THE STATE OF THE SCIENCE 1 YEAR ON

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Contents

Executive Summary

In the first year of his second term, President Donald Trump established his administration's priorities with remarkable alacrity and assurance.

The administration's priorities for Earth and space sciences have been articulated in myriad ways. It has engaged in a massive effort to deregulate standards and statutes that have long governed the nexus of science and industry, for example—and also engaged in a systematic effort to more tightly regulate academic speech. It has made deep, sincere investments in instrumentation and exploration for fossil fuels—and also eliminated entire, globe-spanning Earth and space science monitoring networks. It codified "Gold Standard Science"—and also removed rigorously reported datasets from public platforms.

The administration's approach to climate and energy is one marked by a commitment to fossil fuels and a break with policies aimed at mitigating the effects of climate change. Such actions, made through legislation, executive orders, and funding allocations, could halve U.S. progress on limiting carbon emissions and erase at least 0.1°C (0.18°F) of international progress in reducing global warming by 2100.

Trump's climate policies alone could change perceptions of health and safety, with one report associating the administration's climate policy rollbacks with as many as 1.3 million additional temperature-related deaths in the 80 years following 2035. Staff and funding cuts to federal health, safety, and emergency response programs, most notably the Federal Emergency Management Agency, as well as the U.S. withdrawal from the World Health Organization present their own dangers.

Even before his inauguration, Trump openly stated his desire to drastically reduce the size of the federal workforce, and once in office, he almost immediately began cutting teams, programs, and entire cabinet-level departments. In addition to reducing the federal workforce, the administration appointed agency leaders with little experience in government, many with past experience in industries they now regulate.

Scientists outside the federal workforce also faced professional uncertainties as the administration began to reshape academia and higher education. Sweeping policy initiatives, as well as directives targeting specific groups and institutions, reduced funding for the scientific enterprise and limited scientists' ability to pursue their research.

With the establishment of programs like the Make America Beautiful Again Commission, Trump similarly redefined environmental stewardship in the United States. He has fast-tracked permits for mining, as well as oil and gas exploration; invested in artificial intelligence infrastructure; changed pollution limits and reporting requirements; and curtailed protections for public lands and endangered species.

Agencies, institutions, and individual scientists are still responding to the whirlwind of change unleashed in the past year. Some are adjusting their interactions with the Trump administration, some are negotiating new relationships with organizations inside and outside the federal government, and still others are meeting the administration in the courts.

We hope this report provides a framework to better understand these responses and help inform your own.

For a full list of acronyms used in this report, please see here.

To follow key concepts used across all sections of this report, please consult our index here.

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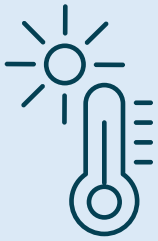
The State of the Science 1 Year On: *Climate Change and Energy*



Trump's first year in office has reversed many climate policy decisions and aggressively advanced fossil fuel interests.

Overview

In the first year of his second term, President Donald Trump worked across agencies to roll back practical and political momentum to address the climate crisis.

Experts say the array of administration policies supporting the fossil fuel industry could halve U.S. progress on reducing carbon emissions, and actions such as withdrawing the United States from the Paris Agreement are projected to erase at least 0.1°C (0.18°F) of international efforts to limit warming by 2100.

Rolling Back Climate Policy

Trump's interagency effort to roll back critical climate policies began immediately. An executive order (EO) signed on the first day of Trump's second term titled "Unleashing American Energy" ordered additional oil and gas exploration, accelerated permitting for such drilling, eliminated credits and regulations favoring electric vehicles, and revoked 12 climate- and energy-related EOs issued by the administration of President Joe Biden.

In March, the EPA indicated it would move to reconsider the 2009 Endangerment Finding, which states that greenhouse gases "threaten the public health and welfare of current and future generations." The Endangerment Finding underpins the federal government's authority to regulate greenhouse gas emissions from vehicles, power plants, oil and gas facilities, and factories.

On 29 July, the EPA formally proposed to rescind the finding, and the Department of Energy (DOE) published a report finding that carbon dioxide–induced warming "appears to be less damaging economically than commonly believed," that U.S. policy actions have "undetectably small direct impacts on the global climate," and that claims of increased frequency or intensity of storms are "not supported" by historical data.

In September, the National Academies of Sciences, Engineering, and Medicine conducted their own review, stating that "EPA's 2009 finding that the human-caused emissions of greenhouse gases threaten human health and welfare was accurate" and is "beyond scientific dispute." In a letter to the National Academies, House Oversight Chair James Comer (R-KY) dismissed the review as a "blatant partisan act to undermine the Trump Administration."

In August, the American Meteorological Society published a report identifying "five foundational flaws" in the DOE report that each place the report "at odds with scientific principles and practices."

In addition to reconsidering the Endangerment Finding, the Trump administration immediately began to dismantle the Greenhouse Gas Reduction Fund, a $27 billion lending program meant to spur private investment in clean energy. In March, EPA Administrator Lee Zeldin terminated $20 billion of this funding. Numerous lawsuits followed, but in July, Trump rescinded all funding for the program.

In February, Congress repealed a Biden era rule implementing a federal tax on methane pollution, which would have been the United States' first tax on greenhouse gases. In June, the administration also proposed to rescind all greenhouse gas emissions standards for coal-, oil-, and gas-fired power plants.

The One Big Beautiful Bill, the omnibus spending bill that became law on 4 July, removes or rapidly phases out most clean energy, electric vehicle, and clean manufacturing tax credits introduced by Biden's key climate bill, the Inflation Reduction Act. While reducing support for clean energy projects, the law also grants $40 billion in new subsidies and tax credits to the fossil fuel industry through 2035, according to a report from Oil Change International, an anti–fossil fuel advocacy group.

In total, the One Big Beautiful Bill is expected to cut the development of new clean-power-generating capacity by up to 59% through 2035, according to a report by the Rhodium Group. An analysis by Carbon Brief and Princeton University found the passage of the law will set the United States up to drop emissions to 3% below current levels by 2030 rather than the 40% mandated by the Paris Agreement.

In November, the EPA announced it would delay methane emissions reduction requirements set by the Biden administration, giving oil and gas companies until January 2027 to comply. In December, the White House and Department of Transportation announced a proposal to revoke vehicle fuel efficiency standards that were tightened in 2024.

The administration is expected to finalize this proposal in 2026.

Boosting Fossil Fuels, Obstructing Renewables

Trump's declaration of a "national energy emergency" gave federal agency heads authority to grant emergency approvals to expedite the completion of energy projects.

"We're going to drill, baby, drill," Trump said after being sworn in. That day, Trump issued an executive order (EO) to resume processing permit applications for new liquefied natural gas projects, which had been halted under Biden.

In an April EO seeking to revive the "beautiful clean coal industry," the Trump administration directed agencies to identify possible new coal resources on federal lands. The order also laid out plans to identify and revise existing regulations and policies that might lead the country away from coal power or coal production. "It is the policy of the United States that coal is essential to our national and economic security," the EO states.

"It is the policy of the United States that coal is essential to our national and economic security."

Also in April, the Department of the Interior said it intended to fast-track approvals for coal, gas, oil, and mineral projects. The administration opened up millions of acres of federal land to oil and gas companies and additional millions of acres to potential coal mining projects. In September, the DOE announced it would invest $625 million to retrofit and modernize aging coal power plants, followed by an additional $100 million in federal funding for similar projects. In May, the administration ordered a coal power plant in Michigan to abandon its plans to shut down, citing a "shortage of electric energy" in the Midwest. In December, it also ordered two coal plants in Indiana, two in Colorado, and one in Washington to remain open.

Among the federal land opened to oil drilling is the Arctic National Wildlife Refuge, an iconic wilderness area in northern Alaska. In October, Interior Secretary Doug Burgum announced the federal government would open 1.56 million acres (631,000 hectares) of the refuge to oil and gas leasing, reversing a Biden moratorium on drilling activity there.

In November, the administration announced it planned to open almost 1.3 billion additional acres (526 million hectares) of U.S. coastal waters to new oil and gas drilling. The One Big Beautiful Bill mandated at least 36 oil and gas lease sales in federal waters.

"An offshore lease issued next year could keep pumping carbon into the atmosphere for the next 40 years," Rebecca Loomis, an attorney at the Natural Resources Defense Council, told *The New York Times*.

Renewable energy projects have mostly received the opposite treatment, as federal agencies made a concerted effort to halt existing solar and wind energy projects and slow the permitting and approval process for new ones. Trump took particular aim at wind energy: An EO on the first day of his term withdrew all new offshore wind energy lease opportunities and suggested the possibility of terminating or amending existing leases. A coalition of state attorneys sued the administration, saying Trump does not have the authority to unilaterally make such mandates. In December, a federal judge wrote that the EO violated federal law.

"This arbitrary and unnecessary directive threatens the loss of thousands of good-paying jobs and billions in investments, and it is delaying our transition away from the fossil fuels that harm our health and our planet," New York Attorney General Letitia James said of the EO.

Solar projects have suffered, too. The Trump administration slowed development on a solar project in Nevada that, if built, would be one of the world's largest. In October, the EPA canceled $7 billion in grants for a popular clean energy program, Solar for All, meant to help low- and moderate-income households install solar.

Oil and gas permitting, but not renewable energy permitting, continued during the 44-day government shutdown this fall, as the Trump administration approved more than 470 permits to drill on public land. After the January 2026 military action in Venezuela, President Trump announced the country "will be turning over" 30-50 million barrels of oil and that the federal government would maintain control over Venezuela's oil industry.

