



ITRC State Engagement Program Summary of ITRC State Priority Issues November 2010

A key element of the ITRC State Engagement Program is to inform ITRC leadership of priorities issues facing states so that informed decisions can be made on the selection of ITRC projects. On a yearly basis each state POC is requested to collect, compile, and prioritize his or her state's information. POCs are asked to collect all priority environmental issues identified for their state even if ITRC is already working on them and even if they are in areas that ITRC has not addressed in the past. For 2010, 32 states submitted 317 priority environmental issues. The states that responded to the 2010 survey include: Alabama, Arizona, Arkansas, California, Colorado, Connecticut, Delaware, Florida, Georgia, Illinois, Kansas, Kentucky, Maine, Maryland, Massachusetts, Michigan, Nebraska, New Hampshire, New York, Ohio, Oklahoma, Pennsylvania, Puerto Rico, Rhode Island, South Carolina, South Dakota, Tennessee, Utah, Virginia, West Virginia, Wisconsin, and Wyoming.

Issues were grouped in topics and an overall weighted average score was created based on the number of states identifying the issue and the ranking of the issue within the state. Many of the identified high priority state needs are already being met by ITRC Technical Teams including the top five topics: *Incremental Sampling Methodology* and *Environmental Molecular Diagnostics* (addressing Site Characterization: Sampling, Modeling, Monitoring issues); *Environmental Impacts of Ethanol and Bio-Based Fuels* (addressing Alternative Energy issues); *Mining Waste and Biochemical Reactors to Treat Metals in Mining-Influenced Water* (addressing Mining issues), *Vapor Intrusion Classroom Training* (addressing Vapor Intrusion); and *LNAPL and LNAPL Classroom Training* (addressing Oil and Gas Industry issues).

Trends resulting from the analysis:

- Site characterization issues, including guidances for contaminants, analysis, and modeling continued to be near the top of most state's priorities.
- **Alternative Energy** and **Climate Change** issues continue to remain near the top of state priorities. Included in these results was an increase in methane capture as an alternative energy source.
- While the **Oil and Gas Industry** issues continues to be near the top of state priorities, there was an increase in topics related to ground water contamination from "fracking" during the exploration of oil and gas.
- **Nanotechnology/Nanoscale Particles** issues saw a substantial increase from last year.
- There continued to be an increase in the percentage of states that report **pharmaceutical contamination** in ground water as a priority issue.
- Under the **Surface Water** grouping, three states listed **toxic algae blooms** in lakes/bays as a priority issue (zero states listed this issue last year).
- Although it was not reported in large numbers, there was an increase in states that reported **Urbanization Impacts** and **Construction and Demolition Debris** as priority issues.

The following table lists the issues with those ranking highest listed first. For priorities related to current ITRC Projects, rows are shown in gray; however, there may be other aspects of the priorities in the grayed-out topic areas that the related ITRC teams are not addressing and that may still be important as viable future projects.

Issue Grouping	Weighted Average Score	Related ITRC Project*
Site Characterization: Sampling, Modeling, Monitoring	11.55	Incremental Sampling Methodology; Environmental Molecular Diagnostics
Alternative Energy	11.05	Environmental Impacts of Ethanol & Bio-Based Fuels
Mining	10.5	Mining Waste; Biochemical Reactors to Treat Metals in Mining-Influenced Water
Vapor Intrusion	9.9	Vapor Intrusion Classroom Training
Oil and Gas Industry	9.85	LNAPLs; LNAPL Classroom Training
Climate Change	9.4	
Groundwater Contamination	9.35	Groundwater Statistics and Monitoring Compliance; Attenuation Processes for Metals and Radionuclides
Sediments	9.25	
Environmental Impacts from Remediation Technologies	8.15	Green and Sustainable Remediation (GSR)
Landfills and Solid Waste	7.2	
Storm water Non-Point Source Impacts	7.05	Contaminated Sediments
Air Contamination	6.55	
Regulatory Process	6.25	
Nanotechnology/Nanoscale Particles	6.1	
Institutional Controls/Long-term Stewardship	6.05	
Risk	6	Remediation Risk Management
Pharmaceuticals in Surface Water and Ground Water	5.35	
Remedial Technology Implementation	5.35	Solidification/Stabilization; Phytotechnologies; PRB: Technology Update
Surface Water	5.1	
Ecological	5.05	
CAFOs	4.3	
Urbanization Impacts	4.3	
Sewage and Septic System	4.15	
Water Supply	3.95	

Issue Grouping	Weighted Average Score	Related ITRC Project*
Coal Industry	3.9	
Emerging Contaminants	3.45	
Brownfields	3.4	
Radionuclides Contamination	3.35	Attenuation Processes for Metals and Radionuclides
Budget Reductions	3.3	
UXO and Firing Ranges	3.25	Unexploded Ordnance (UXO)
State Level Natural Resources Damages	2.9	
Arsenic	2.8	
DNAPLs	2.75	Integrated DNAPL Source Strategy; BioDNAPLs
Pesticides	2.6	
Construction and Demolition Debris	1.8	
Perchlorate	1.8	
Data Management	1.7	
Mercury	1.35	
Pollution Prevention	1.15	
Metals	0.95	
X-Ray Machines	0.55	

*Includes active projects, and implementation projects as of 2011

Note on ranking:

Scoring factors in the ranking provided by the states – Issue #1 are ranked higher than Issue #2 issues. The scoring is set up as follows: 1.00 factor for Issue #1; 0.95 factor for Issue #2; 0.90 factor for Issue #3, etc. Some states did not rank priorities. In order to provide fair inclusion, an average priority was assigned to all needs.