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Inside the "Greatest Day of Deregulation": 31 Actions That Redefined the EPA This Year

Environment * Climate Change * Conservation

1. Introduction: The "Greatest Day of Deregulation"

In the history of American environmental policy, few dates are likely to be as consequential -- or as contentious -- as January 28, 2026. On that Wednesday, amidst the flurry of activity characterizing the start of the second Trump administration's first full year, the Environmental Protection Agency (EPA) announced what it termed the "Greatest Day of Deregulation." In a synchronized administrative maneuver, EPA Administrator Lee Zeldin unveiled 31 distinct regulatory actions designed to rescind, weaken, or suspend environmental protections that had been established over the previous decades.[1]

This event was not merely a bureaucratic adjustment; it represented a fundamental philosophical pivot in how the federal government interacts with the natural world. The scale of this shift is difficult to overstate. By the end of January 2026, the administration had initiated nearly 70 separate actions targeting rules that protect air quality, water safety, and climate stability.[1] These actions were described by proponents as a necessary liberation of the American economy from "hidden taxes" and regulatory strangulation.[1] However, environmental experts, public health advocates, and former agency officials characterized the move as a "war on all fronts" -- a systematic attempt to strip the EPA of its core function and leave behind only a "symbolic husk" of the agency created in 1970.[1]

The targets of this deregulatory campaign were not random. They focused on the foundational scientific findings that underpin the federal government's authority to regulate pollution. From the rescission of the 2009 Endangerment Finding, which established greenhouse gases as a threat to public health, to the narrowing of the "Waters of the United States" (WOTUS) definition, the administration sought to redefine the legal boundaries of the environment itself.[1] By altering the definitions of what constitutes a "waterway" or a "pollutant," the EPA effectively removed vast swathes of the American landscape and atmosphere from federal oversight.

This report seeks to provide a deep-dive analysis of these policy shifts, not just as legal or political events, but as interventions in complex physical and biological systems. To understand the true impact of allowing more methane into the atmosphere or more coal ash into groundwater, we must look beyond the text of the Federal Register and into the molecular structure of the pollutants themselves. We must understand the quantum mechanics of radiative forcing that dictates planetary warming, the cellular mechanisms by which particulate matter triggers heart disease, and the stubborn chemistry of the carbon-fluorine bond that makes "forever chemicals" so persistent.[1]

The following sections will explore these scientific realities in detail,

contrasting the administration's policy rationales with the established consensus of atmospheric physics, hydrology, and toxicology. This analysis reveals a widening chasm between the regulatory landscape of 2026 and the physical laws that govern the health of the biosphere.

2. Atmospheric EPA Policy: Redefining the Physics of the Sky

The most aggressive actions taken during the 2026 rollbacks targeted the regulation of the atmosphere. The administration's approach relied on a two-pronged strategy: challenging the legal authority to regulate greenhouse gases and altering the cost-benefit analysis of conventional air pollutants to prioritize industrial savings over public health benefits.[1]

2.1 The Endangerment Finding and the Science of Greenhouse Gases

At the heart of federal climate policy lies the 2009 Endangerment Finding. This determination, mandated by the Supreme Court's decision in *Massachusetts v. EPA*, concluded that six well-mixed greenhouse gases -- carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride -- threaten the public health and welfare of current and future generations.[1] This finding is the legal trigger that compels the EPA to regulate these gases under the Clean Air Act.

In 2025, the EPA proposed to rescind this finding, effectively removing the legal foundation for all federal climate regulations.[1] The justification for this repeal rests on a re-evaluation of climate science, heavily referencing a report from the Department of Energy that characterizes global warming projections as "exaggerated" and claims that the science is far from settled.[1]

One of the central scientific arguments advanced by deregulatory proponents is the idea of "saturation." This hypothesis suggests that because carbon dioxide is already abundant in the atmosphere, its ability to trap heat has reached a limit, or "saturated," meaning that adding more carbon dioxide will have a negligible effect on global temperatures.[1] This argument appeals to a simplified understanding of absorption spectroscopy but fails to account for the complex vertical structure of the Earth's atmosphere.

