



PFAS Research Funding

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EPA's Office of Agriculture and Rural Affairs

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Office of Agriculture and Rural Affairs (OARA)

- The Office of Agriculture and Rural affairs serves as the primary liaison between rural and agricultural stakeholders and EPA.
- We maintain close contact with EPA's program offices and regions
- OARA works with relevant federal and state partners, in addition to the Rural Partners Network, to collaborate with small, underserved towns and rural communities seeking federal investments in infrastructure upgrades and other community improvement opportunities.

EPA launches new office to strengthen engagement with agricultural and rural communities

March 1, 2024

Contact Information

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WASHINGTON – Today, March 1, 2024, the U.S. Environmental Protection Agency announced that it is establishing a new office to expand engagement opportunities with agricultural and rural communities. The creation of the first-ever EPA Office of Agriculture and Rural Affairs represents the Biden-Harris Administration's ongoing commitment to improving environmental stewardship and economic opportunity for America's farmers and ranchers, as well as strengthening the vitality of small towns and rural communities.

"Farmers and ranchers are crucial partners as we work together to deliver clean air, clear water, and climate solutions, all while playing the critical role of ensuring an abundant fiber, fuel and food supply," said EPA Administrator Michael S. Regan. "With the launch of this new office, we are ensuring agricultural and rural stakeholders will continue to have a seat at the table for many years to come."

Administrator Regan announced the creation of the new office alongside U.S. Secretary of Agriculture Tom Vilsack while delivering remarks at the 2024 Commodity Classic in Houston, Texas, the largest farmer-led annual convention in the country. He is the first EPA Administrator in history to attend the seminal event.

The new Office of Agriculture and Rural Affairs will be led by Rod Snyder, who has served as Administrator Regan's Senior Advisor for Agriculture since October 2021. The new office will expand on the work of the Ag Advisor and increase coordination with a network of existing agriculture policy advisors located in all ten EPA regional offices across the country.

In close coordination with EPA's program offices and regions, the office will forge practical, science-based solutions that protect the environment while ensuring a vibrant and productive agricultural system. In support of the Biden-Harris Administration's Rural Partners Network, the new office will also collaborate with small, underserved towns and rural communities that are seeking federal investments in infrastructure upgrades and other community improvement opportunities.

Additionally, the new office will facilitate closer coordination with relevant federal and state partners such as the U.S. Department of Agriculture, U.S. Food and Drug Administration, and state departments of agriculture. The office will also house EPA's existing Farm, Ranch and Rural Communities Federal Advisory Committee (FRRCC). The Committee provides independent policy recommendations to Administrator Regan on a range of policies that impact agriculture and rural communities.

Please visit the Office of Agriculture and Rural Affairs website for more information.



EPA OARA - Roles & Responsibilities



- Increase coordination with the network of existing [agriculture policy advisors](#) located in all 10 regions
- OARA houses EPA's existing [Farm, Ranch and Rural Communities Advisory Committee \(FRRCC\)](#), which provides independent policy recommendations to the agency on environmental issues important to agriculture and rural communities.
- OARA, along with OW, also oversees the newly created [Animal Agriculture and Water Quality \(AAWQ\) FRRCC Subcommittee](#) that will inform the Agency's decisions on EPA's permitting program to reduce nutrients and water pollutants from AFOs
- This office works with relevant federal and state partners, in addition to the Rural Partners Network, to collaborate with small, underserved towns and rural communities seeking federal investments in infrastructure upgrades and other community improvement opportunities.



EPA's Goals in the 2021-2024 Strategic Roadmap

RESEARCH

Invest in research, development, and innovation to increase understanding of

- Methods for measuring PFAS in the environment
- Assessing human health and environmental risks
- Evaluating and developing technologies for reducing PFAS

RESTRICT

Pursue a comprehensive approach to proactively prevent PFAS from entering air, land, and water at levels that can adversely impact human health and the environment.

REMEDiate

Broaden and accelerate the cleanup of PFAS contamination to protect human health and ecological systems.