Hindering Climate Science

As the Trump administration hindered clean energy projects and boosted fossil fuels, it also targeted climate science. In February, Trump prohibited federal scientists from traveling to take part in a planning meeting of the Intergovernmental Panel on Climate Change (IPCC). Federal scientists were reportedly told to stop work on all IPCC-related activities, though some nonfederal U.S. scientists are still involved.

In April, the administration dismissed all scientists working on the United States' own National Climate Assessment (NCA). In July, a spokeswoman for NASA told *The New York Times* that NASA would no longer host previous NCAs online. AGU and the American Meteorological Society have responded by creating a special collection on climate change

to help catalyze and advance synthesis science to inform our understanding of risks and solutions for U.S. climate research and assessments. In December, the Trump administration asked a group of scientists known for their climate skepticism—the same group that authored the DOE report undermining the 2009 Endangerment Finding—to write the next installment of the NCA.

Additionally, many programs and offices collecting and analyzing climate data were shuttered this year because budgets were cut and staff were fired, creating a widening climate data void. In April, for example, the EPA failed for the first time to meet the obligations of a 1992 treaty setting greenhouse gas reporting requirements for wealthy countries. The Environmental Defense Fund released the data after filing a Freedom of Information Act request. The same month, political appointees told EPA staff that they planned to virtually eliminate the Greenhouse Gas Reporting Program, which requires the country's largest industrial sites to report their emissions of carbon dioxide, methane, and nitrous oxide.

"The public has a right to know how much climate pollution is being emitted."

"The public has a right to know how much climate pollution is being emitted," Vickie Patton, an attorney at the Environmental Defense Fund, told *The New York Times*. "The attack on the data, the attack on the science, is irresponsible."

Pieces of signature energy reports from the Energy Information Administration, a data-tracking arm of the Department of Energy, were removed, while the publication of its International Energy Outlook for 2025 was scrapped.

NOAA, once identified as "one of the main drivers of the climate change alarm industry," has come under intense scrutiny. Under the Trump administration, the agency ended support for key data products at the National Snow and Ice Data Center, retired its Billion-Dollar Weather and Climate Disasters data product (though the nonprofit Climate Central is bringing it back to life), suspended work on a massive dataset meant to predict extreme rainfall, and consolidated climate data hosted on Climate.gov on another NOAA domain. The administration also canceled its lease for NOAA's Global Monitoring Laboratory in Hilo, Hawaii, an important site for scientists tracking carbon dioxide in the atmosphere.

Trump proposed cutting virtually all funding for climate research at NOAA, though Congress is considering spending bills that include much more modest cuts. Congress is also considering a bill that would ensure the uninterrupted storage of NOAA datasets indefinitely.

NASA's climate programs suffered, too: This spring, the Trump administration began the process of shrinking the NASA Goddard Institute for Space Studies, which maintains critical climate data records. And over the summer, the administration directed NASA employees to draw up plans to end satellite missions designed to monitor carbon dioxide emissions. Acting Administrator Sean Duffy made clear the agency will deprioritize all climate science.

The Department of the Interior cut funding to a third of the U.S. Geological Survey's Climate Adaptation Science Centers, which funds projects aimed to help people, wildlife, land, and water adapt to local effects of climate change. This includes mapping risks of wildfire and flooding, maintaining infrastructure such as storm drains, and assessing fish and wildlife populations for both hunting and conservation.

The Trump administration also axed funding for the U.S. Global Change Research Program, a decades-old congressionally mandated interagency climate research program. And in November, a new organizational plan for the Energy Department no longer showed various offices that had overseen clean energy technology development.

More than 100 National Science Foundation (NSF) grants for climate-related science have been canceled as well. In December, the Trump administration announced that it would dismantle the NSF-funded National Center for Atmospheric Research (NCAR), one of the world's leading climate and Earth science laboratories.

The administration also systematically removed mentions of climate change and related language from agency websites and directed the Department of Energy not to use certain language, including the words "green" and "decarbonization." The EPA also erased references linking human activities to climate change from sections of its website.

And while geoengineering has not been a priority of the Trump administration, Rep. Marjorie Tayler Greene (R-GA) introduced the Clear Skies Act in July, which would impose $100,000 fines and potential jail time for anyone conducting "weather modification" activities.

Stalling Global Progress

The Trump administration's approach to climate and energy policy has reverberated globally. The administration's decision to pull out of the Paris Agreement (to take effect in January 2026) will set global projected emissions back 0.1°C (0.18°F) by 2100, according to a United Nations report.

The same EO that withdraws the United States from the Paris Agreement also directs the administration to revoke contributions to international climate finance funds. This directive means the global climate finance goal agreed upon at COP29 (the 29th Conference of the Parties to the U.N. Framework Convention on Climate Change) will be much more difficult to meet. In March, the administration also pulled the United States out of the Board of the Fund for Responding to Loss and Damage, a U.N. climate damage fund created at COP28 dedicated to helping finance developing countries' climate adaptation efforts. The same month, the United States withdrew from the Just Energy Transition Partnership, an international collaboration formed at COP26 meant to help developing countries implement clean energy.

The Trump administration did not attend COP30 in Belém, Brazil, a move that other leaders admonished. "Mr. Trump is against humankind," said Colombian President Gustavo Petro. It was the first time in COP history that the United States did not send a delegation.

In January 2026, the White House issued an EO ordering the withdrawal of the United States from the U.N. Framework Convention on Climate Change, a 1992 treaty that set the legal framework for international negotiations on climate change. According to the terms of the treaty, the formal withdrawal will occur one year after the government submits paperwork to the U.N., after which the United States will be the only country not engaged in the global agreement. The EO also ordered the withdrawal of the United States from the IPCC.

At an International Energy Agency meeting held in London in April, Trump administration staff members opposed policies to regulate fossil fuels. In September, Secretary of Energy Chris Wright traveled to Italy to attend the world's largest natural gas conference. While in Europe, Wright urged European governments to ditch methane regulations, called net-zero goals "a colossal train wreck," and downplayed the risks of climate change. "It's turned out that not only does climate change not look to be an urgent threat…but doing something about it has proven remarkably difficult," Wright told reporters in Brussels.

The Trump administration also attempted to use economic levers to encourage other nations to walk back their climate goals. In July, for instance, the administration agreed to reduce some tariffs on the European Union (EU) if the EU purchased $750 billion in American oil and gas. In December, the Trump administration asked the EU to exempt US oil and gas companies that sell oil and gas to Europe from European methane regulations.

Next Steps

Despite criticism of the DOE report and widespread opposition to the reconsideration of the rule—even Tesla wants to preserve it—the EPA is expected to move forward with revoking the Endangerment Finding in early 2026. The decision is expected to face serious legal challenges, and the Trump administration faces an ongoing lawsuit from the Environmental Defense Fund and the Union of Concerned Scientists over the controversial DOE report. Final repeals of federal vehicle fuel economy standards and power plant emissions limits are also expected in early 2026.

The future of climate programs like the Greenhouse Gas Reduction Fund, Solar for All, electric vehicle infrastructure funds, and other climate-related grants likely lies in the courts, not the ballot box. Environmental groups and other stakeholders have filed multiple lawsuits challenging these actions, and they are still proceeding through the legal system. A coalition of states has even sued Trump and his administration over the president's initial declaration of a "national energy emergency."

Curated Links

Key resources for this report and people interested in this topic:

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The State of the Science 1 Year On: *Health and Safety*

The Trump administration has holistically reevaluated the government's relationship—and how it responds to threats—to the health and welfare of its citizens.

Overview

Since President Donald Trump took office a year ago, he's made a series of executive orders, policy changes, and announcements that directly affect the health and safety of Americans.

One analysis found that Trump's climate policies alone, which will increase greenhouse gas emissions over the next decade, could lead to as many as 1.3 million additional temperature-related deaths in the 80 years following 2035.

But his cuts to staff and funding to agencies such as the Federal Emergency Management Agency (FEMA), Centers for Disease Control and Prevention (CDC), and National Institute for Occupational Safety and Health (NIOSH), as well as the United States' withdrawal from the World Health Organization, present their own dangers.

FEMA and the Future of Disaster Preparedness

Under Trump's leadership, the nation has become less prepared to manage the effects of natural disasters and recover from them.

In May, NOAA announced that its Billion-Dollar Weather and Climate Disasters database would no longer be updated. Since 1989, the database had allowed the public, researchers, and the media to track the costs of natural disasters.

Time magazine noted how the retirement of the database would disproportionately affect poorer communities, where flood risk is higher, homes are more likely to be destroyed by wildfires, and people live farther away from emergency services.

Extensive cuts to agencies such as FEMA could mean that the cost of such disasters will also grow. Just days after his inauguration, Trump issued an executive order calling for a full-scale review of the agency, citing concerns about political bias and the agency "spending well over a billion dollars to welcome illegal aliens." A March executive order declared that much of the responsibility for emergency preparedness should be managed on state, local, and individual levels, and Department of Homeland Security Secretary Kristi Noem, whose department oversees FEMA, went on to say that she is "working so hard to eliminate FEMA as it exists today."

In a declaration decrying cuts to the agency, nearly 200 current and former staffers said that FEMA's mission—"to help people before, during, and after disasters"—is being obstructed. (Publicly listed signatories to the declaration were suspended the day after it was released.)

In April, the administration canceled FEMA's Building Resilient Infrastructure and Communities (BRIC) program, which was designed to reduce damage from weather-related events such as tornadoes and floods. In December, a federal judge ruled that unilateral cancellation of the program was unlawful. However, in-progress projects, such as building a tsunami evacuation zone at Columbia Memorial Hospital in Oregon, were suddenly left without BRIC funding. Other hospitals are facing different challenges, as changes to the Affordable Care Act and Medicaid proposed in Trump's omnibus One Big Beautiful Bill (OBBB) could leave hospitals with more uninsured patients who can't pay their medical expenses. One analysis conducted by the University of North Carolina's Sheps Center for Health Services Research suggested that changes proposed in OBBB could lead to the closure of more than 300 rural hospitals.

