The Trump Administration's hostile attitude toward science has continued unabated. The Administration has used a triad of strategies: efforts to defund research, suppression of scientific findings, and embrace of fringe science.

1. **Budget.**Administration continues to favor deep cuts in research support. Its initial 2020 budget proposal calls for a 13% cut to the National Science Foundation, a 12% cut at the National Institutes of Health and elimination of the Energy Department's research support for advanced energy technologies (ARPA-E) and EPA's climate change research office. The proposal would also eliminate funding for the Sea Grant program, which funds environmental research on the coasts. The budget proposal is unlikely to become law, given that similar proposals were rejected even when the Republicans controlled both houses of Congress. But they are indicative of the Administration's values.
2. **Toxic chemical risks.** A report by the Government Accountability Office concluded that since June 2018, senior officials at EPA have blocked the addition of new chemical risk assessments to the Integrated Risk Information System (IRIS). EPA has also delayed for months on issuing a report on formaldehyde risks. The House Science Committeefound evidence that a political appointee who was supposed to be recused nevertheless intervened to block the report.
3. **Endangered Species.** The press recently discovered that Trump's nominee to head the Interior Department blocked the release of a scientific report showing that certain pesticides pose massive risks to endangered species. That would have been a very inconvenient scientific finding.
4. **Air pollution.** The Administration purged its scientific advisory committee of independent academic experts, replacing them with industry representatives. As I wrote in a recent post, the new committee has admitted that it lacks the expertise to review new air quality standards for particulates. The new chair, an industry consultant, has fringe views about risk assessment which he is attempting to imprint on EPA. EPA is now making an effort to redo the air quality standards for particulates and ozone in order to justify laxer regulation of these major pollutants.
5. **Climate Change.** The White House is apparently still planning to create a working group on climate change under the auspices of the National Security Council. The Washington Post reported that the plan is to "counter conclusions that the continued burning of fossil fuels is harming the planet, according to three senior administration officials." Recently, Trump met with the

supporters of the plan, according to Climate Wire. In the meantime, according to E&E, the White House stripped language from an EPA guidance on disaster planning that explained the link between rising disaster risks and climate change. The White House also issued guidance about agency information requiring broad disclosure of data, methods, and computer code, burdening agencies and potentially aiding industry challenges to agency science. As far as is known, no scientists were consulted about the change.

6. **The President.** Trump reiterated his own support for climate denialism in a tweet on March 12: "Patrick Moore, co-founder of Greenpeace: 'The whole climate crisis is not only Fake News, it's Fake Science. There is no climate crisis, there's weather and climate all around the world, and in fact carbon dioxide is the main building block of all life.' @foxandfriends Wow!" Wow, indeed. Among other things, Moore was not a co-founder of Greenpeace; he was an early participant in Canada who has spent decades since then as an industry shill.
7. **Filtering out scientific evidence.** Despite earlier reports to the contrary, EPA is continuing to work on a proposed rule that would block the agency from considering important, well-regarded scientific studies. Under the guise of improving transparency, the proposal would exclude consideration of studies when the underlying data is not accessible to industry due to confidentiality agreement
8. **Staffing.** The Union of Concerned Scientists (UCS) reports that "[a]s of mid-January 2019, President Trump had filled only 40 of the 83 government posts that the National Academies of Sciences, Engineering, and Mathematics (NASEM) designate as 'scientist appointees.' Trump's nominee to head NOAA is a former business executive with no scientific background — not to mention a huge conflict of interest due to his family's financial stake in AccuWeather, which had major sexual harassment issues when he ran it.
9. **Children's health.** EPA pulled funding from research centers on children's health. As E&E News explained, "Jointly funded by EPA and the Department of Health and Human Services' National Institute of Environmental Health Sciences (NIEHS) for more than two decades, the children's centers study everything from childhood leukemia to the development of autism spectrum disorders. Grants to those centers have long been considered unique in the public health world for including funding for both research and public outreach." Without EPA's share of the funding, key programs will be shuttered.
10. **Scientific Advisory Board (SAB).** . The SAB's mission is to give independent scientific advice to EPA. In a bid to neuter the board, EPA expelled all

members who had received EPA grants, with the effect of replacing academic experts with industry scientists. But apparently the industry scientists have shown more spine than expected, so EPA has tried to bypass the board completely or sharply limit the scope of the board's review of a proposed action. The board has publicly complained about being excluded from the process. Last week, board members expressed puzzlement about how to respond to EPA's effort to slash federal jurisdiction over wetlands, with board members observing that EPA's science was wrong but that it wasn't clear that EPA considered science to be relevant to the decision.

No doubt things would have been worse if the Administration hadn't encountered pushback on various fronts. There seem to be several things behind the war on science. One is Trump's disdain for expertise of all kinds. More important is the annoying fact that the scientific evidence supports a great deal of regulation. Since the Administration can't change the scientific realities, its next-best strategy is to silence the scientists.