CONGRESSIONAL TESTIMONY

When Science Gets Trumped: Scientific Integrity at the Department of the Interior

Testimony before the
House Committee on Natural Resources

United States House of Representatives

July 25, 2019

Daren Bakst
Senior Research Fellow in Agricultural Policy
The Heritage Foundation

My name is Daren Bakst. I am the Senior Research Fellow in Agricultural Policy at The Heritage Foundation. The views I express in this testimony are my own and should not be construed as representing any official position of The Heritage Foundation.

I want to thank the Members of the House of Representatives Committee on Natural Resources for this opportunity to discuss scientific integrity at the Department of the Interior and in the federal government in general.

A Brief Overview

President Barack Obama, in a 2009 memorandum on scientific integrity, explained that “The public must be able to trust the science and scientific process informing public policy decisions.”¹ This is a useful starting point in discussing scientific integrity in the federal government. It is also important that the science and the scientific process are in fact deserving of the public’s trust.

This need for trust in the science also goes beyond the science directly used in policy decisions. Whenever the federal government disseminates scientific information, the imprimatur of the government carries significant weight. The results of a single federal scientific study may, for example, be widely disseminated in media reports shaping public opinion or be utilized by other federal agencies in their rulemakings.

Often, questions of scientific integrity focus on improper political interference in science decisions. This is only part of the picture. The politicization of science is not merely some after-the-fact decision by political officials to stifle science. It also includes processes in which sound science is undermined because the best science is not utilized, the science has significant flaws, qualified people are not involved, or there is insufficient vetting of the science (including through inadequate or a lack of public participation).

Actions undermining scientific integrity are not limited to political officials meddling with the science. It also includes those in science going beyond the science and seeking to answer inherently policy-oriented questions. This can be a result of them, on their own, going beyond their responsibilities or it can be a function of them being asked to answer questions that are policy-oriented and subjective in nature.

Concerns Regarding Scientific Integrity are Not New

While the title of today’s hearing suggests a focus on the Trump Administration, there is nothing new about concerns regarding scientific integrity in the federal government. Over the years, such concerns have spanned Administrations and they cover numerous ways that the integrity of the science has come into question. For example:

President Jimmy Carter fires USGS Director. In his first year of office, President Jimmy Carter fired Vincent McKelvey, the Director of the United States Geological Survey (USGS); then considered an apolitical position. Both Democrat and Republican legislators were concerned about political interference at the USGS, including Republican concern that he was fired over disagreements over the amount of oil and gas in the ground.²

In 1977, Rep. Jack Kemp (R-NY) made his views known on the House floor:

I do not believe it is a coincidence that McKelvey’s forced removal from his post as Director of the U.S. Geological Survey, which is unprecedented in its history, followed closely on the heels of an important speech given by McKelvey to the TSAL forum in Boston on June 13. In that speech McKelvey refused the notion that the United States is rapidly running out of energy. There are vast amounts of hydrocarbons sealed away in forms not presently recoverable economically, such as gas in tight formations in the Rocky Mountains, gas in black shales in the Eastern United States, and gas occluded in coal beds throughout the country… I believe that this treatment of any Government official who deviates from the official administration line that the United States is on the very brink of running out of energy is an absolute scandal.³

Department of the Interior fires whistleblower working on scientific integrity. Dr. Paul Houser was a member of the team working on scientific integrity at the Department of the Interior.


Ironically, he was allegedly a victim of the Department’s lack of scientific integrity (when President Barrack Obama was in office).⁴ According to Dr. Houser, “After I questioned science reporting and summary documents related to the Klamath River Dam Removal Secretarial Decision, I faced systematic reprisal and my job was terminated on February 24, 2012.”⁵

Sue and settle and Endangered Species Act (ESA) listings. The listing of species and the designation of critical habitat under the ESA should be developed through a transparent process based on sound science. Yet, many species are listed as a result of lawsuits by advocacy groups that are settled behind closed doors.⁶ The case of the Hine’s emerald dragonfly provides a good example of how sue and settle works. As explained by the U.S. Chamber of Commerce:

