

Planning for July 2012 SAB/BOSC Meeting

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March 22, 2012



21st Century Environmental Challenges

Today's issues are broad in scope, deep in complexity and widespread in their impacts

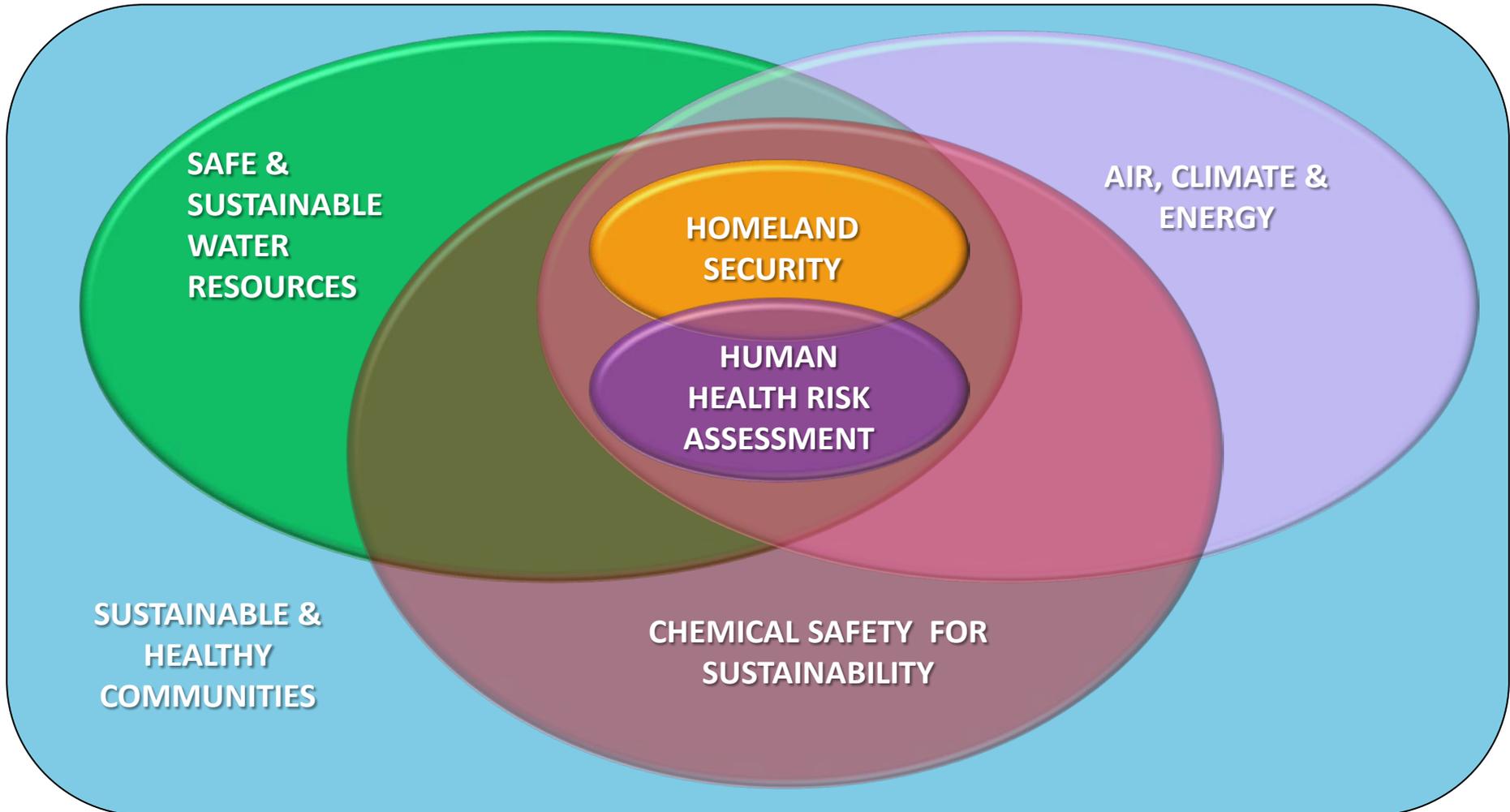
- Climate change
- Changing energy landscape
- Multi-pollutant exposure
- Nutrients in water
- Environmental justice
- Thousands of new industrial chemicals and pesticides each year
- Potential chemical, biological, radiological-based terrorism

Restructuring ORD's research programs

- Promote **innovative** and **catalytic** research
- Couple excellence in problem assessment with excellence in **solving problems**
- Encourage **integrated, transdisciplinary** research
 - Move away from stove-pipes
- Re-orient our research to **sustainability**: healthy environments v. acceptable risk
- **Engage** EPA partners and outside stakeholders
- Reduce transactional costs
- Align with EPA strategic goals

Former ORD Research Structure	Integrated ORD Research Structure
Global Change Research	Air, Climate & Energy
Sustainability Research	
Clean Air Research	
Human Health and Ecosystems Research	
Drinking Water Research	Safe and Sustainable Water Resources
Water Quality Research	
Human Health and Ecosystems Research	Sustainable and Healthy Communities
Pesticides & Toxics Research	
Sustainability Research	
Fellowships	
Land Research(Excluding Nanotechnology)	
EDCs Research	Chemical Safety for Sustainability
Computational Toxicology Research	
Human Health & Ecosystems Research	
Human Health Risk Assessment (NexGen)	
Pesticides & Toxics Research	
Land Research (Nanotechnology)	
Clean Air Research (Nanotechnology)	
Sustainability Research	
Human Health Risk Assessment	Human Health Risk Assessment
Homeland Security	Homeland Security

Integrated ORD research programs



Possible Topics for Discussion in July 2012

- 1) Progress in developing the six research programs
- 2) Integrating across the six programs
- 3) Stimulating innovative research

Progress in Developing the Six Research Programs

- For each program, provide overview of progress in the past year
 - Highlight key science activities and outputs
- Describe impact of SAB/BOSC comments (Oct. 2011) on program development
- Opportunity for NPDs to raise specific questions to SAB/BOSC for advice

Integrating across the Six Research Programs

- Importance of strengthening interactions across the six programs
- Discuss case studies that demonstrate integration
 - Climate change
 - Nitrogen
 - Integrating results from Chemical Safety for Sustainability into Human Health Risk Assessment
- Need to be careful to avoid unintended consequences, e.g., creating additional research programs

Planning for SAB/BOSC Discussion in July 2012

- Last year we sought your strategic advice in designing the realigned programs that address the challenges of the 21st century.
- This year we seek your advice as we move forward, making choices about strategic priorities and *how* we conduct research.
- We look forward to a productive discussion in July.