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Trump Attacks on Climate Science May Violate Numerous Federal Laws

By Michael B. Gerrard
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Starting on its first day on January 20, 2025, the second Trump administration has launched an unprecedented rollback of efforts to fight climate change. The Sabin Center for Climate Change Law's Climate Backtracker already has 117 items.

Much of this is aimed at scientific research on climate change, or has the effect of inhibiting the conduct and dissemination of this research. Many of these actions may also violate federal laws.

This article discusses these actions, some of their legal implications, and the litigation challenges that have already been brought. It begins with actions that are specifically aimed at climate research, and then moves to actions that affect a broad swath of scientific research including that related to climate.

Climate-Specific Research

National Climate Assessment

The Global Change Research Act of 1990 requires the federal government every four years to prepare a National Climate Assessment which "analyzes the effect of global change on the natural environment, agriculture, energy production and use, land and water resources, transportation, human health and welfare, human social systems, and biological diversity." 15 U.S.C. §2936.

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An assessment was issued in 2000 under President Bill Clinton, but in 2006 more than four years had gone by, the George W. Bush administration had not even started work on the report, and environmental groups sued. They won; the court ruled that the report was required by law and ordered its preparation. *Center for Biological Diversity v. Brennan*, 571 F. Supp. 2d 1105 (N.D. Cal. 2007).

The report was issued in 2009. It and its successors in 2014, 2018, and 2023 became the most definitive reports on the effects of climate change in the U.S., and have painted pictures of ever-worsening climate conditions.

The next report is due in 2027. In April 2025 the Trump administration dismissed all of the about 400 scientists and other authors working on the next report and canceled the program's funding, making it virtually certain that no official report will be ready by 2027, at least one based on a solid scientific foundation.

The American Geophysical Union and the American Meteorological Society have announced that

they will enlist members to issue publications that will at least partly fill the void.

Reporting Emissions Data

In 1992 the United Nations Framework Convention on Climate Change (UNFCCC) was negotiated in Rio de Janeiro, signed by President George H.W. Bush, and unanimously ratified by the U.S. Senate. It required all signatory nations to develop and make publicly available national inventories of greenhouse gas (GHG) emissions.

In response Congress, in the Energy Policy Act of 1992, directed the preparation of an annual inventory of these emissions. 42 U.S.C. §13385(a). In a 2008 appropriations bill, Congress went further and appropriated funds for the Environmental Protection Agency (EPA) to develop a rule requiring companies to monitor and report their GHG emissions. Pub. L. No. 110-161, 121 Stat. 1844, 2128 (2007).

EPA issued the rule in 2009, 40 C.F.R. pt. 98, and the reporting began in 2010. These reports can provide a foundation for many regulatory efforts and also allow corporate self-monitoring and benchmarking. EPA usually publishes the resulting inventory report in April.

This year EPA withheld the report, but the Environmental Defense Fund obtained it under the Freedom of Information Act and posted it on May 8. On March 12 EPA announced that it was reconsidering the program.

This year's annual inventory report was due to the UNFCCC offices on April 15, but so far it does not appear to have been formally issued, adding to concerns about further U.S. involvement with the UNFCCC.

Already some of EPA's GHG monitoring programs are being shut down. Elon Musk's "Department of Government Efficiency" is moving to cancel many leases of facilities of the National Oceanic and Atmospheric Administration (NOAA), including the lease for the support office for the Mauna Loa Observatory in Hawaii, which monitors carbon dioxide levels and generates the famous Keeling Curve.

So far, the observatory is still running. The latest reading of carbon dioxide levels in the atmosphere is 430 parts per million. It is rising rapidly; on the month that Trump was first inaugurated in 2017 it was 406 ppm. Some scientists say a safe level would be 350 ppm.

Removing or restricting climate websites and datasets

The Trump administration has taken down many climate-related websites, removed numerous datasets and mapping tools, excised references to climate change from websites, and otherwise rendered much climate-related information inaccessible or harder to find. Among the agencies' websites affected are those of NOAA, the National Aeronautics and Space Administration (NASA), the U.S. Department of Agriculture (USDA), and the Council on Environmental Quality (CEQ).