In 2008, environmental advocacy groups sued FWS to protest the exclusion of 13,000 acres of national forest land in Michigan and Missouri from the final “critical habitat” designation for the endangered Hine’s emerald dragonfly under the Endangered Species Act. Initially, FWS disputed the case; however, while the case was pending, the new administration [Obama Administration] took office, changed its mind, and settled with the plaintiffs on February 12, 2009. FWS doubled the size of the critical habitat area from 13,000 acres to more than 26,000 acres, as sought by the advocacy groups. Thus, FWS effectively removed a large amount of land from development without affected parties having any voice in the process. Even the federal government did not think FWS was clearly mandated to double the size of the critical habitat area, as evidenced by the previous administration’s willingness to fight the lawsuit.⁷

The Fish and Wildlife Service may very well have agreed upon a listing and a critical habitat area that was not substantiated by the science. Even assuming it were, this type of closed process undermines scientific integrity because little faith can be placed in how the agency decision was reached. President Obama, in his scientific integrity memorandum, was right to discuss the public’s trust both in the science and the scientific process.

EPA proposed its water rule before its science report was finalized. The Obama Administration’s EPA developed a report called the “Connectivity of Streams and Wetlands to

---


Downstream Waters: A Review and Synthesis of the Scientific Evidence.”\(^8\) In January, 2015, the EPA announced the release of this final report in a fact sheet.\(^9\) At the end of the document, it states:

> Now final, this scientific report can be used to inform future policy and regulatory decisions, including the proposed Clean Water Rule being developed by EPA’s Office of Water and the U.S. Army Corps of Engineers.\(^{10}\) [Emphasis added.]

There was a problem though. This scientific report was finalized after the proposed rule was published. As a result, the proposed rule was not informed by the report, and the public ended up providing comments on a proposal that did not take into account the “scientific basis needed to clarify CWA jurisdiction,” as the EPA explained was a purpose of the report.\(^{11}\)

Further, those involved in developing the final report would have likely felt constrained in making changes that put into question the substance of the proposed rule; if a final rule is significantly different than a proposed rule, this can threaten an entire rulemaking and require the process to start over.\(^{12}\) According to the D.C. Circuit Court of Appeals, “Given the strictures of notice-and-comment rulemaking, an agency’s proposed rule and its final rule may differ only insofar as the latter is a ‘logical outgrowth’ of the former.”\(^{13}\)

**Dietary Guidelines veers off mission.** Sometimes scientific integrity is undermined because of the scientists. They may go beyond the science in their work and even into unrelated substantive areas. This happened during the last Dietary Guidelines process. The Dietary Guidelines Advisory Committee (DGAC) was working on recommendations to provide the Departments of Agriculture (USDA) and Health and Human Services (HHS) regarding the 2015 Dietary Guidelines for Americans.\(^{14}\)

---


Instead of focusing on dietary and nutritional factors, the DGAC started to work on issues such as climate change and sustainability, and allow those issues to inform their advice. It would have been misleading to develop Guidelines not focused solely on nutritional objectives, and even potentially dangerous. For example, if the best nutritional advice recommends increasing meat consumption, but the DGAC deemed that environmental considerations suggest reducing meat consumption, it is not clear which objective would win out. Quite simply, there are many instances when environmental factors will not align with nutritional benefits for humans.¹⁵

These actions threatened the legitimacy of the Dietary Guidelines because the advisory committee that was supposed to work on science lost its focus.

Misconceptions about Science and Policy

The above discussion has highlighted issues that are connected to scientific integrity. There are some issues though that may get put into the scientific integrity discussion, but their inclusion is unwarranted and actually can be harmful. The most prominent example is the conflating of science and policy.

There is a misconception permeating public discourse that policymakers should look to scientists for the answers, even answers to policy questions. There is plenty of legitimate concern about scientific integrity, but criticizing policymakers for looking beyond the science to answer policy and legal questions is not one of those legitimate concerns.

Science does not answer policy questions. Science can inform policy decisions by providing answers to objective questions, without making value judgements. Policy decisions though require value judgements and subjective decision-making. For example, science can inform policymakers about the likelihood that a product may cause harm to humans, but it does not answer the inherent value question as to what is an acceptable level of risk.

