

State and Tribal Engagement

ISSUE SUMMARY:

ORD's mission is to provide the best available environmental science and technology to inform and support human health and environmental decision making for the agency and our state, Tribal, and local partners. A key part of achieving this mission is regular engagement with the states and Tribes—because environmental and public health protection in the United States begins on the front lines at the state and local levels.

Working with states and Tribes who are doing the work 'on the ground' helps focus ORD research on where it is most needed. Given that most states and Tribes conduct limited research, ORD is a vital scientific and technical resource to the states and Tribes and assists in building and strengthening state and Tribal science capacity. Working with state environmental and public health agencies and Tribes has redefined how ORD plans, executes, and—most importantly delivers—the data, tools, and science-based resources states, Tribes, and territories need to meet today's complex environmental challenges. Environmental outcomes are best achieved through collaborative and effective partnerships across all levels of government.

State Engagement

State Research Needs: ORD works in partnership with environmental and public health officials across the country to tailor our research so that it is squarely aimed at their most pressing challenges and delivers the solutions they need. To better align EPA research with states' science priorities, ORD uses the results of biennial [State Research Needs Assessments](#) conducted by the Environmental Research Institute of the States (ERIS), the research arm of the Environmental Council of the States (ECOS, the national association of state environmental agency leaders), as well as input provided by the Association of State and Territorial Health Officials (ASTHO, the national organization representing public health agencies in the US). ORD uses the state-identified priority needs to inform the development of [Strategic Research Action Plans](#), which outline ORD's longer-term research programs and shorter-term technical support efforts.

Working with the National Research Programs, ORD identified specific research products for its [State Engagement Focus Product Portfolio](#) that are most closely aligned with state interests. ORD plans to engage with state media associations/partnership groups throughout research implementation, and pursue co-generation of research with states and territories where mutually beneficial and appropriate. Transparency, investing in open and constant communications, and working hand-in-hand with the states has created a synergy that continues to deliver for our co-regulator partners.

Research Communication and Translation: Biennial in-person meetings with each EPA region and their states, workshops, webinars, communities of practice and other forums facilitate information exchange between ORD and state environmental and health agency leaders and staff. The state team works across the National Research Programs and Centers to improve science translation and delivery of ORD research results/resources to state partners and decision makers.

Environmental Health Collaborations: ORD works with state environment and health leaders on joint projects through a [Memorandum of Agreement with ECOS and ASTHO](#) to advance our shared mission of protecting the public's health from environmental threats and hazards and advancing health and environmental equity for all.

Tribal Engagement

ORD actively engages with Tribes through the Tribal Science Council and other EPA Tribal partnerships groups. The Tribal Science Council (TSC) is a forum for interaction between Tribal and agency representatives to work collaboratively on environmental science issues. The Council is comprised of EPA representatives from across the agency, a Tribal representative from each of the EPA regions with federally recognized Tribes, and a representative of the Alaska Native Villages. The TSC is committed to the development of sound scientific approaches to meet the needs of Tribes.

The TSC seeks to:

- Better understand the priority science issues of Tribes from across the nation.
- Collaborate on approaches for addressing priority scientific issues and consider them as part of its formal planning process.
- Share EPA products or activities that could help address the important science issues of Tribes.
- Promote partnerships between Tribal and EPA scientists in the development and application of science tools.
- Communicate and coordinate with other Agencies and organizations to more effectively respond to issues.

ORD hosts monthly Tribal Science Council conference calls and twice a year in-person meetings of the Council. ORD shares scientific information with the Tribes through webinars and a Tribal science bulletin. ORD periodically partners with EPA program offices and other Tribal partnership groups on specific projects. Additionally, during the development of its [Strategic Research Action Plans \(StRAPs\)](#), ORD includes a formal Tribal consultation on elements of its Strategic Research Action Plans. ORD recently received feedback during StRAP 4 development through several approaches including listening sessions, early engagement with the National Tribal Caucus, Tribal Partnership Groups, Regional Tribal Operation Committees, the Tribal Science Council, partners in program and regional offices, and through the Tribal consultation process. ORD continues to engage with Tribes as research implementation progresses.

UPCOMING MILESTONES:

- ECOS Spring Meeting, March 23-26, 2025, in Arlington, VA
- ORD Region-State Meetings planned for 2025 tentatively include Regions 4, 5, 7, 8, and 10

State and Tribal Engagement

- The Tribal Science Council Meeting, December 2-6, 2024, Robert S. Kerr Environmental Research Center, Ada, OK

BACKGROUND:

The benefits of state and Tribal engagement include some high-profile success stories. More examples can be found in the [EPA Research Partner Support Stories](#).

