of Research Integrity notes that instances of differing scientific opinion are referred to individual Public Health Service agencies rather than being investigated by the Office of Research Integrity; however, no procedures are outlined and no further guidance is provided.

Whistleblower Protections: Green

Both HHS broadly and its Office of Inspector General are 2302(c) certified.

Department of the Interior (DOI)

Scientific Integrity Policy: Green

DOI updated its SI policy in 2014, improving an already strong policy with a new handbook describing how the policies will be implemented, although areas including whistleblower protection and public communications should be strengthened.

Procedure for Allegations: Green

In 2014, DOI created an extremely comprehensive, stand-alone handbook detailing procedures for handling scientific integrity violation allegations.

Public Reporting of Allegations: Green

DOI maintains a closed case database for scientific integrity violation cases. This database should be a model for other departments.

Scientific Integrity Official: Green

The scientific integrity section of DOI's website contains a page listing the department scientific integrity official's name and contact information, as well as the SI officials at each DOI sub-department.

Peer Review Policy: Yellow

DOI posts an easily accessible link to OMB's 2004 Final Information Quality Bulletin for Peer review, as well as links to the peer review agendas of its subagencies. However, it does not appear to have a peer review guide of its own.

Clearance Policy: Red

DOI policy defers to its sub-departments and is vague about clearance policies for unofficial work: "Before engaging in outside teaching, speaking, or writing for compensation, make sure that you comply with Department and bureau prior approval requirements for outside activities and employment."

Media Policy: Yellow

DOI's media policy (handbook part 470 dm 1) is explicit about scientists' right to speak to media publicly in their personal capacity with disclaimers, but it also notes that public affairs' staff must be "notified in advance" of any media requests or communications. It allows subject matter experts to review news releases before release.

Social Media Policy: Green

DOI has a strong social media policy which clearly delineates between official and personal use of social media. It permits employees to reference their employer when using social media in a personal/unofficial capacity and provides useful guidance on including disclaimers.

Differing Scientific Opinions: Yellow

In DOI SI policy, sections B(5) ("I will welcome constructive criticism of my scientific activities and will be responsive to peer review") and B(6) ("I will provide constructive, objective, and professionally valid peer review of the work of others, free of any personal or professional jealousy, disputes, competition, non-scientific disagreement, or conflict of interest resulting from financial interests or personal or business relationships") do not provide a procedure for dealing with differences of opinion, but do suggest DOI's acknowledgement of the importance of measured dialogue.

Whistleblower Protections: Green

DOI registered in August 2016 but has not yet been 2302(c) certified. However, DOI's Office of Inspector General was certified in October 2017.

Department of Labor (DOL)

Scientific Integrity Policy: Red

In previous evaluations, DOL's scientific integrity policy received a yellow rating, but the policy no longer appears to be online and publicly accessible. As a result, its score has been downgraded.

Procedure for Allegations: Yellow

While DOL's SI policy includes a section entitled "Procedures for addressing scientific misconduct and dishonesty," its recommendations are vague and do not fully detail the department's procedures for submitting, investigating, and resolving allegations of scientific integrity violations. The policy refers also to a 'research misconduct' rule, which is more detailed, but difficult to find and narrow in scope.

Public Reporting of Allegations: Yellow

DOL does not appear to publicly report SI violation allegations separately from its investigations reported by the Inspector General.

Scientific Integrity Official: Yellow

While the DOL SI policy is explicit about the presence of an SI Officer, the office to which this officer would belong, and expectations for this officer's credentials, it is impossible to identify who, if anyone, the current scientific integrity officer is based on the DOL website. The name currently referenced as a contact for more information appears to have left the department in 2012.

Peer Review Policy: Yellow

DOL does not appear to have a peer review policy of its own but posts an easily accessible link to OMB's 2004 Final Information Quality Bulletin for Peer Review. It also links the peer review agendas of sub-agencies, although they would be improved by clearer formatting.

Clearance Policy: Red

DOL's clearance policies for scientists' unofficial work does not appear to be available.

Media Policy: Red

DOL does not appear to have any distinct media communications policy available to the public. There is thus no evidence of a personal-views exemption, right-of-last-review for subject experts, or any other foundational media policies.

Social Media Policy: Red

DOL does not appear to have any distinct social media policy, applicable to employees and available to the public. There is thus no evidence of foundational policies such as a differentiation between personal and official use and an employee's right to mention their employer with appropriate disclaimers.

Differing Scientific Opinions: Red

No policy on resolving differing scientific opinions can be found, as DOL's scientific integrity policy appears to be missing.

Whistleblower Protections: Yellow

DOL's Office of Inspector General has registered for, but not completed, 2302(c) certification; DOL's certification expired in October 2019 and the department has not re-registered.

Department of Transportation (DOT)

Scientific Integrity Policy: Red

DOT posts as its SI policy a memorandum that claims to implement the Administration's policy on SI, but the memo fails to address most of the guidelines put forth in the December 9, 2010 memorandum (Grifo 2013). Additionally, DOT notes that the memo "will serve as the framework for any model scientific integrity policies and for a DOT Scientific Integrity Policy Implementation Manual that will provide further direction on the issue." While the memo dates from 2012, it is not possible to find a published Implementation Manual.

