

2020 ITRC Priorities

The 2020 ITRC Priorities were developed from the 2018 ITRC State Engagement Program survey results, as well as the 2018 ERIS Research Needs survey results, and priority issues from other state associations. We encourage proposals that will address these priorities, but we will also consider proposals that address environmental issues not included in this list. ITRC will also consider proposals that would update existing ITRC documents. Existing ITRC documents can be found [here](#).

The priorities listed below are **not** in any order of significance.

Water Reuse

- ❖ Beneficial reuse of produced water
- ❖ Energy efficient wastewater treatment
- ❖ Technological overview on monitoring, managing, and data sharing
- ❖ Health benchmarks and risk communication
- ❖ Impact of acid mine drainage on water
- ❖ Addressing abandoned mines, including uranium mines

Waste Reduction

- ❖ Microplastics sources, transport, fate, and ecological and human health risks
- ❖ Persistent Bioaccumulative and Toxic Substances (PBTs)
- ❖ Reducing and managing food waste

Chemicals of Emerging Concern

- ❖ N-Nitroso-dimethylamine (NDMA)
- ❖ 1,2,3-Trichloropropane (TCP)
- ❖ 2,4,6-Trinitrotoluene (TNT)
- ❖ Dinitrotoluene (DNT)
- ❖ Polybrominated diphenyl ethers (PBDEs) & Polybrominated biphenyls (PBBs)

Cleanup Technologies

- ❖ Natural attenuation (update): fate and transport, monitoring and evaluation strategies, human health and environmental concerns
- ❖ Plume delineation and new cleanup technology
- ❖ Groundwater commingled plumes and the use of forensics and fingerprinting
- ❖ Remote sensing technology to identify and facilitate remediation of chlorinated solvent plumes

Water Quality

- ❖ Addressing and managing lead issues and cleanup
- ❖ Sustainable groundwater use and reduction of “big ag” extracts
- ❖ Regional planning of well head / aquifer protection and sewage disposal
- ❖ De-icing and road salt runoff
- ❖ Aging infrastructure and facility upgrade costs
- ❖ Aging dam infrastructure and addressing organic material buildup, soil erosion, and wildlife disruption
- ❖ Pharmaceuticals found in drinking water

Air Quality

- ❖ Improved analytical methods for air quality sampling
- ❖ Air pollution control technologies for the industrial and mobile source sectors
- ❖ Smog pollution management and detection technologies (for nitrogen oxide and volatile organic compounds)
- ❖ Greenhouse gas reduction initiatives and cost-effective clean energy technology
- ❖ Greenhouse gas reporting and monitoring