



Geoengineering: Who's Behind It and How We Stop It



Nicole Shanahan  
@NicoleShanahan · 10 Jul

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Over the past month, I've been in contact with a government whistleblower—an individual who has held high-level security clearances and has spent over a decade consulting directly with major federal agencies. Their experience spans the Department of Defense, the Department of Energy, NOAA, and the Intelligence Community. With their permission, I've agreed to share here on X the information they provided to me, as they—and I—believe it raises serious concerns.

While the whistleblower did not disclose any classified information, what they did provide was a roadmap to navigate the tangled mess that is our government's geoengineering programs. They told me that despite President Trump's 2020 directive to halt taxpayer-funded climate change initiatives, federal grants for solar radiation management (SRM), stratospheric aerosol injection (SAI), and other geoengineering technologies are still being issued. The programs haven't stopped—they've just been rebranded.

Geoengineering is now commonly called "*climate intervention*." SRM is now referred to as "*solar radiation modification*." SAI is now "*stratospheric aerosol intervention*." These semantic shifts aren't scientific; they're strategic. They're designed to obfuscate the truth and shield these programs from Freedom of Information Act (FOIA) requests, media scrutiny, and public opposition.

The whistleblower provided me with federal grant data showing millions of taxpayer dollars flowing to universities under these new labels. One organization stood out: the University Corporation for Atmospheric Research (UCAR). This nonprofit consortium of 130 colleges and universities manages the National Center for Atmospheric Research on behalf of the National Science Foundation. UCAR has received more than \$220 million in direct

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scientific papers reveal [clear participation](#) in stratospheric aerosol assessments and [other geoengineering research](#). The university-to-geoengineering pipeline is a real problem, and one that I discussed with Dane Wigington on *Back to the People* a few weeks ago.



According to the whistleblower, this network of programs is far more advanced and coordinated than the public has been led to believe.

In addition to internal files and historical documentation, they directed me to the Biden-Harris administration’s mandated [2023 SRM Report](#), which outlines the federal agencies currently involved in geoengineering, climate intervention, solar radiation management (SRM), and stratospheric aerosol injection (SAI). These include NOAA, NASA, the National Science Foundation (NSF), the U.S. Geological Survey (USGS), and the Department of Energy (DOE).

NOAA was emphasized as a critical place to start digging, an agency that has taken deliberate steps to discourage public inquiry into its own archives. One document that was highlighted, titled [Weather Modification](#), published in 1979, describes nearly 100 geoengineering projects. These included hurricane manipulation, radioactive and electromagnetically enhanced fog dispersal, microwave chaff deployment, supersonic ice nucleation, and conventional cloud seeding operations. That report was released nearly 50 years ago. Since then, both the funding and the technology have expanded significantly.

Today, NOAA insists it does not fund geoengineering; however, it is currently allocating an estimated \$1.2 million to solar radiation research, with [up to four projects each receiving \\$300,000](#). NOAA disclosed this funding in a webinar last year; a clip of the presentation can be viewed below.

ERB Program Overview

The Earth's Radiation Budget (ERB) Program seeks to improve the understanding of aerosol impacts on Earth's energy balance through: establishing a capability to observe and monitor stratospheric conditions; detecting and accurately simulating the impacts of natural and human-caused aerosol injections in the stratosphere and troposphere; and deriving co-benefits for Earth system prediction through better understanding of aerosols and clouds.

Program Manager: Victoria Breeze, PhD, victoria.breeze@noaa.gov
Program Manager: Greg Frost, PhD, greg.frost@noaa.gov

Strategic Partnerships

NOAA:

- OAR Labs and Programs: CSL, GML, GFDL, ARL, GSL, PMEL, WPO
- NESDIS

Academia: Universities in 12+ states, plus international

Private sector & NGOs: NOFO, NOAA-agreements

Federal agencies: NASA, DOE

Community-Driven: GeoMIP, GEOS-Chem, IGAC

Current Research Portfolio

- Stratospheric Measurement
- Stratospheric Modeling
- Tropospheric Measurement
- Tropospheric Modeling

Department of Commerce // National Oceanic and Atmospheric Administration // 11

NASA also plays a critical logistical role. With a fleet of high-altitude, long-range aircraft and a global network of satellites, the agency is uniquely positioned to support large-scale deployment and monitoring of SRM technologies. The SRM Report (pg. 20) even references a National Academies publication describing NASA's involvement in climate-related flight operations and airborne labs.