To understand why this argument is flawed, we must look at how the greenhouse effect actually works. It is not simply a matter of blocking radiation at the surface. The Earth maintains a thermal equilibrium by radiating energy back into space in the form of infrared radiation. This radiation must pass through the atmosphere. Greenhouse gases like carbon dioxide absorb this outgoing radiation at specific wavelengths -- most notably the 15-micrometer band for carbon dioxide -- and re-emit it in all directions, including back toward the surface.[1]

It is true that in the lower atmosphere, near the surface, the center of this 15-micrometer absorption band is largely saturated; radiation at this specific wavelength is absorbed within a few meters of the ground.[1] However, the greenhouse effect depends on the altitude at which the radiation finally escapes into space. As the concentration of carbon dioxide increases, the atmosphere becomes more opaque to infrared radiation. This forces the "effective emission height" -- the layer of the atmosphere where the air is thin enough for radiation to escape -- to move to higher altitudes.[1]

In the troposphere, air temperature decreases with altitude. Therefore, as the emission height moves upward, the radiation is being emitted from a colder layer of gas. According to the Stefan-Boltzmann law of physics, the energy emitted by an object is proportional to its temperature raised to the fourth power. A colder emission layer radiates significantly less energy into space.[1] This creates an energy imbalance: the Earth is absorbing more solar energy than it is releasing as infrared radiation. This trapped energy warms the planet until the upper atmosphere becomes hot enough to restore the balance. This mechanism operates regardless of whether the absorption bands are saturated at the surface.[1]

Furthermore, the "saturation" argument ignores the "wings" of the spectral lines. As atmospheric pressure increases, the absorption lines of carbon dioxide broaden -- a phenomenon known as pressure broadening.[1] This allows carbon dioxide to absorb radiation at frequencies slightly away from the peak 15-micrometer center. These "wings" are not saturated, and as concentrations rise, they continue to absorb more energy, further enhancing the greenhouse effect.[1]

The repeal of the Endangerment Finding also affects the regulation of methane, a greenhouse gas that presents a different set of physical properties. While carbon dioxide is the long-term driver of climate change, methane is the "fast-twitch" muscle of the climate system, capable of delivering a powerful burst of warming in the short term.

The potency of methane is rooted in its molecular geometry. A methane molecule consists of one carbon atom bonded to four hydrogen atoms arranged in a tetrahedron.[1] This five-atom structure is more complex than the linear, three-atom structure of carbon dioxide. This complexity gives methane more "degrees of freedom," or ways that it can vibrate. Specifically, methane has nine vibrational modes, whereas carbon dioxide has only four. Each of these vibrational modes corresponds to a specific energy level that allows the molecule to absorb infrared photons.[1]

Critically, methane absorbs radiation in a specific part of the infrared spectrum -- roughly between 7 and 8 micrometers -- often referred to as the "atmospheric window".[1] In this region, carbon dioxide and water vapor are relatively transparent, allowing heat to escape to space. Methane effectively "closes" this window, trapping heat that would otherwise be lost. This is why, molecule for molecule, methane is far more efficient at trapping heat than carbon dioxide.[1]

The administration's decision to halt the enforcement of methane leak regulations from oil and gas infrastructure ignores this physical reality. By allowing the release of a gas with a Global Warming Potential 28 to 36 times that of carbon dioxide over a century -- and up to 86 times higher over 20 years -- the policy guarantees an acceleration of near-term warming.[1] This decision prioritizes the short-term economic savings of avoiding leak repairs over the long-term thermodynamic stability of the climate system.

2.2 The Return of Particulate Matter and the "Zero Value" of Life

While climate change poses a long-term existential threat, the most immediate health consequences of the 2026 rollbacks concern conventional air pollutants: particulate

matter (PM) and ozone. In a controversial move regarding cost-benefit analysis, the EPA announced in January 2026 that it would cease calculating the monetary value of lives saved by reducing these pollutants, assigning them a value of zero in regulatory impact assessments.[1] The agency argued that because air quality has improved significantly since the 1970s, older models for estimating health benefits are no longer accurate.[1]

This administrative decision to devalue the health impacts of pollution contradicts a vast and settled body of biomedical literature. Fine particulate matter, known as PM_{2.5} (particles smaller than 2.5 micrometers in diameter), is not merely dust. It is a complex chemical mixture often composed of ammonium sulfate, ammonium nitrate, elemental carbon, and organic compounds.[1]

When inhaled, these microscopic particles bypass the body's natural defenses in the nose and throat, penetrating deep into the alveolar sacs of the lungs. From there, they can translocate into the bloodstream, reaching organs throughout the body. The mechanism of injury is fundamentally one of oxidative stress and inflammation.[1]