Negative Effects of HABs on the Water Quality of Lake Havasu

Harmful algal blooms (HABs) are a major problem across the nation. Blooms occur when excess nutrients (nitrogen and phosphorus), combine with sunlight and warm water temperatures. HABs can cause severe, negative impacts on aquatic ecosystems and human health. For many Tribes, water bodies serve a cultural, recreational, and economic purpose. To explore ways to eliminate or reduce the cumulative negative impacts of HABs, ORD and EPA Region 9 collaborated with the Chemehuevi and Colorado River Indian Tribes to evaluate the effectiveness of man-made floating vegetated islands to remove nutrients from the water in Lake Havasu and the Lower Colorado River. Floating islands function by allowing plant roots to grow down into the water and absorb nutrients and minerals.

This study provided Tribal decision makers with improved scientific information and tools to assess, predict, and manage the risk of nutrients, HABs, associated toxicity events, and the resultant ecological, economic, and health impacts.

Wildfire Smoke Air Monitoring Response Technology Pilot

The growing threat of wildfires and related smoke impacts is a public health concern in the United States. In many areas affected by wildfire smoke, air monitoring data may be limited or absent. Supplemental measurement technologies can help air monitoring organizations gather timely data to assess smoke impacts and provide public health information. To increase supplemental air monitoring data during wildfires, ORD launched the Wildfire Smoke Air Monitoring Response Technology (WSMART) Pilot in September 2021. WSMART has made specific air monitoring technologies available for loan to state, local, and Tribal air organizations to support supplemental air monitoring in areas affected by wildfire smoke. The current systems available upon request are two stationary sampling air sensor systems and a portable system called the Vehicle Add-On Mobile Monitoring System (VAMMS).

“Before WSMART, we only had monitoring for ozone near our area. Because of this, we would look on AIRNow, and it said our air quality was good though we were able to see smoke in the air. In 2022, we received four PM2.5 sensors from WSMART which gave us real-time data in our area and helped us distribute accurate information about smoke impacts to the Tribal community.” – Fallon Pauite-Shoshone Tribe, Environmental Protection Department, Environmental Specialist Sonia Corleto

Illinois and Michigan – Lead: Helping residents know the importance of using water filters to reduce lead in their drinking water, Lead Service Line (LSL) identification project and technical support

“The Illinois EPA was very pleased that Galesburg volunteered to participate in ORD’s LSL identification project. We are very hopeful that this project will go a long way in assisting water suppliers who are unsure of the

material types of the plumbing connected to their distribution systems. Ultimately, the Illinois EPA hopes that this LSL identification project, combined with other research being conducted by ORD, will provide low-cost alternatives to digging to determine service line material types.” – Illinois EPA, Bureau of Water, Division of Public Water Supplies Manager W. David McMillan

“The results of EPA’s Benton Harbor filter study were a key component in informing the public health on what steps they could take to protect their families from lead in drinking water.” – Michigan EGLE former Director Liesl Clark

New Jersey – Wildfires: The delivery of new, easy-to-use tools to track and monitor the impacts of wildfires on local air quality

“With wildfire smoke having visible impacts in New Jersey and along the East Coast this year, ORD’s work to make air quality and smoke data readily available through AirNow and the [AirNow Fire and Smoke Map](#) has been very valuable.” – New Jersey DEP Commissioner Shawn LaTourette

“This past summer [2023], as much of the U.S. has been impacted by the Canadian wildfire smoke, the EPA AirNow Fire and Smoke Map has been an invaluable tool for the New Jersey Department of Health. Such tools are instrumental in providing the agency with situational awareness about environmental conditions across the state that can affect health, which helps guide the development of timely and accurate public health messaging.” – New Jersey DOH Acting Commissioner Dr. Kaitlan Baston

North Carolina – PFAS: Expanding state-wide efforts to monitor and assess the potential risks of PFAS in the environment

“EPA ORD scientists provided valuable technical support to NC DEQ in our oversight of the facility’s remediation measures to reduce the levels of GenX and other PFAS reaching the Cape Fear River. The support during the design, installation and testing have helped ensure that the barrier wall and treatment system address a significant source of PFAS exposure for communities along the Cape Fear River.” – NC DEQ Secretary Elizabeth S. Biser

Utah – HABs: Support the environmental management and public use of U.S. lakes and reservoirs by providing a capability of detecting and quantifying cyanobacteria harmful algal blooms using satellite data records ([CyAN App](#))

“The images we’ve been receiving through the CyAN project have been tremendously helpful to the Utah DEQ Division of Water Quality (DWQ), providing the foundation for a wide range of useful outputs. It allows DWQ to better target field sampling and more efficiently use our limited resources to protect public health. Finally, images are easily shared with response agencies as a useful visual communication aid.” – Utah DEQ, DWQ Benjamin Holcomb

KEY EXTERNAL STAKEHOLDERS:

State and Tribal Engagement

- ☐ Congress
- ☐ Industry
- ☒ States
- ☒ Tribes
- ☐ Media
- ☐ Other Federal Agency
- ☐ NGO
- ☒ Local Government
- ☐ Other (Local unions)

States, Tribes, and local governments need information to make decisions to protect their communities.

MOVING FORWARD:

- ORD will continue engaging with our state and Tribal partners to ensure research needs are met.

LEAD OFFICE/REGION: ORD

OTHER KEY OFFICES/REGIONS: REGIONS