

Many people distrust environmental science, though for different reasons. Progressives may discount science that they see as supporting business interests. Meanwhile, conservatives may think scientists come to “politically correct” conclusions in order to get grants. It’s reasonable to think that these things may sometimes happen. But how strong are these effects?

Unwittingly, the Trump Administration has given us something akin to what social scientists call a “natural experiment” — an institutional change that allows us to observe how these effects work. The results are reassuring for those who believe in the integrity of the scientific process. This “experiment” involves the Administration’s efforts to pack the EPA’s Scientific Advisory Board.

The experiment was begun by Scott Pruitt, Trump’s first appointment as Administrator of EPA. (Remember him, the guy with the [\\$43,000 phone booth](#) in his office?) Pruitt decided that academic scientists were untrustworthy because they get government grants. He decided to replace them with industry scientists and appointees from environmental agencies in conservative states. He chose eighteen new members for the SAB, with representatives from the utility industry, chemical industry, refining industry and state governments. Other new members came from environmental agencies in Texas and Arkansas, or were industry consultants. The Pruitt appointees made up 43% of the Board. GAO later [determined](#) that the process violated government ethics requirements. Later appointments seem to have been less political, but the Pruitt appointments (including the chair of SAB) are all still serving their three-year terms.

Many people, including me, thought that was the end of the SAB as a source of independent scientific advice. Many people, including me, were wrong.

As it turned out, the SAB was scathingly critical of some of EPA’s highest-profile regulatory rollbacks. As [Science](#), the premier US scientific journal, observed, “in a stinging rebuke of the Trump administration’s handling of science, the “Environmental Protection Agency (EPA) advisory panel has found major shortcomings in the agency’s pursuit of key regulatory rollbacks. The sharp criticism in the reports on four top deregulatory efforts is particularly notable given that the administration has selected the majority of the members of the Science Advisory Board (SAB).” Those proposed deregulatory actions included the repeal and replacement of the Waters of the United States rule (WOTUS), the repeal of the finding that regulating toxics from coal plants is “necessary and appropriate,” the proposed “scientific transparency” rule (which might more accurately be called a censored science rule), and the rollback of fuel efficiency standards for cars and trucks.

It would be a mistake to conclude that the change in SAB membership had no effect. There were probably other regulations that this SAB approved but a differently constituted SAB would reject. Still, the membership change had far less effect than many of us predicted. Apparently, scientists drawn from industry and Republican-led state agencies are still, at the end of the day, scientists. It speaks well of them that, despite possible incentives to do the contrary, they stood up for scientific standards, just as staff scientists with the government have been [doing](#).

In short, even scientists who were presumably handpicked for their sympathy with the Administrations' goals turned out to be much more objective than expected. Of course, there are limits to how much we can generalize from a single incident. But at the very least, we can say that the evidence failed to confirm stereotypes about political bias in science.