

Intersection of Science, Public Health, and Environmental Justice

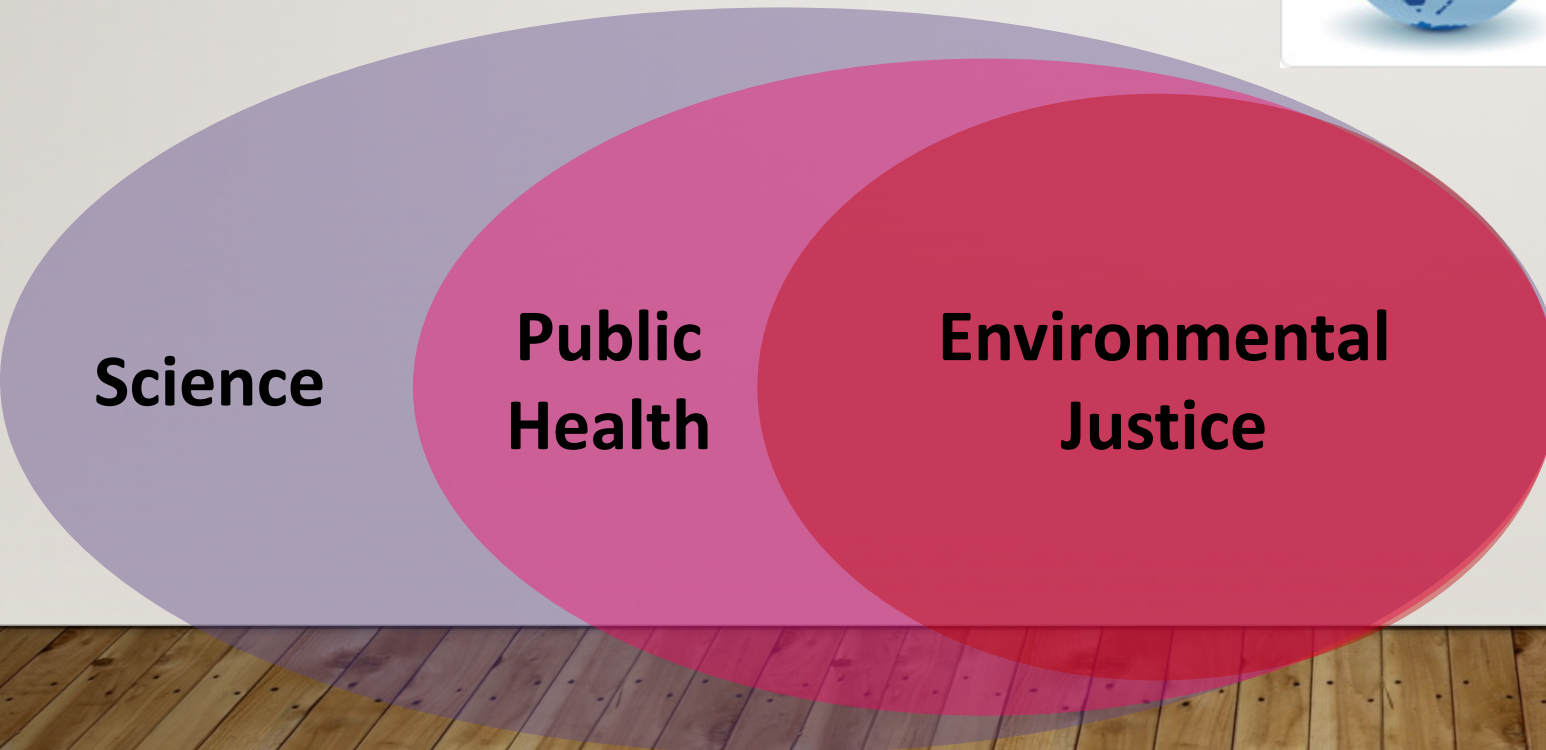
Vanessa Galaviz, PhD, MPH

vanesg@uw.edu



Prevention
Population

Promotion
Partnership



Hood, E. (2005). "Dwelling disparities: how poor housing leads to poor health." *Environ Health Perspect* 113(5): A310-7