None of this is speculation. It is documented, federally coordinated, and strategically concealed behind euphemistic labels. These programs haven't been discontinued. They've been renamed and reframed.

The History of Weather Warfare

What many Americans don't realize is that none of this is new.

Our government has been investing in weather modification for over half a century, quietly and expansively, with almost no public oversight. A 1964 congressional hearing by the Senate Subcommittee on Irrigation and Reclamation revealed astonishing testimony about the scale and ambition of federal efforts, even at that time.

with until you really know what you are doing, but at the same time you proceed cautiously.

Senator ANDERSON. One of the great problems in the early days was that the question of damages was unsettled. When three scientists of General Electric tried a controlled experiment in controlling a hurricane they succeeded in their plan, but the storm came back along the borders of the United States at a considerable height. If it had stayed down low General Electric might have some real suits against them. They asked the Government to do it, and the Government said, no, if it is dangerous we will not do it either. There was no work done. I was only hopeful that the Interior would feel, "Damn the consequences, full speed ahead," whatever the torpedo phrase was.

Dr. CALHOUN. I think we are saying this in effect.

Senator ANDERSON. In this statement?

Dr. CALHOUN. And I was trying to point out here, not damages resulting from landowners or suits, I was trying to point out the possible disadvantages that would result in a technological sense.

Well, sir, if I do not give the impression that I don't mean damn the torpedoes, full speed ahead, let me say that in spite of some of the hesitations and controversies in this subject we think that we are right at the point where some large-scale experiments are necessary and desirable and that we ought to move forward with all speed which is commensurate with good planning to find out once and for all whether or not we can increase the water supply in the Colorado Rockies, and particularly the Colorado Basin, by weather modification techniques.

Senator ANDERSON. Thank you very much. That was what I was hoping to get to and I was going to quit questioning when I got that statement from you.

During that hearing, the National Science Foundation (NSF) was officially designated as the lead federal agency responsible for weather modification research. This helps explain why so many of today's geoengineering grants are routed through NSF, rather than more obvious environmental or energy-related agencies. As early as 1959, the NSF was funding large-scale cloud seeding programs, awarding millions to universities for experiments involving the dispersal of silver iodide, hail suppression, and the manipulation of tropical storms and hurricanes.

These programs were already accelerating in the early 1960s. By 1962, NSF had more than doubled its weather modification funding compared to 1961. In its annual report, the agency stated plainly: "The promise of useful weather modification techniques is sufficiently great that research into its full potential should be pushed urgently." It even went so far as to claim that large-scale weather control might "equal or surpass atomic energy" in its potential to solve global problems such as the "population explosion."

lated to the science of weather modification, but where there was no actual cloud seeding involved.

1962

The 1962 National Science Foundation annual report on weather modification stated: "The promise of useful weather modification techniques is sufficiently great that research into its full potential should be pushed urgently." To this end, NSF recommended as rapid as possible progress be made to:

Continue to attract new, creative talent to weather modification, and to the atmospheric sciences as a whole;

Broaden research by supporting theoretical and field research into potential new methods of modification or control with new emphasis on long-range weather and climate control on regional or continental scales;

Shorten the time gap between the development of theory and the start of field research so that new techniques may be tested as soon as a sound theoretical basis is established.

The National Science Foundation felt that the rewards to be gained from methods of large-scale weather control may equal or surpass atomic energy in dealing with the world's population explosion and other problems requiring maximized benefits from natural resources.

The use of mathematical models now makes it possible to test such weather modification ideas as damming the Bering Strait between Alaska and Siberia, laying a chemical film on the ocean to lessen evaporation, or changing the radiative balance of the polar regions by coating icecaps with carbon black. Such experiments are simulated in a computer, and the total effect can be then analyzed.