FEMA cuts limited many people's access to federal aid. The agency ended its door-to-door canvassing efforts in May, meaning agency workers are no longer making sure residents are aware of the aid programs available to them. In August, the administration introduced a new policy that requires people to register for federal aid using email addresses, making the process more difficult for people without internet access.

In June, Noem announced that every FEMA contract and grant of more than $100,000 must be approved by her personally, a move an anonymous official described to *The Guardian* as "bureaucracy to the umpteenth degree."

Streamlining the agency has meant assistance for survivors has been delayed. For instance, as of October, only about 22% of those who applied for

federal disaster assistance after the devastating July floods in Kerr County, Texas, had been approved for relief, reported the *Texas Tribune*. To put that in context, about 39% of applicants were approved for aid between 2015 and 2024.

The president flat-out denied aid for Cook County, Ill., following heavy rainfall and flooding, despite an estimated $83.5 million in damage documented by FEMA. The requested funding would have helped repair homes and remove mold.

In North Carolina, some county governments that spent tens of millions on cleanup and recovery after Hurricane Helene in 2024 are still waiting for the government to reimburse them. "To me, personally, this is the most heart-wrenching element of the federal situation right now," Matt Calabria, the head of the Governor's Recovery Office for Western North Carolina, told *The Washington Post*. "They are just waiting, for reasons that no one knows."

The *Washington Post* reported that more than 800 Hurricane Helene survivors have applied for FEMA-funded government buyouts of their homes, which are no longer safe to live in. As of December 2025, none had been approved. According to the Revolving Door Project, the president had rejected 15 extreme weather-related requests from states as of early January.

"I don't think I've seen a more dangerous decision in public health in my 50 years in the business."

Federal cuts have affected preparedness and recovery efforts beyond FEMA and for more than just storms. Trump's proposed NASA budget makes severe cuts to the science mission, which could affect efforts to track asteroids on a collision course with Earth. And an October report by Grassroots Wildland Firefighters found that efforts to reduce hazardous fuels on U.S. Forest Service lands (through thinning forests, clearing brush, and conducting prescribed burns) were down 38% in 2025 compared to the previous 4 years.

FEMA and the federal government have not issued blanket denials of assistance, however. The administration has approved some disaster aid, including for tornado recovery in Missouri and typhoon recovery in Alaska.

Air Quality

How has the administration affected the air we breathe?

In March, the administration shut down a web page that reported air quality data at U.S. embassies and consulates. In a post on Bluesky, climate scientist Dan Westervelt said the move erased 17 years of data critical "for the health of thousands of foreign services officers, critical for research, and critical for air quality data availability for many countries that were otherwise lacking high quality data."

In May, the Interior Department suspended air quality monitoring at 63 national parks. The program monitored pollutants such as ozone and particulate matter, which are linked to health problems ranging from asthma to heart attacks.

The Administration invited public feedback when it announced plans to repeal the EPA's Endangerment Finding. This landmark review of scientific studies demonstrating that greenhouse gases endanger human health and welfare underlies the government's ability to regulate climate pollution. At hearings and online, thousands of comments were submitted, with the vast majority opposing the change, although a handful supported the deregulation.

"After decades of living between three major highways in the thick of Arizona air pollution, I am now receiving hospice care due to stage 4 cancer and respiratory issues," said Hazel Chandler, a member of Elders Climate Action, adding that she was "appalled to see this administration rolling back progress I have spent my life, my career, fighting for."

Vaccines and Medicine

In May, the government reduced access to the COVID-19 vaccine. The same month, the administration canceled a $766 million project to develop a bird flu vaccine and a $358 million program that was searching for an HIV vaccine.

Secretary of Health and Human Services (HHS) Robert F. Kennedy Jr. fired the CDC's entire immunization advisory committee. In August, the White House dismissed CDC Director Susan Monarez, and Kennedy announced the termination of $500 million in funding for 22 projects that would have developed vaccines using mRNA technology. He noted that "HHS supports safe, effective vaccines for every American who wants them."

"I don't think I've seen a more dangerous decision in public health in my 50 years in the business," Mike Osterholm, a University of Minnesota expert on infectious diseases and pandemic preparations, told The Associated Press. A dozen former Food and Drug Administration (FDA) commissioners said they were "deeply concerned" by the stricter vaccine approval plan.

By November, at least 383 clinical trials—investigating issues such as cancer, cardiovascular disease, and sleep disorders—had lost their research funding, according to *JAMA Internal Medicine*.

In November, the CDC updated its "Autism and Vaccines" web page, which previously stated that

there is no link between the two, to read that "studies have not ruled out the possibility that infant vaccines cause autism" and that "studies supporting a link have been ignored by health authorities."

In December, the Advisory Committee on Immunization Practices removed its longstanding recommendation to administer the hepatitis B vaccine to infants. In December, HHS also cut millions of dollars worth of grants to the American Academy of Pediatrics, and cut funding to hospitals offering gender-affirming care. In January 2026, the CDC stopped recommending all children be vaccinated against rotavirus, influenza, meningococcal disease, and hepatitis A.

Services and Safety

Some policy changes have deeply harmful effects on specific groups concerned with ensuring the health and safety of Americans.

National parks and those who visit them, for example, have been hard hit by financial cutbacks. Wracked by staffing and funding cuts, national parks across the country have seen piles of trash, overflowing bathrooms, unmaintained trails, and even a wildfire. A December report from the Forest Service stated that some districts lost 100% of their trail staff, leaving many trails unmaintained. The National Park Service lost at least 24% of its permanent staff in 2025, a loss that has left fewer rangers available to protect visitors, said a ranger at Joshua Tree National Park in California who spoke to NPR in June on the condition of anonymity.

"They're doing everything they can to hurt the working man."

"This is the time of year when people die in the desert because people's bodies aren't adjusted for that heat," the ranger said. "We're at risk of having those kinds of tragedies occur because there are fewer people out protecting you."

ProPublica identified 30 Department of Transportation actions targeting regulations aimed at, among other goals, preventing pipeline failures and keeping bus drivers from falling asleep at the wheel. According to the agency's own previous estimates, such regulations could save tens of thousands of lives per year.

Ongoing funding cuts and grant delays for NOAA have endangered the Integrated Ocean Observing System, a program for collecting and tracking ocean data that has bipartisan support in Congress. The data helps fishers and cargo ships determine when it is safe to fish and leave port.

As another example, the mining industry in particular has undergone significant changes since Trump took office. In September, the Department of Energy announced an intention to invest $625 million in expanding the nation's coal industry. Though environmental groups decried the move, groups such as the American Coal Council celebrated it. In October, the agency also announced $100 million in funding to refurbish and modernize the nation's coal plants.

However, the administration has also recommended cutting the budget for NIOSH by 80%. In May, approximately 90% of NIOSH staff were notified they were being laid off, though some positions were reinstated weeks later.

A rule approved by the Mine Safety and Health Administration in 2024 that would limit levels of silica dust exposure for miners has been delayed. Cecil E. Roberts, who retired as president of the United Mine Workers of America in October, compared challenging the rule to murdering people by holding pillows over their faces.

"They're doing everything they can to hurt the working man," coal truck driver and former miner Randy Lawrence told The Associated Press. Lawrence voted for President Trump but no longer supports him. "They ain't worried about the miners or people in West Virginia or coal miners anywhere."

Finally, the disability community is facing its own set of negative effects, or what the Center for American Progress calls "an all-out war against disabled people." In July, the Trump administration withdrew a proposal to quash a rule that allows employers to pay workers with disabilities less than minimum wage. In August, the administration ended funding for a program that helped disabled people, particularly those experiencing unstable housing conditions, to access their benefits.

Looking Ahead

Scientists, health professionals, and emergency managers are considering the long-term implications of policy decisions that are still being implemented, including but not limited to the following:

- a hiring freeze at the FDA that left nearly one in five positions at the agency vacant
- the nomination of a chemical industry lobbyist to lead the EPA's Office of Chemical Safety and Pollution Prevention
- the proposed elimination of an independent agency that investigates the causes of chemical disasters, such as explosions at oil refineries
- the closure of the U.S. Agency for International Development (USAID), affecting programs ranging from measles and rubella surveillance to maternal health (a report in *The Lancet* suggested that the funding cuts to USAID could result in "a staggering number of avoidable deaths" by 2030)

- the outcome of an open letter signed by more than a thousand current and former HHS staff calling for Robert F. Kennedy Jr. to resign, accusing him of "endangering the nation's health"

It is important to note that many of the policy changes and budget cuts the president has announced have not yet been implemented. If the president's proposal of $163 billion in cuts to the federal budget passes in early 2026, experts say property will be damaged, forecast and warning systems will be degraded, and lives will be lost.

Curated Links

Key resources for this report and people interested in this topic:

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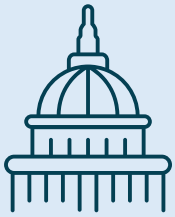
The State of the Science 1 Year On: *The Federal Workforce*



Thousands have left the federal workforce, and those who remain face significant uncertainty about their professional futures.

Overview

Before Inauguration Day, President Donald Trump openly stated his desire to drastically reduce the size of the federal workforce and cut teams, programs, and even cabinet-level departments deemed "wasteful" of federal resources or misaligned with his political agenda.

He has followed through with those intentions in waves of fast-moving policy and has employed a variety of tactics to push federal employees, including scientists, out of their jobs. A year into his second term, the federal workforce faces significant uncertainty about who may be the next target for cuts and how far those cuts could go.