Framework to Support the Science of Environmental Justice

 **Engagement and Partnership**

 **Participatory Democracy**

 **Research to Action**

 **Equity and Justice**





Imperial Valley Canal Water Study

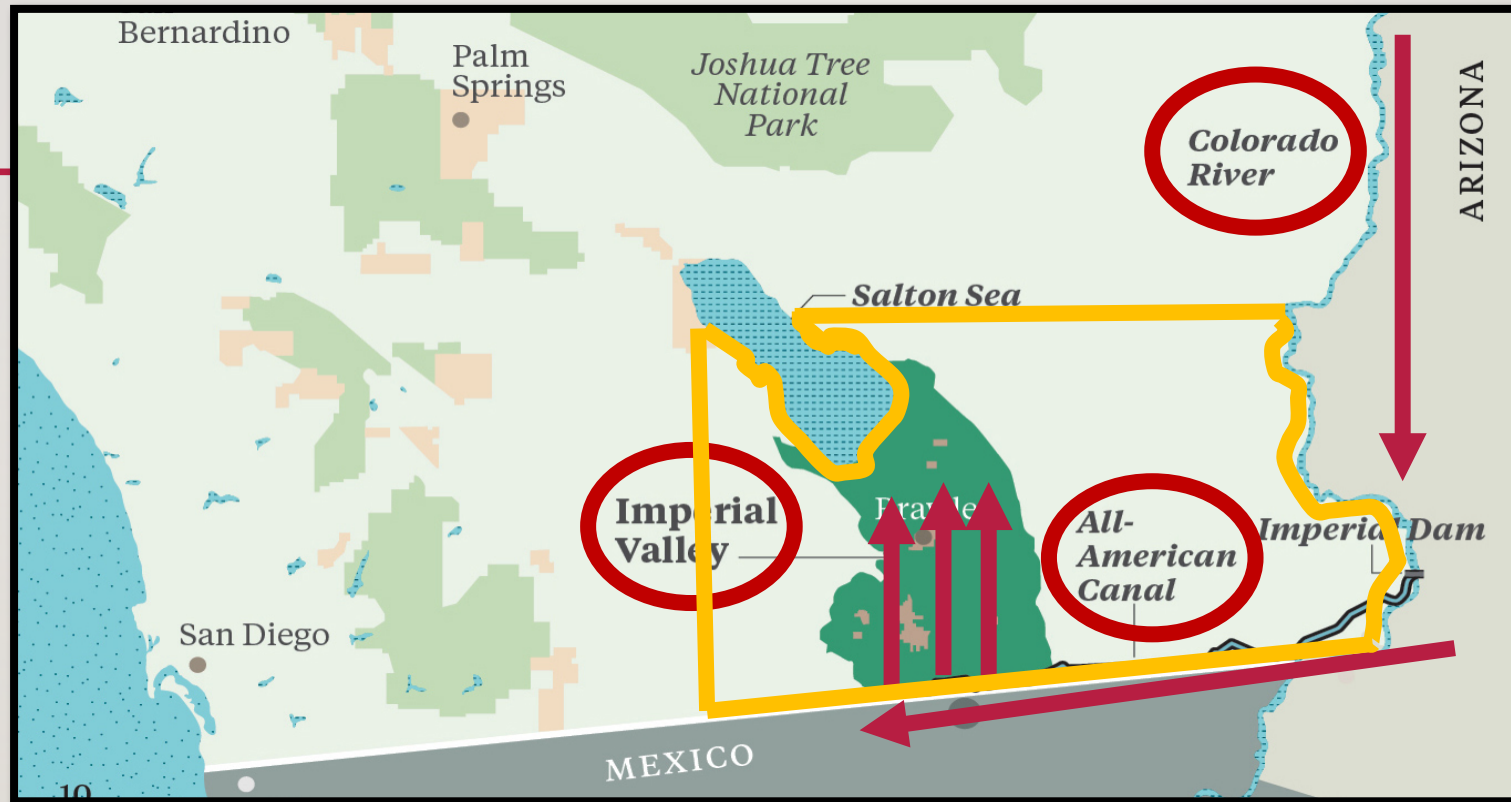
#IVwaterstudy

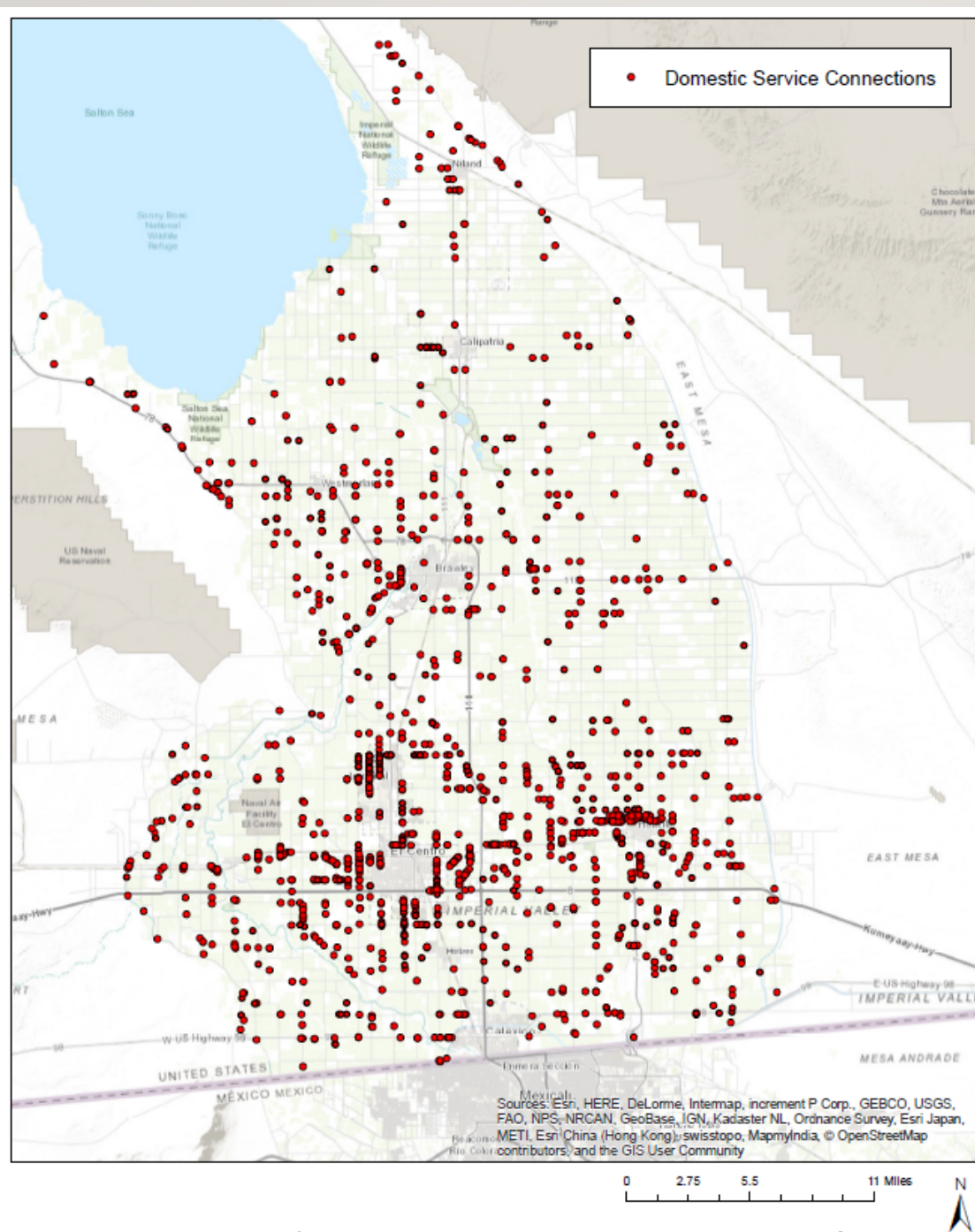
<https://www.ccvhealth.org/water/>



Imperial Valley

Canal system is 3,000 miles long because of the lateral canals!





Canal Water Service Connections for Domestic Use

Map by University of Washington MPH student, Kori VanDerGeest

The Concern: Canals and Human Health



- Canals may contain contaminants that are harmful to human health
- Canals may contain pesticides, fertilizers, and other contaminants from runoff
- Approximately 3,000 households use untreated canal water in their homes
- Canals serving households may run through agricultural and industrial areas





Engagement and Partnership



**Comite
Civico Del
Valle, Inc**

**University of
Washington
Department of
Environmental and
Occupational
Health Sciences**



**California
Office of
Environmental
Health Hazard
Assessment**

**California
Environmental
Protection
Agency**



**California State
Water Resources
Control Board**



Community Leaders



Community leaders from Imperial Valley working alongside government and academia to advise the project

- What contaminants are in the canal water serving households?
- Do residents drink the canal water?
- Is the canal water safe for domestic use such as showering and washing food and dishes?



