



Union of
Concerned Scientists

UCS

Catalyst

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Throwing Sand in the Gears


*Using every tool we
have, UCS is fighting
the administration*

Science Is Rising: Join Us

**A Firsthand Account
of Fear and Hope in
Minneapolis**

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It's Time for Science to Rise



Gretchen Goldman (center) and other UCS staff attend the Stand Up for Science rally in Washington, DC, in early March. Goldman also spoke at the event, urging attendees to hold the Trump administration accountable.

By Gretchen Goldman

When a president and his cabinet secretaries make it clear from their first day in office that they won't listen to experts or tolerate dissent on any issue, it's perhaps inevitable they'll eventually lead our country into chaos and violence.

And when our leaders make decisions that affect us all without relying on the accumulated knowledge and experience of experts including scientists, they're inevitably influenced instead by their own interests: power, money, access, even spite.

President Trump and the political appointees in his second administration have engineered violence and suffering on our own streets. They've rejected decades of diplomacy to start an unprovoked, unnecessary war in the Middle East that has killed thousands of innocent people and threatened the security of millions more. They've invented new threats to our safety while ignoring, denying, and worsening the existing threat of climate change and its overlapping, cumulative effects on people across the country (p. 4), leaving many in harm's way from floods, storms, and extreme heat.

Every taxpayer dollar spent on wars overseas and immigration crackdowns on our streets—as my colleague Sarah Goodspeed points out in her searing account from her home city of Minneapolis (p. 18)—is a dollar *not* spent on climate adaptation, vaccine research, clean energy, public health, disaster recovery, reducing pollution from cars and trucks (p. 22), keeping our soil and water clean (p. 12), and protecting the most vulnerable people in our society.

This is not leadership. And as long as this administration follows this dangerous path, we're going to call out these actions and do what we can to slow and stop them (p. 6). That's why I'm excited to share the launch of a bold new initiative—Science Rising—to meet this moment (p. 16). Through Science Rising, we're responding to what's happening in the moment, and creating a vision for what the future should look like when this administration is history and we can rebuild.

The Union of Concerned Scientists is staying in the fight and working for that better future. We're so glad you're with us in these difficult times. {C}

Gretchen Goldman is president and CEO of UCS. Read more from Gretchen on our blog, *The Equation*, at blog.ucs.org.

UCS ON THE RECORD . . . AND HAVING AN IMPACT

“EPA’s repeal of the Endangerment Finding and safeguards to limit vehicle emissions marks a complete dereliction of the agency’s mission to protect people’s health and its legal obligation under the Clean Air Act. This shameful and dangerous action by the Trump administration and EPA administrator Zeldin is rooted in falsehoods, not facts, and is at complete odds with the public interest and the best available science.”

GRETCHEN GOLDMAN, UCS president and CEO, in a Guardian story on the EPA’s repeal of both the Endangerment Finding—a legal and scientific consensus that many climate and public health policies are based on—and vehicle emissions standards (see p. 6)

“It’s not about individuals and how much you’re driving. It’s about the investment the state makes in our infrastructure.”

KEVIN SHEN, UCS analyst, on Boston25 news, on a proposed bill in the Massachusetts legislature that would allow the Commonwealth’s transportation agency to study how to reduce driving and expand access to other forms of transit

“[T]hey all fully concede that I’ve described it correctly. They just say there’s nothing wrong with that.”

MIKE JACOBS, senior manager for the UCS Climate and Energy Program, describing for energysage.com how energy utilities build new infrastructure for Big Tech companies seeking to power the AI boom, but bill households for the cost

“The Trump administration is not simply refusing to face the reality of climate change we are experiencing, it is actively lying about the science and undermining our nation’s federal scientific resources. It is acting like there’s no tomorrow by trying to force even more burning of coal, oil, and gas, which will cost lives and make the Earth a harder place to live in the years to come.”

CARLOS MARTINEZ, senior UCS scientist, in a Guardian article on how the United States is not responding to climate change, even as 2025 was declared the third-hottest year on record

“Asking scientists to spy on and report on their fellow co-authors [is a] classic hallmark of authoritarianism . . . [and a] throwback to McCarthyism.”

JENNIFER JONES, director of the Center for Science and Democracy at UCS, reacting in ProPublica to the Trump administration’s directive for employees at the US Department of Agriculture to watch for “subversive or criminal activity” among international scientists who collaborate with the agency

“When national protections fail, state governments and courts become . . . essential venues for addressing harm and ensuring accountability in these spaces. The federal government stepping back from regulating climate pollution doesn’t make the problem disappear.”

L. DELTA MERNER, associate director of the UCS climate accountability campaign, in a Guardian story about the fossil fuel industry’s legal exposure in the aftermath of the Endangerment Finding’s repeal



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Danger Season Is Here. UCS Is Ready.



From heat waves and floods to storms and wildfires, climate change is bringing us more extreme weather each year—and this year is no exception. UCS is working to keep people informed on the latest science, and ensure the Trump administration does its job to prepare and protect communities when disasters strike.

Record warm winter temperatures in the western United States are raising concerns about particularly intense weather in the months ahead. Experts at the Union of Concerned Scientists are closely tracking the influence of climate change on potentially extreme weather events—and the Trump administration actions that hamper our ability to face them.

Danger Season—the period between May and October when climate change brings the most harmful weather extremes—will again be exacerbated by the Trump administration’s actions to degrade federal science and emergency response capacity. As the administration creates a baseline of authoritarian stress across

many US communities, its actions compound the ongoing heightened climate-related risks for heat waves, floods, storms, wildfires, and drought while continually attacking key agencies and policies that would help us prepare for the disasters they bring. The administration’s actions also contribute to a worsening affordability crisis.