Before Inauguration and Overarching Goals

There were 2,313,216 people employed across the federal government in September 2024. As of January 2026, there were 2,084,618, a 9.9% reduction. Table 1 shows a breakdown of employee numbers at select federal science agencies before Trump's second inauguration, the number of people employed at those agencies as of 1 October 2025, and the change in number of employees. These numbers were compiled before the 8 January data release from the Office of Personnel Management.

In addition to reducing the federal workforce, the Trump administration has made strategic decisions when appointing cabinet-level and other agency leaders.

Elon Musk, for example, is CEO of NASA's largest contractor, SpaceX. The day of Trump's inauguration, Musk was appointed to lead the newly created Department of Government Efficiency (DOGE) and serve as a special adviser to the president. Interior Secretary Doug Burgum, a former North Dakota governor and longtime proponent of oil and gas drilling, now leads the National Energy Council that oversees drilling permits on public land. Education Secretary Linda McMahon, a former professional wrestling executive, was appointed with the mission of shuttering the department she leads.

EPA Administrator and former New York legislator Lee Zeldin often voted against environmental legislation during his time in Congress and now oversees efforts to roll back environmental and climate regulations. Meteorologist Neil Jacobs, who supported Trump during the 2019 "Sharpiegate" incident, was appointed head of NOAA. Jared Isaacman, NASA Administrator, is a private astronaut and billionaire with deep ties to Musk.

First 100 Days

Trump's second first 100 days in office (20 January–30 April) brought unprecedented, rapid, and legally dubious changes to the federal workforce. Russell Vought, director of the Office of Management and Budget, admitted that "we want the [government] bureaucrats to be traumatically affected … We want to put them in trauma" so that they voluntarily leave their jobs.

Several of Trump's Day 1 executive actions sought to reshape the federal workforce, including (but not limited to) eliminating climate change and environmental justice research; programs related to diversity, equity, and inclusion; and the Department of Education. He implemented a hiring freeze across the federal government and required all federal employees to return to in-person work. These and other executive actions related to the federal science workforce are listed in Table 2.

On 28 January, the Office of Personnel Management (OPM) sent federal workers an email titled "A Fork in the Road," which offered them the option of deferred resignation on 30 September. This limited-time offer, which some agencies revived in April, led roughly 154,000 people (7% of the federal workforce) to leave voluntarily.

In February, DOGE required all federal employees to send weekly emails explaining five things they did in their jobs and justifying their continued employment. "Failure to respond will be taken as a resignation," Musk posted on his social media platform, X. Some agencies directed employees to comply with the order while others told them to ignore it. OPM later said that responding to the emails was voluntary, and the White House ended the initiative in April.

The administration barred federal scientists from attending a meeting of the Intergovernmental Panel on Climate Change (IPCC) and canceled the upcoming

National Climate Assessment (NCA), ceding leadership on fighting climate change to other countries. This cancellation led AGU and the American Meteorological Society to put together a special collection of research to maintain momentum to support the NCA. AGU also partnered with several universities to nominate U.S. scientists to contribute to the next IPCC report.

Mass layoffs and reductions in force (RIFs) began soon after Trump took office. Initially, RIFs targeted probationary employees, but the scope quickly expanded to include experienced personnel. Hundreds were fired from NOAA in February (a 5% reduction), including two flight directors of the Hurricane Hunter program and National Weather Service (NWS) scientists who produced forecasts, tracked flood risks, and maintained radar systems. NASA used RIFs to shutter its offices of strategy, chief scientist, and diversity. The EPA closed its environmental justice offices and worked to fire more than 1,000 scientists in its research arm. DOGE and the General Services Administration targeted the Mine Safety and Health Administration for cuts.

The Department of Health and Human Services fired scientists working on preventing the spread of bird flu and other airborne viruses. The Department of Energy fired people overseeing the safety of America's nuclear stockpile. The Transportation Department fired dozens of air traffic controllers, a decision that impacted military, commercial, and space travel.

May's temporary restraining order "was no match for this Court's demonstrated enthusiasm for greenlighting this President's legally dubious actions."

The Education Department closed its office of civil rights enforcement and several diversity and justice-related programs.

After several lawsuits and public backlash, a judge's order reversed some of these mass layoffs and ordered the government to make clear that employees were not fired for cause. AGU was a coplaintiff in this lawsuit. Some mission-critical employees were offered back their positions, though not all took the offer. Some who came back were later laid off anyway and some probationary employees returned to work late in the year, describing the experience as "a complete roller coaster."

Layoffs Throughout the Year

In May, the president released The President's Budget Request (PBR), which proposed major funding cuts to science programs across the federal government alongside workforce reductions. A draft of this budget request was released in April and was followed by Executive Order No. 14210, which directed federal agencies to engage in "large-scale" RIFs and reorganizations.

At least nine lawsuits have been filed opposing the executive order, including one from a coalition of nonprofits, including AGU, as well as unions, U.S. cities, and counties asserting that those RIFs are illegal without a congressionally approved budget.

At the time of publication, these PBR-guided RIFs have not gone into effect or been adopted into a federal budget for fiscal year 2026 (FY26). Congress seems poised to reject this budget request.

Regardless, layoffs and RIFs continued through the spring and summer. The Departments of Defense, Treasury, and Agriculture saw the largest workforce reductions, although the EPA fired hundreds of employees in late April and the Department of the Interior lost 9,700 employees. NASA lost 4,890 people, including more than 2,000 senior-level staff. Meanwhile, 400 Centers for Disease Control and Prevention staff who were laid off in April were brought back.

In May, a federal judge in San Francisco temporarily halted some of these layoffs. That temporary restraining order was then extended, but the Supreme Court allowed the mass firings to proceed in July. In the lone dissent, Justice Ketanji Brown Jackson said that May's temporary restraining order "was no match for this Court's demonstrated enthusiasm for greenlighting this President's legally dubious actions in an emergency posture."

In December, the Department of Veterans Affairs (VA) abruptly cut around 35,000 jobs, many related to healthcare, after having already lost around 30,000 employees throughout the year.

On 2 January 2026, FEMA laid off 65 people on the Cadre of On-Call Response and Recovery workforce. Leaked emails revealed a draft plan to terminate more than 10,000 more positions in 2026, reducing staff numbers by half.

Rule Changes and Pushback

In March, thousands of people participated in Stand Up for Science rallies at more than 100 locations across the United States and in Europe.

In late May, Trump signed an executive order "Restoring Gold Standard Science" to federal science agencies. Scientists immediately voiced concern that the directive would open the door to political interference in federal science and lead scientists to self-censor to avoid being fired.

"Don't be fooled, this 'gold standard' is about politics, not science," AGU President Brandon Jones wrote in response. "It co-opts the very language and practices we all have abided by, twisting it to support an agenda that will undermine advances across a

range of critical areas, from climate science and new sources of clean energy to natural disaster preparedness and air and water quality."

Though most departments and agencies have focused on downsizing, some are hiring, albeit with new standards. Many applying for federal jobs in 2025, including prospective NWS meteorologists, faced questions about their loyalty and support for the Trump administration and its policies.

In June, more than 300 officials from the National Institutes of Health (NIH) condemned the administration's actions against federal science in the Bethesda Declaration. Hundreds of EPA employees signed their own Declaration of Dissent, followed by employees at the National Science Foundation (NSF) in the Alexandria Declaration and employees at NASA in the Voyager Declaration. In August, nearly 200 current and former Federal Emergency Management Agency (FEMA) staffers signed the Katrina Declaration objecting to the obstruction of FEMA's mission.

Any renewed push to reshape the federal workforce will bring more change, more uncertainty, and potentially more trauma to an already beleaguered federal workforce.

Some who signed these letters experienced retaliation. The EPA fired at least five dissenters and suspended more without pay. FEMA has placed on leave all employees who put their name on the Katrina Declaration. It later fired one signatory and declined to reinstate others. NIH placed the scientist who organized the Bethesda Declaration on leave, as well as several senior officials who blew the whistle on the undermining of vaccine research. Some have sued the administration for wrongful termination.

In September, whistleblowers at NASA claimed that OMB officials were directing NASA to implement the budget and program cuts outlined in the PBR. Despite the whistleblower report and increased scrutiny, subsequent reporting showed that NASA was closing several buildings and labs at the Goddard Space Flight Center in Greenbelt, Md.

In December, a bipartisan group of lawmakers struck down an executive order that stripped federal workers of collective bargaining rights.

The 43-Day Government Shutdown

Congress failed to pass a spending bill for FY26 or a continuing resolution to temporarily extend FY25 funding, so the U.S. government shut down on 1 October. It was the start of a 43-day shutdown, the longest in U.S. history.

Ahead of the shutdown, Trump and congressional Republicans threatened that many federal workers would be laid off rather than furloughed and would not guarantee that furloughed employees would receive backpay despite it being mandated by law. Trump directed federal agencies to prepare for mass firings and RIFs during the shutdown and directed that those RIF plans align with PBR priorities.

Some agencies began implementing RIFs during the shutdown. The CDC laid off 1,300 employees, only to bring hundreds back the next day. Around 4,000 RIF notices had been issued by day 10 of the shutdown.

Labor groups sued the Trump administration to halt these layoffs. (AGU moved to connect its existing suit protecting federal workers to the new shutdown-related lawsuit.) On day 15 of the shutdown, a judge temporarily blocked the administration from conducting mass layoffs during the shutdown. On day 28, that order was extended to indefinitely block further RIFs during the shutdown and halt any RIF orders that had already been issued. The judge is continuing to evaluate the merit of the RIFs on an agency-by-agency basis.

During the shutdown, many federal scientists were required to work without pay. Hurricane Hunters flew over Hurricane Melissa. NOAA and NWS meteorologists continued to provide forecasts. Air traffic controllers and aviation meteorologists worked ceaselessly. NASA mission control staff continued to monitor active spacecraft and the International Space Station. National parks remained open.

