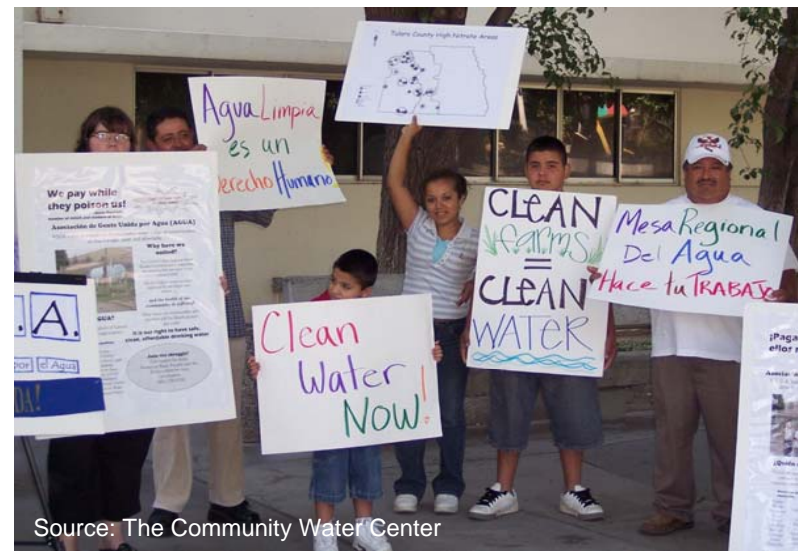



# Water Justice: Environmental Justice & Access to Clean Drinking Water in California's San Joaquin Valley

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International Water & Sanitation Symposium  
UC Berkeley  
April 10, 2009

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Source: The Community Water Center



# Why consider access to clean drinking water in the U.S.?

■ **A dominant domestic view:** "access of almost all ... U.S. residents to reliable safe drinking water distinguishes the United States ...from much of the rest of the world..."

–Levin et al 2002, EHP

■ However, my research identifies ***burdens*** that challenge this dominant point of view

- Equity
- Environmental justice
- Regulatory
- Financial

# Research Questions



Q1:

■ Is the race/class of a water system's customer base correlated with the concentration of contaminants or violations of the Safe Drinking Water Act?

Q2:

■ How do historical and institutional processes, regulatory mechanisms and financial constraints of communities illustrate a broader burden of drinking water quality in the Valley?

# Approach



## Q1: Statistical Modeling & Spatial Analysis

### ■ **Outcomes of interest:** Arsenic, Dibromochloropropane (DBCP), Nitrate, Total Coliform

- Absolute & relative concentration levels
- Maximum Contaminant Level (MCL) Violations:
  - 10 ug/L Arsenic
  - 2 ug/L DBCP
  - 45 mg/L (as NO<sub>3</sub>)

### ■ **Covariates of interest:** % Latino, % individuals in poverty

- Controlling for:
  - Distance to agriculture
  - Treatment technology
  - Septic/sewer
  - Depth to water
  - Service connections
  - Home ownership/citizenship

### ■ **Unit of analysis:** community water systems (CWS)

### ■ **Data source:** Dept of Public Health, US Census, GIS layers

## Q2: Case Study Analysis

### ■ **Three illustrative communities in Tulare County**