

# 2014 ERIS Questionnaire Summary

The ERIS questionnaire on research priorities and needs of the states was conducted in two phases. 28 states responded to the first phase of the survey while 32 responded to the second phase.

The first phase provided an overview of how state agencies organize their research and on their interactions with EPA's Office of Research and Development (ORD). It also allowed states to suggest areas of research that would be included in the second phase of the survey. The second phase allowed each state to rank its research priorities in seven different categories. For each category, each state was allotted 100 points to distribute among a set of research topics to reflect their priorities. These data were compiled and the top priorities are shown in the attached spreadsheet.

Key findings of Phase One included:

- 23 of 28 responding states do not have an individual or office responsible for research within their agency.
- The results show a clear need to create a stronger tie between ORD and the state regulatory agencies. Familiarity with ORD was modest with 46% of the respondents being either slightly or not at all familiar with the work of ORD and only 11% very familiar. Given those responses, it is not surprising that the frequency of interaction (working or communication) with ORD is not very high.
  - 74% of the states had not worked with ORD
  - 65% had not used ORD's research results
  - 89% of states reported that they had never or seldom communicated with the ORD contact in their EPA regional office.
- Most states did wish to work with ORD in setting research priorities and in making use of ORD research results. Nearly every state identified better communication between states and ORD as critical to improving interactions. Many identified better distribution of ORD results as an additional action to increase state agency familiarity with ORD.
- States did have a number of suggestions to improve their interaction with ORD. Many of these could be done at low cost to EPA. The strongest recommendation was that ORD create a searchable library of their past studies to facilitate access for states. More frequent communication prior to, during and after completion of a study were all rated as very effective ways to improve communication between ORD and the states.

The results of the second phase are summarized in table below. For each of the seven categories, we list the top responses by number of points earned. The number of states listing that topic as a priority and the rating of each topic relative to the average for that category are also listed. In two categories, only one answer was statistically significant. For these two categories, we listed the answer with the second highest number of points.

- The number next to each major entry is the average score of all entries and the standard deviation in scores on that question.

- Score = total number of points earned.
- Number = number of states that voted for this as a priority.
- Normed Rating - Compares this score to the average in its category. 1 is the average.
- Significance - answer is or is not statistically significantly different at one standard deviation.
- 10 Answers are significant at 2 sigma; YES shows these answers.
- The list contains at least two answers for each question/category.

	Average	Std. Dev.		
	Score	Number	Normed rating	Statistically Significant
<b>WATER POLLUTION</b>	<b>120.00</b>	<b>60.39</b>		
Non-Point Source- Effectiveness of BMP's for NPS pollutants	296	21	2.47	<b>YES</b>
Nutrients - better assessment of nutrient loading to water bodies	221	19	1.84	yes
Assessment - Mercury in fish and other biota - trends and distribution	197	18	1.64	yes
Non-Point Source - Edge of field studies and BMP's for nutrients	195	16	1.63	yes
Assessment - Biological water quality criteria and biological responses to habitat and nutrients	191	17	1.60	yes
<b>WATER PROTECTION TECHNOLOGIES</b>	<b>86.11</b>	<b>68.58</b>		
Wastewater system performance - Low cost, low energy nutrient removal technologies	285	23	3.31	<b>YES</b>
Wastewater system performance - New technology assessment - wastewater treatment and potential re-use	270	21	3.14	<b>YES</b>
Small community infrastructure needs	208	17	2.42	<b>YES</b>
Wastewater system performance - Endocrine disruptors - individual and cumulative impacts	204	19	2.37	<b>YES</b>
Wastewater System performance - personal health care products	160	19	1.85	yes
Septic systems- cost effective technologies to reduce nutrient losses from septic systems	154	15	1.79	yes

	Average	Std. Dev.		
	Score	Number	Normed rating	Statistically Significant
<b>DRINKING WATER</b>	<b>483.33</b>	<b>220.49</b>		
Drinking water safety	843	23	1.74	yes
Risks from emerging contaminants	635	27	1.31	<b>no</b>
<b>HAZARDOUS WASTE</b>	<b>157.89</b>	<b>95.93</b>		
Research into expanded recycling/reuse opportunities - potential beneficial re-use	294	22	1.86	yes
Hazardous waste handling - remediation technologies and effectiveness	292	21	1.85	yes
Hazardous waste handling - lag in comprehensive chemical registrations and listings (IRIS)	276	20	1.75	yes
<b>AIR</b>	<b>188.24</b>	<b>146.83</b>		
Air quality- Integrating multi-pollutant impacts into NAAQS	509	24	2.70	<b>YES</b>
Modeling - Updated emission factors	419	27	2.23	<b>YES</b>
Modeling - Improved air dispersion and phytochemical models	394	22	2.09	<b>YES</b>
<b>ENERGY</b>	<b>442.86</b>	<b>218.15</b>		
Energy efficiency in drinking water and wastewater systems	790	28	1.78	yes
Mitigation techniques for environmental impacts of new energy sources	620	26	1.40	<b>no</b>
<b>OTHER/MULTI-MEDIA</b>	<b>150.00</b>	<b>93.90</b>		
Information Technology - Optimizing information and data management technologies	336	22	2.24	<b>YES</b>
Information technology- Remote sensing technologies	310	18	2.07	<b>YES</b>
Concentrated feeding operations - Combined air and water impacts of CAFO's	273	21	1.82	yes
Environmental justice/Disadvantaged communities	245	15	1.63	yes