An October executive order extended the near-total hiring freeze implemented on day 1 and also ordered that hiring be "consistent with the national interest, agency needs, and the priorities of my administration."

The shutdown ended on 12 November. The continuing resolution (CR) that reopened the government reversed many of the shutdown layoffs and reiterated that furloughed employees were entitled to backpay. The CR also prevents further RIFs before it expires on 30 January.

Looking Forward

The first year of Trump's second term in office has been one of upheaval for federal workers, including federal scientists, who serve the public across the country. Although mass layoffs, reorganizations, RIFs, and voluntary departures have shrunk the federal workforce by 9.9% (228,598 people), that number falls short of the apparent goal of reducing the federal workforce by 75% (1.7 million people) by 2028.

Some of the administration's objectives have been achieved. Offices related to climate, environmental justice, civil rights, and diversity, equity, and inclusion have been shuttered. New policies have increased political oversight of federal hiring, firing, and research

spending. The Department of Education and EPA have experienced drastic employment cuts, reorganizations, and a reduction of regulatory jurisdiction. Other objectives have yet to be realized, including the privatization of NWS and NASA and the outright closure of the Department of Education.

It's unclear whether RIFs will resume when the CR expires and whether the administration will once again order agencies to prepare for layoffs should another shutdown occur. Agencies may be required to make more staffing or research cuts depending on the details of a congressionally approved FY26 budget. Civilian federal employees received a 1% pay increase on 1 January, lower than the inflation rate, which will financially strain workers. Any renewed push to reshape the federal workforce will bring more change, more uncertainty, and potentially more trauma to already beleaguered federal employees.

Table 1. Number of People Employed by the Federal Government

AGENCY OR DEPARTMENT	EMPLOYEES, SEPTEMBER 2024[a] [1]	EMPLOYEES, 1 OCTOBER 2025	TOTAL CHANGE[b]	PERCENT CHANGE
Total	2,313,216	2,101,535	**−211,681 [2]**	−9.2
Department of Education	4,209	1,700 [3]	**−2,509**	−59.6
Department of Health and Human Services (HHS)	92,620	79,717 [4]	**−12,903**	−13.9
Centers for Disease Control and Prevention (CDC)	12,820	13,635 [4]	**815**	6.4
Environmental Protection Agency (EPA)	16,839	15,166 [5]	**−1,673**	−9.9
Federal Emergency Management Agency (FEMA)[c]	24,348 [6] 24,348 [6]	24,925 (GAO) [6] 23,350 (DHS) [7]	**577** **−998**	2.4 −4.1
National Aeronautics Space Administration (NASA)	18,150	18,218 [8]	**68**	0.4
National Oceanic and Atmospheric Administration (NOAA)	12,434	10,466 [9]	**−1,968**	−15.8
National Park Service (NPS)	21,866	14,500 [10]	**−7,366**	−33.7
National Science Foundation (NSF)	1,717	1,402 [11]	**−315**	−18.3
U.S. Forest Service (USFS)	39,285	32,390 [12]	**−6,895**	−17.6
U.S. Geological Survey (USGS)	8,417	6,776 [13]	**−1,641**	−19.5

[a]Unless otherwise indicated, all employment numbers in this column are derived from source [1].
[b]This calculation of the total change in employment does not account for people hired between September 2024 and 20 January 2025 or fired after 1 October 2025 and is an underestimate. More details can be found in the text, and the most recent federal employment numbers can be found at https://data.opm.gov/.
[c]The Government Accountability Office (GAO) and Department of Homeland Security (DHS) cite different 1 June employment numbers for FEMA. Both have been included here for completeness.

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Table 2. Partial List of Executive Actions Impacting the Federal Science Workforce

DATE	NUMBER	NAME	IMPACT
20 Jan. 2025	14,148	Initial Rescissions Of Harmful Executive Orders And Actions	Rescinds many previous executive orders, including several that sought to create new jobs to combat the climate crisis, prevent sex- and gender-based workforce discrimination, and promote diversity in the federal workforce
20 Jan. 2025	14,151	Ending Radical and Wasteful Government DEI Programs and Preferencing	Ends "Equity Action Plans" instituted across federal agencies, terminates offices related to diversity, equity, and inclusion and environmental justice and related positions
20 Jan. 2025	14,158	Establishing and Implementing the President's "Department of Government Efficiency"	Established DOGE, which implemented mass layoffs, deferred resignations, and early retirement programs meant to shrink the federal workforce
20 Jan. 2025	14170	Reforming the Federal Hiring Process and Restoring Merit to Government Service	Instructs agencies to create federal hiring plans in accordance with administration priorities
20 Jan. 2025	14,171	Restoring Accountability to Policy-Influencing Positions Within the Federal Workforce	Reclassifies Schedule F employees (those employed in policymaking positions) to make them easier to fire
20 Jan. 2025	Memorandum	Hiring Freeze	No position vacant on 20 January may be filled, and no new positions may be created; exceptions: armed forces, immigration, national security, and public safety
20 Jan. 2025	Memorandum	Return to In-Person Work	Instructs agencies to terminate remote work arrangements and orders federal workers to return to in-person work

DATE	NUMBER	NAME	IMPACT
21 Jan. 2025	14,173	Ending Illegal Discrimination and Restoring Merit-Based Opportunity	Rescinds several previous executive orders that promoted diversity and inclusion in the federal workforce and for federal contractors
23 Jan. 2025	14,177	President's Council of Advisors on Science and Technology	Established a committee to advise the president on matters of science
24 Jan. 2025	14,180	Council to Assess the Federal Emergency Management Agency	Established a committee to evaluate how to reform FEMA
11 Feb. 2025	14,210	Implementing the President's "Department of Government Efficiency" Workforce Optimization Initiative	Directs federal science agencies to prepare for widespread reductions in force and reorganizations
24 Apr. 2025	14,284	Strengthening Probationary Periods in the Federal Service	Adjusts definition of probational period for new federal employees, aids in probationary period RIFs
23 May 2025	14,303	Restoring Gold Standard Science	Changes federal science standards in a way that reduces transparency and increases political oversight; requires agencies to submit plans on how they will comply with new standards
7 Aug. 2025	14,332	Improving Oversight of Federal Grantmaking	Formalizes a system of political appointees reviewing and approving research grants
15 Oct. 2025	14,356	Ensuring Continued Accountability in Federal Hiring	Extends the federal hiring freeze implemented on 20 January, with limited exceptions; also requires that hiring practices align with administration priorities

Curated Links

Key resources for this report and people interested in this topic:

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The State of the Science 1 Year On: *Academia and Research*

The past year was a shock to the U.S. higher education system. The coming year may see even more jolts.

Overview

In its first year, the second administration of President Donald Trump has taken numerous actions, in the form of both sweeping policy initiatives and directives targeted at specific groups or institutions, to reshape academia and higher education. Many have affected academic scientists' funding and ability to pursue their research across an array of disciplines; others have presented new challenges and burdens for current and aspiring students.

These actions have not gone unchallenged. Insiders and observers have called out threats to academic freedom and autonomy, and some schools, states, professional organizations, and individuals have pushed back on campuses and in the courts. Others have negotiated with the administration in their attempts to navigate the rapidly shifting landscape of U.S. higher education.

Funding Cuts Hit Research Hard

Among the highest-profile actions of the Trump administration aimed at academia have been its attempts to cancel or claw back billions of dollars in federal funding awarded to specific universities, including grants for scientific and medical research. The administration has also raised taxes on wealthy universities and, at times, threatened the tax-exempt status of some (most notably Harvard University) as punishments for alleged wrongdoings or ideological differences. These schools have responded in different ways to try to preserve their funding.

When the administration announced in March that it would review federal contracts and grants with Harvard—and soon thereafter demanded a litany of changes to the school's hiring, admissions, and operations policies to "maintain Harvard's financial relationship with the federal government"—Harvard rejected the demands, with university president Alan Garber saying the school would not "surrender its independence." The administration countered by freezing more than $2 billion in grants. Harvard then sued, arguing the administration was improperly overreaching with its funding cuts.

Most other universities threatened with funding pullbacks have at least partially acceded to administration demands to reinstate federal research money. Columbia University agreed in July to pay a $200 million fine and change hiring and admissions practices to restore $400 million in funding. Brown University similarly made a deal to preserve more than $500 million by agreeing to make administrative policy changes and to put $50 million toward state workforce programs.

Cornell University and Northwestern University later struck agreements too.

Federal judges have handed some victories to schools, victories that may be temporary if rulings are appealed. In response to lawsuits filed by faculty groups at the University of California, Los Angeles, and the American Association of University Professors (AAUP), for example, a judge issued several orders to block a $1.2 billion fine and restore hundreds of grants from the National Science Foundation (NSF) and National Institutes of Health (NIH). And in September, Harvard prevailed in its suit against the government.

Even with court victories and negotiated deals reinstating funding, the turmoil, uncertainty, and interruptions from monthslong—and in some cases ongoing—conflicts with the administration have slowed or stalled scientific research projects on campuses. They have also led numerous universities and colleges to cut spending through hiring freezes and layoffs.

Academic science has been under pressure not only through the administration's targeting of universities directly but also through its efforts to remake the federal grantmaking process, reduce the amounts and types of external research funded, and reduce budget appropriations for scientific research by more than 20% through large-scale cutbacks and reorganizations in federal science agencies. Unsurprisingly, the administration's actions are having ripple effects for higher education, business (among companies who supply scientific products, for instance), and public health.

