

The Survey

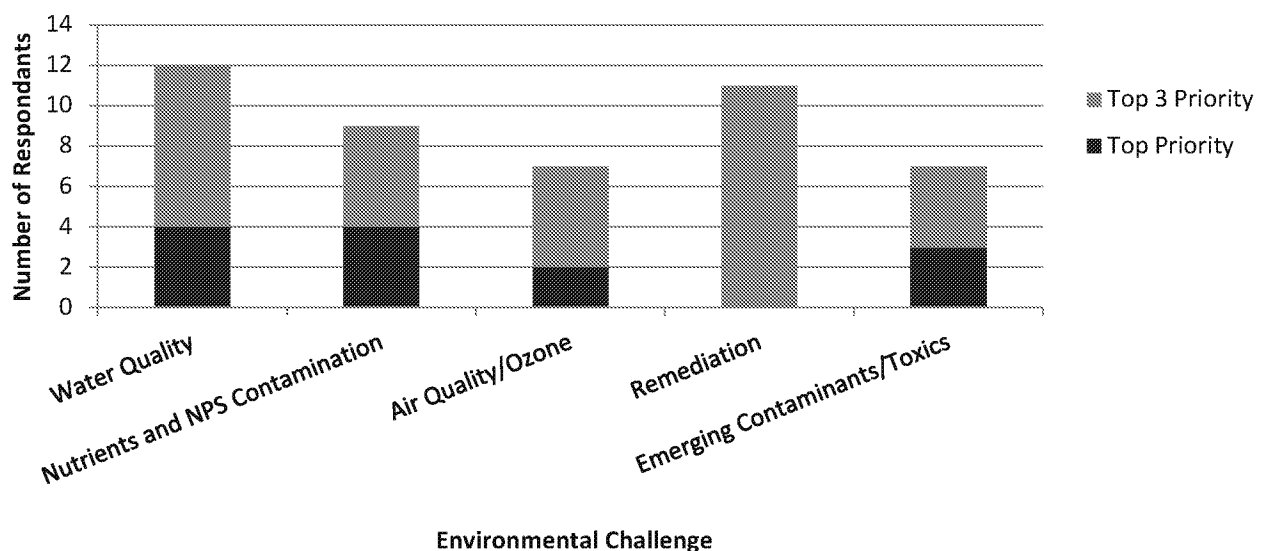
The Environmental Research Institute of the States (ERIS) has worked closely with the U.S. Environmental Protection Agency's (EPA) Office of Research and Development (ORD) for several years to create a closer link between state science needs and the work of ORD. In 2014, the ERIS Board of Directors asked state environmental agency leaders to identify scientific research needs. In response to the results of that survey, ORD made adjustments to ongoing research work and shared information on their research and tools that addressed these needs through a [document](#) and a [Tools Café](#) at the ECOS 2015 Fall Meeting. The results of the 2014 survey and the communication with states prompted EPA to take actions such as adding layers and metrics to their [EnviroAtlas](#) Interactive Map, including a national layer of phosphorous application rates for better assessment of nutrient loads and metrics on the number of stream miles with nutrient, temperature, and mercury impairments.

ERIS distributed its second bi-annual survey in fall 2016. It was designed to assist both ERIS and the Interstate Technology and Regulatory Council (ITRC), an ERIS program, in identifying current research needs across states, how states acquire science information, and how to address research needs. Thirty respondents completed the survey for ERIS¹. Their responses are summarized below.

The Results

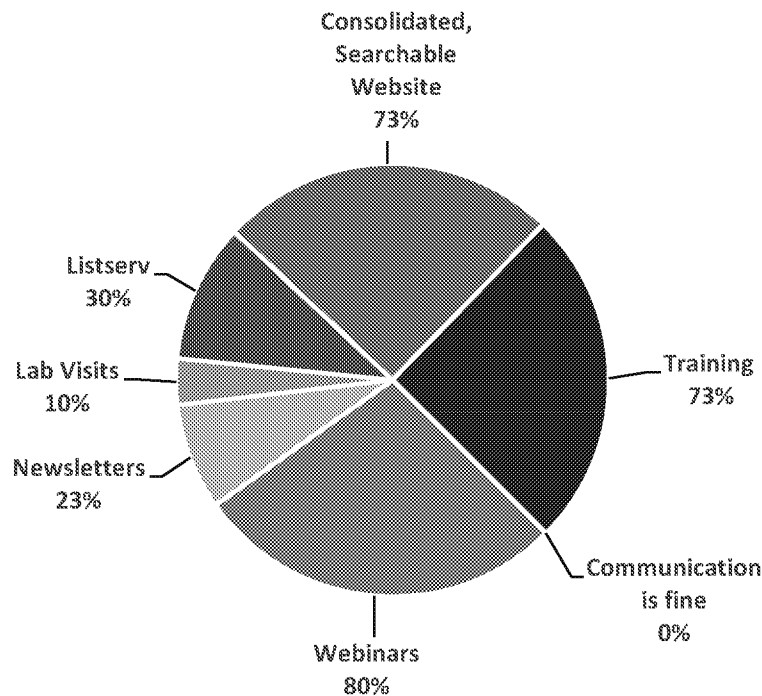
States were asked to rank their top three environmental and public health challenges across all media, including water, air, waste/remediation, and energy. Based on the responses, the following are the most pressing challenges for states in 2016:

1. Water Quality – Surface and Groundwater: 12 states listed this topic in their top 3 research priorities;
2. Remediation and Changing Remediation Standards: 11 states listed this topic in their top 3 research priorities, but no state listed this as their first priority;
3. Nutrients and Nonpoint Source Contamination of Water including Harmful Algal Blooms: 9 states listed this topic in their top 3 research priorities
4. Emerging Contaminants/Toxics: 7 states listed this topic in their top 3 research priorities
5. Air Quality Specifically the New Ozone Standard: 7 states listed this topic in their top 3 research priorities



¹ The 30 survey respondents include 27 states, of which Iowa and the District of Columbia submitted two responses each, and one U.S. Territory (American Samoa).

In addition to identifying research needs, respondents shared their views on how well EPA communicated their research results and tools, the best ways to communicate such information to states, and what activities could help them address their research needs. Most states agreed that more training on federal research information, methods, and tools would help their agencies. The majority of respondents agreed that bringing people together through ECOS workgroups and trainings would enable increased state-state and state-EPA collaboration related to research. Some states also expressed interest in ITRC teams and noted the importance of strengthening the state-federal relationship. All states sought improved communication and translation of research, and identified webinars, training classes, and a searchable website as the best resources for enhancing communication on research and tools.



ITRC distributed an identical survey and received similar feedback to that of ERIS. ITRC solicited responses from its State Points of Contact that coordinate state involvement in ITRC and are commonly more technical staff than ERIS respondents. Thirty-seven states responded to ITRC's request and identified more than 100 environmental priorities. Like ERIS, among the top five priorities are water quality, remediation, and emerging contaminants. The ITRC results differ from the ERIS results in that two of the primary concerns are drinking water treatment and climate change. ITRC will use the results of the survey in their out-year planning of new projects.

Survey Follow Up

The ERIS Board has already communicated the high-level results of the states' research needs survey to EPA. In March 2017, ORD scientists held a series of follow-up calls with state representatives to gather more detailed information on the identified needs. The ERIS Board will continue to share information on state scientific research needs with federal agencies and others while seeking opportunities to share information on federal research and tools with state agencies. This increased communication of scientific information among state and federal partners will help better protect human health and the environment.