At least some of these actions likely violated the Paperwork Reduction Act (PRA), which Congress enacted to "ensure the greatest possible public benefit from and maximize the utility of information created, collected, maintained, used, shared and disseminated by or for the Federal Government." 44 U.S.C. §3501(2).

The PRA requires agencies to "ensure that the public has timely and equitable access to the agency's public information" and to provide adequate notice when "substantially modifying[] or terminating significant information dissemination products." 44 U.S.C. §3506(d)(3). The PRA does not require agencies to maintain websites indefinitely.

At least three lawsuits have been filed against the Trump Administration alleging violations of the public information provisions of the PRA.

In one case the U.S. District Court for the District of Columbia found that the Centers for Disease Control (CDC), the Department of Health and Human Services (HHS), and the Food and Drug Administration (FDA) had likely violated the PRA when they removed critical medical information and datasets from their websites.

The court granted a preliminary injunction and ordered the agencies to restore the websites.

Doctors for America v. Office of Personnel Management, No. 1:25-cv-00322 (D.D.C. Feb. 11, 2025).

Northeast Organic Farming Association v. USDA, No. 1:25-cv-01529 (S.D.N.Y.), alleges that the USDA violated the PRA when it removed significant information on climate change from its webpages, including policies, guides, datasets, interactive tools, etc., without adequate notice.

On May 12, the Department of Justice notified the court that the USDA would restore climate change-related web content, including all the webpages and interactive tools at issue in the case. *Sierra Club v. EPA*, No. 1:25-cv-01112 (D.D.C.), is a similar lawsuit against the EPA, CEQ, and other agencies alleging that they violated the PRA when they removed critical information on environmental justice and climate from their websites.

Also supporting the public release of climate data is the National Space Policy promulgated under the National Aeronautics and Space Act. 51 U.S.C. §§20101 et seq.

The Policy, issued by President Trump toward the end of his first term on Dec. 9, 2020, provides that NOAA and the Air Force "shall … develop a plan to provide Earth environmental satellite observation capabilities" and also requires agencies to "pursue innovative partnerships to make their … Earth observation data more easily discoverable, accessible, and usable to the public." 85 Fed. Reg. 81755, 81768 (Dec. 16, 2020).

The statute provides that "[i]nformation obtained or developed by [NASA] … shall be made available for public inspection," with certain exceptions such as classified information. 51 U.S.C. §20131(a).

Moreover, the National Climate Program Act of 1978 calls for "systems for the management and active dissemination of climatological data, information and assessments, including mechanisms for consultation with current and potential users." 15 U.S.C. § 2904(d)(5).

Another important program that NOAA has been forced to shut down is its Extreme Weather Database Program, which has tracked the cost of natural disasters like hurricanes and wildfires since 1980. It does not seem to be statutorily required, but the insurance industry and many others rely on it.

Several nonprofit organizations downloaded many governmental websites and datasets before they were taken down so that they remain publicly accessible, including the Public Environmental Data Project, the Open Environmental Data Project, the Harvard Environment and Law Data Collection, the Environmental Data and Governance Initiative, and the Environmental Policy Innovation Center.

Pausing or denying international collaboration

According to press reports, around Feb. 5, 2025 many NOAA employees received email orders to pause "all international engagements" and to cease communications with "foreign nationals," including "foreign national colleagues."

Also in February the Trump administration denied U.S. scientists permission to attend a meeting of the United Nations' Intergovernmental Panel on Climate Change (IPCC), the world's leading climate science entity.

The Administration also instructed U.S. government scientists to cease working on the next installment of the IPCC assessment report, which is due in 2029. In April, Secretary of State Marco Rubio announced that he was eliminating the State Department's Office of Global Change, which led U.S. negotiations of international climate agreements.

It has been reported that these restrictions on international travel and cooperation by U.S. scientists are already having a "cascading impact" on European climate science, as so much research involves transatlantic cooperation and global data gathering.