Substantial changes at NSF, which provides roughly a quarter of federal funds for basic research at colleges and universities, began almost immediately upon Trump's return to office. Expert grant review panels were canceled in late January. By early Febru-

ary, staffers were reviewing keywords in thousands of existing projects to screen for any language that might conflict with early executive orders related to the recognition of genders and curtailing diversity, equity, and inclusion (DEI) efforts. Grant pauses and holdups continued through spring as reviews expanded to target awards for research on climate change, environmental and social justice, and misinformation. In May, NSF announced plans to abolish dozens of divisions. And in December, the administration said it would dismantle the NSF-sponsored National Center for Atmospheric Research (NCAR). The decision elicited strong criticism—and support for NCAR—from numerous scientists, including many attending AGU's Annual Meeting when the announcement was made.

Despite the upheaval, NSF still provided more than $8 billion in funding in fiscal year (FY) 2025, according to an analysis by *Science*. Yet the many changes in grant reviews and awards slowed the process considerably and created confusion both within the agency and among researchers who depend on it. The changes also led to the termination of thousands of existing grants as well as a 20% reduction in the number of new grants awarded.

The turmoil, uncertainty, and interruptions from monthslong conflicts with the administration have slowed or stalled scientific research projects on campuses.

Other agencies experienced upheavals in funding, grantmaking, and staffing. At NOAA, these upheavals included the proposal to eliminate the agency's primary research arm (the Office of Oceanic and Atmospheric Research) as well as funding for climate research facilities and grants. Further, multiple key datasets and data products used by scientists, decisionmakers, and companies—such as the Billion-Dollar Weather and Climate Disasters product and the Sea Ice Index (maintained by the National Snow and Ice Data Center)—have been discontinued or lost support. These losses prompted grassroots efforts by scientists and institutions both domestically and internationally, as well as a push in Congress, to preserve imperiled datasets.

At NASA, concerns over near-term funding and policy directions led to delayed calls for grant requests, a decrease in grants awarded, substantial staff cuts, and facility closures. Uncertainties about the status of ongoing and future science missions have also left the availability of mission datasets up in the air.

Meanwhile, the Department of Energy (DOE), the country's single biggest funding agency for physical science, is collapsing six scientific panels into a single Office of Science Advisory Committee. The new committee will, according to an agency statement, still include "leaders from academia, industry, and National Laboratories," but the news left some scientists concerned about losing important avenues of input to the agency and the possibility that political appointees may have greater say over DOE science.

At the EPA and NIH, too, significant reductions in force, uncertainty stemming from proposals to end data collection (e.g., through EPA's Greenhouse Gas Reporting Program), and changes and cutbacks in grantmaking are affecting research inside and outside these agencies. EPA and NIH each ended hundreds of awards, most supporting work on administration-targeted topics such as environmental justice, climate, DEI, and transgender health.

However, federal judges halted some grant terminations, and NIH agreed to review grant proposals that were previously denied, withdrawn, or frozen because of administration directives.

To go along with the thousands of individual research projects lost or limited by terminated grants, cuts at federal agencies have also hit projects involving and serving scientists across sectors. Support has been pulled for, among other projects, the Cosmic Microwave Background Stage 4, which would have built new radio telescopes to detect clues about the origins of the universe, as well as the country's only icebreaker supporting Antarctic research.

And in April, the government announced it was canceling funding for and releasing scientists involved in producing the next National Climate Assessment (NCA), due to be released in 2028. Published quadrennially through the U.S. Global Change Research Program (which the administration also ended), the previous five NCAs represented the consensus, science-based evaluation of how climate change is and will continue affecting the country's environment, economy, and people. In response to the cancellation, AGU and the American Meteorological Society announced they were partnering to create a special research collection "to sustain the momentum of the sixth National Climate Assessment almost a year into the process."

New Obstacles for Students

A signature goal of Trump's second administration—and one that was aggressively advanced during its first year—is to dismantle the Department of Education (ED) as much as possible.

In mid-February, Linda McMahon, during her confirmation hearing to become secretary of education, signaled how the administration would aim to relocate ED programs to other departments. That announcement came on the heels of hundreds of millions of dollars in cuts to an ED office track-

ing student progress and Trump saying he wanted McMahon to "put herself out of a job." In March, an executive order directed McMahon to "facilitate the closure" of ED.

Authority to abolish the department ultimately rests with Congress, but the administration has nonetheless been able to push its agenda forward through dramatic cuts and reorganizations. It reshaped department advisory boards, for example, such as those focused on education science and the accreditation of higher education institutions. The administration also ended funding to grant programs designated specifically for minority-serving institutions and selectively terminated or rejected grants to schools that mentioned DEI in their grant applications.

In November, ED said it would move several offices, including the Office of Postsecondary Education, to the Department of Labor (DOL). Critics argued that moving programs does little to clear red tape and instead imperils services because DOL is not equipped to run them.

Disruptions to federal education funding are not limited to ED. After NSF gave out far fewer awards than usual through its Graduate Research Fellowship Program (GRFP) in the spring, for example, its months-delayed release of guidance for the next round of awards caused substantial confusion among would-be applicants. When the GRFP guidance was released in September, students learned they had less time than usual to complete applications and that second-year Ph.D. students were no longer eligible to apply.

Many of the Trump administration's actions regarding higher education and academic research have been aimed at pressuring the administrators and faculty to reshape their schools' curricula and programming.

The major shift in GRFP policy left thousands of budding scientists—some of whom purposefully waited until their second year of graduate school to apply to improve their chances of success—without an opportunity to even be considered. Earlier in the year, funding uncertainties at NSF also frustrated undergraduates as the agency reduced support to schools through its Research Experiences for Undergraduates program.

The One Big Beautiful Bill, signed into law in July, as well as subsequent decisions made significant changes to student loan and loan forgiveness plans, including borrowing maximums, the types and lengths of loan repayment plans available, and student eligibility for Pell Grants. And even before July, administration moves to slow or stop the application process for loan forgiveness under certain conditions led to new confusion for borrowers and drew a lawsuit from the American Federation of Teachers, which resulted in a settlement to resume processing loan forgiveness applications.

International students already in the United States or looking to apply have found themselves in limbo as well because of the administration's approaches to immigration, research security, and other concerns. Early in the year, alongside incidents of international students being arrested and detained, the administration revoked visas for more than 1,500 students. These actions sowed confusion and fear among the nation's international student body, which numbers more than 1 million. International students account for only about 6% of enrollment in U.S. colleges but make up the majority in many graduate science, technology, engineering, and mathematics fields.

Even after restoring most of the canceled visas in April, the administration suggested it would continue pursuing revocations. Indeed, just a month later it announced it would temporarily stop scheduling interviews for new student visas and would start revoking visas for Chinese students studying in "critical fields" out of concern that these students' access to U.S. training and funding were benefiting China's government.

These measures appear to have had a chilling effect on the interest or ability of students from abroad to study in the United States. International student applications dropped 9% compared to the prior year, according to the Institute of International Education, and the size of the international student body in graduate programs dropped by 12%.

The new obstacles for both domestic and international students, combined with lost funding and research support, contributed to decisions by graduate programs at many schools to scale back or altogether forgo admissions of new students. "If this keeps up," one scientist told *Nature*, "it would be really devastating for the field, because this is where the next generation of experts comes from."

Fears for Academic Freedom

Many of the Trump administration's actions regarding higher education and academic research have been aimed at pressuring administrators and faculty to reshape their schools' curricula and programming. Critics saw these actions as open threats to academic freedom.

In May, Trump issued an executive order on "Restoring Gold Standard Science." It calls out a supposed crisis of public confidence in science amid perceived misuses of data and purportedly seeks to bolster re-

search that is reproducible and transparent. Although these are widely accepted qualities of good science, critics argued the order would only undermine confidence in science while opening the door to greater administration control over federally funded research.

In August, Trump issued another, more focused executive order on "Improving Oversight of Federal Grantmaking," which stipulates that senior political appointees review and approve new funding opportunities and grant applications.

When the president threatened to punish university accrediting organizations for focusing on DEI-related criteria, the AAUP accused the administration of weaponizing the accreditation process and called it "another attempt to dictate what is taught, learned, said and done by college students and instructors."

Trump's 2025 campaign to reshape universities reached a crescendo in early October when it sent letters to nine schools asking them to sign a "Compact for Academic Excellence in Higher Education" in exchange for "multiple positive benefits." The compact comprised a long list of administration goals, such as banning consideration of demographics in admissions, aid, and hiring decisions; ending "institutional units that purposefully punish, belittle, and even spark violence against conservative ideas"; and recognizing strict definitions of gender. The compact's touted benefits included greater access to funding, higher payments for overhead costs, and administration acknowledgment that schools "are complying with civil rights law and pursuing Federal priorities with vigor."

Trump's campaign to reshape universities reached a crescendo in early October when it sent letters to nine schools asking them to sign a "Compact for Academic Excellence in Higher Education."

Seven of the nine schools rejected the letter soon after receiving it, and reactions from the higher education community to the compact, which the administration indicated could be extended to any interested schools, were overwhelmingly negative.

Many university leaders, education organizations, and faculty and student groups voiced alarm, for example, about clear infringements on academic freedom (the document explicitly states that "academic freedom is not absolute") and the fact that the compact would reward schools on the basis of loyalty to the administration rather than merit. Some schools, however, engaged with the administration to provide feedback about the initial compact and have been reluctant to share details of their positions; a few expressed interest in signing it.

The administration has also sought to oust specific administrators and pressure researchers into compliance. The administration's attacks on University of Virginia president James Ryan over the school's DEI programming, for example, led Ryan to resign in June. Individual academics, particularly those researching misinformation, cybersecurity, and other politically sensitive topics, were also targeted and, at times, succumbed to pressure to leave their positions.