As spring warms the continent, nine states in the western United States just recorded their hottest winter ever. That heat had major impacts on mountain snowpack, which is near or at record low levels, signaling critical water supply challenges. On top of this, most of the contiguous United States is forecast

to experience above-average heat this spring through fall. This type of heat, combined with widespread drought conditions, raises the risk of an intense wildfire season. Over the course of the summer, Earth is also expected to enter a period of El Niño, which is known to drive a range of acute climate conditions in the United States and around the world.

In a time where media is cutting back on climate change coverage, UCS is working to keep people informed and ready to take action to address this ongoing crisis. Our scientists are linking extreme weather events to the changing climate in real time; learn more at act.ucs.org/sp26-danger-season.

UCS Engineer Named State Advisor



Earlier this year, Paula García, senior manager of energy justice research and policy at UCS, was invited by Massachusetts Governor Maura Healey to join the state's Environmental Justice Council (EJC). This group advises the state's secretary of energy and environmental affairs on environmental justice policies, standards, and decisions that prioritize communities in harm's way from pollution and climate impacts, and ensure these communities benefit from the transition to clean energy.

The EJC includes representatives from Indigenous tribes, environmental justice-focused nonprofits, academia, and others. In her many years with UCS, García has worked with grassroots organizations in Massachusetts to unlock access to the benefits of renewable energy and reduce air pollution in vulnerable communities, and this appointment aligns with her passionate commitment to a fair and just transition to a cleaner energy future.

Photos: Nick Davis-Iannaco/UCS (Paula García);
Drew Altizer (Harold Segelstad)

Data Center Electricity Costs Draw National Attention

For months, UCS has been sounding the alarm about an unsustainable boom in energy-hungry data centers, driven by big technology companies selling AI products that require massive amounts of data processing. More data centers mean more power generation, and instead of tech companies paying their fair share for electricity, UCS energy analysts have shown that utilities and other power managers are passing the costs onto consumers—because current regulatory practices allow them to do so.

In two reports released over the past year, UCS has built a strong case for new policies that will prevent the data center boom from raising electricity bills, straining the electricity grid,

and increasing reliance on polluting fossil-fueled power. The media and decisionmakers are taking notice: UCS findings and recommendations were cited widely, including in *Wired* and the *Guardian*, and legislation has been filed in Congress and several states to address these issues. For example, US Senator Chris Van Hollen's proposed Power for the People Act—which includes direct input from UCS staff—would prioritize clean energy generation to meet demand, and ensure that the corporations driving this demand assume a share of the costs. This bill is a federal analogue to similar legislation in states across the country. Visit act.ucs.org/sp26-data-centers to stay updated on these efforts.

ANNOUNCING A LEGACY MATCH FOR SCIENCE

Thanks to a generous and accomplished supporter, UCS is offering a matching gift opportunity throughout 2026 for anyone who will make, or has made, a legacy gift.

Harold Segelstad has dedicated his life to strengthening science in policy-making and protecting our planet's future. A retired nuclear physicist and renewable energy engineer, his philanthropy reflects his commitment to scientific integrity and a sustainable planet.

This passion led him to create the Legacy Match for Science: When you notify us of a gift in your will or other estate plan by December 31, 2026, Harold will match it with an immediate donation of up to \$20,000. Your legacy gift will support science-based advocacy for years to come while also advancing our work today.



UCS supporter Harold Segelstad

To learn more or activate your match, visit ucs.org/legacymatch or reach out to our Planned Giving team at (617) 301-8095 or plannedgiving@ucs.org.





SAND IN THE GEARS

*How UCS Is Jamming Up
the Trump Administration's
Anti-Science Agenda*

BY MICHELLE RAMA-POCCIA

Since President Trump took office, UCS has taken swift, targeted actions with every tool at our disposal to thwart the administration's anti-science and anti-democracy tactics. Using a multi-pronged strategy, we've fought—and continue to fight—to protect our rights, our health and safety, and vital scientific resources.

The Trump administration appears bent on dismantling policies on climate change, clean energy, and environmental justice. And in its march toward authoritarianism, it has trampled the rights of people of color, silenced opposition, started senseless wars, and even signaled its intention to nationalize voting in the United States—a potentially democracy-ending action.

We are not sitting idly by, watching as President Trump and his political appointees take our rights and government resources away. Instead, UCS is pouring sand in the administration's gears: filing lawsuits, organizing protests, and broadcasting the science-backed truth about key issues to legislators and the public. What follows is a rundown of some of the key actions we've taken to slow down and stop the administration's plans.



President Trump, surrounded by agency and congressional allies, announces lower fuel economy standards in the Oval Office on December 3, 2025.

1. STOPPING FAKE CLIMATE SCIENCE

When the Trump administration developed a report in secret, authored by people known to reject the scientific consensus on climate change, UCS helped activate the scientific community to respond. We joined a lawsuit to block the report's use and challenge the clearly illegal process by which it was developed.

The administration's plan was to set down climate disinformation as government record, thus providing a basis for doing away with the US Environmental Protection Agency's (EPA) bedrock 2009 Endangerment Finding—the science-backed position that global warming emissions endanger public health.

In response, UCS published an op-ed and blog posts condemning the administration's sham report and its plans to revoke the EPA's mandate on climate pollution, and our experts were interviewed by national media. Along with the Environmental Defense Fund (EDF), we also filed a lawsuit to block any use of the report—and a federal judge declared that the Trump administration violated federal law in secretly forming its Climate Working Group. The administration subsequently moved to dissolve the group. As part of that lawsuit, the administration was also compelled to turn over more than 100,000 documents, which UCS and EDF made public.

2. CHALLENGING THE ENDANGERMENT FINDING REPEAL

UCS filed comments on behalf of our half-million supporters and our network of more than 22,000 experts voicing strong opposition to the EPA's proposed repeal of the Endangerment Finding and vehicle emissions standards. We also submitted a letter to the EPA signed by more than 1,000 scientists opposing the repeal and urging the agency to stop dismantling critical climate regulations and fulfill its mission to protect public health.

