

January 2024



WestFAST News

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Biden-Harris Administration Finalizes Rule to Prevent Inactive PFAS from Reentering Commerce

EPA January 8, 2024

Today, the U.S. Environmental Protection Agency (EPA) finalized a rule that prevents companies from starting or resuming the manufacture or processing of 329 per- and poly-fluoroalkyl substances (PFAS) that have not been made or used for many years without a complete EPA review and risk determination. In the past, these chemicals, known as “inactive PFAS,” may have been used without review in many industries, including as binding agents, surfactants, in the production of sealants and gaskets, and may also have been released into the environment.

Without this rule, companies could have resumed uses of these PFAS absent notification to and review by EPA. The rule builds on [three years of progress](#) on the Biden-Harris Administration’s commitment to advancing environmental justice, protecting public health, and addressing the impacts of these “forever chemicals,” and is a key action under EPA Administrator Michael S. Regan’s [PFAS Strategic Roadmap](#).

“Under President Biden’s leadership, EPA has shut the door on the possibility of anyone restarting use of over 300 PFAS without first ensuring a robust safety review to stop uses that could be harmful to our communities and our planet,” said Assistant Administrator for the Office of Chemical Safety and

Pollution Prevention Michal Freedhoff. “For far too long, communities – particularly those with environmental justice concerns – have suffered the impacts of exposure to ‘forever chemicals.’ We’re continuing to use every tool at our disposal to better protect communities across the nation from these persistent and dangerous chemicals.”

When the Toxic Substances Control Act (TSCA) was first enacted in 1976, thousands of chemicals were grandfathered in under the statute and allowed to remain in commerce without additional EPA review. During the first 40 years of the law’s existence, EPA completed formal reviews on only about 20% of new chemicals and had no authority to address new chemicals about which the Agency lacked sufficient information, which is part of the reason why many chemicals, including PFAS, were allowed into commerce without a complete review.

Under the 2016 TSCA amendments through the bipartisan Frank R. Lautenberg Chemical Safety for the 21st Century Act, the Agency must formally review the safety of all new chemicals before they are allowed into commerce. Under this new significant new use rule (SNUR), EPA must now conduct modern, robust reviews before any of these inactive PFAS could be used again.

TSCA requires EPA to compile, keep current, and publish a list of each chemical that is manufactured (including imported) or processed in the United States for uses under TSCA, known as the TSCA Inventory. TSCA also requires EPA to designate each chemical on the TSCA Inventory as either “active” or “inactive” in commerce. An “inactive”

designation means that a chemical substance has not been manufactured (including imported) or processed in the United States since June 21, 2006.

The final rule applies to all PFAS that are designated as “inactive” on the TSCA Inventory and which are not already subject to a SNUR. EPA has aligned the rule with reporting requirements for the [Active-Inactive rule](#), which designated these “inactive” chemicals.

If a company wants to use any of these 329 chemicals, they are required to notify EPA first. The Agency would then be required to conduct a robust review of health and safety information under the modernized 2016 law to determine if the new use may present unreasonable risk to human health or the environment and put any necessary restrictions in place before the use could restart. Any new uses of PFAS would be considered under EPA’s framework for evaluating new PFAS and new uses of PFAS, announced in June 2023.

Since EPA [proposed this rule](#) in January 2023, one company that held Confidential Business Information claims relating to some of these inactive PFAS relinquished its claims on the chemical identities of twelve of these substances, which were previously listed in the confidential portion of the TSCA Inventory. EPA will be moving them to the public portion of the TSCA Inventory.

[Read the final rule.](#)

Since 2021, the Biden-Harris Administration has taken action to strengthen the nation’s chemical safeguards under TSCA.

The Agency has proposed rules to protect millions of people from risks posed by five dangerous chemicals, including a proposed ban on ongoing uses of [asbestos](#), a proposed ban on all uses of [trichloroethylene](#), and a proposal to ban most uses of [methylene chloride](#). The Agency has released a risk evaluation for [TCEP](#) and a supplemental risk evaluation for [1,4-dioxane](#), continues to evaluate about two dozen additional chemicals, and has started the process to [prioritize five more chemicals](#) for risk evaluation, including vinyl chloride, the chemical involved in the East Palestine train derailment.

EPA has [proposed updates](#) to the regulations that govern the Agency’s review of new chemicals to eliminate exemptions for PFAS. The Agency has also released a [framework](#) for safely addressing new PFAS and new uses of PFAS.