Procedure for Allegations: Red

DOT's SI policy does not detail the department's procedures for submitting, investigating, and resolving allegations of scientific integrity violations.

Public Reporting of Allegations: Yellow

DOT does not appear to report scientific integrity violation allegations separately from investigations handled by the Inspector General.

Scientific Integrity Official: Yellow

DOT's scientific integrity policy names Dr. Kevin Womack as DOT's Scientific Integrity Officer (DSIO). While Dr. Womack still works at DOT, he is listed only as the Director of the Officer of Research, Development and Technology and the Director of the Transportation Safety Institute on DOT's website. It is unclear if Dr. Womack is still in charge of scientific integrity and, if not, who has taken over.

Peer Review Policy: Yellow

DOT does not appear to have a peer review policy of its own, and while it appears to provide a link to OMB's 2004 Information Quality Bulletin for Peer Review, that link is dead. While it describes the information that would be featured in a peer review agenda, the actual agenda is missing. However, in October 2019, DOT updated its Information Dissemination Quality Guidelines, which provides some guidance on peer review (e.g., influential information should be peer-reviewed by subject matter experts who did not contribute to the original information).

Clearance Policy: Red

DOT's clearance policies for scientists' unofficial work does not appear to be available.

Media Policy: Red

DOT policy requires scientists to coordinate with "their immediate supervisor and the public affairs office" before speaking to the media. The policy lacks a clear personal-views exemption and does not appear to discuss scientists' right to last review.

Social Media Policy: Red

DOT does not appear to have a social media policy. DOT lists web policies, but none address or provide guidance for employees' rights on social media.

Differing Scientific Opinions: Red

Despite DOT's comprehensive alternative dispute resolution for a variety of human resource issues, DOT does not appear to discuss how the department would handle scientific disagreements.

Whistleblower Protections: Yellow

Some DOT sub-agencies are 2302(c) certified or registered (the DOT Office of Inspector General, for example, has registered). DOT broadly has not registered for or completed certification.

Department of Agriculure (USDA)

Scientific Integrity Policy: Green

USDA updated its scientific integrity policy in November 2016, fixing some previously concerning language and greatly expanding its instructions for handling allegations of violations of scientific integrity.

Procedure for Allegations: Green

USDA's SI handbook, which was updated and improved in November 2016, clarifies the department's procedures for submitting, investigating, and resolving allegations of scientific integrity violations. Its policy is detailed and instructive, and it includes a useful flowchart.

Public Reporting of Allegations: Yellow

While USDA does produce an annual report of scientific integrity allegations separate from Inspector General reports, this report contains very little detail regarding the substance of the allegations. Moreover, the Office of Inspector General directs readers to submit FOIA requests to view full investigations.

Scientific Integrity Official: Green

USDA website has a dedicated web page listing names and contact information for the Department Scientific Integrity Officer (DSIO) and the Agency Scientific Integrity Officers (ASIOs).

Peer Review Policy: Green

USDA issues a highly detailed supplemental guide to help agencies better implement OMB's 2004 Final Information Quality Bulletin for Peer Review, in addition to providing an accessible link to the OMB guidelines within its SI policy. USDA does not appear to consolidate the peer review agendas of its subagencies, but the policy notes sub-agencies' responsibility to do so.

Clearance Policy: Yellow

USDA explicitly clarifies that employees may participate, in a personal capacity, in professional associations and events, as well as write and submit articles in a personal capacity, as long as they do not rely on non-public USDA information and use appropriate disclaimers. However, they do not specify a reasonable time for approval/clearance of unofficial work that relies on nonpublic USDA data.

Media Policy: Yellow

USDA's SI policy, updated in 2016, improves over earlier iterations, as it includes a personal-views exception and clarifies that officials, including public affairs officers, may not suggest or ask scientists to "alter the presentation" of their findings in a way that would misrepresent those findings. However, it does not make explicit scientists' right to last review for press materials that rely on their findings.

Social Media Policy: Yellow

USDA's "new media" policy distinguishes personal use from official use but not does provide clarity on the differences or on employees' rights. Employees' right to identify their employer when expressing personal views is absent but not explicitly denied.

Differing Scientific Opinions: Red

USDA's SI policy does not address how to handle scientific disagreements, except to note that such disagreements are not part of research misconduct.

Whistleblower Protections: Red

USDA's Office of Inspector General's previous 2302(c) certification expired in September 2019, and the overall department has neither registered nor been certified.

Census Bureau

Scientific Integrity Policy: Yellow

The Census Bureau follows, in conjunction with other Principal Statistical Agencies, a statement that declares a "common set of professional standards and operations practices to ensure the quality, integrity, and credibility" of its work. This statement is a start, but it is vague about enforceable policies and undated. We encourage the Census Bureau to build on this statement with its own strong policy.

Procedure for Allegations: Red

The Census Bureau does not appear to have its own procedures for submitting, investigating, and resolving violations of scientific integrity; as a result, the Bureau's score defaults to that of its parent department, Department of Commerce, which scored a red.