Following UCS and EDF's success in challenging the Trump administration's sham climate report, the EPA dropped all references to the report in its final rule—yet still went ahead with repealing the Endangerment Finding and vehicle emissions standards, despite lacking any scientific basis for doing so. This decision clearly favors fossil fuel interests while allowing the EPA to evade its responsibility for limiting the dangerous, costly impacts of climate change. UCS, along with a group of environmental, health, and science nonprofits, filed a lawsuit against the Trump administration in response to this unlawful and disastrous action.

3. EXPOSING SPECIAL TREATMENT FOR POLLUTERS

UCS published the analysis *Dirty Air, Dirty Deeds* last year that shines a light on the Trump administration’s laissez-faire attitude towards pollution. President Trump’s invocation of a provision in the Clean Air Act intended to be used only during national emergencies gives industries that emit hazardous air pollutants a two-year exemption from their responsibilities under the act. The administration told companies and plant operators that they could “apply” for this exemption just by sending an email to the EPA, with no official form or criteria.

Our interactive map (act.ucs.org/sp26-dirty-air) shows that more than one-third of US coal plants, chemical manufacturers, coke ovens, and other facilities have been largely exempted from multiple clean air rules that were put in place to protect communities from toxic air pollution. These legally dubious exemptions cut the public, and the hundreds of thousands of public comments that informed the law, out of decisions that affect public health.

UCS released a summary of the analysis in Spanish for outreach to some of the affected communities. We have also called on our supporters to contact their members of Congress and ask them to hold President Trump and the EPA accountable for unlawfully using these exemptions to give polluters a free pass.

4. PROTECTING HISTORY AND SCIENCE AT NATIONAL PARKS

Moved by our shared commitment to protect treasured parkland, preserve and share history, and promote scientific literacy and access, UCS and a coalition of other organizations filed a lawsuit challenging a Department of the Interior policy that is actively erasing history and science from US national parks. The suit followed a Trump administration executive action forcing national parks to remove many exhibits that discuss the history of slavery and enslaved people, civil rights, treatment of Indigenous peoples, climate science, and other core elements of our national experience—even though these exhibits share factually accurate and relevant US history and scientific knowledge.

The unlawful implementation of this executive order ignores the unique role national parks play in educating people about the history of the United States, and it contradicts the laws that created and govern the national park system.


5. CALLING OUT INDIFFERENCE TO DISASTER READINESS

UCS has focused significant efforts on defending the need, value, and staffing of the Federal Emergency Management Agency (FEMA), which President Trump stated his intention to eliminate early in his second term. We activated our supporters, which led 10,000 of our members to submit comments to the *Federal Register* opposing efforts to undermine FEMA and push the unfair burden of disaster recovery onto states.

We publicized the administration’s illegal cancellation and modification of FEMA grant programs, its politicization and reduction of disaster aid, its cuts to staffing and programs, and the incompetence of its political appointees that makes communities less safe. The attacks on FEMA are especially concerning during Danger Season—the period between May and October when climate impacts are most severe. Our extensive writing about the administration’s efforts to gut FEMA drew attention on Capitol Hill. Our policy team also submitted substantive comments to a House committee on a bill to reform FEMA and federal disaster assistance, which would make needed improvements such as returning FEMA to a cabinet-level agency, and ensuring disaster assistance reaches those who need it most.



UCS President and CEO Gretchen T. Goldman delivers remarks at the Stand Up For Science rally in Washington, DC on March 7, 2026.



**LAWSUITS,
OP-EDS,
LETTERS,
REPORTS,
PUBLICATIONS &
PROTESTS**

6. MONITORING ABUSES OF POWER

The second Trump administration came quickly out of the gate targeting federal agencies with sweeping plans to deregulate them and grant powers to the president that he doesn't legally have. The most visible examples of this early overreach were the mass firings across agencies carried out by the so-called Department of Government Efficiency (DOGE).

At the same time, the administration was carrying out a subtler and yet potent attack on democracy: denying the public a voice in federal rulemaking. When a federal agency makes any rule change, it must inform the public by issuing a proposed rule and give individuals and organizations an opportunity to weigh in. That's called the notice-and-comment process, and it's been the law for about 80 years.



Elon Musk and his child join President Trump at the White House on February 11, 2025, soon after the creation of the DOGE office.

Under the Trump administration, agencies have repeatedly skipped this process, according to the 2025 UCS analysis *Access Denied* (act.ucs.org/access-denied). The report finds that during the first six months of the administration, nearly 600 final rules were issued across six key science agencies, but 182 of these rule changes—nearly a third—bypassed the public comment process. Like slashing agency funding, denying the public the opportunity to comment on new rules is a violation of our rights. Neither the president nor DOGE have the legal authority to review and cancel federal funding, fire federal workers, dismantle federal agencies, or shut down public comment on rulemaking.

Fortunately, President Trump closed the DOGE office months ahead of schedule amid public outrage and after UCS and others filed a lawsuit to stop its illegal activities—a case that a federal judge ruled this spring can continue. Some DOGE staffers are now embedded in agencies and are making cuts more quietly, and UCS continues to watch for abuses of power.

7. FIGHTING TO SAVE SCIENTISTS' JOBS (AND THEIR WORK)

As the Trump administration targeted key science-focused federal agencies, firing experts and putting tight political constraints on their work, UCS organized the scientist community and joined with allies to support federal scientists and the important work they do.

UCS President and CEO Gretchen Goldman stood with members of Congress outside the EPA and spoke to the press and an audience of hundreds, condemning the administration's attacks on this agency that plays a vital role in protecting public health and safety.

We also stood behind the National Oceanic and Atmospheric Administration (NOAA) by organizing more than 2,500 scientists from 51 US states and territories and 27 other countries to sign a letter calling on Congress and the commerce secretary to protect NOAA from severe staffing and budget cuts. We urged UCS supporters to rally outside NOAA headquarters in Maryland along with hundreds of others. Thanks in part to the media attention we generated, the Trump administration backed off from its plan to close NOAA's Regional Climate Centers, which conduct important research, and Congress has restored some funding for scientific agencies.

