

# Drinking Water Regulatory Program

### The Division of Drinking Water and Environmental Management

California Department of Public Health

# Drinking Water in California

To ensure California public drinking water supplies meet all applicable federal and state drinking water standards, CDPH's Drinking Water Program:

Oversees nearly 8,000 public water systems serving over 38 million people.

#### <u>SRF/ARRA has funded</u>:

- 295 planning and construction projects for 236 entities in 51 counties.
  - 169 projects have been completed and are in repayment, now providing approximately \$43 million in interest and principal payments each year.
- Over \$1.75 billion to applicants, including
  - Low-interest loans
  - Zero-interest loans

• Grants

| Type of System                         | Approximate # |
|--|---------------|
| COMMUNITY                              | 3,000         |
| Large (>3,300 people)                  | 700           |
| Small (>15 connections, <3,300 people) | 2,300         |
| NON-COMMUNITY                          | 4,500         |
| Nontransient                           | 1,500         |
| Transient                              | 3,000         |
| TOTAL                                  | 7,500         |

| Type of System                       | Population | % of CA population |
|--------------------------------------|------------|--------------------|
| Large Water System >1000 connections | 37 million | 98%                |
| Small Water System <1000 connections | 400,000    | 1%                 |

The Drinking Water Program has nearly 200 staff located in 23 districts and offices throughout the state. Each District is staffed by:

- Senior District Engineer
- 3-6 technical staff (primarily engineers)





#### Districts Responsible for Permitting/Inspections & Enforcement Actions

- District staff perform all permitting, inspections, and enforcement activities for their water systems.
- Important for maintaining relationships and understanding local water supply and quality concerns/issues.
- Evaluate the technical aspects of all funding projects, meet with systems, consultants, and develop support for needed projects
- District staff oversee and evaluate LPA SWS programs. Provide technical assistance.

- CDPH's Drinking Water Program
  - <u>Regulatory</u> Oversight
    - Issues Water Supply Permits— Typically by District Engineers; Nearly 1,400 since 2010
    - Conduct Inspections—EPA Primacy Requirement
    - Review Water Quality Data and respond to problems
    - Issued over 1600 Formal Enforcement actions since 2010; BWO/UWA issued immediately
    - Evaluate Technical, Managerial, and Financial Capacity
    - Emergency Response to Natural Disasters and Water Quality Emergencies
    - Investigate Complaints

#### CDPH's Drinking Water Program

#### <u>Regulatory</u> Oversight Continued

- Local Primacy Agency Oversight
- Small Water System Technical Assistance
- Water Treatment Technology Evaluation
- Recycled Water Program
- <u>Funding</u> Technical Evaluations
  - Federal Funding SDWSRF (20% State match)
  - State Bond Programs Prop 50, Prop 84, Interim Water Supplies

## 8 Mandatory Elements of Sanitary Surveys



## **Drinking Water Fees**



- Drinking Water Program is substantially funded by fees charged to water systems
- Large Water Systems are billed hourly for the time spent by CDPH staff
  - Minimum billable goal to assure sufficient funding
  - Cap on the total amount of fees assessed per year
- Small Water System are charged flat fees
  - Fee based on # of service connections, or population
  - Statute allows increase without legislation, but requires approval by legislature

# So Cal Branch Challenges

The EPA estimates that over the next 20 years, more than \$600 billion in water system infrastructure improvements nationally will be necessary.

Imported Surface Water-Capacity & Treatment Issues

Sea Water Intrusion

Extremely Impaired Groundwater

**International Water Supplies** 

Mountain Areas—Hard Rock Wells Capacity Problems

> Central Valley/Desert Areas—High Nitrate, Arsenic, Chromium, TCP, DBCP, Uranium

> > Perchlorate Contamination

Recycled Water Projects

#### Desalination



#### Water Supply Challenges

- Climate Change Impacts (Sea level rise, expected snow pack variability, severe weather events)
- Imported Water Constraints—Delta SWP & Colorado River (ESA Regulatory Drought)
- Desalination
- Treatment Of Extremely Impaired Sources (52 of 94 CA Superfund sites in So Cal branch)
- Groundwater Recharge & Surface Water
  Augmentation W/Recycled Water

(475 entities w/~ 30,000 use sites)

Out Of Country Supply





#### Natural Disasters



Earthquakes, Wildfires, Mudslides, Flooding, Water Quality Emergencies

Conduct damage assessments, evaluate water quality results to confirm safety of supplies





# Small Water Systems

- 3,440 SWS under our direct jurisdiction
- 4,100 delegated to county health agencies
- Serve small communities, schools or businesses, or transient populations (e.g. restaurants, ski resorts)
- Many small community systems are disadvantaged and isolated
  - Limited access to skilled operators, managers
  - Not enough money to operate or improve system, lack financial skills to navigate State funding process
  - Isolation makes consolidation very expensive (pipe extensions cost \$500,000 - \$1 million per mile)

### SWS CHALLENGES

#### Technical, Managerial, and Financial Challenges

- Technical
  - Lack of basic information on quantity of water needed and usage;
  - Old, leaking distribution systems;
  - Lack of engineering support to assess alternatives and design solutions;
  - Proposed solution has environmental impacts or needs permits from other agencies.
- Managerial
  - Lack of clear ownership of water system;
  - Lack of clear water rights;
  - No water system operator.
- Financial
  - Historic low water rates resulting in limited budget, deferred maintenance, lack of reserves, and inability to afford operations and maintenance costs;
  - Water rates that are, or will be, too high to be affordable to residents, especially if treatment is needed for contaminant removal.
  - Privately-owned water systems, including mobile home parks, are not eligible for grants under the SRF, only loans.

## SWS CHALLENGES

CDPH is not able to provide <u>funding</u> for operations and maintenance costs

- Water rates are a key element to maintaining compliance
- Rates must be sufficient to cover:
  - Operations and maintenance costs, increasing with increased treatment needs;
  - Future infrastructure replacement
  - Small water systems have less customers to spread costs- too limited rate base
  - Operator expertise needed for new treatment facilities