Public Reporting of Allegations: Yellow

The Census Bureau does not appear to publicly report allegations of SI violations separately from the investigations reported by the Inspector General.

Scientific Integrity Official: Red

It is unclear on the Census Bureau's website if the Bureau has a scientific integrity official; if it does, the name of this individual is not publicly available. The same can be said about its parent department, DOC.

Peer Review Policy: Red

The Census Bureau does not appear to have its own publicly available peer review policy. While it briefly discusses peer review processes in some places, links to OMB's 2004 bulletin are broken.

Clearance Policy: Yellow

The Census Bureau's clearance policies for scientists' unofficial work do not appear to be available, so it receives the score of its parent agency, DOC.

Media Policy: Yellow

The Census Bureau does not appear to have its own media policy, so its score reflects that of its parent department, DOC. As a statistical agency, the Census Bureau is also subject to OMB's 2008 Statistical Policy Directive, which mentions "Outreach to the Media" but does not establish experts' rights.

Social Media Policy: Green

The Census Bureau does not appear to have its own social media policy and is thus subject to the **DOC**'s social media policy, which clearly distinguishes between official and personal use of social media and clearly permits employees to use their titles on social media.

Differing Scientific Opinions: Red

The Census Bureau does not appear to have a policy on handling scientific disagreements.

Whistleblower Protections: Green

The Census Bureau's 2302(c) certification expired in June 2020 and it has not re-registered.

Centers for Disease Control and Prevention (CDC)

Scientific Integrity Policy: Green

CDC updated its already strong SI policy in 2016. This policy contains detailed directions for releasing and sharing data and its communications policies are clear, accessible, and committed to free and open exchange (Grifo 2013). However, the policy is accessible through a search engine but could not be retrieved from CDC's website - CDC should correct this to ensure that the public can easily navigate to these policies.

Procedure for Allegations: Yellow

While the procedure for responding to research misconduct allegations is thorough, CDC's SI policy provides little detail regarding the submission, investigation, and resolution of allegations in which "the observed conduct does not fall under the definition of research misconduct but may lead to loss of integrity."

Public Reporting of Allegations: Yellow

CDC does not appear to publicly report SI violation allegations outside of the HHS Inspector General investigation reporting for CDC.

Scientific Integrity Official: Green

CDC posts information regarding the Director of its Office of Scientific Integrity, who is a senior member of the Office of the Associate Director for Science management team. It would help, however, for CDC to post this information on its main SI page.

Peer Review Policy: Green

CDC posts its own comprehensive, publicly available peer review policy, which outlines clear standards and personnel responsibilities and appears to offer additional resources. CDC also posts a link to OMB's 2004 Final Information Ouality Bulletin for Peer Review and has an easily accessible, detailed peer review agenda.

Clearance Policy: Yellow

CDC defers to its centers to "develop procedures for resolving disputes that arise during the clearance process." CDC's SI policy encourages researchers to disseminate work, serve as editors for scientific journals, and participate in professional associations (membership does not usually require approval).

However, the policy also notes that "employees must obtain approval before engaging in an outside activity that requires the use of professional qualifications readily identified with CDC employment" and does not provide timelines for approval. CDC should be explicit about scientists' rights to conduct unofficial scientific work without clearance.

Media Policy: Yellow

CDC's media policy is included in its scientific integrity policy, which is only accessible through a search engine. While the policy permits scientists to speak to media "without interference" from public affairs officials, it does not address preapproval requirements, nor is it explicit about scientists' right of last review for public communications relying on their work. The policy also references another document, "Release of Information to News Media," which could not be found. This would warrant a "red" rating, so CDC receives the "yellow" rating of its parent department, HHS.

Social Media Policy: Yellow

CDC's social media policy makes distinctions between personal and official use of social media. The policy prohibits employees from naming their employer when using social media in a personal capacity – but elsewhere in the same policy, states, confusingly, that CDC staff "who choose to disclose their affiliation" should consider including a disclaimer.

Differing Scientific Opinions: Yellow

CDC SI policy states that "CDC accepts scientific debate and respects the peerreview process" and identifies offices that can provide "an alternate route for raising issues of concern outside of the direct supervisory chain," but does not provide specific procedures and contacts for handling disagreements.

Whistleblower Protections: Red

CDC has not registered for or completed 2302(c) certification.

Consumer Product Safety Commission (CPSC)

Scientific Integrity Policy: Yellow

As an independent agency, the CPSC is not required to follow President Obama's or John Holdren's memoranda on scientific integrity, so its publication of a scientific integrity policy is laudable. However, CPSC could strengthen its policy – which largely lists freedoms and expectations for CPSC staff – by providing procedures for violations of scientific integrity and a media policy that does not require scientists to notify communications and managerial staff before participating in interviews.

Procedure for Allegations: Red

CPSC's policy does not detail the Commission's procedures for submitting. investigating, and resolving allegations of scientific integrity violations.