These bans on international cooperation not only cripple scientific work on the global oceans and atmosphere, but they also seem to run counter to the National Climate Program Act, which provides that the Secretary of Commerce (to whom NOAA reports) "shall cooperate and participate with other federal agencies, and foreign,

international, and domestic organizations and agencies involved in international or domestic climate-related programs"; that the program shall include "measures for increasing international cooperation in climate research, monitoring, analysis and data dissemination"; and that the Secretaries of Commerce and State shall provide "representation at climate-related international meetings and conferences in which the United States participates." 15 U.S.C. §2904.

Similarly, the National Space Policy requires NOAA to "[u]tilize international partnerships to sustain and enhance a robust Earth observations program." 85 Fed. Reg. 81755, 81768 (Dec. 16, 2020).

Emergency declaration

A device that several agencies have used to circumvent normal procedures concerning climate, energy and the environment is President Trump's Executive Order 14156 issued on January 20, "Declaring an Energy Emergency." 90 Fed. Reg. 8433 (Jan. 29, 2025).

In *State of Washington v. Trump*, No. 2:35-cv-00869 (W.D. Wash.), 15 states claim that the current energy situation does not meet the requirements of the National Emergencies Act, 50 U.S.C. §§1601 et seq., or the criteria for exercise of emergency powers in several substantive statutes. Plaintiffs claim that the administration's actions are ultra vires and violate the Administrative Procedure Act (APA).

Social cost of carbon (SCC)

The SCC attempts to quantify the damages caused by a given ton of GHGs. It has been used in the cost-benefit analysis of government regulations and other actions. Many methodological issues arise in calculating it, and its use has become a political football. The last figure used by EPA during the Biden administration was $190/ton.

Trump's "Unleashing American Energy" Executive Order stated that the SCC "is marked by logical deficiencies, a poor basis in empirical science, politicization, and the absence of a foundation in legislation." 90 Fed. Reg. 8353 (Jan. 29, 2025).

On May 5 the Office of Information and Regulatory Affairs of the Office of Management and Budget (OMB) released new guidance directing agencies not to use the SCC at all unless it is explicitly required by a statute.

The guidance also stated that should Court of Appeals precedents require use of something like the SCC, the agencies "affected by such a decision should consult with the Department of Justice to consider the agency's options under the nonacquiescence doctrine."

For example, the Ninth Circuit has ruled that when the benefits of certain standards are monetized, the costs such as those of GHG emissions should also be monetized. *Ctr. for Biological Diversity v. Nat'l Highway Traffic Safety Admin.*, 538 F.3d 1172 (9th Cir. 2008).

Use of the nonacquiescence doctrine may mean that an agency will use the SCC for actions within the territory of the Ninth Circuit (seven western states, Alaska, Hawaii and Guam) but not elsewhere.

Other district court decisions have held that it is appropriate or even mandatory to use the SCC. Refusing to use it – or applying a narrowly constrained number, as the OMB guidance requires – may invite litigation.

Proposed budget

On May 2 OMB issued its proposed budget (or, more precisely, list of proposed changes to discretionary funding) for Fiscal Year 2026. It calls for massive reductions in climate-related research and action.

OMB would reduce the budget of EPA's Office of Research and Development by $235 million. The accompanying text states: "The Budget puts an end to unrestrained research grants, radical environmental justice work, woke climate research, and skewed, overly-precautionary modeling that influences regulations."

In the Department of Energy, the proposed budget would cancel over $15 billion from the Infrastructure Investment and Jobs Act (IIJA) which it characterizes as "Green New Scam funds

committed to build unreliable renewable energy, removing carbon dioxide from the air, and other costly technologies burdensome to ratepayers and consumers.

The Budget also ends taxpayer handouts to electric vehicle and battery makers ....” It reduces energy efficiency and renewable energy programs by $2.57 billion and the Office of Science by $1.15 billion, reducing “funding for climate change and Green New Scam research.”

NOAA’s budget would be reduced by $1.3 billion. The OMB text states, “The Budget terminates a variety of climate-dominated research, data, and grant programs, which are not aligned with Administration policy-ending ‘Green New Deal’ initiatives. For example, NOAA’s educational grant programs have consistently funded efforts to radicalize students against markets and spread environmental alarm.