8. DEFENDING CLIMATE AND WEATHER RESEARCH

Ever since the National Center for Atmospheric Research (NCAR) landed in the Trump administration's crosshairs, UCS has maintained a drumbeat of support for this critical weather and climate research institution. To prevent the administration's plans to dismantle NCAR, we sent out media alerts, communicated directly with agency officials, and developed materials that explain NCAR's importance.

In a letter to the National Science Foundation (NSF), which funds NCAR, UCS raised significant concerns about the NSF's plans to restructure NCAR given the immense societal benefits the agency provides. We have also called on NSF leadership and filed Freedom of Information Act requests to release documents that would allow people across the country to scrutinize NCAR's proposed reorganization. And because the average person has likely never heard of NCAR, UCS drew public attention to the agency with an explainer video and an op-ed in *Earth and Space Science News* titled "What Americans Lose If Their National Center for Atmospheric Research Is Dismantled." {C}

Michelle Rama-Poccia is a senior bilingual writer and podcast host at UCS.



An aerial photograph of a rural landscape. In the foreground, a blue pipe runs across a green field. The middle ground shows a mix of green and brown fields, with a cluster of trees and a few buildings. The background is a vast, flat landscape under a clear blue sky.

ONE EASY FIX FOR FARMERS

Crop farmers in this country haven't faced prospects this bleak since the 1980s. But by using less fertilizer, they could preserve both their operations and the environment.

BY BRYAN WADSWORTH

Except for the beef sector, where prices are up and costs are down, most farmers today are facing high costs of operations and low prices for their crops, making this an extremely tough time to stay in business. US crop farmers lost more than \$34 billion last year according to the American Farm Bureau, and the US Department of Agriculture (USDA) expected farm debt to reach a record high. As a result, 15,000 farming operations called it quits in 2025—part of a total loss of 166,000 farms since 2017.

A number of factors are at play, including extreme weather such as droughts, floods, and fires that have all been made worse by climate change. Some trends, like falling commodity prices and rising costs for farming equipment and chemicals (what farmers call inputs), have been exacerbated by Trump administration policies. Those policies seem almost designed to hurt farmers in spite of that demographic's strong political support of the president. Consider:

Immigration crackdowns. The Pew Research Center estimates 750,000 immigrants left the US workforce in the first eight months of 2025 alone, whether out of fear of being arrested and deported by Immigration and Customs Enforcement (ICE) or because they were actually rounded up by ICE. This is a problem for the US agriculture sector in general, where immigrants make up a majority of the farm labor workforce, but especially for “specialty” crop producers whose fruits and vegetables must be picked by hand.

Federal layoffs and funding cuts. Some 1,200 employees at the USDA's Farm Service Agency will no longer be available to process farmers' applications for loans or disaster relief. And the USDA eliminated \$1 billion that schools and municipalities used to purchase food from local farmers.

Tariffs. Regardless of the Supreme Court's February decision striking down the president's beloved tax duties, his tariffs have had the effect of driving down demand for US crops—and as a result, crop prices. In the most extreme example, the biggest importer of US soybeans, China, stopped importing them altogether. At the same time, tariffs have driven the cost of equipment and chemicals to historic highs; nitrogen and phosphate fertilizer imports to the United States, for example, were 10 to 15 percent higher in 2025 than the previous year, according to the University of Illinois. This additional pressure on farmers' already thin profit margins drove corn producers to write a letter to US officials last summer asking for action to lower fertilizer prices.

Instead of addressing *any* of these issues, the administration's response (both now and in President Trump's first term) has been bailouts. Yet the \$12 billion recently authorized by Congress fails to cover even half of farmers' losses in 2025.

TOO MUCH OF A GOOD THING IS . . . NOT GOOD

The last thing farmers need at this point is to be spending more than necessary on a high-cost input, but that's exactly what's happening with fertilizer. US farmers spend about \$36 billion a year on fertilizer: often a third of their production costs or more. And according to a new Union of Concerned Scientists analysis, *Less Fertilizer, Better Outcomes* (act.ucs.org/sp26-fertilizer), they're applying much more than their crops can use. Corn and soybean producers, specifically, overapplied between 3.5 million and 5.8 million metric *tons* of synthetic nitrogen fertilizer in 2023.

Other research also suggests that as much as half of the nitrogen fertilizer applied to US commodity crops is wasted.



In this satellite image of the coastline of eastern Texas and western Louisiana, nitrogen-rich fertilizer runoff flows into the water from the Mississippi River delta to the east. This runoff depletes oxygen in Gulf waters, leading to “dead zones,” as marine life cannot survive in hypoxic water.

SCIENCE FOR HEALTHIER FARMS

One of the best ways to reduce the damaging overuse of nitrogen fertilizer is nutrient management: a systematic and science-based approach to using chemical inputs cost-effectively, maximizing productivity while protecting the environment. The USDA estimates that if all the farmland in the United States where fertilizer is being overapplied were to adopt a nutrient management plan, farmers would save a total of \$2.6 billion.

Factors to be considered when developing such a plan can be described with the shorthand SMART:

- **SOURCE**—matching the input to the crop, soil, and local climate
- **METHOD**—how the input should be applied (injected or incorporated into the soil versus spread over the surface)
- **ASSESSMENT**—taking into account conditions of the land and practices that may affect nutrient needs
- **RATE**—testing and technology can determine precise amounts of inputs needed
- **TIMING**—considering both the growing season and expected weather

In combination with other responsible practices such as no-till farming, cover crops, and buffer strips, nutrient management can help farmers increase yields while keeping costs down and preserving both soil and water quality.