Public Reporting of Allegations: Yellow

CPSC does not appear to publicly report SI violation allegations separately from investigations reported by the Inspector General in its semi-annual reports to Congress.

Scientific Integrity Official: Red

It is unclear on CPSC's website if CPSC has a scientific integrity official; if it does, the name of this individual is not publicly available.

Peer Review Policy: Yellow

While the CPSC minimally complies with the OMB directive by publishing a peer review agenda, it does not appear to have a peer review policy of its own nor an easily accessible link to OMB's 2004 Final Information Quality Bulletin for Peer Review.

Clearance Policy: Yellow

CPSC policy clarifies that "writings, speeches, or publications made by staff members outside the scope of their employment" are not subject to clearance but must use an appropriate disclaimer. Joint projects, between CPSC staff and outside groups, are subject to approval. Speeches are also subject to approval, although unapproved speeches can be given with an appropriate disclaimer; no timeline for clearance is discussed.

Media Policy: Yellow

A provision guaranteeing scientists' right to last review is absent from CPSC's policy - information must be "cleared" by subject matter experts but also receive policy decision clearance. Media requests "must be referred" to the public affairs office. The policy describes a personal-views disclaimer for "oral statements" and "publications."

Social Media Policy: Red

CPSC has, in prior years, received praise for its social media policy. However, while its "Social Media and Employee Use Directive" policy is still available, the appendix referenced in it - "Social Media - Frequently Asked Ouestions About Personal Use" - could not be located. Given that the policy defers entirely to the appendix regarding personal use of social media, and thus, that no guidance was available, CPSC's score has been downgraded.

Differing Scientific Opinions: Yellow

SI policy notes that "airing novel approaches, minority opinions, and concerns about data limitations or interpretations is supported and encouraged" and that "avenues for open, honest discussion and for resolution of scientific or technical conflicts on issues are available." This is a good start, but specific details on procedures to handle disagreements is needed.

Whistleblower Protections: Yellow

CPSC overall has registered for, but not yet completed, 2302(c) certification. The Office of Inspector General is neither registered nor certified.

Environmental Protection Agency (EPA)

Scientific Integrity Policy: Green

EPA's SI policy is accessible, detailed, and strong in its commitment to SI principles. Additionally, EPA broke new ground in its policy by permitting personal-views exceptions and giving scientists the right of last review (Grifo 2013).

Procedure for Allegations: Yellow

As EPA's 2014 SI annual report notes, "there are no formal processes for receiving or resolving allegations included in the policy." While the report contains a summary of the draft procedures being finalized by EPA's Scientific Integrity Committee, the EPA website does not yet display a final version. In 2015, EPA published a document describing coordination procedures between the Scientific Integrity Official and the Office of Inspector General, although these appear to deal only with research misconduct.

Public Reporting of Allegations: Green

EPA publicly reports all SI violation allegations and summarizes the adjudicated allegations. These allegations are listed on their own webpage.

SI Official: Green

EPA clearly <u>identifies</u> and provides contact information for Francesca Grifo, PhD, the agency's Scientific Integrity Official (ScIO).

Peer Review Policy: Green

EPA publishes its own Peer Review Handbook, which provides extensive details on procedures and approaches to peer review for EPA staff and managers, as well as an easily accessible link to OMB's 2004 Final Information Quality Bulletin for Peer Review. The EPA's peer review policy should serve as a model for other agencies.

Clearance Policy: Yellow

In 2018, the EPA Scientific Integrity Committee published a comprehensive document entitled "Best Practices for Clearance of Scientific Products at EPA," which—while not policy or guidance—was designed to help EPA programs and offices develop their own clearance policies. The best practices define and give examples of a wide range of scientific products; emphasize the importance of timeline-driven clearance processes and suggests time frames appropriate for different scientific products; and provide clear, detailed guidance on the use of ethics disclaimers. EPA should ensure that this guidance becomes agency policy and that scientists' right to conduct unofficial scientific work is protected.

Media Policy: Green

EPA's media policy gives scientists an explicit right of last review for public materials that rely on their work, and it gives scientists the right to express their views to the media with appropriate disclaimers. The policy notes that scientists should "notify their managers when communicating in an official capacity," though EPA should further clarify that notification does not equate to obtaining permission.

Social Media Policy: Yellow

EPA's social media policy is divided across several documents. In its primary policy document, it notes that the guidance does not apply to EPA employees using social media for personal use but does not elaborate. EPA's Limited Personal Use of Government Office Equipment Policy outlines the use of a disclaimer, but it is unclear if this applies only to employees when using agency equipment. It makes no mention of an employee's right to mention their employer on social media.

Differing Scientific Opinions: Green

While EPA does not appear to have published a "transparent mechanism" for handling differing scientific opinions, as described in its SI policy, EPA's SI policy still provides a workable outline for how the agency would handle

situations in which employees disagree over scientific data, scientific interpretations, or scientific conclusions, as well as encourages employees to express their scientific opinions.

Whistleblower Protections: Green

EPA completed 2032(c) certification in January 2018. EPA's Office of Inspector General was certified until October 2019, when its certification expired.