NOAA has funded such organizations as the Ocean Conservancy and One Cool Earth that have pushed agendas harmful to America’s fishing industries. These NOAA grants were funding things such as: George Mason University’s ‘Policy Experience in Equity Climate and Health’ fellowship, a workshop for ‘transgender women, and those who identify as nonbinary,’ and NOAA Climate Adaptation Partnerships, which funded webinars that promoted a children’s book ‘designed to foster conversations about climate anxiety’ as therapy.”

These proposed cuts should not be surprising. Trump’s appointee as director of OMB is Russell Vought, who was one of the architects of the Project 2025 project, which is serving as a blueprint for much of what the Trump Administration is doing.

The project report declared (on p. 675) that NOAA “has become one of the main drivers of the climate change alarm industry and, as such, is harmful to future U.S. prosperity.” In calling for the breakup of NOAA, Project 2025 said that the National Weather Service “should fully commercialize its forecasting operations.”

Since Trump’s second inauguration, hundreds of Weather Service employees, or about 10 percent of the agency’s total staff, have been terminated or accepted buyout offers.

These cutbacks seem inconsistent with the policies adopted by Congress in the Food Security Act of 1985, which was signed by President Reagan.

That Act declares that “the maintenance of current weather and climate analysis and information dissemination systems … is essential if agriculture and silviculture are to mitigate damage from atmospheric conditions,” that “weather services at the federal level should be maintained with joint planning between [NOAA] and the Department of Agriculture,” and that “efforts should be made, involving user groups, weather and climate information providers, and federal and state governments, to expand the use of weather and climate information in agriculture and silviculture.” 15 U.S.C. §8521(a).

These cutbacks are also at odds with the National Weather Service Organic Act, which gives the Secretary of Commerce the duty of “taking of such meteorological observations as may be necessary to establish and record the climatic conditions of the United States.” 15 U.S.C. §313.

This is not to say that there is necessarily a role for the courts in enforcing these provisions, as the courts have granted broad discretion to the Weather Service, even when it failed to take actions that could have prevented a loss of life. *Monzon v. United States*, 253 F.3d 567 (11th Cir. 2001); *Brown v. United States*, 790 F.2d 199 (1st Cir. 1986).

It is now up to Congress whether to accept or modify the OMB budget. When Congress passes a budget and the President signs it, the role of the courts is limited.

General Scientific Research

The items discussed above specifically concern climate research. The rest of this article concerns cutbacks in federal funding across a broad range of scientific research, including but not limited to climate research.

Inflation Reduction Act

The IRA was passed by Congress (with zero Republican votes in either the House or the Senate) and signed by President Biden in 2022. According to the Inflation Reduction Act Tracker, it contains 119 climate change-related provisions to be implemented by 16 federal agencies. President Trump campaigned on a pledge to repeal the IRA.

Congress has not acted, but meanwhile the administration has taken many actions to block the availability of IRA funding, to cancel grants, and even to claw back some funds already paid. This has been met with multiple lawsuits and several preliminary injunctions.

On his second inauguration day Trump issued Executive Order 14154, Unleashing American Energy, 90 Fed. Reg. 8353 (Jan. 29, 2025). It directed all agencies to immediately stop disbursing funds appropriated under the IRA and the IIJA.

A week later OMB released a memorandum requiring agencies to temporarily pause all grant, loan, and financial assistance program pending review. The first of a barrage of lawsuits began immediately, and two days after issuing the memorandum OMB rescinded it. But both the agency actions against IRA and IIJA funding and the lawsuits challenging them have continued in full force.