Because plants can only absorb a certain amount of nitrogen, the rest runs off farm fields into waterways or leaches into groundwater. “Our brains automatically think of pristine green and rolling fields when we imagine farms,” says Omanjana Goswami, one of two authors of the UCS report. “But despite that beautiful picture, agriculture is actually a major source of pollution.”

Fertilizer runoff can lead to contaminated drinking water and accelerated algae growth, which in turn can consume all the oxygen in water that fish and shellfish need to survive. Annual algae blooms in the waters off the US Gulf Coast resulting from farm runoff in the Mississippi River Basin create a “dead zone” that over the past five years has averaged roughly the size of Connecticut, according to the National Oceanic and Atmospheric Administration.

In addition, the production and application of synthetic nitrogen fertilizer, which is derived from fossil gas, releases heat-trapping emissions including carbon dioxide and nitrous oxide. Nitrous oxide has 273 times more climate-warming potential than carbon dioxide, and agricultural soil produces more of it than any other US economic sector. The UCS analysis found that excessive application of nitrogen fertilizer in the United States results in as much as 60 million metric tons of climate pollution a year—equivalent to the amount produced by 14 million gasoline-powered vehicles.

Precious Tshabalala, the second author of the UCS report, says, “The rising rates of nitrogen fertilizer use have costly consequences for the health of people, our economy, and our environment. Applying twice as much synthetic fertilizer as necessary spews polluting emissions that further heat the climate and endanger public health in rural communities.” One study of the health and environmental damage caused by agricultural nitrogen in the United States estimates an annual toll of \$157 billion.

PUSHING BACK AGAINST BIG-MONEY INTERESTS

You might wonder why farmers would engage in such a counter-productive practice—aren’t they the experts on what their crops need? Blame Big Ag.

“Farmers are caught in a system that is hard to escape,” says Goswami. “Today’s agricultural systems and markets are set up in a way to maximize yield, and giant fertilizer corporations have used aggressive marketing to convince farmers that spraying more of their product will bring them greater crop yields. For instance, most fertilizer application recommendations for the Midwest come from fertilizer retailers who stand to profit the most, not from independent institutions that have no conflict of interest.”

And what can be done to change this practice? UCS is calling for Congress to use its ongoing negotiations over the next food and farm bill as an opportunity to increase funding for USDA conservation programs that can help farmers adopt practices that reduce fertilizer overuse, such as a nutrient management plan (see the box). Implementing these practices can significantly reduce climate emissions while lowering farmers’ operating costs—saving them an average of \$30 per acre in wasted fertilizer.

The USDA’s programs are generally popular among farmers but are chronically underfunded and oversubscribed. Only about one-third of eligible applications are approved. As Goswami says, “If more farmers can gain access to federal conservation resources and reduce their reliance on synthetic fertilizers, it will help to build a more sustainable, healthy, and resilient agriculture system.”

At press time, a new food and farm bill was being considered in the House Agriculture Committee, whose chairman said he is hopeful the bill will garner enough bipartisan support to pass both houses of Congress. But there was supposed to be a new bill in 2023, and three years later we’re still waiting. So are the farmers desperate for help. {C}

Bryan Wadsworth is managing editor at UCS.

A New Way to Take Action with the Union of Concerned Scientists

INTERVIEW WITH MATT HEID

UCS Senior Director of Communications and Strategy Matt Heid checked in about an organization-wide initiative he is co-leading: Science Rising, which is designed to counter the Trump administration's unprecedented assault on science and democracy.

What is UCS hoping Science Rising will achieve?

MATT HEID: Ultimately, we are working to ensure the return of a pro-science, pro-democracy federal government that once again centers the best available science, facts, and evidence to inform the decisions that affect the health, safety, and well-being of us all.

Our goals are fourfold:

First, minimize the harm being inflicted by the Trump administration's anti-science and anti-democratic actions on people and communities across the country.

Second, counter the administration's ongoing efforts to consolidate power and normalize authoritarian rule.

Third, make progress where possible now while laying the groundwork for future progress, with a particular focus on what comes after the 2028 election—most likely the next opportunity for transformative change.

Last, inspire and mobilize the scientific community, and science supporters everywhere, to take action.

In many ways, Science Rising is building upon—and supercharging—the tremendous work we did countering this administration's actions during its first year in office, and drawing from some of the key lessons we learned about the most effective ways to respond.

What are some of the ways UCS has successfully responded to attacks on science? How will Science Rising carry those forward?

MATT HEID: We've seen that one of the most effective ways to slow down or stop the administration's anti-science moves is a powerful and *immediate* response, followed by sustained and focused action. This is particularly crucial because we know that one of the administration's primary strategies is to constantly “flood the zone” with outrageous behavior that distracts and draws attention away from its most recent actions.

To that end, Science Rising is actively developing and deploying more robust capabilities for immediately and force-

fully calling out, and successfully pushing back against, the administration's actions. We've seen success with this approach over the past year, including our work countering the administration's attempts to roll back the Endangerment Finding. We quickly and repeatedly called out the threats and associated harms of this anti-science move, followed by sustained actions from UCS supporters pressuring key decisionmakers in the administration to adhere to the best available science and protect public health. And our litigation efforts—suing the administration over its actions—are another successful prong of this strategy (see cover story, p. 6).

What can regular people do to counter these attacks on science and democracy?

MATT HEID: There are so many opportunities to get engaged and take action in ways that align with your interests, capabilities, and tolerance for risk. You can pressure your elected representatives, especially those in Congress, to defend science and democracy. You can call out the administration's propaganda and lies—and advance the real facts and evidence instead—within your own social and community circles, or by authoring an op-ed in your local media. Remember that demonstrations of courage are contagious: participate in and support marches, rallies, and other events to build and showcase solidarity and inspire others to get off the sidelines and engage. And you can support and provide mutual aid for others, especially for those who are most vulnerable to the administration's attacks.



