

Trump's Interference With Science Is Unprecedented

Experts say that key EPA proposals would meddle with the research process and endanger decades of protective health rules.

[Robinson Meyer](#), Nov 9, 2018



Jonathan Ernst / Reuters

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The Trump administration is breaking with 75 years of precedent by attempting to interfere in how science is practiced by the U.S. government, according to three experts who issued a [dire warning to their profession in the journal *Science*](#) on Thursday. The administration is empowering political staff to meddle with the scientific process by pushing through reforms disguised to look as though they boost transparency and integrity, the experts say.

“It is tempting to conclude that recent proposals for reforming regulatory science are similar to

what has occurred in the past,” they write. “They are not.”

“People who are not scientists are telling us how scientific synthesis and analysis should be done,” says [Wendy Wagner](#), a professor of law at the University of Texas at Austin and one of the authors of the paper. “We’re not even getting scientists’ best work. We’re tying scientists’ hands behind their back and not even giving them a shot.”

“It’s a very dangerous place for science and public policy,” she told me. “Politics has gone to

a place that should be off limits, and no one is noticing and calling them on that fact.”

The experts’ warning may prove particularly damaging to the reforms’ success. One of the Trump reforms that most worries Wagner claims to be inspired by [a 2009 study from the Bipartisan Policy Center](#) and [a 2013 report by the Administrative Conference of the United States](#). A statement from the Environmental Protection Agency [also cited both of those studies for authority](#).

Wagner wrote or co-wrote both of those studies. She said the proposed scientific reform that cites them was “extremely problematic.”

In Thursday’s edition of *Science*, her warning was co-authored with [Liz Fisher](#), a professor of environmental law at Oxford; and Pasky Pascual, a recently retired data scientist and lawyer for the EPA.

The experts are most critical of a so-called [scientific-transparency rule](#) first proposed by Scott Pruitt, the former administrator of the EPA. [As I wrote in July](#), the rule would effectively bar the agency from using public-health research—or any other research that relies on private medical records—when issuing rules to limit water pollution, air pollution, or the use of toxic chemicals. Though Pruitt has resigned, the proposal [remains on track to become official EPA policy](#).

The Pruitt proposal “applies retroactively,” Wagner told me, meaning it would force the EPA to revise—and possibly weaken—nearly every rule protecting human health from air, water, or chemical pollution issued in the agency’s 48-year history.

[Read: Even geologists hate the EPA’s new science rule.](#)

That proposal [has been condemned](#) by nearly 70 scientific and public-health professional organizations, as well as by Harvard, the Association of Public and Land-Grant

Universities, and the editors of *Science*, *Nature*, and *Proceedings of the National Academy of Sciences*.

The experts also criticize [an EPA directive issued by Pruitt in 2017](#) that remains in effect. That memo barred any university scientist who has received a research grant from the EPA from serving on an EPA scientific-advisory board or acting as a peer reviewer of EPA regulatory analysis. Notably, it did *not* put industry scientists under the same restrictions, even if they are employed by a company that could be financially hurt by EPA regulation.

Since the rule was issued, “at least a few respected scientists have been removed from EPA science-advisory boards because they were not willing to abandon their EPA-funded research,” the authors write. “To our knowledge, there is no precedent for such a unilateral exclusion of federal grantees as peer reviewers” in either federal law or academic practice, they add.

The experts also criticize [the HONEST Act](#) and [the EPA Science Advisory Board Reform Act](#), a pair of bills that would constrain the EPA similarly to the proposals above. Both bills passed the House of Representatives last year but seem unlikely to become federal law during this Congress.

Why are all these reforms so unprecedented? According to the authors, each of them places some stage of the scientific process under political direction. For decades, they write, the EPA and other federal agencies have followed a “two-step process” when consulting science: First, scientific staff have reviewed existing research and summarized and synthesized it for political staff. Then that political staff “can accept, ignore, rerun some of the analysis, or reinterpret the results.”

This process essentially erects an apolitical wall between the agency’s scientific staff and its policy makers, and it has been endorsed by the

U.S. National Academy of Science, the authors say. But every single one of the proposed EPA reforms breaches that wall, allowing political staff to dictate the terms of scientific analysis and synthesis to scientists.

“It’s extremely problematic to start to limit what the scientific analysis can actually do within the agency. It cuts into the science, a place we’ve never been before,” Wagner told me.

“Of course, science has been under siege in the agencies for decades,” Wagner said. “But it’s never gotten to the point where we’re actually altering the rules to limit the review of the scientific literature.” Since political appointees can issue exemptions to the new policies, they could essentially pick and choose what research scientists are allowed to even consider for synthesis, she said. “So we’ll now be painting a partial picture, and a lopsided picture.”

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In the paper, the experts provide a short summary of the use of science in government, demonstrating why the Trump interference is so unprecedented. Wagner told me that the best comparison to the new proposals is an erroneous effort by the Indiana state legislature at the end of the 19th century to [establish the value of pi as 3.2](#): “It’s politics going to a place that should be off-limits. They’re in a place that it shouldn’t be.”

The proposed rules also use terms of great scientific consequence—including *replication*

and *transparency*—but fail to define their meaning, the experts say. This could allow federal courts to redefine the terms in ways not conducive to the best interests of science.

[Rena Steinzor](#), a law professor at the University of Maryland who was not involved with this paper, told me that she agrees that the Trump administration’s attempted interference was unlike policies that had come before. “He has done all sorts of strange things,” she said of Scott Pruitt, adding that his transparency proposal was “fairly radical.”

“This is not an administration that is at all respectful of science. It’s a serious problem,” Steinzor said.

Above all, Wagner told me that she hopes the broader community of research scientists and technical experts would sit up and pay attention to the EPA proposals and House bills. Many researchers seem to believe that the rules set up surmountable obstacles, she said, when they may actually endanger entire swaths of regulation. If the “transparency” proposal becomes law, it would apply to every other EPA rule, Wagner said. Courts could toss out entire agency regulations if the underlying research fails to meet the new, politically informed standard. “These are mandatory,” she said.

Even if the proposals don’t become law, they point to a depressing “new era” in the federal wars over science, the experts write. As Wagner told me, “What worries us is that we’ve gotten to this point—that this is even on the table.”

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