In 1962, the Foundation provided a total of \$6,615,000 in support of its overall atmospheric sciences program. Of this sum, \$1,340,000 went for weather modification, \$3,300,000 for basic research in the atmospheric sciences, \$1,200,000 for the National Center for Atmospheric Sciences (Boulder, Colo.), and \$775,000 for the International Indian Ocean Expedition.

At the same hearing, Senator Clinton Anderson of New Mexico recalled a chilling warning from Dr. John von Neumann, a member of the Atomic Energy Commission and a pioneer in modern computing. According to Anderson, von Neumann had warned that "weather manipulation, not the ICBM, would be the ultimate weapon for the protection of the free world." Other expert witnesses echoed the concern. Dr. Irving Langmuir, a Nobel Prize-winning chemist and early cloud seeding researcher, was quoted as saying that the real long-term threat wasn't from missiles but from weather control. In his own words, one could "control the march of armies and everything" using weather modification.

Senator ANDERSON. Do you know a man named Dr. John Von Neumann?

Dr. CALHOUN. Yes, sir.

Senator ANDERSON. Would you regard him as a competent scientist?

Dr. CALHOUN. Very definitely, sir.

Senator ANDERSON. Did you ever see his article in a magazine with regard to cloud seeding?

Dr. CALHOUN. No, I did not.

Senator ANDERSON. It was interesting reading.

Do you know Dr. Irving Langmuir?

Dr. CALHOUN. Yes, sir.

Senator ANDERSON. Do you regard him as a competent scientist?

Dr. CALHOUN. Yes, sir, he has been a strong advocate of this.

Senator ANDERSON. He stated the ultimate threat was weather manipulation, not missiles. You could control the march of armies and everything with weather modification.

A great many weather scientists were interested in it. All the ones I suggested it to 15 or 20 years ago said we are not going to do it because we cannot get a controlled experiment.

As you may know, we tried to pass a bill 10 or 15 years ago, I have forgotten how long—it was the 81st Congress—anyhow, the rain-makers organizations, the people who were making money by being

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Geophysical warfare—a term *The New York Times* used way back in 1972—has in fact been utilized by militaries for millennia, as Peter Kirby explained on *Back to the People* earlier this year.

Back to the People 🗣️ @backtothepeople · 8 Jul

Geophysical warfare has been around for a long time, and what has evolved from it has fundamentally altered everything we thought we knew about weather. For starters, geoengineering is no longer strictly reserved for the battlefield.



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Despite the extraordinary claims made during the hearing, legal and ethical concerns were largely brushed aside. Senators acknowledged that liability could become a problem if weather modification went wrong. However, they repeatedly suggested that legal issues could be addressed later and should not hinder rapid experimentation. At no point did they consider public input, environmental safety, or the long-term impacts of aerosolized metals used in these operations.

The obsession with weather control was, and arguably still is, driven by a militarized, industrial mindset. Nature is treated not as something to preserve, but as a system to be engineered. The Colorado River offers a prime example: The federal government has been trying to induce rainfall there since at least the 1940s using various artificial techniques. And yet, despite nearly a century of experimentation, the river is still in decline. The results have not lived up to the promises. The funding, however, hasn't slowed.

One of the most shocking pieces of information the whistleblower provided was testimony from a 1974 hearing before the U.S. Senate Subcommittee on Oceans and the International Environment, where lawmakers addressed the pressing need for an international treaty to ban the use of environmental and geophysical modification as “weapons of war.”

While Congress expressed strong support for a ban, the Executive Branch at the time was unwilling to take initiative. Testimony revealed that the Department of Defense held primary authority over weather warfare programs, all of which required at least Top Secret clearance. Furthermore, it was disclosed that the DoD requested the inclusion of vague or flexible

weather modification experiments had been conducted domestically since the 1960s, including in various regions across the United States.

DEPARTMENT OF DEFENSE,
OFFICE OF GENERAL COUNSEL,
Washington, D.C., January 25, 1974.

HON. CLAIBORNE PELL,
Chairman, Subcommittee on Oceans and International Environment, Committee on Foreign Relations, U.S. Senate, Washington, D.C.