Upon contact with lung tissue, PM_{2.5} particles interact with immune cells called macrophages. These cells attempt to engulf the particles but are often unable to break them down. This frustrated phagocytosis triggers the release of inflammatory signaling molecules, or cytokines, such as Interleukin-6 (IL-6) and Tumor Necrosis Factor-alpha (TNF-alpha). These cytokines enter the circulation, creating a state of systemic inflammation.[1]

In the cardiovascular system, this inflammation destabilizes atherosclerotic plaques in the arteries, making them more prone to rupture and causing heart attacks or strokes. Furthermore, recent research has identified direct effects on heart muscle cells (cardiomyocytes). Exposure to PM_{2.5} has been shown to disrupt the ion channels that regulate the heartbeat. Specifically, the oxidative stress caused by the particles leads to an overload of calcium ions inside the heart cells.[1]

This calcium dysregulation is a critical pathway for arrhythmogenesis. Intracellular calcium is normally tightly regulated by the Sarcoplasmic Reticulum (SR) via the Ryanodine Receptor (RyR2) for release and the SERCA pump for reuptake.[19] However, PM_{2.5}-induced oxidative stress can modify these proteins or affect the Mitochondrial Calcium Uniporter (MCU).[21] The MCU is responsible for taking up calcium into the mitochondria to match energy production with contractile demand. When cardiomyocytes are exposed to PM_{2.5}, the resulting oxidative stress can lead to excessive calcium uptake by the mitochondria or leakage from the SR. This calcium imbalance interferes with the electrical signals that coordinate contraction, increasing the risk of fatal arrhythmias.[1]

Different chemical components of PM_{2.5} have specific toxic profiles. Ammonium nitrate, a common secondary pollutant formed from agricultural and industrial emissions, has been linked to severe airflow obstruction and the infiltration of neutrophils (a type of white blood cell) into lung tissue.[1] By ignoring these physiological mechanisms, the EPA's new cost-benefit model effectively erases the biological reality of cellular necrosis and systemic inflammation experienced by millions of Americans living in polluted areas.

2.3 The "Good Neighbor" Plan and the Chemistry of Ozone

Another major target of the "Greatest Day of Deregulation" was the "Good Neighbor Plan," a regulation designed to control the interstate transport of ozone precursors. On January 28, 2026, the EPA proposed revoking this rule, allowing power plants and industrial facilities in upwind states to emit higher levels of nitrogen oxides (NOx) without regard for the air quality in downwind states.[1]

Ozone is a secondary pollutant; it is not emitted directly but forms in the atmosphere when nitrogen oxides react with volatile organic compounds in the presence of sunlight.[1] This photochemical reaction creates ground-level ozone, which is chemically identical to the ozone in the stratosphere but highly harmful when inhaled.

Ozone is a powerful oxidant. Biologically, its toxicity stems from its ability to react with the molecules that make up the lining of the lungs. The respiratory tract is lined with a thin layer of fluid containing lipids (fats) and proteins. When ozone enters the lung, it reacts instantly with the unsaturated fatty acids in this fluid, a process known as lipid peroxidation.[1]

This chemical reaction produces secondary toxic compounds. The reaction of ozone with a carbon-carbon double bond proceeds via the Criegee mechanism, forming unstable ozonides that decompose into aldehydes and other reactive species.[27] These downstream products, such as nonanal and hexanal, damage the epithelial cells beneath the fluid layer. This damage disrupts the "tight junctions" that hold the cells together, causing the lung barrier to become leaky. Fluids and proteins can then seep into the air sacs, causing edema and inflammation.[1]

This process mimics a chemical burn inside the lungs.[1] Nitrogen dioxide, the precursor to ozone, is also directly toxic. Because it has low water solubility, it does not dissolve in the moisture of the upper airways. Instead, it travels deep into the distal bronchioles and alveoli. There, it generates reactive nitrogen free radicals that attack the cellular machinery, leading to cell death and, in severe cases, a fibrotic narrowing of the airways known as bronchiolitis obliterans.[1]