Fish and Wildlife Service (FWS)

Scientific Integrity Policy: Green

FWS SI policy relies on, and largely restates, the DOI's comprehensive SI policy but adapts some provisions to cater to FWS specifically.

Procedure for Allegations: Green

FWS SI policy clearly details the procedures to report an allegation and the procedures FWS will take to investigate and resolve allegations; however, FWS's SI policy has not been thoroughly updated since 2011 and would benefit from a more user-friendly, accessible interface.

Public Reporting of Allegations: Green

Allegations regarding SI violations at FWS are reported through DOI's closed case database.

Scientific Integrity Official: Green

Dave Scott was recently selected as FWS' Service Scientific Integrity Officer. News of this announcement is on the FWS website, and his contact information is available on the DOI site.

Peer Review Policy: Green

FWS posts an easily accessible link to the OMB's 2004 Final Information Quality Bulletin for Peer Review, a checklist detailing the information that will be posted online for FWS peer reviews, and a peer review agenda. The agency also appears to go into more detail on the peer review responsibilities of FWS contractors.

Clearance Policy: Green

o FWS' "Policy Review Guidance for Scientific Publications" explicitly exempts from supervisory review "personal expressions of information," including articles and reports that an employee writes in their personal time and that do not relate to official work. For publications that are based on knowledge an employee acquired at work, the employee must provide a copy of the publication to their supervisor—but "supervisory policy review or approval is not implied or required."

Media Policy: Yellow

The FWS policy has a clear personal-views exemption, though pre-approval is required for official communications (with some exceptions). It gives public affairs officials the responsibility to ensure subject matter experts review public communications for accuracy, but this should be reframed as an expert's right.

Social Media Policy: Green

FWS has a comprehensive Social Media Hub that organizes its tool-specific policies and clearly refers to the DOI's strong social media policy.

Differing Scientific Opinions: Yellow

FWS repeats DOI's policy statements, which provide little detail on the procedure for handing differing scientific opinions.

Whistleblower Protections: Red

o FWS has not registered for or completed 2302(c) certification.

Food and Drug Administration (FDA)

Scientific Integrity Policy: Yellow

FDA SI policy outlines principles of scientific integrity, but it is missing specific provisions and guidance (Grifo 2013).

Procedure for Allegations: Yellow

While FDA provides a comprehensive manual for dealing with scientific disputes, it does not discuss the agency's procedures for submitting. investigating, and resolving allegations of scientific integrity violations. It appears that allegations, in general, should be filed through the office of the ombudsman, but the exact procedure is unclear, and SI violations go unmentioned. This would warrant a red rating, so FDA receives the higher score of its parent department, HHS.

Public Reporting of Allegations: Yellow

FDA does not report allegations of scientific integrity violations separately from investigations reported by the Inspector General.

Scientific Integrity Official: Green

The FDA's website references an Office of Scientific Integrity and clearly identifies the director of this office (G. Matthew Warren), as well as his contact information.

Peer Review Policy: Red

FDA posts a peer review agenda, but it includes very little detail. The agency's SI policy mentions OMB's 2004 Final Information Quality Bulletin for Peer Review but does not post an easily accessible link to the OMB guidelines. FDA does not appear to have its own peer review policy.

Clearance Policy: Green

FDA has an excellent, detailed clearance policy that explicitly gives employees the right to move forward with publishing unofficial but "FDA-related articles or speeches," if a 30-day review period expires. It also explicitly defines "nonpublic information" and "FDA-related article or speech," which is helpful to understanding the document.

Media Policy: Yellow

The FDA defers to the <u>news media policy of HHS</u> and does not appear to have its own, so its score reflects that of its parent department.

Social Media Policy: Green

The FDA social media policy, released in late 2015, was notable for its clear distinction between official and personal use of social media and the wide latitude it gives employees regarding their personal use. Overall, the policy is strong and clear.

Differing Scientific Opinions: Green

FDA's SI policy provides a summary of the procedures found in the FDA Staff Manual Guide on Scientific Dispute Resolution at FDA, which is comprehensive and accessible.

Whistleblower Protections: Red

o FDA has not yet registered for or completed 2302(c) certification.

National Aeronautics and Space Administration (NASA)

Scientific Integrity Policy: Green

In June 2018, NASA released a new SI policy handbook that outlines in detail the agency's commitments to SI, and is an excellent improvement from its previous SI policy. It is organized, accessible, and enhanced throughout with links to further reading (Grifo 2013).

Procedure for Allegations: Yellow

NASA's June 2018 SI policy handbook notes that the Inspector General is tasked with "handling allegations" related to research misconduct, and it contains a link to 14 CFR 1275, the agency's comprehensive research misconduct policy. However, the policy is old and focuses narrowly on research misconduct. instead of scientific integrity violations more broadly.

Public Reporting of Allegations: Yellow

NASA does not appear to publicly report scientific integrity violation allegations separately from investigations reported by the Inspector General.

Scientific Integrity Official: Yellow

A NASA webpage notes that the NASA Chief Scientist (currently James Green) is "responsible for scientific integrity" but this webpage is not accessible from Green's profile.

