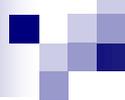


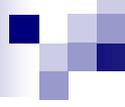
HHRA and CSS breakout group

Joint SAB-BOSC meeting
June 30, 2011



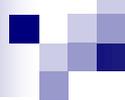
Question 1

- **To what extent do the draft research frameworks describe EPA's National Program and Regional Offices strategic science priorities? How well do ORD's research programs align with those priorities? If resources allow, what are areas for increased emphasis? If resources decline, what areas might be appropriate for decreased emphasis?**



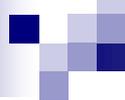
To what extent do the draft research frameworks describe EPA's National Program and Regional Offices strategic science priorities?

- Documents reflect intense effort, but too theoretical
- Clarify what is meant by the term “sustainable” and its derivative forms
- Other terms (e.g., “inherency”) need definition.



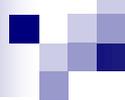
How well do ORD's research programs align with those priorities?

- Appear to be aligned appropriately
- Metrics (milestones) should be developed to ensure that realignment is effective and persists.



If resources allow, what are areas for increased emphasis?

- Additional use of social, behavioral, economic and decision science needed
- Environmental Justice issues should be incorporated
 - These cross-cutting elements should be more visible regardless of resources.



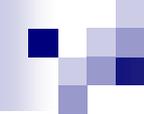
If resources do not allow, what are areas for decreased emphasis?

- Recommend developing criteria for prioritization rather than a priori identification of specific programs.
- Coordination across Govt Agencies (NTP, NTSDR, CDC, USDA, USGS, etc).
- May reflect current needs.



Question 2

- **How can ORD enhance coordination among its research programs, and better ensure that they complement one another?**



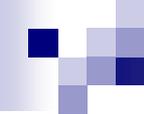
Response

- The committee recognized that research coordination was the most important issue developed by the EPA in its presentations
- Incentivize coordination of research by promoting a multi-PI approach
- PATHFINDER project is a good example - periodic review is needed to ensure efficacy



continued

- RFAs should be issued that require coordination of research projects across the various programs
- Cross-cutting issues, such as environmental justice, need to be overtly part of those RFAs
- Social, Behavioral and Decision sciences could also easily be used as a research tool to ensure coordination among the programs.



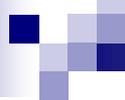
Question 3

- **How well do ORD's proposed research directions reflect its commitment to sustainably protecting human health and the environment?**



Response

- The CSS framework did not clearly explain how the program would achieve its desired outcome.
- The committee believed that “sustainability” should be the goal and not the means by which chemical safety is achieved
- It would be useful to develop a set of metrics that would be required elements (early markers of this long-term goal).



Question 4

- **How do the six programs fit together as an integrated environmental research strategy, charged with informing decisions on the nation's most critical environmental issues? Are these programs positioned to address the nation's highest priority, emerging environmental issues in the coming years?**

Response

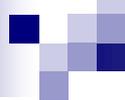
- Difficult to predict emerging issues, i.e., oil spill
- The new structure appears to make the workforce more nimble and flexible allowing free flow of expertise among the units
- Workforce “continuing education” is critical.
- Development of programs (visiting scholars, post-doctoral programs, or other “collaborative practices” with outside scientists) designed to maintain the appropriate skill-set within the Agency is important

Question 5

- **Based on Board members' familiarity with efforts in the broader scientific community, how well do ORD's research programs appear to catalyze and complement environmental science programs elsewhere? What suggestions do the members have for how EPA's research programs could improve upon their leveraging with those of others?**

Response

- EPA is a clear leader in the fields of environmental sciences
- ORD's research programs should develop mechanisms to rapidly incorporate the innovative work into the regulatory apparatus.
 - Coordinate with and translate to regulatory apparatus
 - Incorporate technology into regulatory studies
- There should be more coordination with programs such as Design for the Environment to reciprocally enhance the activities of each.
- Identifying ways to minimize the adversarial nature regarding individual risk assessments may impact funding and achieving consensus
- Agency should explore industry-government collaborative models, e.g., Europe, Australia and New Zealand



Question 6

- **How does the SAB/BOSC view ORD's activities in stimulating innovative research and what other suggestions would the SAB/BOSC have to promote innovation in EPA research?**



Response

- SAB/BOSC members were impressed with the efforts on innovation and ways of energizing the creative nature of Agency scientists.
- Metrics to evaluate programs such as Pathfinder are needed. What is the acceptable “failure” rate (what is “failure” and what is “success”). These metrics should be developed in advance.
- There are two kinds of innovation – new ways of doing old things, and completely new functionalities – both are needed



continued

- Create a culture of “innovation” by assembling a specialized group or section that identifies areas of research where innovation will be important
- Make EPA data easily accessible to the outside community of scientists who could use these data in creative ways.
- Develop a reward system to enhance an organized “thinking outside the box” type of innovation
- Innovative ideas are not always obvious. Develop metrics to evaluate which ideas to pursue recognition of the fact that many – if not most – “innovative” ideas will fail