

Proposed Amendment to the Recycled Water Policy

Early Public Consultation Meeting

December 1, 2017

Sacramento, CA

Laura McLellan

Tessa Fojut



Meeting Purpose

- **Project:** Amendment to the Water Quality Control Policy for Recycled Water
- Seek early public consultation on the project
- Receive input from public on the proposed scope of the project
 - Range of project actions
 - Significant impacts to be analyzed
 - Cumulative impacts (if any)
 - Identify study issues that do not require further analysis



Meeting Format

- Staff Presentation
 - Project background
 - Project necessity & goals
 - Project description
 - Comments submission
- Public Forum
 - Feedback on the scope of the project and potential environmental impacts



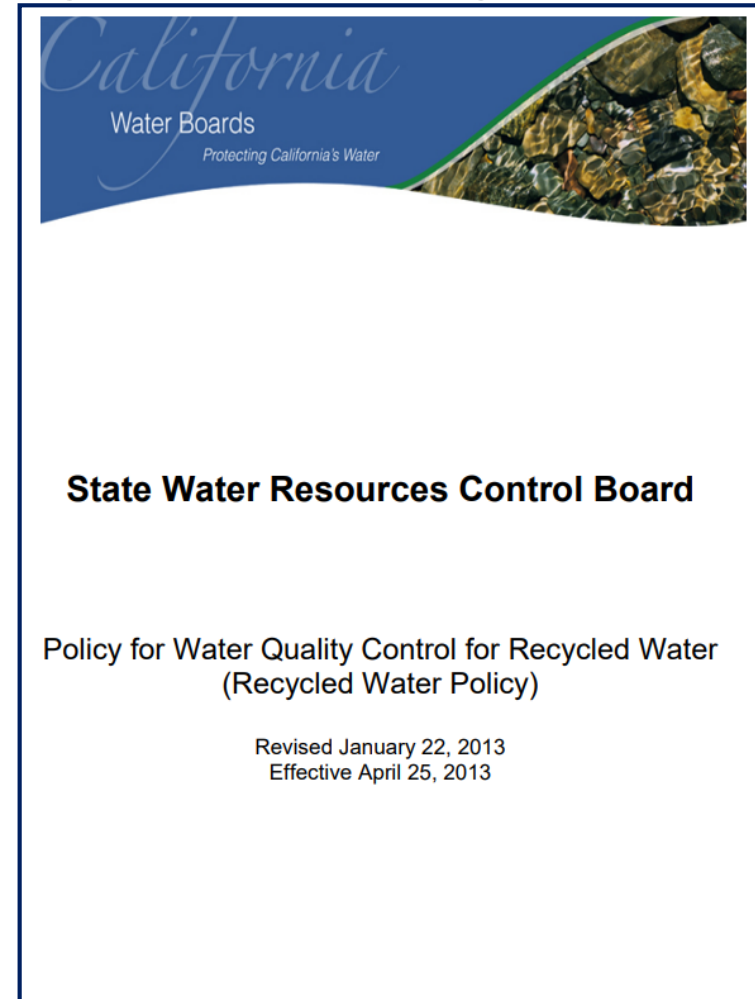
Recycled Water Policy History

Promote the use of recycled water while protecting public health and water quality through consistent, streamlined permitting of recycled water projects