Peer Review Policy: Green

NASA posts an easily accessible link to OMB's 2004 Final Information Quality Bulletin for Peer Review, and its June 2018 SI policy clearly outlines the agency's peer review policy and includes links to additional, detailed resources. NASA also clarifies that its research does not generally meet the requirements needed to appear in a peer review agenda.

Clearance Policy: Green

In its policy on "Requirements for Documentation, Approval and Dissemination of Scientific and Technical Information," NASA notes that employees' scientific work "produced on their own behalf, using information [...] already available in the public domain, and not part of their official Government duties (such as in the case of graduate coursework, theses, or dissertations)" are exempt from the policy. It also notes that managers are responsible for "instituting a process to ensure that timely (prior to needed release date) notification" is given to NASA authors regarding approval or disapproval of their work.

Media Policy: Yellow

NASA's policy has a clear personal-views exemption and allows scientists to communicate with the media with appropriate disclaimers. It encourages, but does not appear to require, scientists to notify and coordinate with the public

affairs office "in advance of [media] interviews whenever possible, or immediately thereafter..." However, scientists' right to last review is not explicit.

Social Media Policy: Red

Despite its exemplary use of social media tools to allow NASA scientists to engage with the public, NASA does not appear to have an official social media policy. In the past, the agency has provided guidelines to employees on its intranet, but this public unavailability sets a risky precedent that undermines agencies' accountability.

Differing Scientific Opinions: Yellow

NASA's new handbook outlines processes to resolve disputes related to publication dissemination and media release; this is a start, but the agency should create and publish procedures for handling scientific disagreements specifically.

Whistleblower Protections: Green

NASA completed 2302(c) certification in April 2018. NASA's Office of Inspector General registered in May 2019.

National Institute of Standards and Technology (NIST)

Scientific Integrity Policy: Yellow

Although NIST has a scientific integrity summary on its website, it states that its SI policy is undergoing updates and revisions. No additional information is available; it is therefore judged by the DOC policy.

Procedure for Allegations: Red

NIST does not detail procedures for submitting, investigating, and resolving allegations of scientific integrity violations.

Public Reporting of Allegations: Yellow

NIST does not appear to publicly report allegations of SI violations separately from the investigations reported by the Inspector General.

Scientific Integrity Official: Yellow

According to a 2011 document, the Associate Director for Laboratory Programs "is responsible for ensuring that requirement processes and procedures are developed, implemented and maintained that encourage personal and organizational responsibility in upholding scientific integrity at NIST." However, there is no indication on the current ADLP's page that scientific integrity is under his control.

Peer Review Policy: Yellow

NIST posts an easily accessible link to OMB's 2004 Final Information Quality Bulletin for Peer Review and explains why, as a non-regulatory agency, it is generally exempt from the requirement to publish a peer review agenda. However, NIST does not appear to have a peer review policy of its own.

Clearance Policy: Yellow

NIST notes that its information quality standards, including clearance processes, do not apply to "opinions where the presentation makes it clear that what is being offered is not the official view of NIST." Beyond this, however, no information on clearance of unofficial work is available, so NIST receives the score of its parent agency, DOC.

Media Policy: Yellow

In its statement on scientific integrity, NIST states directly that it adheres to DOC policy "with respect to its Public Communications." NIST is therefore evaluated by DOC's media policy, which is missing key elements.

Social Media Policy: Green

NIST is subject to the DOC's social media policy, which clearly distinguishes between official and personal use of social media and clearly permits employees to use their titles on social media.

Differing Scientific Opinions: Red

NIST's SI summary does not address procedures for handling differing scientific opinion.

Whistleblower Protections: Red

o NIST has not registered for or completed 2302(c) certification.

National Institutes of Health (NIH)

Scientific Integrity Policy: Yellow

NIH is covered by two policies: its own SI policy, which claims to cover scientific integrity but is only concerned with the subset of research misconduct, and the Department of Health and Human Services SI policy, which is insufficient (see the section for HHS). NIH receives the score of its parent department.

Procedure for Allegations: Yellow

NIH policy has a clear procedure for reporting and investigating research misconduct allegations. However, there is no mention of procedures for handling broader scientific integrity allegations. The HHS policy does not cover how to submit, investigate, and resolve scientific integrity allegations.

Public Reporting of Allegations: Yellow

HHS Office of Research Integrity separately reports cases relating to research misconduct. However, there is no reporting of broader SI violation allegations separate from investigations reported by HHS Inspector General.

Scientific Integrity Official: Yellow

While NIH has an agency intramural research misconduct director, Kathy Partin, it does not have an officer for scientific integrity.

Peer Review Policy: Green

NIH posts an easily accessible link to OMB's 2004 Final Information Quality Bulletin for Peer Review and appears to have instructions related to peer review of scientific research that build on the OMB guidelines.

Clearance Policy: Yellow

In its policy called "Preparation and Clearance of Scientific, Technical, and Public Information Presented by NIH Employees or Produced for Distribution by NIH," NIH notes that employees' routine presentations and "writing, presenting, or otherwise disseminating information in their personal capacities" are exempt from clearance processes, as are peer-reviewed scholarly works.