There is also the flawed assumption that scientists only answer science questions and their conclusions will be independent of personal opinion. This should be the case when scientists are expected to be answering science questions, but too often, it is not. The Dietary Guidelines example above illustrates how scientists sometimes inappropriately undermine the integrity of the science. They may use a scientific process and the guise of science to actually conduct policy analysis with policy conclusions, or allow their own beliefs to inappropriately influence what are supposed to be scientific conclusions.

Susan Dudley, who is Director of the GW Regulatory Studies Center, explained these concerns in 2017 Congressional testimony:

> It is this tendency to “camouflag[e] controversial policy decisions as science” that Wendy Wagner called a “science charade” and it can be particularly pernicious. For instance, a 2009 Bipartisan Policy Center (BPC) 2009 report, Improving the Use of Science in Regulatory

---

Policy, concluded that “a tendency to frame regulatory issues as debates solely about science, regardless of the actual subject in dispute, is at the root of the stalemate and acrimony all too present in the regulatory system today.” Both of these problems, hidden policy judgments and the science charade, can be the result of officials falling prey to the “is-ought fallacy”: incorrectly mixing up positive information about what “is” with normative advice about what “ought to be.”16 [Citations omitted].

When scientists integrate policy judgements into their scientific work, this hurts scientific integrity. More importantly, “science” that has such a policy focus is not even science.

Recommendations to Improve Scientific Integrity

There have been efforts to improve scientific integrity. As mentioned, President Obama issued a 2009 memorandum on scientific integrity. The Trump Administration has also taken significant steps as well. The EPA has proposed an important rule to address secret science17 and issued a directive to end the practice of sue and settle.18 On April 24, 2019, the Office of Management and Budget (OMB) issued a memorandum19 to help improve the implementation of the Information Quality Act (IQA) by updating 2002 OMB Guidelines on the IQA.20

Strengthen the Information Quality Act. The IQA, enacted in 2000, makes it possible for the public to serve as a check on government dissemination of information and the soundness of agency science.21 The text of the IQA requires federal agencies to “issue guidelines ensuring and maximizing the quality, objectivity, utility, and integrity of information (including statistical information) disseminated by the agency.”22

The IQA can help to ensure the accuracy of the information disseminated and promote transparency of the science used by agencies. The potential of the IQA to ensure scientific integrity has been undermined though by insufficient agency accountability and judicial decisions holding the IQA does not authorize judicial review.23

22 Ibid.
One of the best ways to promote public trust in the science and the scientific process is to allow the public to have a means to directly challenge the science. There needs to be teeth put into IQA enforcement. This would involve requirements that agencies will respond thoughtfully and in a timely manner to public requests under the IQA. There would also be judicial review to ensure, in part, that agency science meets the established IQA guidelines, especially when informing policy decisions.

**Promote Transparency of the Science.** In explaining its secret science rule, the EPA stated the, “EPA will ensure that the regulatory science underlying its actions is publicly available in a manner sufficient for independent validation. Where available and appropriate, EPA will use peer-reviewed information, standardized test methods, consistent data evaluation procedures, and good laboratory practices to ensure transparent, understandable, and reproducible scientific assessments.”

If there is going to be public trust in the science, federal agencies, not just the EPA, should utilize those scientific studies where the data and methodology is publicly available. This should be done in a manner that properly protects privacy and confidential information.

Depending on journal peer review processes alone is insufficient. There can be a big difference in the quality of the peer review processes across journals. In addition, the independence of peer review is not something that can merely be assumed, especially when many of the peers could be close colleagues. It is one thing when the peer review process is used for strictly academic purposes, but once studies are being used as the basis for public policies that have serious real-world impacts on the lives of Americans, the standards must be strengthened.

Concern over peer review is not merely about independence but also about its limitations. Dr. George Wolff, a former Chairman of EPA’s Clean Air Scientific Advisory Committee has explained:

> In the development of regulations based on environmental studies, numerous subjective assumptions and choices must be made regarding the selection of data and models that have a profound impact on the strength of any statistical associations and even whether the associations are positive or negative. The appropriateness of the assumptions and choices are not adequately evaluated in the standard peer review process. That is why it is essential that the data and models be placed in the public domain for a more rigorous evaluation by qualified experts. The proposed regulation, Strengthening Transparency in Regulatory Science [the proposed EPA rule], will provide an opportunity for such evaluations.  