2009
Adopted

2013
Amended
Added CEC
monitoring

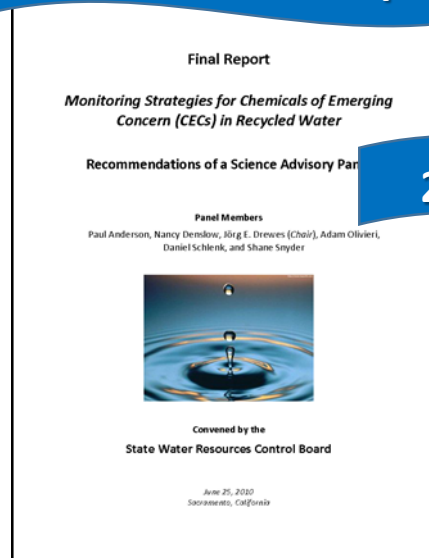
2016
Resolution



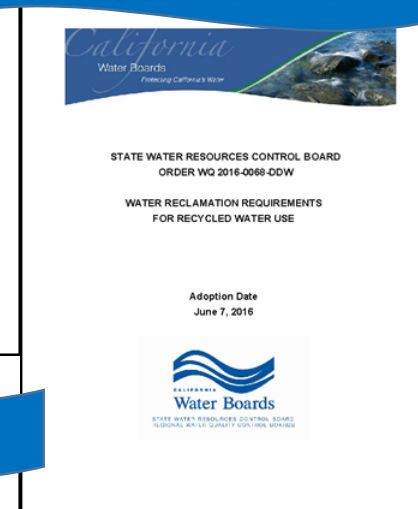
Project Necessity

- Reconvene Science Advisory Panel on CECs
- Changes in regulatory environment
- State Water Board Resolution 2016-0061