However, it also notes that employees doing this work may be asked to consult or receive approval from supervisors, and it does not provide guidance on ensuring timely clearance.

Media Policy: Yellow

NIH has a very accessible policy. However, it does not clarify scientists' right of last review for public communications that rely on their work. Additionally, while it appears to exempt employees' "outside activities" and responses to press inquiries from clearance, it defers to sub-department policies and is not explicit about preapproval.

Social Media Policy: Red

NIH has, in past years, received high scores for its social media policy. However, the policy today appears to be only accessible to employees, a risky precedent that undermines agencies' public accountability. As a result, NIH's score has been downgraded from green to red.

Differing Scientific Opinions: Yellow

NIH's SI policy identifies the Office of the Ombudsman as a resource to "help researchers (1) identify and prevent problems arising from scientific collaborations and (2) address interpersonal conflicts involving scientists or others they manage," as well as manage "scientific and interpersonal disputes." However, this is vague, and there is no clear process for resolving scientific disputes.

Whistleblower Protections: Red

NIH has not registered for or completed 2302(c) certification.

National Oceanic and Atmospheric Administration (NOAA)

Scientific Integrity Policy: Green

NOAA SI policy is detailed, broad in scope, and easily accessible on the NOAA website - so long as the weaker Department of Commerce policy does not supersede (Grifo 2013). Its SI policy has been longstanding, since 2011, but was supplemented with additional internal guidance – albeit uncodified – on research communications in 2016.

Procedure for Allegations: Green

NOAA created a procedural handbook that clearly details NOAA's processes for submitting, investigating, and resolving scientific integrity violation allegations.

Public Reporting of Allegations: Green

NOAA publicly reports out SI violation allegations in its own annual reports, separate from those of its parent department, DOC.

Scientific Integrity Official: Green

The homepage for NOAA's Scientific Integrity Commons lists Cynthia Decker as NOAA Scientific Integrity Officer.

Peer Review Policy: Yellow

NOAA does not appear to have its own peer review policy but does post an easily accessible link to OMB's 2004 Final Information Quality Bulletin for Peer Review, as well as links to other useful information quality policies. NOAA's

peer review agenda is easy to find and includes contact information for NOAA staff, although the agenda would benefit from more detail.

Clearance Policy: Green

NOAA defers to DOC on the clearance of "Non-Official Communication of Interest" (see section on DOC) but interprets the purpose of this policy as being for "agency awareness," rather than approval. NOAA also notes that a supervisor cannot prohibit the release of this information (these interpretations may not correspond directly with DOC's policy, which is unclear about the supervisor's capacity to alter or challenge release of this information). NOAA also explicitly notes that review and clearance procedures do not apply to "Contributions by NOAA scientists to non-federally led scientific assessments that undergo extensive external peer review" and "Continuously updated data and research products, such as publicly disseminated online databases," an excellent policy.

Media Policy: Green

NOAA is a sub-department of DOC, but NOAA has a distinct, in-depth media policy that goes beyond DOC's by acknowledging scientists' "right to review and correct any official document" that uses their scientific work, even after it has gone through clearance and editing processes (Sec. 7.01). It also expressly recognizes NOAA scientists' right to speak freely to the media.

Social Media Policy: Green

NOAA is subject to DOC's social media policy, which clearly distinguishes between official and personal use of social media and clearly permits employees to use their titles on social media.

Differing Scientific Opinions: Yellow

NOAA's SI policy directs research partners and collaborators to be "professional, courteous, and fair in working with others and respectful of the ideas of others," and notes that "differences of opinion will be resolved by through the NOAA-wide framework for review and approval of Fundamental Research Communications consistent with DAO 219-1." However, no clear framework or procedure is easily available.

Whistleblower Protections: Red

Neither NOAA nor NOAA's Office of Inspector General has registered for or completed 2302(c) certification.

National Science Foundation (NSF)

Scientific Integrity Policy: Green

NSF SI policy contains some of the strongest media policies of all the agencies, but it is missing some other key protections (Grifo 2013).

Procedure for Allegations: Yellow

NSF SI policy cites its research misconduct policy, which has extensive detail on procedures for reporting and resolving research misconduct. However, this policy applies narrowly to research misconduct - "fabrication, falsification, or plagiarism" in research contexts – and not to scientific integrity violations more broadly.

Public Reporting of Allegations: Yellow

NSF has a closed case database under the Office of Inspector General, where you can search for cases under various classifications, including "NSF Employee Misconduct," and several cases relate to scientific integrity. However, it does not separately report cases relating to scientific integrity.

Scientific Integrity Official: Yellow

The NSF website names a Director of Research Integrity and Administrative Investigations, but does not explicitly indicate that it has a scientific integrity

Peer Review Policy: Yellow

According to the NSF website, NSF "does not currently produce or sponsor the distribution of influential scientific information (including highly influential scientific assessments)" and thus does not need to post a peer review agenda. It acknowledges, but does not provide a link to, the OMB guidelines. However, it does provide extensive information regarding its Merit Review process.