Another thrust of the pressure campaign on researchers has involved examining and limiting their freedom to work with foreign scientists, as well as influencing foreign scientists themselves. In May, for example, NIH announced a new policy barring scientists from providing funding—in the form of subawards from grants given to U.S. researchers—to international collaborators. In the fall, Congress considered legislation amounting to an outright prohibition on U.S. scientists collaborating with researchers or advising students "affiliated with a hostile foreign entity," specifically China, Iran, North Korea, and Russia.

That bill drew substantial pushback from academia and failed to gain traction, although in December, the House passed the 2026 National Defense Authorization Act, which still includes security restrictions for U.S. researchers.

Some foreign scientists themselves have been subjected to sweeping travel bans and denials of entry into the United States for allegedly criticizing the Trump administration. Scientists abroad who receive U.S. funding were sent surveys probing whether their research aligns with the administration's agenda. In addition, foreign scientists seeking employment in the United States, including as postdocs and faculty at universities, now face a much steeper barrier to entry because of a new policy requiring employers to pay $100,000—instead of just a few thousand dollars—to secure an H-1B visa for their would-be hire.

Meanwhile, numerous U.S.-based researchers have contemplated trying to find employment in other countries, raising widespread concerns of a brain drain from the country's scientific enterprise. In March, *Nature* reported that 75% of roughly 1,600 respondents to a poll they conducted said they were "considering leaving the United States following the disruptions prompted by Trump." And spurred by interest from other countries—from Canada to Europe to Asia—to entice U.S scientists with opportunities for employment abroad, at least some scientists have departed.

Resolute Resistance

The array of actions taken by the Trump administration to impose its will on the academic community

prompted strong resistance and a multitude of rebuttals, many taking shape in courtrooms.

Major private and public universities initiated or joined lawsuits to try to win back canceled grants and contracts, challenge caps on reimbursements of research overhead costs, and fight limitations on enrolling international students.

Organizations representing higher education—such as AAUP, the Association of American Universities, and the American Association of Colleges and Universities—issued multiple statements about executive orders and the administration's punitive actions against universities. Some organizations also led legal challenges.

Major private and public universities initiated or joined lawsuits to try to win back canceled grants and contracts, challenge a cap on reimbursements, and fight limitations on enrolling international students.

State governments, too, joined forces to fight the administration's education cuts in court. Some have also tried to fill gaps created by the cuts, such as in Oregon, where lawmakers looked to preserve and expand education programs like the state's Tribal Student Grant program.

In many cases, faculty themselves stepped up to call individuals and their institutions to action and take the government to court. In April, more than 1,900 scientists—all elected members of the National Academies of Sciences, Engineering, and Medicine—signed an open letter calling out the "real danger" posed to science by the administration's actions. The same month, faculty groups at Big Ten universities began issuing resolutions asking their institutions to enter a mutual defense pact under which they could pool legal and financial resources in the event the administration targeted any of the schools.

Individual researchers have also instigated lawsuits to fight grant terminations they said were unjust and unexplained. Four scientists from institutions across the country, for example, joined with several organizations to file suit over terminated NIH and NSF grants. (An initial U.S. District Court ruling in their favor was partly put on hold by the Supreme Court.)

In another case, a federal judge sided in June with a small group of researchers from the University of California, Berkeley, who, aided by colleagues from the university's law school, sued over their own canceled grants. Alongside these legal challenges, other researchers have entered the fray by helping to track and organize information about terminated grants and by ramping up efforts to communicate about their science directly to the public.

What's on the Horizon?

The first year of the second Trump administration was a colossal shock to the higher education system in the United States. The second year may follow suit. The lasting effects of the record-long 43-day federal shutdown will not be clear for weeks or months. The shutdown cut off communications with furloughed federal researchers, halted processing of grant applications, and, in some cases, limited researchers' ability to draw existing grant funds.

Uncertainties around funding have been compounded by the fact that Congress has not settled on a full FY2026 budget and that it faces the potential for another shutdown in late January. House and Senate versions of the budget include substantially higher funding for science than was included in Trump's budget request, but specific allocations remain unknown.

Furthermore, numerous lawsuits challenging the legality of recent executive orders and administration efforts to cancel grants, curtail specific fields of research, and limit who is eligible for future funding—and even just to be on U.S. campuses—are still working their way through the courts. Rulings to date have predominantly been in favor of plaintiffs, a good sign for higher education institutions, but their ultimate outcomes are yet to be seen.

Curated Links

Key resources for this report and people interested in this topic:

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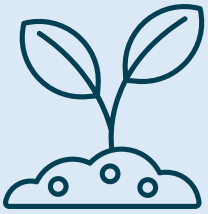
The State of the Science 1 Year On: *Environment*



Administration policies have eliminated funding sources, review processes, and pollution limits designed to protect the nation's land, water, and air.

Overview

Both on the campaign trail and during his time in office, President Donald Trump has spoken about wanting clean air and water for Americans. He even established a Make America Beautiful Again Commission and called himself an environmentalist.

He has also rescinded executive orders from past presidents aimed at protecting the environment, made "drill, baby, drill" one of his catchphrases, and described the concept of a carbon footprint as "a hoax made up by people with evil intentions."

Since Trump took office in his second term, his administration has worked to roll back environmental protections. This work has included efforts to fast-track permits for mining, oil and gas exploration, and artificial intelligence infrastructure; changing pollution limits and reporting requirements; curtailing protections for public lands; and even narrowing the scope of the Endangered Species Act.

Air and Water Quality

Scientists play an important role in monitoring and protecting the quality of our nation's air and water. Funding and staffing cuts have made this work increasingly difficult to do.

The One Big Beautiful Bill (OBBB), Trump's omnibus spending bill for fiscal year 2026, suggests eliminating the research arm of NOAA and closing all weather and climate labs. It also includes a $2.46 billion cut to EPA's Clean and Drinking Water State Revolving Funds, $1.01 billion in cuts to categorical grants that fund air and water quality efforts, and $721 million in cuts to the Department of Agriculture's Rural Development Program, which includes support to repair water systems damaged by disasters.

"Trump's plan to virtually eliminate federal funding for clean, safe water represents a malevolent disregard for public health," said Food & Water Watch executive director Wenonah Hauter in a statement.

The budget also eliminates the launch of a planned NOAA satellite, part of Geostationary Extended Observations, that would measure pollution, including from wildfire smoke, from space.

Independent of the proposed budget, the Trump administration also ordered the closure of 25 U.S. Geological Survey (USGS) Water Science Centers, which monitor U.S. waters for flooding and drought, as well as manage supply levels.

At NOAA's Great Lakes Environmental Research Laboratory, funding cuts have made it difficult for staff to purchase equipment. A 35% staff cut reduced scientists' capacity to monitor the region's harmful algal blooms, which can cause illness in humans and death in animals.

A common tactic by the Trump administration has been to shift pollution limits (or proposed limits) and to reduce the requirements for some entities to self-report pollution statistics. For instance, in May, the EPA announced that it would reconsider the limits for four per- and polyfluoroalkyl substances (PFAS) in drinking water. PFAS are "forever chemicals" linked to developmental delays in children, cancer, and reduced fertility. Months later, however, the EPA announced that it would uphold a Biden era rule that holds polluters accountable for PFAS and perfluorooctanoic acid contamination.

In September, the administration proposed narrowing the scope of safety review for some chemicals already on the market, including formaldehyde and asbestos, a move praised by the chemical industry.

Also in September, provisions in the House and Senate annual Defense authorization bills sought to delay the phaseout of PFAS in the Pentagon. Jared Hayes, a senior policy analyst at the Environmental Working Group, told *The Hill* that such a delay would increase contamination, "essentially condemning more defense communities and another generation of service members." Lawmakers across the country questioned the move in a formal letter to Defense Secretary Pete Hegseth. The Department of Defense (now also known as the Department of War) also changed the timeline for cleanup of PFAS at more than 100 military sites around the country—in some cases by up to a decade, reported *The New York Times*.

In September, the EPA withdrew a proposed rule that would have tightened water pollution limits

for slaughterhouses, which in 2019 released more than 28 million pounds (almost 13 million kilograms) of nutrients that can contaminate drinking water.

The cleanup of an oil spill in Louisiana, which left some residents' homes and water supply contaminated, faced delays in September, in part because of funding cuts. A letter to the EPA from the Louisiana Environmental Action Network stated that people were reporting negative health effects daily.

In November, the EPA ended a Biden era rule that strengthened regulations on soot. The EPA previously predicted that the change would prevent up to 4,500 premature deaths in 2032, when the rule was scheduled to be fully in effect.

Then, in December, the EPA proposed a revision to its assessment of the health risks of formaldehyde that would double the amount of the cancer-causing toxin considered safe to inhale.

Public Lands and Waters

Reorganization of the Department of the Interior, budget cuts to programs intended to protect national parks and federal lands, and narrowing the scope of the Endangered Species Act have threatened public lands, waters, and wetlands in the United States—and the creatures that call them home.

"This disastrous decision to undermine our nation's bedrock environmental law means our air and water will be more polluted, the climate and extinction crises will intensify, and people will be less healthy."

Texas oil executive Tyler Hassen was tasked with reorganizing the Interior Department in May. After leading a massive consolidation effort, he left the department in November, as reported by *E&E News*. Plans to lay off more than 2,000 workers were temporarily paused by a federal judge in October.

In June, the Department of Justice reversed a 1938 legal opinion by determining that Trump has the authority to abolish protected areas that past presidents designated as national monuments. Also in June, a Republican senator added a proposal to the OBBB that would allow the U.S. Forest Service and Bureau of Land Management to sell off 2 million to 3 million acres (1.2 million hectares) of federal land. The proposal faced widespread backlash and was promptly removed.

