EPA-ORD Strategic Research Action Plans (StRAPs) Draft Charge to the Board of Scientific Counselors (BOSC)

Introduction: The mission of the EPA Office of Research and Development (ORD) is to provide the best available science and technology to inform and support public health environmental decision-making at the Federal, state, tribal, and local levels, addressing critical environmental challenges and anticipating future needs through leading-edge research. ORD prepares Strategic Research Action Plans (StRAPs) to guide its research planning over the ensuing 4 years, and beyond. The draft 2019-2022 StRAPs are the third such strategic planning exercise in this format (previous StRAPs covered 2012-2016 and 2016-2019). The draft 2019-2022 StRAPs orient ORD's research to respond to Administration priorities, as expressed in EPA's Strategic Plan. Additional detail on specific research needs has been identified through formal discussions with EPA programs and regions over calendar year 2018. Development of this third iteration of the StRAPs also emphasizes consultation with the states to identify their needs, particularly through the Environmental Council of the States (ECOS), along with engagement with the tribes. The six StRAPs are:

- Air and Energy (A-E)
- Safe and Sustainable Water Resources (SSWR)
- Sustainable and Healthy Communities (SHC)
- Chemical Safety for Sustainability (CSS)
- Homeland Security Research Program (HSRP)
- Human Health Risk Assessment (HHRA; delayed awaiting Agency input on priorities)

The consolidated EPA program and region, state, and tribal research needs are structured in the StRAPs under Topics, which are organized into Research Areas, and then detailed into draft research Outputs (Appendix 1 of each StRAP). The Outputs, in turn, will serve as the focus for future engagement with EPA Laboratories, Centers, and Offices (LCOs) to identify research products to address the identified needs. ORD will also maintain engagement with partners throughout the research process to optimize the utility of the research products to meet their needs.

At this time, ORD is seeking input from the Board of Scientific Counselors (BOSC) on the draft StRAP documents and proposed research strategies therein. The emphasis is on advancing ORD research that can successfully address the needs identified by EPA programs and regions, and states and tribes. This BOSC review at the strategic planning phase will be followed by regular BOSC reviews of research activities over the course of StRAP3 implementation.

Charge Questions

A. StRAP Document

Q.1a: Does the research outlined for the 2019-2022 timeframe <u>support</u> the relevant Agency priorities as described in the EPA and ORD Strategic Plans?

Q.1b: Each ORD research program undertook a rigorous engagement process to provide additional detail on specific EPA program and region, state, and tribal needs, the results of which are summarized in the StRAP objectives and explanations of research topics and areas. How well does the proposed research program <u>respond</u> to these partner-identified needs?

Q.1c: Does the StRAP, including the topics, research areas, and proposed outputs, clearly <u>describe</u> the strategic vision of the program? Given the environmental problems and research objectives articulated, please comment on the extent to which the StRAP provides a coherent structure toward making progress on these objectives in the 2019-2022 time frame.

Q.1d: ORD resources and scientist numbers and hiring have declined over recent years. With the objective of maintaining a dynamic research organization at the forefront of environmental science, and recognizing the importance of addressing the identified partner research needs, are there any other critical emerging environmental needs or fields of expertise and/or new research methods where this program should consider investing resources?

Q.1e: What are some specific ideas for innovation (including prizes/challenges) and market-based approaches that the program could use to advance solutions to existing and emerging environmental problems?