BOARD OF SCIENTIFIC COUNSELORS SUSTAINABLE AND HEALTHY COMMUNITIES SUBCOMMITTEE

Research Areas 9 and 10

RESPONSES TO CHARGE QUESTIONS

June 2020

SUSTAINABLE AND HEALTHY COMMUNITIES SUBCOMMITTEE

Courtney Flint, Ph.D. (Chair) *Utah State University*	James Kelly, MS *Minnesota Department of Health*	Leslie Rubin, MD *Morehouse School of Medicine*
Matthew Naud, MPP, MS (Vice Chair) *adapt.city LLC*	Rainer Lohmann, Ph.D. *The University of Rhode Island*	Derek Shendell, D. Env, MPH *NJ Safe Schools Program Rutgers School of Public Health*
Jay Golden, Ph.D. *Wichita State University*	Jonathan Meiman, MD *Wisconsin Division of Public Health*	Michael Steinhoff, MPA, MSES *Kim Lundgren Associates, Inc.*
Kimberly Gray, Ph.D. *Northwestern University*	Donald Nelson, Ph.D. *University of Georgia*	
Elena Irwin, Ph.D. *Ohio State University*	Barrett Ristroph, Ph.D. *Ristroph Law, Planning, and Research*	

RESEARCH AREAS 9 AND 10

- RA 9: Benefits from Remediation, Restoration, and Revitalization
    - Methods and metrics to characterize and forecast potential benefits from remediation and restoration that improve ecological and human health and well-being.

- RA 10: Community-Driven Solutions
    - Community resilience, particularly focusing on vulnerable groups, and potential impacts of hazards

CHARGE QUESTION 1

- Q.1: BOSC subcommittee members have been provided a summary of planned research products related to research areas 9 & 10 for review at this BOSC meeting. After reviewing these materials, combined with the presentations provided during the 2-day virtual meeting, <u>are there any critical gaps that would preclude accomplishing the environmental science goals of RA 9 and 10?</u> Please provide recommendations for addressing those.

Complementarity

Systems Thinking

Community Applicability

Vulnerability Disparities

Health Impact Assessments

Long-term Research Vision

Variety of Research Methods

Social Science

STRENGTHS

Balancing Partner-driven Research and Longer-term Systemic Research by Design

Synthesizing and Generalizing Information

Furthering Community Applicability

Vulnerability Disparities

Units and Levels of Analysis

Health Impact Assessments

SUGGESTIONS

Causation

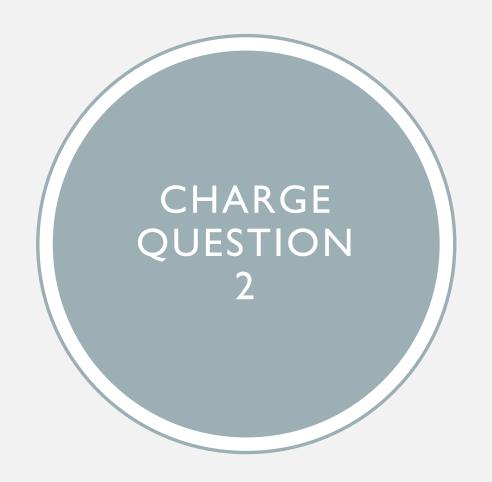Learning and Resiliency

Scenario Planning

DASEES Integration

PFAS

COVID-19

Built Environment and Vulnerable Infrastructure

SUGGESTIONS - CONTINUED

- **Recommendation 1a:** Maintain a balance across the research program to incorporate long-term systematic research - guided by research questions and design - with careful research site selection that will allow for inquiry across time and localities to better understand what findings can be generalized and what is context specific. This systemic research is fundamental to support the agency's applied research goals.

- **Recommendation 1b:** Incorporate frameworks beyond EnviroAtlas to quantify a holistic range of environmental, economic, social tradeoffs as relevant and needed to assess community resiliency.

- **Recommendation 1c:** Include the built environment, including high risk dams and other major infrastructure maintenance and integrity, in geospatial model layers when considering vulnerability.

RECOMMENDATIONS

CHARGE QUESTION 2

- Q.2: The combined StRAP and Research Area Coordination Team (RACT) process was resource intensive for both ORD scientists and partner organizations. Yet, this engagement has clearly vested EPA programs and regions, states, and tribes in the research to be conducted, and heightened their interest in participation with ORD and in the outcomes of the work. ORD is seeking BOSC input on effective ways to maintain this mutual engagement and communication between researchers and our research partners as we go forward with implementation.

Responsive to Partner Needs

Attention to Translational Deliverables

Regional Representation

Needs-based Tools Development and Sharing

Recognition of Variable Local Capacity to Engage

STRENGTHS

Diversify Partner Selection

State and Local Partner Perspectives

Document Regional Representation

Broaden Outreach Opportunities and Output Alternatives

SUGGESTIONS

Utilization Metrics Tracking

Opportunity Mapping

Technical Capacity, Language and Goal Alignment

COVID-19

SUGGESTIONS - CONTINUED

- **Recommendation 2a:** SHC should partner with regions to explore an intentional and measurable process to identify state and local expertise and local data sets to inform tool development, testing, local capacity, training needs, and tool use metrics across partners

- **Recommendation 2b:** SHC should establish a process with the regions to represent the heterogeneity within and across communities and expand the diversity and inclusion of stakeholders who become partners. This should include more equitable opportunities for states, territories, tribes, and communities (including marginalized or environmental justice communities) across all regions.

- **Recommendation 2c:** SHC should explore requiring research translation plans (e.g., NIEHS model) for SHC products (ideally co-created with regions and partners) to support regional staff capacity to share SHC products with a broader set of partners.

RECOMMENDATIONS