MATT HEID develops, coordinates, and implements communications strategy and content creation across UCS, with a specific focus on the organization's response to Trump administration actions. Prior to joining UCS, he worked in communications strategy and content development for several nonprofit organizations including the Alaska Geographic Association and Appalachian Mountain Club. He holds a BA in earth and planetary science from Harvard University.

One of the most effective ways to slow down or stop the administration's anti-science moves is a powerful and immediate response.

Science Rising states that we must lay the groundwork now for reimagining federal science and our democracy. What are some guiding principles of this work? What can we do better, or get right in the future that wasn't working for people even before 2025?

MATT HEID: We don't want to go back to the way things were before all this—to return to a status quo that sometimes perpetuated inequities in the ways science was used and applied across different parts of society. Instead, our goal with Science Rising is to develop, support, and advance a better, more equitable vision for science in the future, while simultaneously ensuring that critical science the administration is currently working to suppress can continue unfettered.

To achieve that goal, Science Rising includes our Independent Science Initiative, which is working to ensure that critical science continues outside of

government. (Follow our progress at act.ucs.org/sp26-independent-science.) This effort to foster and build an alliance of independent scientists initially focuses on supporting independent committees that can continue the work of federal science advisory committees the administration has shut down.

What do you see as the role or responsibility of scientists to speak up in our current political climate?

MATT HEID: Scientists have a crucial role to play as trusted messengers in our society. Indeed, most people in the United States—77 percent—trust scientists to act in the public's best interest, according to a Pew Research poll from January.

Put another way: When scientists speak, people listen. This past year has clearly demonstrated that putting your head down, staying quiet, and hoping for the best is not an effective strategy for countering

this administration's relentless assault on science. At the same time, we recognize that everybody is in a different position, with different levels of risk, and that it's crucial for scientists to know and evaluate their personal risk tolerance (see our guide at act.ucs.org/sp26-know-your-risk).

Those who can more safely speak out should, and loudly! Those facing greater personal or professional risks should calibrate their actions accordingly. But everybody, no matter what their risk tolerance might be, can do something.

How is UCS looking to its supporters to be part of the Science Rising campaign?

MATT HEID: One of the core strategies for Science Rising is to build unity within the scientific community, which includes anyone and everyone who is passionate about protecting and advancing science and democracy in these challenging times. If you're a scientist or other technical expert, you can join the more than 20,000 experts in the UCS Science Network who have signed up to apply their skills to local and national issues they care about. The Science Network provides training and opportunities for experts to engage as advocates within and for their own communities—you can sign up at act.ucs.org/sp26-scinet.

And beyond that, all of our supporters can help build and strengthen our collective power. That means encouraging and motivating others to get involved, especially those who have been sitting on the sidelines. That means calling out the administration's authoritarian actions for what they are, and building greater awareness and understanding of the threat and risks to our democracy. And that means spreading the message that we do have the power to build a better, safer, and more just future for us all. {C}

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A Firsthand Account of Fear and Hope in Minneapolis

By Sarah Goodspeed

I've been an organizer throughout my professional career, including three years as a campaign manager with the Union of Concerned Scientists. At UCS, I'm part of a team working to hold powerful fossil fuel corporations accountable for the damage caused by their products and their disinformation about climate change.

I'm also a lifelong Minnesotan. The pain inflicted upon our city over the past months will remain an unforgettable chapter in our history. I've witnessed and heard about ruthless brutality and cruelty inflicted on our residents, as the world has watched and ached with us. And I've learned so much from the powerful organizing response carried out by my community.

A RECORD OF TRAUMA—BUT ALSO UNITY

January 5, 2026: More than 3,000 federal agents have been deployed into Minneapolis and the surrounding region. This is an outrageous number for any city; local officials call it an occupation. Immigration and Customs Enforcement (ICE) agents are not only targeting undocumented immigrants but documented immigrants and refugees as well—despite a court order. Immigrants and people of color, regardless of legal status, are being followed and abducted from their homes, businesses, schools, and places of worship. Huge portions of our communities are sheltering in place.

Children aren't able to go to school because ICE agents detain them at the bus stop or follow them home. The public health implications are dire. People are missing appointments and not filling prescriptions because they're afraid to go where either they or the staff might be detained. They're forgoing or delaying critical care, straining health care institutions already buckling under cuts to Medicare.

Our friends and neighbors are living in fear that they might be taken next. Businesses are running on fumes as workers and customers stay home. Even citizens are carrying documentation with them for daily tasks.

It's "go time" for long-established immigrant rights organizations that I've worked alongside for years, which are investing their entire capacities to support our communities. We've learned from Charlotte, Chicago, Los Angeles, Portland, and other cities that have seen ICE's evolving strategy over the past year.

I'm relatively safe and protected as a White US citizen. And yet, the daily vigilance and the news of more and more families torn apart takes a psychological toll. Neighbors blow whistles to alert others when agents are near. Neighborhoods are activating networks of mutual aid to support those staying home. The echoes of whistles and helicopters over each block throughout the day remind us to look out for one another. Our hearts are heavy, our nerves are strained, our bodies are tired.



Everyday Minnesotans turned out en masse to help their neighbors under the occupation, including (legally) filming ICE operations, as in this photo from February 2026.



Protestors calling for an end to immigration raids and ICE violence march in Minneapolis on January 30, 2026, in what was declared a “National Shutdown.”

January 26: Raids and abductions have shifted into mass intimidation, detention, and surveillance of immigrants and observers alike. It’s hard to overstate the psychological impact of the constant, widespread presence of agents or the brutality of their tactics. They throw people to the ground. They tear people from cars. They beat people and deny them medical care. They’ve broken into homes without warrants, deployed chemical irritants at parks and day care centers, and drawn guns on children and used them as bait. They have shot and killed bystanders, injured and gassed protesters, and beaten detainees. They deter legal observers while flaunting constitutional violations. Dozens of people have died and many times more have been injured in ICE custody—alongside unknown numbers of people who have disappeared, with no records of where they were sent.

