

**Safe and Sustainable  
Water Resources (SSWR)  
Response to Charge Questions**

## 2a. How well does the StRAP support Agency objectives and cross-cutting strategies?

- Alignment generally good at high-level objectives
- Becomes more difficult to assess as you drill down further into the many detailed short- and long-term objectives
- Essential to prioritize among objectives given declining budgets
  - Must define process allocate resources across research areas
  - Meet short-run problem solving needs of OW, versus long run strategic objectives
  - Setting future priorities using a “value of information” approach
- Essential to identify areas of EPA strengths, & develop complementary partnerships w/others

## **2b. How well does proposed research directions address env. issues of 2020 and beyond?**

- EPA cannot address issues of 2020 by themselves
  - Coordination needed at higher level than ever in past
- Partnerships must leverage existing resources, not increase workloads (e.g., organizing & coordinating)
- Uncertainty assessments are essential model outputs (process models vs. statistical models)
- Demographic and spatial change in populations
  - e.g., Growth in Az. Fla, depopulation of Detroit
  - Sensitive sub-populations as part of “normal” life stages. pregnant women, elderly, young.
- Focus on invasive species, esp. secondary transport

## 2c. Do plans indicate that ORD is designing for integration with other programs?

- Good attention to other ORD research programs
  - Especially Sustainable & Healthy Communities
  - Energy-Air-Climate or Energy-Air-Climate-Water-Energy?
  - Need better connections to Human Health Risk Assessment
- Better opportunities with other agencies,
  - Especially USDA and DOE

## 5a. Where can EPA make best contribution in sustainable water-energy future?

- Major focus on water-food-energy-climate nexus
  - Many agencies w/authority, expertise and money
  - Partnerships with other agencies is essential
- EPA carve out unique area, not duplicate other efforts
  - Strengths in system analysis, fate & transport modeling, uptake, human & env. risk analysis
- Prominent roles in policy, R&D, deploying monitoring technologies

## 5a. Where can EPA make best contribution in sustainable water-energy future (Con't)?

- EPA an lead transformation of wastewater to resource recovery
  - Water reuse, valuable chemicals (e.g., flue gases), energy
- EPA well positioned for resource recovery from water
  - Dual roles in technical assistance and regulator positions
  - Engaged with industry and municipalities