EPA [finalized a rule](#) to gather data on PFAS, has issued [three TSCA test orders](#) under its [National PFAS Testing Strategy](#) to advance the Agency’s understanding of the impacts of these chemicals, and [made more PFAS subject to Toxics Release Inventory reporting](#).

[New USGS map shows where damaging earthquakes are most likely to occur in US](#)

The research-based map is the first to display an updated, comprehensive National Seismic Hazard Model for all 50 states.

USGS January 16, 2024

Nearly 75 percent of the U.S. could experience damaging earthquake shaking, according to a recent U.S. Geological Survey-led team of 50+ scientists and engineers.

This was one of several key findings from the latest USGS National Seismic Hazard Model (NSHM). The model was used to create a color-coded map that pinpoints where damaging earthquakes are most likely to occur based on insights from seismic studies, historical geologic data, and the latest data-collection technologies.

The congressionally requested NSHM update was created as an essential tool to help engineers and others mitigate how earthquakes affect the most vulnerable communities by showing likely earthquake locations and how much shaking they might produce. New tools and technology identified nearly 500 additional faults that could produce a damaging quake, showcasing the evolving landscape of earthquake research.

“This was a massive, multi-year collaborative effort between federal, state and local governments and the private sector,” said Mark Petersen, USGS

geophysicist and lead author of the study. "The new seismic hazard model represents a touchstone achievement for enhancing public safety."

The latest iteration, the first 50-state comprehensive assessment, was updated from previous versions published in 2018 (conterminous U.S.), 2007 (Alaska) and 1998 (Hawaii).

Noteworthy changes in the new model show the possibility of more damaging earthquakes along the central and northeastern Atlantic Coastal corridor, including in the cities of Washington D.C., Philadelphia, New York and Boston. In addition, there is a chance for greater shaking in the seismically active regions of California and Alaska. The new model also characterizes Hawai'i as having greater potential for shaking because of observations from recent volcanic eruptions and seismic unrest on the islands.

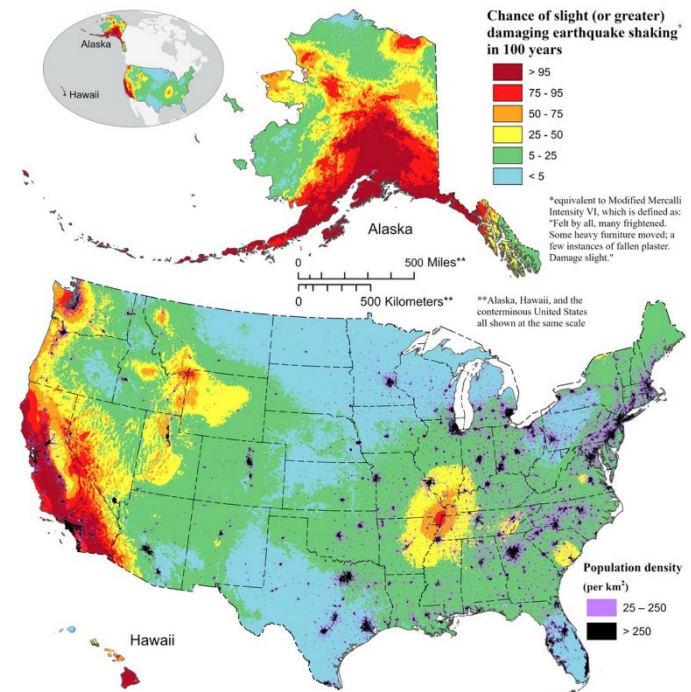
"Earthquakes are difficult to forecast but we've made great strides with this new model," said Petersen. "The update includes more faults, better-characterized land surfaces, and computational advancements in modeling that provide the most detailed view ever of the earthquake risks we face."

Key findings from the updated seismic hazard model include:

- **Risk to People:** Nearly 75% of the U.S. could experience potentially damaging earthquakes and intense ground shaking, putting hundreds of millions of people at risk.
- **Widespread Hazard:** 37 U.S. states have experienced earthquakes exceeding magnitude 5 during the last 200 years, highlighting a long history of seismic activity across this country.
- **Structural Implications:** The updated model will inform the future of building and structural design, offering critical insights for architects, engineers, and policymakers on how structures are planned and constructed across the U.S.
- **Unified Approach:** This marks the first National Seismic Hazard Model to encompass all 50 states simultaneously, reflecting a massive collaborative effort with federal, state, and local partners.