Key Roadmap Actions: Research and Development

Develop and validate methods to detect and measure PFAS

RESEARCH

Advance the science to assess human health and environmental risks

RESEARCH

Evaluate and develop technologies for reducing PFAS in the environment

RESEARCH

REMEDiate



PFAS Research:

Extramural Funding Opportunities

- EPA supports PFAS research and development efforts through several programs, including;
 - Research grants
 - Small Business Innovation Research (SBIR) program
 - Challenges and prizes
 - P3 Student Design Competition





PFAS Research Funding: Research Grants

Understanding PFAS Uptake and Bioaccumulation in Plants and Animals in Agricultural, Rural, and Tribal Communities

- In September 2024, EPA awarded over \$15 million in grant funding to ten institutions for research to reduce per- and polyfluoroalkyl substances (PFAS) exposure from food and protect our farmland and farming communities.
- These community-engaged research projects will collect PFAS bioaccumulation data in agricultural plants and livestock and explore strategies for reducing PFAS exposure, which are important parts of EPA's commitment to protecting human health and the environment from PFAS.





PFAS Research Funding: Research Grants

Understanding PFAS Uptake and Bioaccumulation in Plants and Animals in Agricultural, Rural, and Tribal Communities – Awardees

- Michigan State University, East Lansing, Mich.
- Passamaquoddy Tribe, Sipayik Environmental Department, Pleasant Point, Maine
- Temple University, Philadelphia, Penn.
- Texas A&M University, College Station, Texas
- Texas Tech University, Lubbock, Texas
- University at Albany, State University of New York, Albany, New York
- University of Illinois, Urbana, Illinois
- University of Maine, Orono, Maine
- University of Utah, Salt Lake City, Utah
- University of Virginia, Charlottesville, Va.



PFAS Research Funding: Research Grants

Understanding PFAS Uptake and Bioaccumulation in Plants and Animals in Agricultural, Rural, and Tribal Communities

Michigan State University

Project Title: Comprehensive Evaluation of Fate, Transport, Bioaccumulation and Management Solution of PFAS on a Crop and Livestock Farm that Received Biosolids

- Principal Investigator: Hui Li
- Award Amount: \$1,600,000
- Project Summary: The project team will work with a crop and livestock farm in Michigan that received land application of PFAS-contaminated biosolids to evaluate the fate, transport, plant uptake, bioaccumulation in livestock, and life cycle of PFAS during farming practices. Research will include a detailed soil survey and measurement of PFAS accumulation in a variety of field crops and livestock forages. Investigators will also measure PFAS bioaccumulation in cattle and evaluate mitigation strategies, as well as develop high-throughput protocols to screen and map the PFAS and precursors accumulated in soil, plants, and animal organs. Results will be shared through educational activities.



EPA PFAS Research Funding: Research Grants

Understanding PFAS Uptake and Bioaccumulation in Plants and Animals in Agricultural, Rural, and Tribal Communities

Passamaquoddy Tribe, Sipayik Environmental Department, Pleasant Point, Maine

- Project Title: PFAS Accumulation in Finfish and Shellfish Species within the Coastal and Inland Waters of the Peskotomuhkati (Passamaquoddy) Homelands
- Principal Investigator: Chris Johnson
- Award Amount: \$1,558,555
- Project Summary: Peskotomuhkati culture, economy, and traditions are tied to river health and core Tribal lifeways practices of fishing and fish consumption. However, current PFAS measurements are limited and do not reflect the diversity of ecosystems and species that Peskotomuhkati people depend on. In this project, researchers will collect water and fish tissue samples for PFAS, heavy metals, and stable isotope analysis (food web structure) from watersheds in Tribal and disadvantaged regions of Northeastern Maine. Multiple fish species will be collected along areas of critical fish passage, habitats, and fishing grounds. Results from this research will help inform the health of Tribal members and the area who depend on recreational fisheries as critical food sources.



