



**CDPH RECYCLED  
WATER  
PROGRAM**

# CDPH Role in the Safe Use of Recycled Water

- To ensure the protection of public health in the use of recycled water.
- Work closely with local Regional Boards and the SWRCB.
- CDPH currently focuses on:
  - Proper matching of water quality with use.
  - Disinfection that meets Title 22 requirements.
  - Proper control of recycled water at use areas.

# Recycled Water Use Goals

- Water Code
  - 700,000 acre-feet/year (AFY) by 2000
  - 1,000,000 AFY by 2010
- Recycle Water Policy - Increase the use of recycled water over 2002 levels
  - by at least one million AFY by 2020 ~ 1.5 MAFY
  - by at least two million AFY by 2030 ~ 2.5 MAFY

# Current CDPH Activities

- Our current resources include one Senior Engineer dedicated to Recycled Water.
- We have 23 District Offices statewide
  - Primary role is regulation of Public Water Systems
- Our District Engineers are typically project lead in reviewing new proposals:
  - Extensive knowledge of facilities and local issues
  - Working relationship with recycling agencies
- Our focus is on:
  - Adequate treatment of recycled water
  - Use areas are properly controlled and operated
  - Public exposure is adequately addressed
  - Cross-connections with drinking water are avoided

# Types of Recycled Water

- Undisinfected Secondary
- Disinfected Secondary- 23
- Disinfected Secondary- 2.2
- Tertiary
- Advanced treated



# Current Regulations

- Statutes
  - Health & Safety Code
  - Water Code
- Regulations
  - Title 17 (new draft)
  - Title 22
  - Groundwater Recharge (new draft)
  - Surface Water Augmentation (under development)



# Porter-Cologne Act

**CDPH**  **SWRCB**  **RWQCB**

- State Board has ultimate authority over water rights and water quality.
- Established nine Regional Boards.
- Boards permit discharges that affect ground and surface waters.



# Water Recycling Requirements

- Water Code section 13522.5 – Requires any person proposing to recycle water to file a report with the Regional Board.
- Water Code section 13523 – Requires the Regional Board to prescribe, after consulting with CDPH, water reclamation requirements.
  - May apply to the producer, user, or both.
  - Must be in conformance with the recycling criteria.





# Regulatory Structure

**CDPH**  **SWRCB**  **RWQCB**

- Memorandum of Agreement (MOA) in 1996
- RWQCBs responsible for:
  - Permitting
  - Ongoing regulatory oversight
- CDPH responsible for:
  - Development of criteria
  - Protection of public health from hazards
  - Control of cross-connections with water systems



# Regulatory Structure

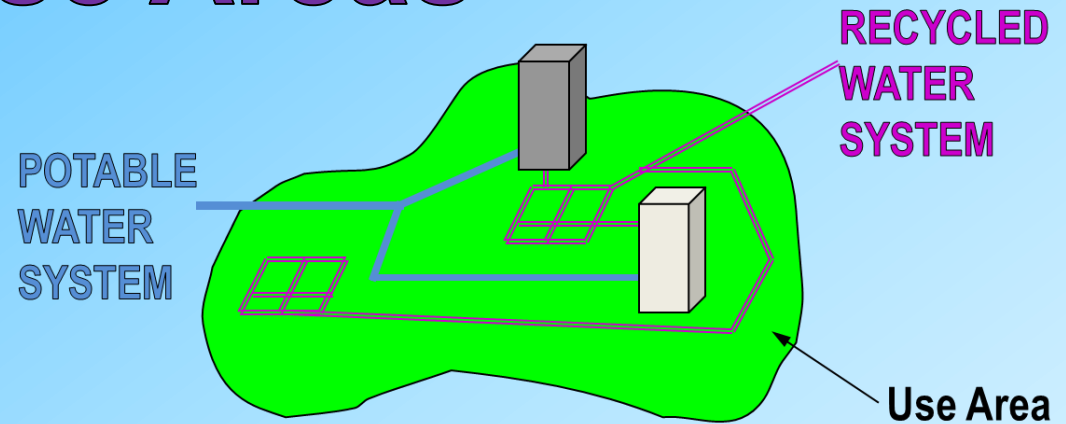
**CDPH**  **SWRCB**  **RWQCB**

- CDPH reviews, identifies, & recommends
- RWQCB incorporates CDPH requirements
- CDPH explains if needed



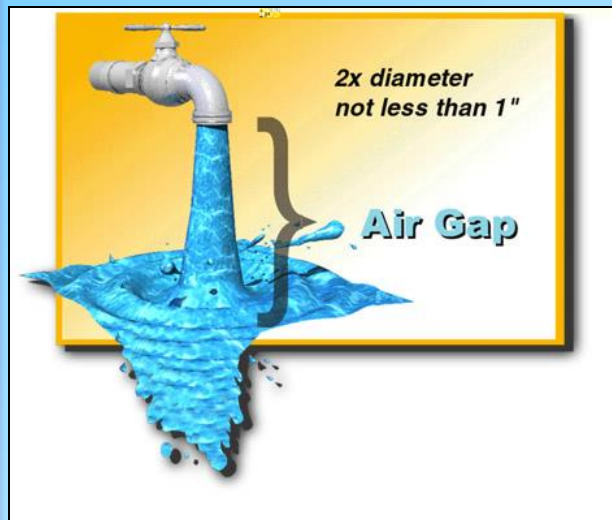
# Use Areas

- Land uses
- Type of reuse
- Party responsible
- Other agencies with jurisdiction
- Map
- Public access
- Cross-connection control procedures



# Cross-Connection Control

- Program to monitor and maintain separation between Recycled and potable systems
- Proper Backflow Prevention Devices



# Irrigation

- What will be irrigated & method of irrigation
- Containment measures & direction of drainage
- Setbacks
- Protection of drinking fountains & eating areas
- Location and wording of signs
- Measures to minimize public contact





# Dual Plumbed Systems

- Means a system with separate piping for recycled water and potable water within a facility.
- And the RW serves
  - Plumbing outlets (not fire) within a building or
  - Outdoor landscape irrigation at residences.



# Impoundments

- Type of use or activity on the impoundment e.g., landscape, restricted or unrestricted
- Degree of public access
- Potential for the impoundment to overflow - when and how often
- Direction of drainage and a description of the area to which the drainage will flow





# Cooling

- Type of cooling system (e.g., cooling tower, condenser, spray, etc.)
- Type of biocide to be used
- Type of drift eliminator to be used
- Potential for human exposure and mitigation measures



# CA Water System Statistics

## WATER RECYCLING AGENCIES IN CA

- ~ 475 entities
- ~ 30,000 use sites
- 7 Active "Groundwater Replenishment Reuse Project (GRRP)"
- Several potential Surface Water Augmentation projects
- Likelihood of many more projects in the future

# Ground Water Recharge





# Surface Water Augmentation



# Direct Potable Reuse

- Existing law requires the preparation of a report on the feasibility of developing criteria for Direct Potable Reuse (by December 31, 2016)
- Governor Brown recently signed SB 322 which:
  - Reiterates the need for this report
  - Specifies milestones and deliverables to meet the target date of December 31, 2016
  - Formation of Expert Panel to:
    - Advise CDPH on Public Health issues
    - Identify areas of any needed research
    - Provided recommendations to accomplish any necessary additional research



*....Ensuring Safe Drinking Water for all Californians*

# Questions?

<http://www.cdph.ca.gov/programs/Pages/DDWEM.aspx>