- **Not a Prediction:** No one can predict earthquakes. However, by investigating faults and past quakes, scientists can better assess the likelihood of future earthquakes and how intense their shaking might be.

To read the full findings of the scientific assessment, which was published in the journal *Earthquake Spectra*, please visit: <https://doi.org/10.1177/87552930231215428>



Sources/Usage: Public Domain. National Seismic Hazard Model (2023). Map displays the likelihood of damaging earthquake shaking in the United States over the next 100 years.

Pesticides are likely impacting invertebrate life essential to our nation's streams

A new nationwide study by USGS scientists provides additional scientific evidence that pesticides are likely negatively impacting aquatic invertebrate community health and therefore the health of our stream and river ecosystems.

USGS January 26, 2024

The USGS used multiple research strategies from statistical modeling to laboratory experiments to sampling in more than 400 streams across the United States. Scientists determined that four pesticides – bifenthrin, chlordane, fipronil and imidacloprid – were each likely impacting the health of aquatic invertebrates at the regional scale in at least one of the five regions studied.

Pesticides are used in agricultural and urban environments to control a variety of pests including invertebrates such as insects, mammals such as rodents, fungi, algae, and plants. They act through a variety of modes on the target organism; however, non-target organisms are often affected either through direct toxicity or secondary or indirect impacts to prey species or habitat. Overspray, drift, and runoff may carry a pesticide far from its application site.

Aquatic ecosystems are critical to our economy and communities, providing sources of drinking water, buffering communities against storms through wetland and marsh areas, driving vast sportfishing and recreational industries, and filling a host of other functions. Invertebrates are keystone species in those river and stream ecosystems. They are also already impacted by other environmental stressors in their environment, such as habitat degradation and changing temperatures, therefore they may be particularly sensitive to pesticide effects.

As part of the study, scientists sampled water, bed sediment and invertebrates to assess their exposure to pesticides. Knowing that pesticides are present in their environment and that aquatic invertebrate communities are struggling does not alone mean that pesticides are the cause. Therefore, scientists needed to investigate a variety of forms of evidence to determine the likelihood that pesticides were negatively impacting aquatic invertebrates in U.S. streams.

The research in this study used multiple lines of investigation to gather evidence. This included:

- Toxicity predictions based on measured pesticide concentrations in streams.
- Statistical analyses that tested the relationship between pesticides and invertebrate communities in streams.

- Multivariate models that identified which pesticides best explained the invertebrate community structure and health.
- Experiments using “mesocosms,” which are aquatic invertebrates brought into the laboratory and dosed with pesticides under controlled conditions to demonstrate the impacts these pesticides have.

“Stream invertebrates are impacted by many environmental stressors, including pesticides, habitat disruption, and changing temperatures, especially in streams that include agricultural or urban land in the watershed. Since many stressors are present, it has been difficult to determine the degree to which pesticides negatively affect stream invertebrates,” said Lisa Nowell, emeritus research chemist with the U.S. Geological Survey. “Looking at data from a variety of different study elements across 400 streams nationwide has not proven causality but has drawn a closer link between pesticides and their likely impact on aquatic invertebrates. Overall, this study makes a strong case that pesticides are a likely cause of harm for invertebrates in U.S. streams. Further, our findings suggest that stream biomonitoring and assessment efforts would benefit from the addition of pesticide monitoring.” said Nowell.

This information can be used by researchers and regulators investigating water quality as a stimulus for future research investigating stream degradation and as an aid to those tasked with remediation or restoration of streams.

The study, titled [“Multiple lines of evidence point to pesticides as stressors affecting invertebrate communities in small streams in five United States regions”](#) was published in Science of the Total Environment on January 24, 2024.

2023 was the world's warmest year on record, by far

NOAA January 12, 2024



July 3, 2023: An aerial view of low water levels at Woodhead Reservoir in Glossop, England, after the United Kingdom sweltered through its hottest June on record. 2023 was the world's warmest year on record, beating the next warmest year (2016) by a record-setting margin of 0.23 of a degree F (0.13 of a degree C). (Image credit: Christopher Furlong/Getty Images) [Download Image](#)

It's official: 2023 was the planet's warmest year on record, according to an analysis by scientists from NOAA's National Centers for Environmental Information (NCEI).