Research to Action



Equity and Justice



Community-Based Participatory Research Study

“Water Quality Assessment for Rural Communities in Imperial County”

Scientific Analysis

- GIS: High Impact Area Analysis

Community Assessment

- Needs Assessment
- Mapping Activity

Research



- Identify 80 sampling sites
- Quantify contaminants using citizen science!

Action

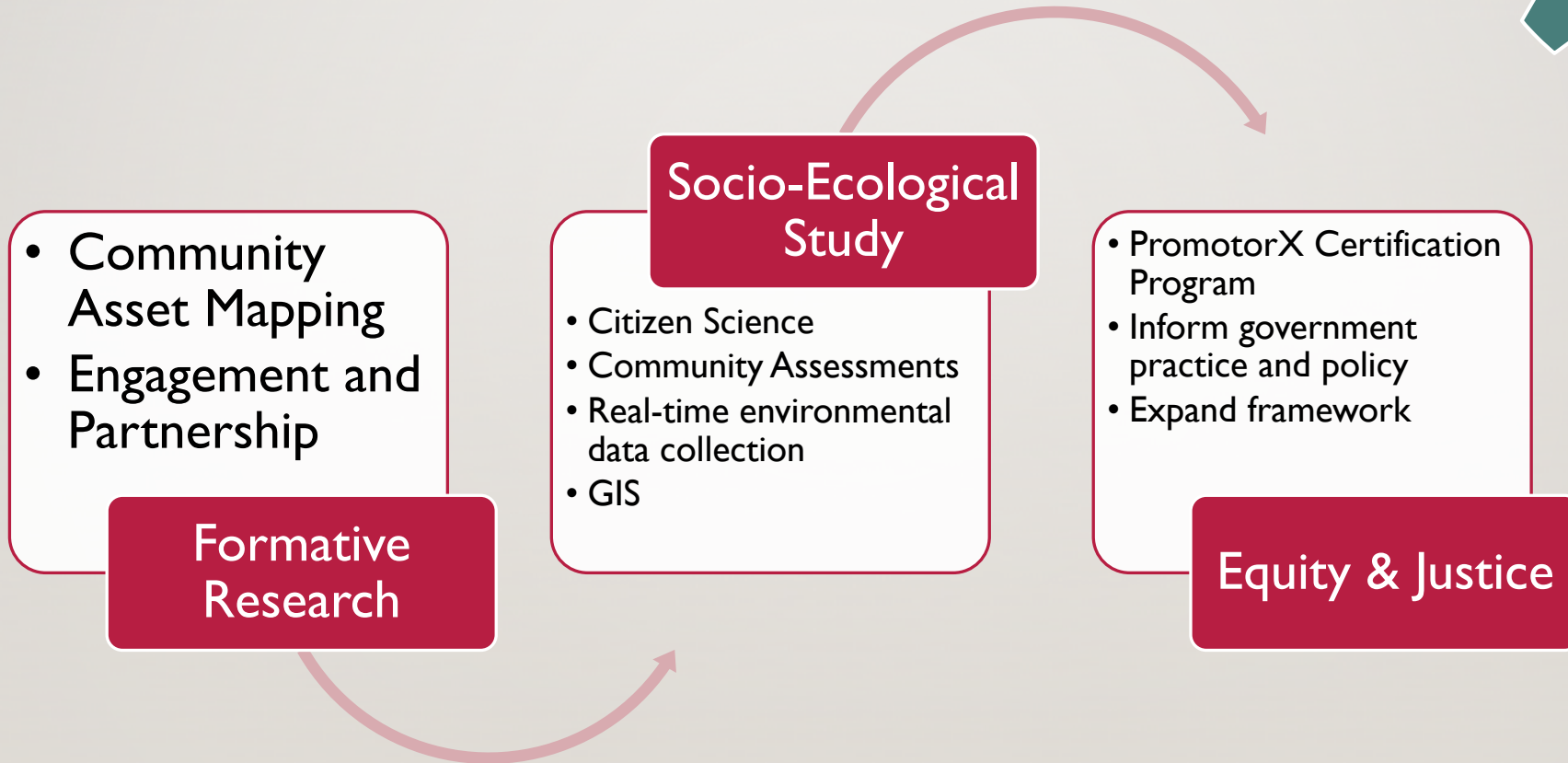


- Conduct an educational campaign
- Potentially provide data for CalEnviroScreen.
- Intervention to reduce exposure

Equity & Justice



Addressing Health Disparities Faced by Rural Underserved Agricultural Communities



THANK YOU!

