

Integrating Human Health & Well-Being with Ecosystem Services

**Research to Provide Practical Tools for
Healthier and More Resilient Communities**

ESA 2019





EPA SHC STAR Research Projects

EPA Sustainable and Healthy Communities (SHC) Research Questions

- What factors determine success or failure in understanding the impacts of multiple environmental stressors?
 - Using existing data sources on environmental pollution, ecosystem services, and community health and well-being.
- What factors influence robust decision-making? Role of:
 - Community engagement
 - Identifying stakeholders and stressors
 - Effective management strategies to set and prioritize goals
- Mitigating community-scale adverse impacts:
 - Causal linking of ecosystem services and promotion of human health and well-being



Community Engaged Research

Community Engaged Research Leading To Community-Based Solutions

- Multidisciplinary, collaborative research to understand how ecosystems support and promote human health and well-being
- Integrate environmental, societal and economic information
- Manage multiple stressors and impacts on humans and ecosystems
- Inform decision-making and management practices
- **Ultimate goal: Help communities achieve their own objectives**





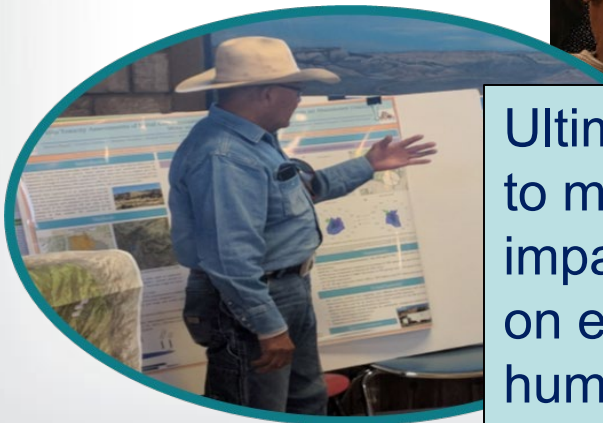
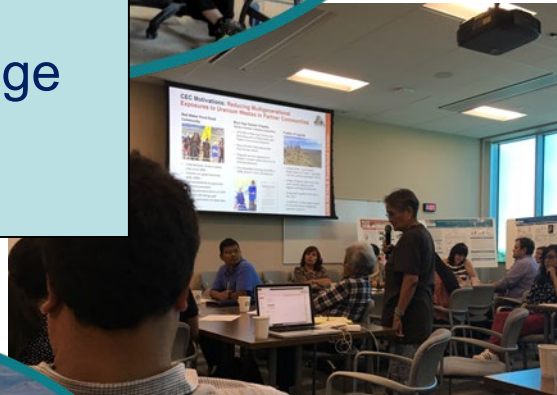
Translation To Build Community Capacity



Increase scientific information and knowledge dissemination and understanding



Induce changes in action, condition, or behavior that will lead to best informed planning, decision makings, or management practices



Ultimately **equip** communities to manage and assess the impacts of multiple stressors on ecosystem services and human health and well-being





2 EPA Tools and 4 STAR Research Projects

8:00 AM: EnviroAtlas – EPA’s mapping tool for building community resilience and sustainability by visualizing community ecosystem services and their linkages to human health and well-being

8:30 AM: Decision Analysis for a Sustainable Environment, Economy, and Society (DASEES): A tool for better decision-making by integrating community values with scientific understanding

9:00 AM: Exploring the links between harmful algal blooms and human well-being: How and why communities take action

9:40 AM: Human health, ecosystem services, and their economic value as part of sustainability assessment for the Sacramento region

10:10 AM: Integrating human wellbeing and ecosystem services into near term action planning in the Puget Sound

10:40 AM: Community-level management of human health risks from concentrated animal feeding operations (CAFOs) with defensive natural capital investments



It takes a whole village...

Let's learn from one another and figure out how to best integrate human health and well-being with ecosystem services!

