



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Washington, DC 20460

OFFICE OF
RESEARCH AND DEVELOPMENT

August 25, 2021

Dear Tribal Representatives,

To inform the development of our research plans for fiscal years 2023-2026, EPA's Office of Research and Development (ORD) invites you to participate in a virtual listening session to help us better understand the concerns facing your tribal environmental, natural resources or health agency with respect to cumulative impacts (we also plan to hold separate listening sessions with state and local agencies). The purpose of these sessions is to give Tribes the opportunity to convey concerns and research interests early in EPA's research planning process: your input can help inform the research needed to better protect human health and the environment in ways that assess and account for cumulative impacts.

There will be two Tribal Listening Sessions held virtually on September 16 from 12-2pm ET and September 23 from 3-5pm ET. Details of the listening sessions are in the attached flyer; please [register here](#) and see the guiding questions below.

EPA's mission is to protect human health and the environment. This mission is accomplished, in part, through EPA's ability to characterize and manage the risks to humans and the environment from multiple exposures to chemical and non-chemical stressors to minimize adverse impacts on health, well-being and environmental quality, and enhance positive impacts of decisions and actions. As EPA prioritizes addressing conditions in underserved, overburdened communities, its challenge is to better understand how lifespan exposures to chemical and non-chemical stressors lead to adverse impacts to communities and how to reverse these impacts and prevent further harm.

EPA ORD provides critical science to better address the increasingly complex environmental challenges of the 21st century, including cumulative impacts and multiple stressors. Our leading-edge research informs Agency decisions and supports the emerging needs of our state and tribal partners.

Addressing cumulative impacts includes research that considers and accounts for how persistent poverty, inequality, and stressors from the built, social, and natural environment affect exposure and response to environmental pollutants. In line with the 2009 National Academies of Science publication, *Science and Decisions Advancing Risk Assessment* (often referred to as the NAS "Silver Book"), assessments for management of cumulative impacts start with the decision context. It will be essential to identify critical decisions and determine how those decisions may add to or subtract from baseline conditions, including how baseline conditions themselves may change because of other factors, such as land use change and climate change. Cumulative impact assessments provide information on how decisions could affect marginal and total changes to human health and wellbeing.

We look forward to your participation and to your input, which will be taken under consideration during the development of ORD's fiscal years 2023-2026 research plans. If you cannot attend the listening sessions, we invite you to email written comments to Monica Rodia (Rodia.Monica@epa.gov) by September 24, 2021.

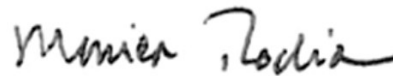
For more information on EPA's research programs please visit epa.gov/research/national-research-programs. We look forward to these upcoming sessions with you as we continue to foster early engagement between our research programs and Tribes.

For questions or additional information, please contact Monica Rodia.

Sincerely,



Maureen Gwinn
National Program Director
Sustainable and Healthy Communities Research
Program
US EPA Office of Research and Development



Monica Rodia
ORD Senior Indian Program Manager
Office of Science Advisor, Policy and Engagement
US EPA Office of Research and Development

Below are some guiding questions that might help you prepare for the listening session; however, do not feel limited to these.

Guiding Questions for Tribes

1. What does the issue of cumulative impacts mean to you?
 - a. Does your Tribe have a formal definition of cumulative impacts or what characteristics are considered associated with the topic (e.g., chemical only, including non-chemical stressors, timescale, impacts both positive and negative)?
 - b. What are your Tribe's major priorities or concerns with respect to cumulative impacts (e.g., what are the types of cumulative impacts or stressors that are of the greatest concern)?
2. Are there challenges in addressing cumulative impacts that your Tribe faces where additional knowledge or scientific discovery could be helpful? Challenges could include the following:
 - a. Ambient air quality and deposition and human and ecosystem exposures to criteria pollutants and air toxics, along with stressors from the built and social environment and climate change.
 - b. Sources and exposure and hazard information for chemicals (including safer alternatives), chemical mixtures, and emerging materials and technologies.
 - c. Health disparities and differing sensitivity within populations and communities, including those with environmental justice and equity concerns.
 - d. Multiple stressors affecting communities during incident response.
 - e. Resiliency of communities to the cumulative impacts of contamination, climate change, and other chemical and nonchemical stressors that affect health and the environment.

- f. Ambient water quality and exposures to chemical mixtures of criteria pollutants.
 - g. Risk management for exposure to groups of regulated and unregulated disinfection byproducts (DBPs) and opportunistic pathogens in drinking water.
 - h. Cumulative risk assessment methodologies and analysis tools.
3. What are the decisions your Tribe makes regarding the challenges faced by exposure to multiple non-chemical (e.g., built/social environment) and chemical stressors? How can EPA's research support those decisions?