Many people have faced state violence before, in this country or in the countries they left for the United States. In Minneapolis, we withstood similar militarized force in the wake of George Floyd’s murder—blocks from where ICE killed Renée Good and Alex Pretti. We refuse to allow ICE to take our neighbors, we continue denouncing the armed state forces in our streets, and more and more Minnesotans are joining together to protect our community and end this violence.

Everybody knows of someone affected in their own neighborhood. Everybody knows someone helping. Nobody knows how long this will go on.

February 14: What’s keeping me going in this siege we’re living under is the power of our communities. Minnesotans from all walks of life are coming out to support however we can, and are often met with hot sambusas (a handheld Somali snack), soup, tea, or coffee to warm our bodies and hearts as we continue to fight to protect and bring home our neighbors.

Parents who never attended a PTA meeting are taking shifts watching their child’s school. Small businesses are using their storerooms to collect and distribute basic goods. Neighbors are cooking and delivering food for families unable to leave their homes, and fundraising for rent and legal fees. Retirees are holding signs outside the detention center and helping bring home those fortunate enough to be released.

People are helping tow and repair cars that were left idling on the street with doors and windows smashed during abductions. Lawyers work tirelessly to release folks from detention and bring them to safety. Volunteers search to find those who have been released—often left in remote locations with no jackets in subzero temperatures, bringing along outerwear knitted by other volunteers. Artists are 3D printing whistles and creating protest signs and zines.

For those who live here, the types of aid spreading across our social media channels are more comprehensive than any news outlet could ever do justice. There is no greater testament to love than the way Minnesotans are showing up for one another right now.

WHAT YOU CAN DO

Authoritarian tactics can be weakened by transparency, solidarity, and organized community response. As trusted providers of information in our society, scientists can play a crucial role in standing up to authoritarianism.

CONNECT. Work within your community to be prepared and to protect one another from ICE agents as they continue their attacks in more cities nationwide. Build your connections and networks. Research shows that among the most important factors in determining a community’s ability to withstand, and respond to, a shock of any kind are the social bonds and connections that exist *before* the shock hits.

LEARN. People of color and people of conscience have been calling for an end to state violence over generations. Learn your constitutional rights, and if it’s safe for you to do so, train as a legal observer. Ask your local leaders how your schools, hospitals, and churches are prepared to protect residents from ICE.

DOCUMENT. Documenting violations can help bring accountability. Until we bring charges, federal agents—and this administration—will continue to operate as if they are above the law.

SPEAK UP. *How and where* government leaders choose to send—and *not* to send—resources is a declaration of values. Hold your congressional delegates responsible for the spending they approve in your name, with your money. Call your members of Congress and tell them what action you want them to take. Call every day, because it does make a difference.

WHATEVER YOU CAN. Think about the creative ways your skills can be put to use to resist authoritarianism. There is a role for everyone. Send the message that we will not let this harm continue.

March 5: While the number of agents has finally started to decrease in recent weeks, it's still many times greater than our local police force. We continue to support ongoing mutual aid needs for families and small businesses surviving these long months of terror, but we now have some breathing room as our broad networks establish a rhythm of resilient support systems.

Everything we know to do today we learned from those who came before us.

For example, federal agents are using Fort Snelling as a base of operations, on the same site where White settlers built a military base and detained, tortured, and killed Dakota people on their sacred land. Indigenous people resisted federal troops then, as leaders across nations and groups like the American Indian Movement continue to do today, calling for the return of their ancestors' land.



Indigenous dancers gather for a march against the influx of federal agents in the city in Minneapolis, Minnesota, on January 10, 2026.

Ten years ago during another cold winter, we kept warm fires and hot coffee while camping outside the 4th Minneapolis Police Precinct demanding accountability for Jamar Clark's murder by local police, stating unequivocally that Black Lives Matter.

We have so much knowledge from generations of resistance; it gives us confidence that our community will withstand this moment, and it instills in us a duty to help one another survive this chapter. Over decades of organizing across sectors and cultures, Minnesotan community organizations and unions have grown powerful and broad coalitions. This kind of *organizing* doesn't require *organizations*. It is simply about showing up to care for one another.

LESSONS FROM MINNEAPOLIS: IT'S ALL CONNECTED

As I reflect on the harm caused by ICE and US Border Patrol agents spreading fear and violence across Minnesota and nationwide, I want to be clear: These actions are part of a broader pattern of aggression by the Trump administration that undermines civil liberties, community safety, and democratic norms.

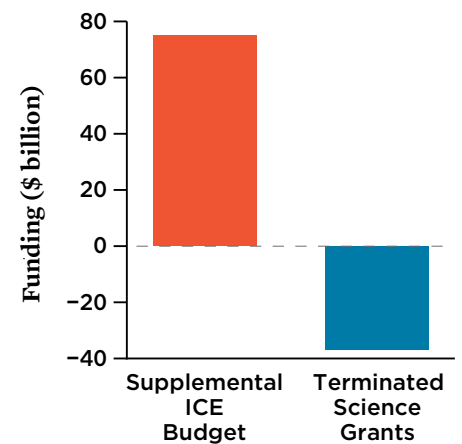
We all depend on democratic principles and protection from violence. Those principles and that protection have quickly disappeared under this administration, and exposed for many how tenuous they were in the first place.

The indignities inflicted on my home of Minneapolis at the hands of the Trump administration are funded by taxpayers. An estimated \$18 million *per week* of taxpayer money has funded the attacks on Minnesotans. Every dollar this administration spends on violence, which is spreading abroad as well as at home, is a dollar we are not spending to help people and our planet.