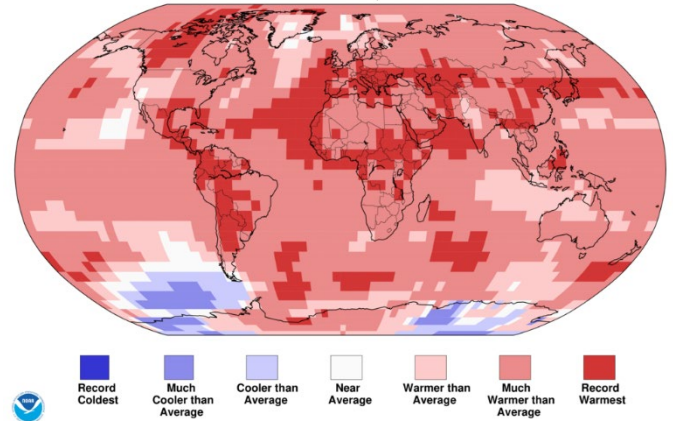
Along with the historic heat, Antarctic sea ice coverage dropped to a record low in 2023.

"After seeing the 2023 climate analysis, I have to pause and say that the findings are astounding," said NOAA Chief Scientist Dr. Sarah Kapnick. "Not only was 2023 the warmest year in NOAA's 174-year climate record — it was the warmest by far. A warming planet means we need to be prepared for the impacts of climate change that are happening here and now, like extreme weather events that become both more frequent and severe.

"We will continue to see records broken and extreme events grow until emissions go to zero," Kapnick said. "Government policy can address both emissions, but also actions to reduce climate impacts by building resilience."

Below are highlights from NOAA's 2023 annual global climate report:

Land & Ocean Temperature Percentiles Jan–Dec 2023
NOAA's National Centers for Environmental Information
Data Source: NOAAGlobalTemp v5.1.0–20240107



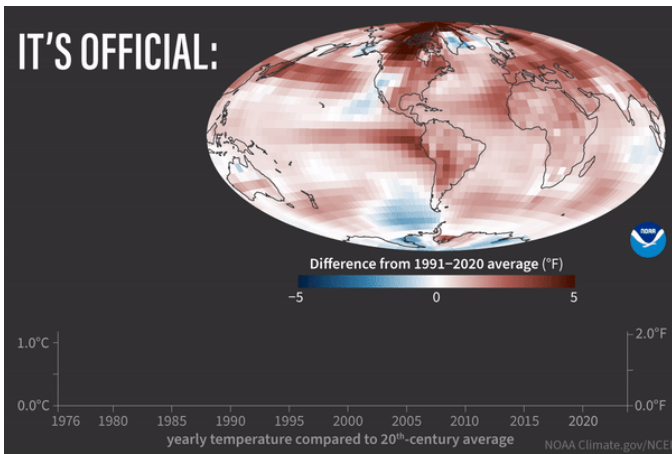
A world map plotted with color blocks depicting percentiles of global average land and ocean temperatures for the full year 2023. Color blocks depict increasing warmth, from dark blue (record-coldest area) to dark red (record-warmest area) and spanning areas in between that were "much cooler than average" through "much warmer than average." (Image credit: NOAA NCEI) [Download Image](#)

Climate by the numbers

Earth's average land and ocean surface temperature in 2023 was 2.12 degrees F (1.18 degrees C) above the 20th century — the highest global temperature among all years in NOAA's 1850-2023 climate record. It also beats the next warmest year, 2016, by a record-setting margin of 0.27 of a degree F (0.15 of a degree C).

The 10 warmest years since 1850 have all occurred in the past decade. In fact, the average global temperature for 2023 exceeded the pre-industrial (1850–1900) average by 2.43 degrees F (1.35 degrees C).