In the summer, the U.S. Department of Agriculture proposed rescinding the 2001 Roadless Area Conservation Rule, which protects about 45 million acres of National Forest System lands from road construction, reconstruction, and timber harvests. Nearly 224,000 people and organizations spoke out about the issue during the public comment period. According to the Center for Western Priorities, an environmental group, about 99% of the comments opposed the repeal.

"The Roadless Rule is one of the best ideas the U.S. Forest Service has ever had and repealing it is one of the worst," said Vera Smith, national forests and public lands program director at Defenders of Wildlife, in a statement.

Interior Secretary Doug Burgum also proposed rescinding a public land management rule that made conservation a "use" of public lands in the same way that drilling and other extractive industries are considered uses.

The government is also transferred 760 acres of public land in California to the Navy to establish a "National Defense Area" in December and is considering giving 775 acres of the Lower Rio Grande Valley National Wildlife Refuge in Texas to SpaceX.

The administration has also aimed to reduce or eliminate protections for U.S. waters and wetlands. In April, Trump signed an executive order opening a protected area of the central Pacific Ocean to commercial fishing. In November, the administration announced a proposal to redefine "waters of the United States" in a way that would eliminate protections for about 85% of the nation's wetlands and more than 70% of the Colorado River's flow sources.

Rollbacks in protections for public lands and waters often come with harms for the creatures living in these habitats, but the current administration has also introduced legislation that could have more direct effects on plants and animals. In August, the Department of Homeland Security waived protections provided by the Endangered Species Act and other statues in Texas's Lower Rio Grande Valley National Wildlife Refuge to expedite construction of a border wall.

In April, the Department of the Interior proposed redefining "harm" under the Endangered Species Act. The new definition would include only taking direct, intentional action to kill or injure endangered or threatened species. It would no longer include "significant habitat modification or degradation" that leads to such ends, which was included in the 1973 passage of the act and upheld in a 1995 ruling.

"What they're proposing will just fundamentally upend how we've been protecting endangered species in this country," Noah Greenwald, codirector of endangered species at the Center for Biological Diversity, told *The Los Angeles Times*.

Fast-Tracking Permits

The Trump administration has reduced or eliminated many existing procedures meant to limit the environmental harm of development projects.

The 1970 National Environmental Policy Act (NEPA) requires federal agencies to assess the environmental effects of potential projects. Environmental impact statements are required if a proposed action is expected to have a "significant effect" on the environment. The act includes a public comment period, but 2025 changes to NEPA procedures have shortened notice and public comment periods.

In January, the administration finalized plans to rescind NEPA-related regulations.

In May, the Supreme Court limited the scope of environmental reviews with a ruling about a proposed railway in Utah.

"This disastrous decision to undermine our nation's bedrock environmental law means our air and water will be more polluted, the climate and extinction crises will intensify, and people will be less healthy," Wendy Park, a lawyer with the Center for Biological Diversity, said in a statement.

"It feels like we're going back in time…I don't understand why they are giving pollution passes that affect people's health."

In July, Trump issued an executive order to accelerate federal permitting of infrastructure for data centers, which can use more than a million gallons of water per day. In August, another executive order authorized the secretary of transportation to "eliminate or expedite" environmental reviews for commercial space launch and reentry permits.

The administration has also made efforts to expedite permitting for mining projects, vowing to reduce a sometimes yearslong process down "to just 28 days at most." In May, the Interior Department announced plans to complete the environmental assessment for the Velvet-Wood mine project in Utah in just 2 weeks. Construction of the mine, which is set to extract uranium and vanadium, began in November.

"Beautiful Clean Coal"

According to the 2024 Global Carbon Budget, coal is responsible for 41% of global fossil carbon dioxide emissions. It also emits chemicals that are harmful to human health, such as sulfur dioxides and heavy metals. Reliance on coal in the United Staes has been falling for decades: In 2001, about 51% of the country's net electricity generation came from coal. By 2023, the figure had dropped to 16.2%.

However, a boom in building artificial intelligence data centers, supported by the administration, threatens to reverse the decline, *E&E News* reported.

An April executive order focused on reviving the coal industry laid out plans to enable coal mining on federal lands and revise regulations aimed at transitioning the country away from coal production. The order also designated coal as a critical mineral.

The same month, the administration exempted at least 66 coal plants from Biden era requirements to reduce emissions of toxins such as mercury and arsenic.

Georgia resident Andrea Goolsby told *E&E News* she was relieved when Georgia Power announced the retirement of a nearby coal plant in 2022. But in January, the utility company announced that the plant would stay open until 2039, and in April, it became one of the 66 plants exempted from emission reduction requirements.

"It feels like we're going back in time," Goolsby told *E&E*. "I don't understand why they are giving pollution passes that affect people's health."

In November, the EPA proposed delaying the closure of coal ash ponds—which are leaking materials such as arsenic and lead into surrounding groundwater—at 11 coal power plants until October 2031.

A March executive order demanded action to increase production of minerals more generally, including uranium, potash, gold, and critical minerals. In November, that list of critical minerals grew by 10, bringing the total to 60. Among the additions were copper, lead, silver, and uranium.

The administration has also worked to expand the scope of where mining occurs.

A provision in the OBBB, for instance, aimed to end a 20-year moratorium on mining in Minnesota's popular Boundary Waters Canoe Area Wilderness. The language was removed by a House committee before the OBBB was signed into law, but the Trump administration announced plans to end the moratorium anyway.

The Trump administration's efforts to expand mining stretch beyond land and, indeed, beyond the borders of the United States. An April executive order called for expediting the permitting process for companies to mine the deep sea in areas both within and beyond national jurisdiction.

In late December, the administration announced it was formally considering permit applications for seafloor mining and that it would hold public hearings on the applications in late January 2026.

Looking Ahead

The Trump administration announces changes to environmental policy almost daily, and their effects often don't manifest immediately.

In November, the Energy Department posted a revised organizational chart that among other changes, no longer displays the Office of Clean Energy Demonstrations. It remains to be seen how this cut will affect the mission of the department, which has

seen a roughly 20% reduction in its workforce over the past year, according to *The New York Times*. The same month, the Interior Department proposed opening up the coastal waters of California and Florida to offshore oil drilling, a plan that was met with opposition by the governors of both states.

Potential health and economic costs aside, scientists and other stakeholders are concerned that the "continued politicization of science-based policy making threatens our environmental resilience, particularly in the face of climate change," wrote hydrologist Adam Ward.

Curated Links

Key resources for this report and people interested in this topic:

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Conclusion

For the scientific community, the swaths of change made by the Trump administration have been threaded with layoffs and reductions in force across agencies, organizations, and universities. The administration's prerogatives have resulted in persistent questions about organizational objectives, professional processes and procedures, and, ultimately, career stability.

For the global scientific enterprise and the place of the United States in it, outcomes of the Trump administration's radical changes of policy are themselves uncertain. Fewer job opportunities and altered approaches to education and immigration may mean fewer American and international scientists will choose to work in the United States. Loosened standards for pollution may have far-reaching impacts for the air we breathe, the water we drink, and the earth on which we stand.

Many of the administration's policy changes and budget cuts have not yet been implemented, and its actions have not gone unchallenged. Many constituents are encouraging their representatives to support science more strongly as Congress develops a budget for fiscal year 2026.

Still, the future of federal career paths, funding, and climate-related legislation likely lies in the courts, not the ballot box. To that end, professional and labor organizations, schools, states and regional groups, and even individuals have filed lawsuits to force the administration to reconsider policies and RIFs that may reduce the efficacy and immediacy of science in the United States.

For a full list of acronyms used in this report, please see here.

To follow key concepts used across all sections of this report, please consult our index here.

Consult Eos's Science Policy Tracker to stay current with the latest news concerning science and the scientific community in the United States and around the world.

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Appendix I: Index

Appendix II: List of Acronyms Used in the Report

AAUP: American Association of University Professors
AGU: American Geophysical Union
AMS: American Meteorological Society
ANWR: Arctic National Wildlife Refuge
BRIC: Building Resilient Infrastructure and Communities
CDC: Centers for Disease Control and Prevention
COP: Conference of the Parties of the United Nations Framework Convention on Climate Change
COVID-19: Coronavirus Disease 2019
CR: Continuing Resolution
DEI: Diversity, Equity, and Inclusion
DHS: Department of Homeland Security
DOGE: Department of Government Efficiency
DOE: Department of Energy
DOI: Department of the Interior
DOL: Department of Labor
ED: Department of Education
EO: Executive Order
EPA: Environmental Protection Agency
EU: European Union
FEMA: Federal Emergency Management Agency
FY26: Fiscal Year 2026
GAO: Government Accountability Office
GRFP: Graduate Research Fellowship Program
HIV: Human Immunodeficiency Virus
HHS: Department of Health and Human Services
IPCC: Intergovernmental Panel on Climate Change
JAMA: Journal of the American Medical Association
mRNA: Messenger Ribonucleic Acid
NASA: National Aeronautics and Space Administration
NCA: National Climate Assessment
NEPA: National Environmental Policy Act
NIH: National Institutes of Health
NIOSH: National Institute for Occupational Safety and Health
NOAA: National Oceanic and Atmospheric Administration
NPR: National Public Radio
NPS: National Park Service
NSF: National Science Foundation
NWS: National Weather Service
OBBB: One Big Beautiful Bill
OMB: Office of Management and Budget
OPM: Office of Personnel Management
PBR: President's Budget Request
PFAS: Per- and Polyfluoroalkyl Substances
REU: Research Experiences for Undergraduates
RIF: Reduction in Force
UN: United Nations
UNFCCC: the United Nations Framework Convention on Climate Change
USAID: U.S. Agency for International Development
USFS: United States Forest Service
USGS: United States Geological Survey
WHO: World Health Organization

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