DEAR SENATOR PELL: During the course of my testimony today on S. Res. 71, you asked me to verify a statement I had made during the earlier Hearings conducted by your Committee in 1972 on S. Res. 281. That earlier statement, as printed on page 50 of those Hearings, is as follows:

"Mr. FORMAN. I think Dr. Pollack has indicated the basic reasons. I don't know that I can enlarge upon what he said other than to remind the chairman that, at least so far as I can recall, it is fairly standard language in these treaties to modify these absolute obligations by such words as 'to the maximum extent feasible' or 'where practicable,' and so forth.

"If I am not incorrect in my recollection, I believe the Seabed Arms Control Treaty, to which reference has been made, has similar language in its text."

EXPERIMENTS CONDUCTED

For 2 years, we carried out experiments in the southern Sierra for the Bureau of Reclamation. Later we cooperated with them in an effort conducted by Fresno State College, to increase the snowpack and the rainfall in the central Sierra Nevada.

For 7 years we have been conducting, through a contractor, North American Weather Consultants, and with help from the Bureau of

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Reclamation, a rainfall augmentation experiment in the Santa Barbara area.

The works has gradually passed from experiments with single clouds to whole groups of clouds and to components of storm systems.

Senator PELL. I read it last night.

Mr. ST. AMAND. I will highlight it to show you the extent of the work we have been involved in.

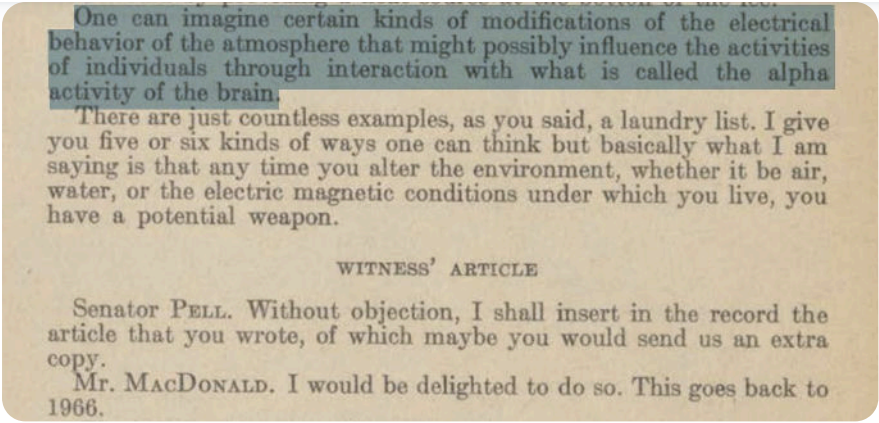
No untoward incidents have occurred and none are expected because of the care with which we have set up the experiments to preclude excessive precipitation as a result of our efforts.

AREAS INVESTIGATED BY NAVY WEAPONS CENTER

We are now engaged in study of a technique for slowing down portions of winter storms and thus changing their trajectory so that the rain along the Pacific coast of California might be spread out a little more equitably thus reducing the perennial drought in southern California and perhaps reducing the rain in the northern part of the State where it is usually too wet.

This we have not attempted to do; this is probably outside of our range of interest. I sincerely hope some other agency of the State of California or the Federal Government will take up where we started.

Perhaps the most provocative testimony came from Dr. Gordon MacDonald (pg. 55), who discussed the use of electromagnetic frequencies to influence human brain activity. He described the potential for global-scale manipulation of neurological states, provoking erratic behavior, disrupting cognition, and generating widespread adverse psychological effects. His testimony suggested that these emerging technologies could one day be used not only for environmental warfare but also as tools of psychological manipulation.



Our government is also not the exclusive source of funding for these programs. The fossil fuel industry has also taken a seat at the geoengineering table. [ExxonMobil](#), [Shell](#), and [BP](#) have all lobbied for solar radiation modification as a convenient engineering solution to climate change, one that allows them to continue emissions-heavy operations without regulatory consequence. These companies' scientists are publishing academic papers, funding think tanks, and shaping narratives that normalize geoengineering.