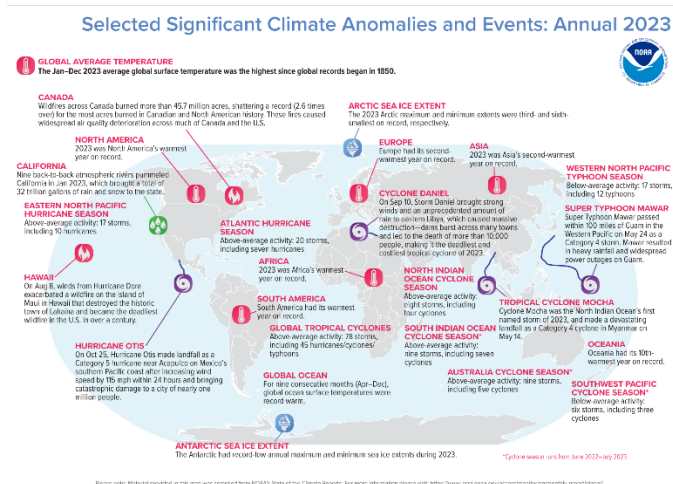
Looking ahead, there is a one-in-three chance that 2024 will be warmer than 2023, and a 99% chance that 2024 will rank among the top five warmest years.



Map of global average surface temperature in 2023 compared to the 1991-2020 average, with places that were warmer than average colored red, and places that were cooler than average colored blue. The bars on the graph shows global temperatures compared to the 20th-century average each year from 2023 (right) back to 1976 (left)—the last year the world was cooler than average. Based on data from NOAA's National Centers for Environmental Information. (Image credit: NOAA Climate.gov, using NOAA NCEI data) [Download Image](#)

2023 as ranked by other scientific organizations

Other scientific organizations, including [NASA](#), the [Copernicus Climate Change Service](#) and the [UK Met Office](#) have conducted separate but similar analyses that also rank 2023 as the warmest year on record.



An annotated map of the world plotted with the year's most significant climate events. Please see the story below as well as the report summary from NOAA NCEI at <http://bit.ly/Global202312offsite> link. (Image credit: NOAA NCEI) [Download Image](#)

Other notable climate findings and events

- **Global ocean heat content set a new record high:** The 2023 upper ocean heat content, which addresses the amount of heat stored in the upper 2,000 meters of the

ocean, was the highest on record. Ocean heat content is a key climate indicator because the ocean stores 90% of the excess heat in the Earth system. The indicator has been tracked globally since 1958, and there has been a steady upward trend since approximately 1970. The five highest values have all occurred in the last five years.

- **Polar sea ice was scant:** The 2023 annual Antarctic sea ice extent (coverage) averaged 3.79 million square miles in 2023, the lowest on record. The maximum extent in September was 6.55 million square miles, which was the lowest by a record margin. The minimum extent in February was 690,000 square miles, which set a record low for the second consecutive year. Arctic sea ice coverage averaged 4.05 million square miles in 2023, ranking among the 10 lowest years on record. The maximum extent in March was 5.64 million square miles, which ranked fifth lowest, while the minimum extent in September was 1.63 million square miles, which ranked sixth lowest.
- **December 2023 set records:** Global surface temperature in December 2023 was 2.57 degrees F (1.43 degrees C) above the 20th-century average — the warmest December on record. For the ninth consecutive month, the global ocean surface temperature was also record warm. Looking regionally, North America and South America both had their warmest December on record.

More: [Access NOAA NCEI's year-end 2023 global climate report and images.](#)

Upcoming Meetings and Webinars

[2024 WSWC Spring \(203rd\) Meetings and Washington Roundtable](#)

March 13 & 14, Washington DC

Other Federal News

BLM 1/11/24. BLM invests \$6 million from Bipartisan Infrastructure Law for ecosystem restoration partnerships in eight states

DOE 1/10/24. Snow-Capped Mountains at Risk from Climate Change

EPA 1/9/24. EPA Requires Toxics Release Inventory Reporting for Seven Additional PFAS

EPA 1/10/24. Assistant Administrator for Water Radhika Fox to step down at EPA

EPA 1/17/24. EPA kicks off in-person regional roadshows to help communities access historic Investing in America funding for local climate and environmental justice solutions

EPA 1/19/24. Biden-Harris Administration announces availability of \$3 million in grants to establish National Stormwater Centers of Excellence

FEMA 1/25/24. FEMA Announces New Application Period Opening for Emergency Manager Exchange Program, Invites Passionate Emergency Managers to Help Shape FEMA Programs and Policy

NOAA 1/9/24. U.S. struck with historic number of billion-dollar disasters in 2023

USFS 1/23/24. USDA Forest Service celebrates historic investments in 2023

The Western States Federal Agency Support Team (WestFAST) is a collaboration between 16 Federal agencies with water management responsibilities in the West. WestFAST was established to support the Western States Water Council (WSWC), and the Western Governors Association in coordinating Federal efforts regarding water resources.