The revocation of the Good Neighbor Plan ignores these chemical transport mechanisms. Pollution emitted in Ohio or Indiana does not stop at the state line; the wind carries the nitrogen oxides hundreds of miles, where they cook in the sun to form ozone that burns the lung tissue of residents in Pennsylvania and New York.[1] By dismantling the regulatory framework that manages this transport, the EPA is permitting a form of chemical trespass that poses severe risks to respiratory health.

| Pollutant || Source || Physical/Chemical Mechanism || Biological/Climate Impact
|| Regulatory Status (Jan 2026) |

| Carbon Dioxide (CO₂) || Fossil fuel combustion || Absorbs IR radiation (15 micrometer band); raises effective emission height. || Long-term planetary warming; ocean acidification. || Endangerment Finding proposed for repeal. |

| Methane (CH₄) || Oil/gas leaks, agriculture || 9 vibrational modes; absorbs in IR "window" (7-8 micrometers). || Potent short-term warming (86x CO₂ over 20 years). || Leak enforcement delayed; reporting rules repealed. |

| PM2.5 || Combustion, secondary formation || Oxidative stress; intracellular calcium overload (MCU/RyR2). || Systemic inflammation; arrhythmia; plaque rupture. || Health benefits assigned "zero value" in analysis. |

| Ozone (O3) || Secondary (NOx + VOCs + Sun) || Lipid peroxidation of lung lining (Criegee mechanism); barrier disruption. || "Chemical burn" of lungs; asthma exacerbation. || Good Neighbor Plan revoked. |

3. Water Policy: Severing the Hydrological Connection

While the changes to air quality regulations were stark, the administration's overhaul of water policy was equally transformative. The EPA sought to fundamentally redefine the scope of the Clean Water Act, narrowing federal jurisdiction to exclude vast networks of streams and wetlands that are integral to the nation's water supply.

3.1 The WOTUS Redefinition and Ephemeral Streams

In March 2025, the EPA finalized a new definition of "Waters of the United States" (WOTUS), explicitly excluding "ephemeral streams" -- water bodies that flow only in direct response to precipitation -- from federal protection.[1] The administration argued that these features are dry for much of the year and therefore cannot be considered "navigable" waters subject to federal oversight.[1]

This definition contradicts the consensus of hydrological science, which views river networks as integrated continuums rather than disconnected segments. Ephemeral streams are the capillaries of the watershed. Although they may not have water in them year-round, they are physically, chemically, and biologically connected to downstream perennial rivers.[1]

Recent research underscores the magnitude of this connection. Ephemeral streams contribute approximately 55% of the annual water discharge exported from regional river systems in the contiguous United States.[1] In the arid West, this contribution can be as high as 97%. These streams are not merely overflow channels; they are the primary sources of water for the larger rivers that the Clean Water Act is indisputably meant to protect.[1]

The connection is not just about water volume; it is about water quality. Ephemeral streams function as "bioreactors".[1] During dry periods, organic matter such as leaves and woody debris accumulates in the stream channel. When a rain event occurs, this accumulated material is processed by microbes. These microbial communities facilitate nitrification and mineralization, converting organic nitrogen into inorganic forms like ammonium and nitrate.[30]

The subsequent flow "shunts" this processed material downstream in a pulse of nutrients. This pulsed delivery of carbon, nitrogen, and phosphorus supports the food web in downstream rivers.[1] Without these pulses, downstream ecosystems can become nutrient-starved.[1] Conversely, ephemeral streams also transport pollutants. If a chemical spill or agricultural runoff enters a dry streambed, it sits there until the next rain, which then flushes the concentrated toxin downstream. By removing federal protection, the EPA effectively allows these headwater channels to be filled, paved, or used for waste disposal. This severs the hydrological arteries

of the watershed, inevitably leading to the degradation of the downstream waters that millions of people rely on for drinking and irrigation.[1]

3.2 Coal Ash and the Geochemistry of Leaching

Another critical area of rollback concerned the regulation of coal combustion residuals, or coal ash. In June 2025, the EPA announced plans to weaken wastewater standards for coal plants, allowing for the continued use of unlined ash ponds and delaying compliance deadlines.[1] Coal ash is the toxic remains of burning coal. It is enriched with heavy metals that were present in the coal, including arsenic, lead, mercury, selenium, and cadmium. When this ash is stored in unlined ponds mixed with water, these metals can leach into the underlying groundwater.[1]