EPA PFAS Research Funding: Research Grants

Understanding PFAS Uptake and Bioaccumulation in Plants and Animals in Agricultural, Rural, and Tribal Communities

University of Maine - Orono

- Project Title: Developing Integrated Mitigation Strategies to Help Farmers Reduce PFAS Risks in Forage and Livestock Systems
- Principal Investigator: Ellen Mallory
- Award Amount: \$1,599,998
- Project Summary: The overall goal of this project is to equip farmers with a set of integrated and scalable PFAS mitigation strategies that target key points of PFAS transfer to reduce the risks associated with producing forages, milk, and meat on PFAS contaminated soil. The project team will conduct research to identify crop management strategies to reduce PFAS uptake by forage crops. They will also evaluate the effectiveness of a livestock feed binder to reduce PFAS concentrations in milk and meat. The results of the project will include practical information for farmers and other decision makers to use in short-term prevention responses to PFAS contamination in forage crops and livestock.



EPA PFAS Research Funding: Research Grants

Understanding PFAS Uptake and Bioaccumulation in Plants and Animals in Agricultural, Rural, and Tribal Communities

University of Illinois

- Project Title: Plant Uptake and Mitigation of PFAS Associated with Sewage Effluent and Biosolids Application in Tile-Drained Field
- Principal Investigator: Wei Zheng
- Award Amount: \$1,599,522
- Project Summary: The research team will perform a series of laboratory and field experiments to monitor the occurrence and abundance of PFAS in subsurface tile-drained fields irrigated with rural sewage effluent by routinely measuring PFAS in irrigation water, groundwater, drainage water, soils, and crops. They will also develop innovative mitigation techniques to prevent PFAS plant uptake from sewage effluent irrigation and biosolids soil amendment by using two types of unique biochars. Researchers will also offer innovative, feasible, and cost-effective approaches to mitigate the loading of PFAS into food crops from sewage effluent and biosolids. If successful, this research will provide information to assess the potential risks of using rural sewage effluent for irrigation of agricultural fields and contribute science-based knowledge on whether biosolids for agricultural use could result in soil contamination and plant uptake.



PFAS Research Funding: Research Grants

Developing and Demonstrating Nanosensor Technology to Detect, Monitor, and Degrade Pollutants

- **Funding Opportunity Number:** EPA-G2024-STAR-G1
Assistance Listing Number: 66.509
Solicitation Opening Date: **July 31, 2024**
Solicitation Closing Date: **November 13, 2024: 11:59:59 pm Eastern Time**
- The U.S. Environmental Protection Agency (EPA), as part of its Science to Achieve Results (STAR) program, is seeking applications for research to develop and demonstrate nanosensor technology with the potential to detect, monitor and degrade per- and polyfluoroalkyl substances (PFAS) in groundwater or surface water that may be used as drinking water sources.
- Advances in nanoscience and nanotechnology have the potential to address the challenges of detection and treatment of PFAS-contaminated waters. Nanomaterials are smaller in size, larger in surface area, and are more easily manipulated and dispersed in water than conventional materials, making them useful for environmental sensing and management. Using nanotechnology may help to build better environmental sensors by reducing cost, improving efficiency and increasing selectivity. Nanotechnology may also be used to degrade PFAS in a way that does not create toxic by-products.
- Applications must address both of the following research areas:
 - Develop and demonstrate nanosensor technology to detect and monitor PFAS in drinking water sources
 - Develop and demonstrate nanosensor technology with functionalized catalysts to degrade PFAS



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PFAS Research Funding: Small Business Innovation Research (SBIR)

- EPA is one of 11 federal agencies that participate in the SBIR Program established by the Small Business Innovation Development Act of 1982.
- EPA issues an annual solicitation for proposals from U.S. small businesses to develop and commercialize innovative technologies that address the Agency's mission.
- Application Timeline
 - 2025 SBIR Phase I - Open: June 26, 2024 - Closed: August 21, 2024
 - [2024 SBIR Phase I](#) - Open: June 28, 2023 - Closed: August 23, 2023





PFAS Research Funding

- For more information on the new Research Grants on PFAS Uptake and Bioaccumulation:
<https://www.epa.gov/research-grants/research-grants-understanding-pfas-uptake-and-bioaccumulation-plants-and-animals>
- Other EPA PFAS Research:
<https://www.epa.gov/chemical-research/research-and-polyfluoroalkyl-substances-pfas>