Government budgets do not exist in a vacuum. In the same year that ICE received a \$75 billion supplemental budget increase, more than 11,000 science grants—worth around \$37 billion—were

INCREASED VIOLENCE, DECREASED SCIENCE

In 2026, at the same time that ICE received a \$75 billion supplemental budget increase, almost \$37 billion worth of science grants were terminated. It's all connected.



terminated, the largest being stripped from clinical research, cancer centers, and infectious disease clinics (*usaspending.gov*; *grant-witness.us*). The Trump administration sought to cut research funding by 35 percent in its latest budget—a move that was largely blocked in the final approved budget, in part thanks to the advocacy of UCS Science Network experts. Our voices are critical for protecting our communities and reclaiming what remains of our democracy.

UCS is connecting the dots between the fight for democratic governance and the fight for climate accountability. The actors driving climate change are profiting from this administration's actions and funding its authoritarianism. They will continue to profit from our pain until they are held accountable. {C}

Sarah Goodspeed is the climate accountability outreach manager at the Union of Concerned Scientists.

What He Studies Is Complex. Supporting UCS Is Simple.



Dr. Robert Coats doesn't shy away from complex interactions, either with people who have different priorities or in his research into the effects of climate change and land use policies on aquatic ecosystems. Through his consulting firm, he provides assessments and designs of wetlands, including water quality monitoring and restoration projects.

Among the fondest memories of his decades-long career as a scientist is a court case for which he provided testimony, involving a real estate developer

who sued a local planning agency for the right to build on steep and erodible slopes near Lake Tahoe. Coats was among several expert witnesses for the planning agency, testifying about potential impacts to the lake's water quality. Luckily, he says, the judge was listening to the science.

"If we had lost, it would have undercut land use controls in the Tahoe Basin," he says. "But we won the case hands down—a slam dunk. I just ate it up."

BUILDING DURABLE RELATIONSHIPS

Coats, who has a PhD in wildland resource science from the University of California, Berkeley, has studied Lake Tahoe and the many variables that influence its water, ecosystems, and surrounding soil—including climate change—for decades. His latest achievement has been to wrangle a group of scientists and experts to contribute chapters to a 2025 book titled *Environmental Change in the Lake Tahoe Basin: A Synthesis of Science and Public Policy*.

The book recognizes the successes of environmental protection efforts led by scientists, policymakers, activists, and locals from the region, such as policies

that have helped limit algae blooms and invasive species in the lake. Because Lake Tahoe abuts four counties in California and Nevada, the work involves an intricate web of people and policies. And thanks to strong partnerships between scientists and policymakers over decades of collaboration, Coats says these deeply rooted conservation efforts can likely survive cuts to federal funding.

"One of the most important lessons from the book is that a small, determined group of scientists and policymakers can really make a difference," he says. "The intersection of science and public policy is a good story that needs to be told."

Coats and his co-authors feel so strongly about science-informed policy that they agreed to generously donate the proceeds of their book to the Union of Concerned Scientists, which Coats has supported for years. "The purposes of the organization are consistent with my interests and concern about climate change," he says. "And I would say that UCS is doing a great job. They know how to work with real science, and they're very focused on the politics of the adaptation and mitigation of climate change." {C}

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How Trump Targeted Transportation— And How UCS Is Fighting Back

By Steven Higashide



For the past seven years, Chicago's public transit agency has been modernizing two of its rail lines, replacing 100-year-old bridges, and making stations more accessible.

The project relies on a mix of local and federal funds. But last October, Transportation Secretary Sean Duffy abruptly paused the federal government's payments.

The suspension (which was lifted by a federal judge this spring) came a month after ICE agents surged into the Chicago area, sparking fierce protests—and after Duffy sent letters demanding that states cooperate, or lose potentially tens of billions of dollars in funding.

It wasn't the only action Duffy has taken against states that have resisted the Trump administration. Over the past year, the Department of Transportation has used funding threats to pressure states to

roll back diversity initiatives and comply with administration directives. These decisions weren't about transportation. They were about power. A dangerous shift is under way: federal transit policy, once an area of relative bipartisan calm, is now part of the Trump administration's authoritarian endeavors.

Autocrats often target scientists first, because empirical evidence is a threat to their lies and propaganda. In May, Duffy canceled \$54 million in university transportation research grants earmarked for studies focused on climate, equity, and air quality. And the Transportation Research Board (TRB), a division of the National Academy of Sciences, Engineering, and Medicine, cited the need "to better reflect national priorities" before canceling projects and disbanding committees related to climate, sustainability, equity, and air quality.

STATES CAN STILL MAKE PROGRESS

The good news is that the Union of Concerned Scientists has helped independent researchers and state governments push back. Last year, we provided technical analysis that helped Illinois

groups win passage of a massive transit funding package. Not only will this allow the state to expand bus and rail service, but it will also provide a cushion against federal intrusion. And UCS worked with members of the TRB's dissolved committees to co-create a January event showcasing equity in transportation policy.

With the right policies and existing technologies, modernizing our broken transportation system is within our reach. We cannot halt the climate crisis without doing so, since the US transportation sector produces *nearly 30 percent* of this country's global warming emissions—more than any other sector.

That's why UCS continues to monitor and respond to ongoing attacks on transportation policy. This includes the administration's proposed rollbacks to fuel efficiency standards that have saved consumers \$5 trillion since 1975, or the surface transportation reauthorization bill that directs funds in ways that determine how we get around our communities. We are providing state leaders and agencies with up-to-date analyses so the policies they enact will better connect people with opportunity at a time when federal leadership is more invested in handouts to billionaires and corporations.

Secretary Duffy has shown that transportation policy can be weaponized by authoritarians, but the response we've seen from states, communities, scientists, researchers, and community members suggests that transportation can also fuel the resistance. {C}

Steven Higashide is director of the UCS Clean Transportation Program. Read more from Steven on our blog, *The Equation*, at blog.ucs.org.



US Department of Transportation Secretary Sean Duffy speaks at an event in Washington, DC. Duffy has weaponized the agency against states that he perceives are not cooperating with President Trump's agenda.



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