The danger of this leaching is governed by complex geochemistry, specifically the reduction-oxidation (redox) potential and pH of the water. In the stagnant, waterlogged environment of an ash pond, oxygen is often depleted. These "reducing" conditions can mobilize certain toxic elements.[1]

For example, arsenic is particularly sensitive to these conditions. In the presence of iron oxides (rust), arsenic is often bound and immobile. However, under reducing conditions (anoxia), the iron oxides undergo reductive dissolution, releasing the trapped arsenic into the water.[1] This process transforms the solid iron minerals into dissolved ferrous iron, liberating the adsorbed arsenic to migrate into local aquifers used for drinking water.[35]

Selenium presents a different challenge. It bioaccumulates rapidly in aquatic food webs. Chemically, selenium is similar to sulfur -- they sit in the same column of the periodic table.[1] When fish or birds ingest selenium-contaminated water or prey, their bodies mistakenly substitute selenium for sulfur when building amino acids like methionine and cysteine.[1] This substitution, creating selenomethionine or selenocysteine, alters the structure of proteins. The selenium atom is larger and more nucleophilic than sulfur, which can disrupt the disulfide bonds that stabilize protein folding.[37] The result is often catastrophic failure in protein function, leading to teratogenic effects such as severe birth defects in fish larvae and waterfowl chicks.[1]

By relaxing the rules that require the lining and closure of these ponds, the EPA is ignoring these geochemical realities. The decision ensures that the "leachate" -- the toxic soup formed in these ponds -- will continue to percolate into the groundwater, posing a silent and persistent threat to rural communities.[1]

3.3 PFAS: The "Forever Chemical" Crisis

Perhaps the most scientifically complex challenge facing the EPA is the regulation of per- and polyfluoroalkyl substances (PFAS). These synthetic chemicals, used in everything from non-stick pans to firefighting foam, are pervasive in the environment. In 2025, the EPA retreated from setting strict drinking water limits for these compounds, citing the high cost of compliance for water utilities.[1]

The persistence of PFAS -- often called "forever chemicals" -- is a direct result of their molecular structure. The defining feature of PFAS is the carbon-fluorine (C-F) bond. This is the strongest single bond in organic chemistry, with a bond

dissociation energy of approximately 485 kilojoules per mole.[1] To put this in perspective, it takes an enormous amount of energy -- far more than is available in natural environmental processes -- to break this bond.

But bond strength is only part of the story. The persistence is also due to "steric shielding." The fluorine atom is physically larger than the hydrogen atom it replaces on the carbon chain. When a chain of carbon atoms is fully fluorinated, the large fluorine atoms crowd each other. To relieve this crowding, the carbon backbone twists into a helix.[1] This helical structure creates a dense sheath of electron-rich fluorine clouds that surround the carbon core.[1]

This "fluorine shield" acts like a suit of armor. It repels both water (hydrophobic) and oil (lipophobic).[40] More importantly, it prevents chemical reagents and biological enzymes from accessing the carbon backbone. Bacteria, which have evolved over billions of years to break down organic molecules, have no enzymatic tools capable of breaching this shield.[43] As a result, the molecule does not degrade. It persists in the environment and in human bodies -- essentially forever.[1]

The health consequences of this persistence are severe. Beyond the well-known risks of cancer and liver damage, PFAS are potent immunotoxicants. Recent research has shown that they suppress the adaptive immune system, specifically the antibody response.[1]

The mechanism involves the disruption of B-cells, the white blood cells responsible for producing antibodies. PFAS molecules interfere with the signaling pathways regulated by Peroxisome Proliferator-Activated Receptors (PPARs), particularly PPAR-alpha.[46] These nuclear receptors play a crucial role in lipid metabolism and immune cell development. Disruption of this pathway impairs the differentiation of B-cells into plasma cells, the factories that produce antibodies.[44]

Epidemiological studies have found that children with higher levels of PFAS in their blood produce significantly fewer antibodies in response to routine vaccinations, such as those for tetanus and diphtheria.[1] By rolling back drinking water standards, the EPA is allowing the continued accumulation of these immunosuppressive agents in the population. In a world of emerging infectious diseases, the decision to tolerate chemicals that degrade the human immune system represents a profound risk to public health resilience.