In addition, elite private foundations like the [Simons Foundation](#), the [Alfred P. Sloan Foundation](#), and [Bill Gates' Fund for Innovative Climate and Energy Research \(FICER\)](#) are all actively funding projects. They funnel millions into academic institutions, where the work proceeds without public engagement or informed consent.

Bill Gates' FICER is particularly alarming. The person in charge of disbursing funds there is [David Keith](#), one of geoengineering's most vocal champions. Keith has appeared on national TV and publicly acknowledged that these activities could result in the premature deaths of at least 10,000 people annually. Still, he continues to advocate for expanding these technologies.



Officials Neglect Public Health Risks

Sadly, those deaths may not be purely speculative. Independent medical research (see a couple of examples [here](#) and [here](#)) has raised serious



compounds. These substances, when inhaled, ingested, or absorbed, have been linked to a range of neurological, respiratory, and cardiovascular conditions.

A 2020 review in the *Journal of Alzheimer's Disease* found that chronic aluminum exposure correlates with Alzheimer's-type dementia, pointing out risks of atmospheric dispersants leaching into the human body. Other peer-reviewed research has associated aerosol pollution with rising asthma rates, chronic obstructive pulmonary disease (COPD), and even endocrine disruption. Yet, these risks go largely unaddressed. The EPA has not conducted any long-term toxicological studies on atmospheric dispersants used in climate intervention. Neither have state health departments. Because if you acknowledge the risk, you must also accept liability.

And while this is happening in plain sight, the federal government, in nearly every respect, claims ignorance. The whistleblower informed me that they had previously sent evidence to the EPA, which dismissed it as nothing more than "persistent contrails." They filed formal requests with the Department of Energy; no response. They testified before state legislatures in support of bills to ban geoengineering, only to see most quietly get held up or killed in committee. The reason is that many lawmakers are funded by utilities and water authorities—organizations that stand to benefit from cloud seeding and other types of weather modification.

The approval process for these operations is just as reckless. NOAA requires only a single-page form (Form 17-4) for anyone to begin modifying the atmosphere. No long-term environmental impact studies, no chemical safety requirements, no business license, no public comment. The form reads like something from a bygone era: simple, outdated, and completely inadequate given the scale of what's being proposed. And yet, that's the only thing standing between a private operator and the right to manipulate our weather.

In the Southwest, where the whistleblower now resides, the process is equally lax. Their state's Water Resources Department manages applications for weather modification and even assists applicants in filling out the paperwork. When the whistleblower submitted a FOIA request asking for all applications related to geoengineering, the department claimed they had none, even though public records show such programs do exist.

This entire ecosystem (federal agencies, university labs, private foundations, and fossil fuel lobbyists) operates in coordinated silence. They push weather modification as a public good while refusing to publicly disclose all of what they're doing, where they're doing it, or what the consequences might be.

Why isn't Congress talking about this? Why are most media outlets labeling it a conspiracy theory? Why do federal and state regulators continue to deny the undeniable? We know that these programs exist. We can trace the money. We can read the grant descriptions. We can see the evidence in the sky.

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The answer, I believe, is fear: fear of the backlash that would follow public acknowledgment, fear of legal liability, and fear of losing control over one of the most powerful tools of environmental and geophysical manipulation in history—the ability to geoengineer our weather.

Changing the Climate on Geoengineering


The American people deserve better. We deserve informed consent, complete transparency, and, above all, a say in whether our skies, soil, water, and air are being altered without our permission.

That's why I'm calling for action.

- We need an **Executive Order** from President Trump that immediately bans all forms of geoengineering until an independent and publicly accountable review is conducted.
- We need a **Congressional inquiry** into every agency and institution—whether public, private, or academic—that currently participates in or funds these programs.
- And, we need a new **Constitutional amendment** guaranteeing the right to unaltered weather in America.


If you care about your health, your children's health, or just the integrity of the natural world, now is the time to act. This isn't about politics. This is about basic human rights.

Geoengineering isn't the future. It's the present. And it's time we make it the past.

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