---


It is also important to recognize that agency officials themselves who may have access to the data and methodology will benefit from hearing different views on the data and methodology, including from other scientists. This is another way that public participation in the rulemaking process can help inform and shape the decisions made by the agencies.

**Scientific Integrity Concerns Should Focus on Science Questions Only.** As has been mentioned, questions that involve policy and value judgements are not science questions. Therefore, for example, agencies should only ask science advisory committees to answer science questions only. Agency staff should ensure that the charge to such committees is on point and committee members do not veer off their mission, especially into policy.

This issue also has implications for Congress. Legislators should not require agencies to answer questions on science alone when such questions are not purely scientific in nature. For example, the listing of threatened and endangered species should be based solely on the science, but since listings can trigger regulatory requirements, they involve non-science related concerns. To promote scientific integrity, the listing decision should be decoupled from any regulatory implications.

**Other Important Recommendations**

- Agency scientists should be free to publish in professional journals, but there should be clear disclaimers when their research does not represent the agency’s position. Other agencies using this research, especially in rulemaking, should not mischaracterize research as agency research when it is just the research of agency employees.²⁶

- Agencies should not be allowed to avoid protections that can promote scientific integrity in the rulemaking process by using guidance documents instead of rules.

- Agencies should appropriately qualify any conclusions, including where there might be doubts regarding the science.

- Agencies should not quash dissenting opinions by agency scientists. Advisory committee reports should clearly detail where dissenting opinions existed among the members.

- Agencies should examine different assumptions, providing clear answers as to why certain choices were made over others.

- Agencies should continuously review the studies and models used and welcome information that could improve their understanding of such studies and models.

- Agencies should not put the interests of agency scientists over the interests of serving the public. This simply means that the interests of federal scientists should be part of the scientific integrity discussion to the extent that it improves the science and the scientific

²⁶ This is a problem I have seen first-hand, with both the CDC and the FDA mischaracterizing a study done by CDC employees. See e.g. Daren Bakst, “Request for Correction of Information Disseminated to the Public that Improperly Attributed a Study to the Centers for Disease Control and Prevention (CDC)” to the Food and Drug Administration Office of the Ombudsman (May 21, 2015). [https://aspe.hhs.gov/system/files/pdf/105946/55aFDA.pdf](https://aspe.hhs.gov/system/files/pdf/105946/55aFDA.pdf) (accessed July 24, 2019).
process. This also means that legitimate agency concerns such as ensuring that any science has been properly peer reviewed does not get ignored out of a desire to be too deferential to agency scientists.

Conclusion

The importance of scientific integrity should not be underestimated. Some of the most important laws impacting the lives of Americans are often justified because of the science used by federal agencies, including the Department of the Interior.

Congress has delegated significant responsibility to agencies (often too much). The scope of agency power is concerning, especially when this power is too often unchecked. In a republic where those making laws are supposed to be accountable to the people, this excessive delegation is antithetical to principles of separation of powers and representative government.

One way to help ensure that agencies are not merely doing whatever they want is to have processes and protections in place so that when the federal government is disseminating scientific information or using science to make policy decisions, the science is credible and can be trusted.
The Heritage Foundation is a public policy, research, and educational organization recognized as exempt under section 501(c)(3) of the Internal Revenue Code. It is privately supported and receives no funds from any government at any level, nor does it perform any government or other contract work.

The Heritage Foundation is the most broadly supported think tank in the United States. During 2014, it had hundreds of thousands of individual, foundation, and corporate supporters representing every state in the U.S. Its 2014 income came from the following sources:

- **Individuals 75%**
- **Foundations 12%**
- **Corporations 3%**
- **Program revenue and other income 10%**

The top five corporate givers provided The Heritage Foundation with 2% of its 2014 income. The Heritage Foundation’s books are audited annually by the national accounting firm of RSM US, LLP.

Members of The Heritage Foundation staff testify as individuals discussing their own independent research. The views expressed are their own and do not reflect an institutional position for The Heritage Foundation or its board of trustees.