California Water Plan Update 2009: CDPH – Drinking Water Program Overview

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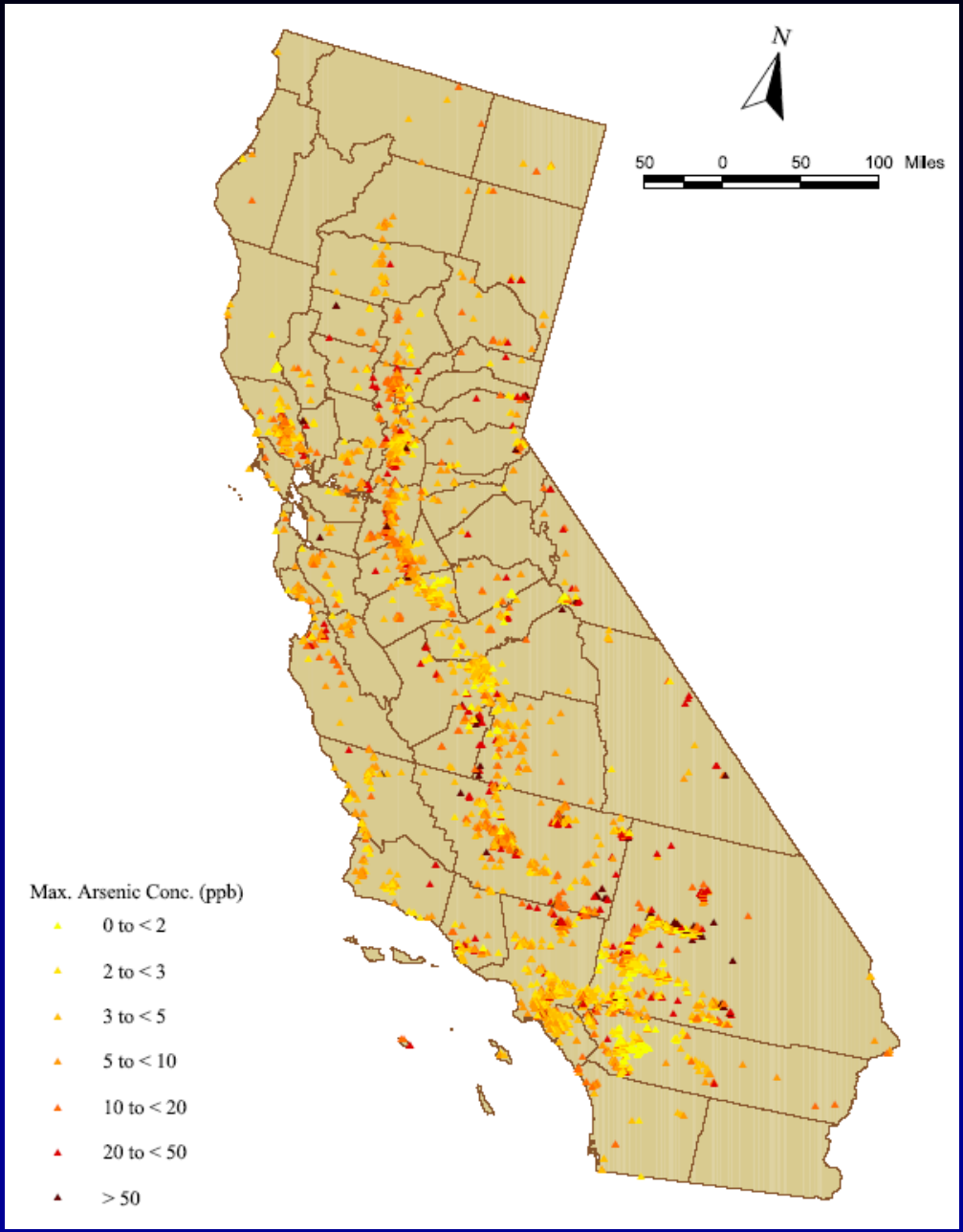
Drinking Water Program Accomplishments/Challenges

1. Water Quality Challenges-
   - Arsenic/Nitrate Contamination
   - Disinfection By-Products
2. Climate Change/Drought Impacts
3. Local Primacy Agency's SWS Programs
4. Recycled Water Projects
5. Technical, Managerial and Financial Challenges



Maximum Arsenic Levels in Groundwater

Table 3. Percentage of groundwater sampling locations exceeding targeted arsenic concentration

Targeted arsenic concentration (ppb)	Percentage of groundwater sampling locations exceeding targeted arsenic concentration
3	75
5	45
10	22
20	9.5
50	1.9

Arsenic Treatment Facilities

- Technical Reports Written for Funding
- Amended Permits Issued to Systems
- Additional Treated Water Monitoring
- Residuals Handling Challenges

177 PWS Have Arsenic Violations in the State!!!

Nitrate Contamination Issues

- Their presence in groundwater is generally associated with septic systems, confined animal feeding operations, or fertilizer use.
- Nitrates are also present in treated wastewater, and as such can be present in surface water, or in treated wastewater used in groundwater recharge projects.
- Nitrate was detected at least once above its MCL in 731 sources. Treatment is expensive and difficult.

Disinfection By-Products

- Water Treatment Modifications
- Amended Permit Issuance
- Operations Plan Review

Climate Change/Drought

- Conservation Programs—
  Need to Meter Customers
  Value Pricing NEEDED
- Groundwater Level
  Monitoring
- Increased Demands Due to
  Population Growth
- Landscape Irrigation is
  Significant Use in Valleys

Small Water System Programs

- Existing fee structure is inadequate to cover the cost of the program; County LPAs are returning them to the State
- Many SWS are in violation and need enforcement actions
- Insufficient Drinking Water Program staffing to adequately oversee these small systems that typically do not have the resources to solve their problems.

Recycled Water Projects

- Increased Interest Due to Availability and Considered a Drought Resistant Supply
- Must Comply with Recycled Water Criteria
- Exposure Dictates Degree of Treatment

Technical, Managerial and Financial Challenges

- Our funding programs target PWS that have water quality/quantity problems

- Unfortunately they typically lack the necessary management and/or technical expertise needed to move the projects forward without a lot of assistance from our staff.

QUESTIONS?

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http://ww2.cdph.ca.gov/programs/Pages/DWP.aspx