The lawsuits that have resulted in temporary restraining orders or preliminary injunctions against some of the administration's actions on the IRA or IIJA include *State of New York v. Trump* , No. 1:25-cv-01144 (S.D.N.Y.); *State of New York v. Trump*, 1:25-cv-00039 (D.R.I.); *National Council of Nonprofits v. OMB*, No. 1:25-cv-00239 (D.D.C.); *Climate United Fund v. Citibank, N.A.*, No. 1:25-cv-00698 (D.D.C.), No. 25-5122 (D.C. Cir.); *Power Forward Communities, Inc. v. Citibank, N.A.*, No. 1:25-cv-00762 (D.D.C.); *Coalition for Green Capital v. Citibank, N.A.*, No. 1:25-cv-00735 (D.D.C.); *California Infrastructure and Economic Development v. Citibank* , No. 1:25-cv-00820 (D.D.C.); *Justice Climate Fund v. EPA*, No. 1:25-cv-00938 (D.D.C.); *Inclusiv, Inc. v. EPA*, No. 1:25-cv-00948 (D.D.C.); and *Woonasquatucket River Watershed Council v. Department of Agriculture*, No. 1:25-cv-00097 (D.R.I.).

The suits against Citibank are all because it is holding grantee funds that EPA has told it to freeze; these cases have been consolidated. All of these lawsuits are very active; there are docket entries almost every day. Whenever the administration loses a case, it files an appeal. A status report on these cases would probably be obsolete by the time this article appears, so instead I am providing links to the dockets.

The group Just Security has an excellent website with links to the dockets for all of the lawsuits it has found challenging Trump administration actions; as of May 14 there were 234 cases on the tracker, of which only seven have been closed. (Many of these cases are about deportation and immigration matters.)

The Inflation Reduction Act Tracker has also launched a website devoted just to the IRA litigation; as of May 14 it has 19 cases. An analysis by Bloomberg found 328 lawsuits challenging Trump administration actions, with orders stopping administration actions in 128 of these cases as of May 1.

Most of the IRA and IIJA cases are brought under the APA and claim that the defendant agencies acted arbitrarily and capriciously in not providing detailed or convincing explanations for their actions, and also failing to follow notice and comment procedures where required.

Several of the cases also claim that the administration does not have the power to hold back Congressionally-appropriated money, that various agency regulations about grants were violated, and that agencies violated the First Amendment in withholding funds from grantees because they engaged in "DEI, woke gender ideology, and the green new deal," as an OMB memo put it.

Several district courts have issued nationwide injunctions against Trump administrative actions. Whether nationwide injunctions are permissible is a major issue in *Trump v. CASA, Inc.*, a case about birthright citizenship that the Supreme Court heard on May 15. The decision in that case will probably affect many other cases.

Freezing academic funding

Federal funding of universities for scientific research dates back at least to the Morrill Act, which President Lincoln signed in 1862, creating the land-grant colleges. It greatly expanded after World War II under President Truman and his successors. Trump seems to be dismantling this longstanding partnership.

The Trump administration has frozen, or threatened to freeze, large amounts of contract and grant money from several universities, claiming, among other things, that the schools violated the civil rights laws by not sufficiently acting against alleged antisemitism, by having DEI programs, or by allowing transgender athletes on university teams.

For example, on April 11 the U.S. Department of Education, the Department of Health and Human Services, and the General Services Administration sent a letter to Harvard University with a long list of demands, including governance and leadership changes; "merit-based" hiring and admissions "reform"; viewpoint diversity in admissions and hiring; "reforming programs with egregious records of antisemitism or other bias"; discontinuation of DEI; and other changes. Harvard refused these demands, and on April 21 it sued. *President & Fellows of Harvard College v. U.S. Dep't of Health & Human Servs.*, No. 1:25-cv-11048 (D. Mass.).

Harvard's complaint states that academic freedom is a special concern of the First Amendment, and that trying to dictate curriculum, hiring, admissions, and internal governance of universities violates that amendment.

The suit also claims that the federal government did not follow the procedures required to take action under Title VI of the Civil Rights Act or the agencies' own grant and contract procedures, and that the government was arbitrary and capricious in providing no satisfactory explanation for its actions.

On April 8, 2025 Howard Lutnick, the Secretary of Commerce, announced cancellation of funding to Princeton University for the Cooperative Institute for Modeling the Earth System. Lutnick declared that the agreement "promotes exaggerated and implausible climate threats, contributing to a phenomenon known as 'climate anxiety,'" fostering "fear rather than rational, balanced discussion."