Clearance Policy: Yellow

NSF requires that employees receive written permission from an ethics counselor before participating as a "policymaking officer for any research or educational institution, any scientific society, or any professional association," but it also notes that, when an employee participates in an outside activity in a personal capacity that does not violate other NSF restrictions (e.g., protections against conflicts of interest), approval is not required.

Media Policy: Red

NSF has had, in the past, strong media policies, but these policies are no longer accessible on the NSF website. Previous links are now dead.

Social Media Policy: Red

NSF has, in past years, received praise for its social media policy. However, the policy is not easily available to the public online. As a result, NSF's score has been downgraded from green to red.

Differing Scientific Opinions: Red

NSF's SI policy does not appear to discuss a procedure for handling scientific disagreements.

Whistleblower Protections: Green

NSF has registered for, but not yet completed, 2302(c) certification. NSF Office of Inspector General is 2302(c) certified.

Nuclear Regulatory Commission (NRC)

Scientific Integrity Policy: Red

NRC has an Information Quality Program, and it issued a memo in 2010 emphasizing the importance of scientific integrity, but neither of these represent an SI policy.

Procedure for Allegations: Red

Within NRC's Information Quality Program, NRC describes allegations of research misconduct. NRC also has an "allegations" page and several documents on reporting wrongdoing; one of these documents lists a few possible scientific

integrity violations, including supervisory retaliation. Nevertheless, these lists are vague; procedures for submitting, reporting, and investigating allegations are unclear; and scientific integrity goes unmentioned.

Public Reporting of Allegations: Yellow

NRC puts out impressively comprehensive annual reports on allegation trends, but does not report specifics on individual cases related to scientific integrity.

Scientific Integrity Official: Red

It is unclear on NRC's website if the NRC has a scientific integrity official; if it does, the name of this individual is not publicly available.

Peer Review Policy: Green

NRC does not appear to have its own peer review policy, but posts a guide to implementing OMB's 2004 Final Information Quality Bulletin for Peer Review and posts an easily accessible link to the OMB guidelines.

Clearance Policy: Red

NRC defers heavily to existing federal ethics statutes. Beyond this, no information on clearance policies for employees' unofficial work could be

Media Policy: Yellow

NRC's policies are spread across multiple documents and difficult to access. One of NRC's policies describes a personal-views exception and provides explicit language for a disclaimer, but it is unclear if this extends to routine media contact. NRC policy notes that "technical offices review news releases for accuracy" and that, if public affairs officials draft a news release, "the originator should review it for accuracy and completeness..." This should be reframed as a clear right to last review.

Social Media Policy: Red

NRC's policy is not easily available to the public online, a risky precedent that undermines agencies' public accountability. As a result, NRC's score has been downgraded from yellow to red.

Differing Scientific Opinions: Red

NRC's Information Quality Program does not discuss how to handle scientific disagreements except to note repeat that the definition of research misconduct "does not include honest error or differences of opinion."

Whistleblower Protections: Yellow

The NRC has registered for, but not completed, 2302(c) certification. The NRC Office of Inspector General is neither registered nor certified.

United States Geological Survey (USGS)

Scientific Integrity Policy: Green

USGS SI policy relies on, and largely restates, the DOI's comprehensive SI policy but adapts some provisions to cater to USGS specifically.

Procedure for Allegations: Green

USGS includes in its SI policy detailed information about procedures to submit, investigate, and resolve allegations. For further information, it directs readers to the highly comprehensive DOI Scientific Integrity Procedures Handbook.

Public Reporting of Allegations: Green

o USGS SI cases are publicly reported through the DOI closed case database.

• Scientific Integrity Official: Green

 The USGS SI official's name and contact information is available on the <u>DOI</u> page for Scientific Integrity Officers.

Peer Review Policy: Green

O USGS posts its own detailed, easily accessible peer review policy, which builds on, and includes a link to, OMB's 2004 Final Information Quality Bulletin for Peer Review. The policy also offers links to other useful information, including a peer review checklist, guidance on intended audience, and other regulatory context. Its peer review agenda is clear and accessible.

• Clearance Policy: Yellow

 <u>USGS</u> permits outside/unofficial work or activity "related to official duties or the bureau's program responsibilities," if employees receive advance authorization by the Division Chief, the employee's supervisor, and a Bureau Ethics Program Officer; however, no explicit time limit for this review is given.

• Media Policy: Yellow

 USGS's <u>2015 media policy</u> has a personal-views exemption but does not appear to address pre-approval for media communications. It also lacks a right-to-lastreview provision, instead giving public affairs officials broad authority.

• Social Media Policy: Green

 The USGS <u>social media policy</u> builds on and references the DOI's strong policy. USGS clearly distinguishes between personal and official use, provides extensive and useful guidance for employees on disclaimers and other issues, and offers links to other relevant policies.

• Differing Scientific Opinions: Yellow

o USGS repeats DOI's policy statements, which provide little detail on the procedure for handing differing scientific opinions.

• Whistleblower Protections: Red

o USGS has not registered for or completed 2302(c) certification.

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