4. Institutional and Economic Dimensions: The "War on Science"

The 2026 rollbacks were not just about changing specific numbers in regulations; they were about altering the institutional machinery of the EPA itself. The administration implemented structural changes designed to limit the agency's ability to create future regulations.[1]

4.1 "Secret Science" and Data Transparency

One of the most controversial procedural changes was the reinstatement of the "transparency" rule, often criticized by scientists as the "Secret Science" rule.[1] This regulation restricts the EPA from using scientific studies in policy-making unless the underlying raw data is made publicly available.

While this sounds like a commitment to openness, in practice, it acts as a tool to

exclude epidemiological research. Large-scale public health studies rely on the private medical records of thousands of individuals. Confidentiality laws (like HIPAA) prevent researchers from releasing this raw data.[1] Under the new rule, pivotal studies linking air pollution to premature death -- such as the landmark Harvard Six Cities Study -- are deemed inadmissible.[49] This study, which tracked thousands of adults over nearly two decades, provided the foundational evidence that fine particulate matter causes early mortality. By barring such studies, the rule creates a "catch-22" where the most relevant human health evidence is barred from consideration, forcing the agency to rely on less direct animal studies or industry-provided data.[1]

4.2 The Hollowing Out of Research

The administration also moved to dismantle the EPA's internal research capacity. Reports indicate that the Office of Research and Development (ORD) and the Office of Atmospheric Protection faced severe budget cuts and office closures.[1] This "brain drain" deprives the agency of the scientific expertise needed to monitor environmental trends and assess new chemical threats. By shuttering these research hubs, the administration is not just rolling back current rules; it is blinding the agency to future dangers.[1]

4.3 The Economic Ledger: Profits vs. People

The justification for all these changes is economic: reducing the burden on industry to spur growth. However, independent economic analyses paint a different picture. The Environmental Protection Network (EPN) estimated that the rules being rolled back would have provided at least \$254 billion in annual economic benefits to the United States.[1]

These benefits come primarily from "avoided costs" -- money that society does not have to spend on emergency room visits, lost work days, and premature funerals. The EPN analysis suggests that for every dollar saved by corporate polluters through deregulation, the American public will incur approximately six dollars in health-related damages.[1] This represents a massive transfer of wealth from the public -- who pay with their health -- to specific industrial sectors.

The human toll is quantifiable. Projections indicate that the increase in pollution resulting from the 2026 rollbacks will lead to nearly 200,000 additional premature deaths by the year 2050.[1] These are not abstract statistics; they represent real individuals dying from preventable heart attacks, strokes, and respiratory failures caused by the inhalation of particulate matter and ozone.

Metric	Projection	Source
Premature Deaths	~200,000 (cumulative by 2050)	Environmental Protection Network [43]
Daily Asthma Attacks	>10,000 per day	Environmental Protection Network [43]
Economic Benefit Lost	\$254 Billion / year	EPN Analysis of EPA data [41]
Cost-Benefit Ratio	\$6 Public Cost for every \$1 Industry Savings	EPN

Analysis [43] |

5. Conclusion: A Divergence from Reality

The environmental policy landscape of January 2026 represents a radical departure from the bipartisan consensus that defined the previous half-century of American environmental governance. The EPA, under the direction of the second Trump administration, has moved away from the precautionary principle -- the idea that regulation should anticipate and prevent harm -- toward a reactive, cost-centric model that prioritizes short-term economic metrics over long-term biological stability.[1]

This shift is fundamentally a rejection of established science. As this report has detailed, the deregulatory agenda requires one to ignore the physics of radiative forcing, the chemistry of oxidative stress, and the hydrology of watershed connectivity. It requires a belief that the laws of Congress can overrule the laws of thermodynamics.

But the physical world is not subject to the Federal Register. The atmosphere will continue to warm as long as the radiative imbalance persists. The cells of the human lung will continue to inflame when exposed to ozone, regardless of the regulatory value assigned to that inflammation. The "forever chemicals" will continue to accumulate in the blood of children, impervious to political cycles.

The "Greatest Day of Deregulation" may have succeeded in rewriting the legal code, but it cannot rewrite the genetic or atomic code. As the legal battles over these rollbacks play out in the courts, the chemical and biological experiments launched by these policies are already underway in the bodies of American citizens and the ecosystems they inhabit. The data suggests that the results of this experiment will be measured in degraded aquifers, compromised immune systems, and a climate that grows increasingly hostile to human thriving. The disconnect between policy and science has never been wider, and the consequences of bridging that gap with ideology rather than evidence will be felt for generations.

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