The administration cancelled $400 million in research grants to Columbia University; "stop work" orders have been issued for several climate, medical and other research projects. These actions against Columbia have been challenged in *American Association of University Professors v. U.S. Department of Justice*, No. 1:25-cv-02429 (S.D.N.Y.).

This suit charges that the administration's actions violate the Civil Rights Act of 1964, the APA, the First Amendment, the Fifth Amendment Due Process Clause, the Tenth Amendment anti-commandeering doctrine, and the Spending Clause of the Constitution, as well as separation of powers and ultra vires doctrines.

Other universities that have seen or been threatened with big hits include Cornell, Northwestern, Brown, and the Universities of Pennsylvania and Maine.

The National Science Foundation (NSF) has long been a major funder of university research. The OMB proposal would shrink its budget by more than half. At least 60 climate-related research projects have already been cancelled. Other agencies that would see massive cuts in their research budgets are the National Institutes of Health, the Department of Energy, NASA, NOAA, EPA, the U.S. Geological Survey, and others.

Reducing university indirect cost rates

The federal grants for climate research (as well as medical and other kinds of research) at universities typically have a certain amount directly for the particular research project, plus an "indirect cost" that helps pay for the university's facilities (buildings, computer systems, laboratories, libraries, etc.) and administration – expenses that must be borne in order for the research to proceed, but that are not tied exclusively to one project.

These rates are individually negotiated for each university based on an audit of eligible expenses.

They typically are between 25 percent and 60 percent.

Beginning in February, several agencies began issuing notices imposing a uniform rate cap of 15 percent. Numerous lawsuits were swiftly filed, generally raising APA arguments and other claims similar to those in the IRA/IIJA cases.

The Association of American Universities and the Association of American Medical Colleges were among the plaintiffs that sued, alleging that a rate cap of 15 percent would have a devastating impact on many functions essential for research.

Many staff have already been laid off, impairing or halting many research projects. Several courts issued preliminary injunctions and some of these have been converted to permanent injunctions, leading to immediate appeals.

Revoking civil service protection

During his first administration, Trump attempted to strip civil service protection from a large number of federal employees by putting them in a new category called Schedule F, which would make it easier to fire them.

He did not complete this process before he left office, and President Biden halted it. On his second inauguration day President Trump restarted this process by issuing an executive order, "Restoring Accountability to Policy-Influencing Positions Within the Federal Workforce." 90 Fed. Reg. 8625 (Jan. 31, 2025).

On Jan. 27 the Office of Personnel Management (OPM) ordered federal agencies to terminate tens of thousands of federal employees by sending them standardized notices of termination, stating they were being fired for performance reasons. Among these were many employees who were administering climate research projects.

This OPM action and other mass firings were quickly met with several lawsuits. In one of them, the court granted plaintiffs a temporary restraining order on May 9. *Am. Fed'n of Gov't Emp'ees, AFL-CIO v. Trump*, No. 3:25-cv-03698 (N.D. Cal.). The others include *American Federation of Government Employees, AFL-CIO v. Trump* , No. 1:25-cv-00264 (D.D.C.), and *Public Employees for Environmental Responsibility v. Trump* , No. 8:25-cv-00260 (D. Md.).

The claims included in the lawsuits are that the President and OPM lack the power to take this action; that it violates the Civil Service Reform Act of 1978; that it violates the Administrative Procedure Act because it did not go through a notice-and-comment process; and that it deprives federal employees of their property interests without due process.

Conclusion

The Trump administration is moving quickly in an effort to shut down federal efforts to fight climate change, including the conduct and dissemination of scientific research. The Silencing Science Tracker, a joint effort of the Sabin Center and the Climate Science Legal Defense Fund (on whose board I sit) already has 74 entries.

Many of these efforts are of questionable legality. Numerous lawsuits have been filed challenging these actions. So far many of the lawsuits have met with early success with the issuance of preliminary injunctions, signaling that the judges think the plaintiffs have a high probability of ultimately winning the cases. Some of these cases will probably make their way to the Supreme Court, and only then will we have definitive word.

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