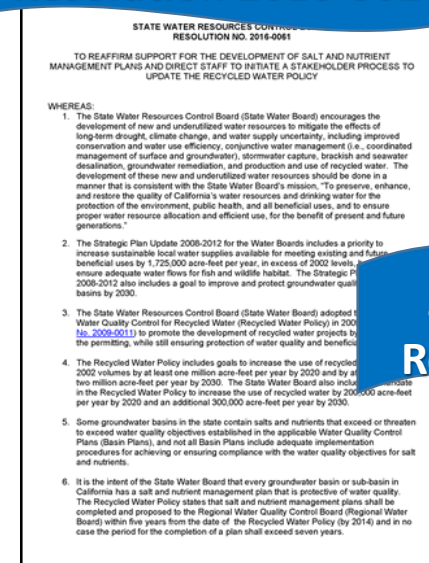
2010 CEC Panel Report



2016 General Order



Resolution 2016-061



2014 Groundwater Recharge Regulations



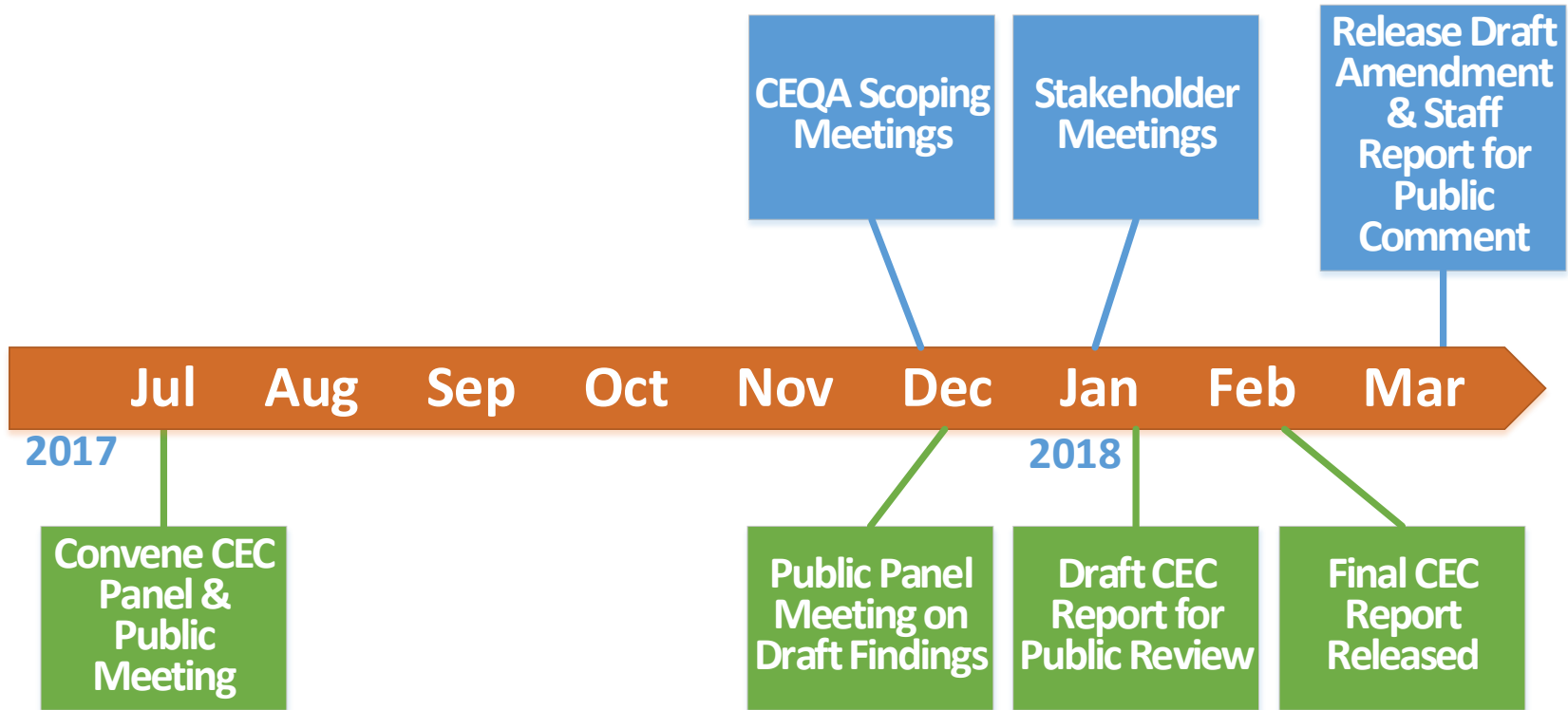
Project Goals

1. Support increased development and use of recycled water in a manner that is protective of public health and the environment
2. Amend Recycled Water Policy to reflect:
 - Changing regulatory aspects of recycled water production
 - Findings from an evaluation of the challenges and benefits of salt and nutrient management plan development
 - Recommendations of the CEC Science Advisory Panel
3. Clarify, streamline, and provide statewide consistency for permit requirements for recycled water projects



Project Schedule

Recycled Water Policy Amendment



Science Advisory Panel on CECs in Recycled Water



Project Description

Potential topics in the proposed amendment

Topics for which no fair argument exists that they could result in any reasonably foreseeable significant adverse environmental impacts

Topics that **may have** reasonably foreseeable significant adverse **environmental impacts**

- Compare to baseline conditions (status quo)
- Reasonably foreseeable – not speculative



Project Description

Potential topics in the proposed amendment

Topics for which no fair argument exists that they could result in any reasonably foreseeable significant adverse environmental impacts:

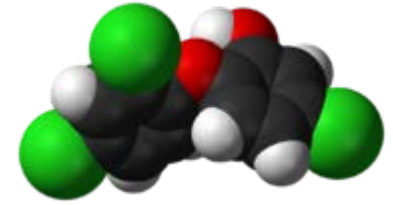
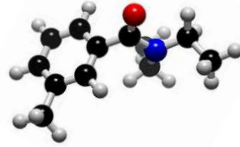
1. Update CEC monitoring requirements
2. Re-evaluate recycled water goals and mandates
3. Tracking recycled water production, use and potential
4. Clarify process to comply with Water Code section 1211
5. Re-evaluate priority pollutant monitoring for landscape irrigation
6. Regional Board review of existing recycled water permits
7. Rescind the 2009 landscape irrigation general order
8. SNMP development: prioritize basins and periodic updates
9. Clarify process for SNMPs that do not result in basin plan amendments

Topics that **may have** reasonably foreseeable significant adverse **environmental impacts**:

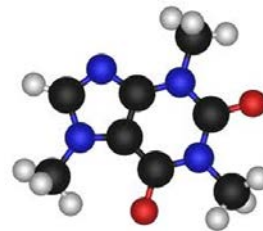
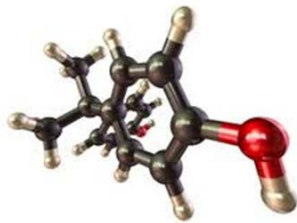
10. Clarify permit requirements for projects in basins with no SNMP and the intent and use of interim assimilative capacity criteria



Topic 1: Update CEC monitoring requirements



- Reconvened the Science Advisory Panel in July 2017
- Review the current state of scientific knowledge and monitoring data related to human health risks associated with exposure to CECs in recycled water
 - Including antibiotic resistant bacteria and antibiotic resistance genes



Constituents of Emerging Concern

Antibiotic resistant bacteria/
Antibiotic resistance genes

PFOA/
PFOS

Flame Retardants

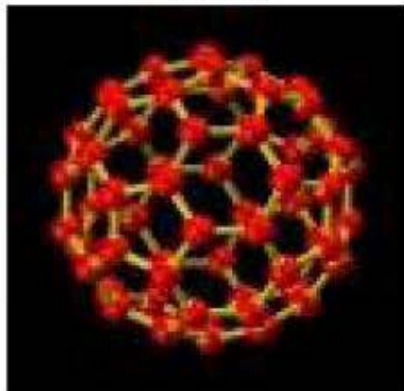
Pharmaceuticals
and Personal Care
Products

Microplastics

Pesticides

Endocrine Disrupting Compounds

PBDEs



CEC Science Advisory Panel

Goals: Update 2010 recommendations for groundwater recharge and make recommendations for all Title 22 approved uses and surface water augmentation

Key questions for the Panel:

- What CECs should be monitored?
- What is known about **toxicology** of CECs?
- How are CECs affected by different **treatment methods**?
- What **possible indicators** might be used to represent different suites of CECs?
- What **levels of CECs** should trigger enhanced monitoring?
- What research is needed on potential human health impacts of **antibiotic resistant bacteria and antibiotic resistance genes** related to recycled water uses?



Current Allowable Uses (Title 22)

Municipal Wastewater

Increased Treatment and Cost

Undisinfected Secondary

- Non food trees
- Non-milk pasture
- e.g., Non-human seed
- e.g., Pathogen processed food
- Ornamental nursery/sod (restricted)
- Flushing sewers

Disinfected 23

- Cemeteries
- Freeway
- Golf Course (restricted)
- Ornamental/sod (unrestricted)
- Pasture (milk)
- Non-edible vegetation
- Landscape impoundment
- Industrial cooling (no mist)
- Industrial boiler
- Fire
- Backfill consolidation
- Soil Compaction
- Concrete
- Dust control
- Road/sidewalk cleaning

Disinfected 2.2

- Food crop: no contact
- Orchards: no contact
- Vineyards: no contact
- Restricted recreation

Disinfected Tertiary

- Food crops
- Parks/playground
- School yards
- Residential landscape
- Golf (unrestricted)
- Irrigation
- Rec impoundment
- Ind. Cooling
- Flush toilet
- Prime drains
- Industrial w. contact
- Fire (structural)
- Decorative fountains
- Laundries (commercial)
- Backfill
- Snow making
- Car wash (comm.)

Disinfected Tertiary

- Indirect Potable Reuse:
- Groundwater Replenishment via Surface Application

Full Advanced Treatment RO/Oxidation

- Indirect Potable Reuse:
- Groundwater replenishment via Subsurface Application

Coming Soon!

Surface water augmentation (reservoir augmentation)



Vadose Zone

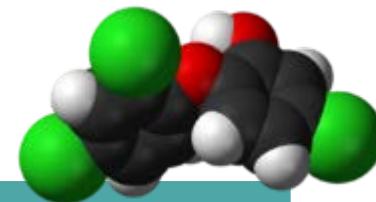
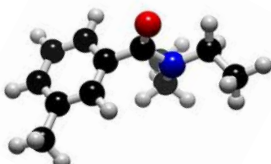
Groundwater

Soil-aquifer treatment

Surface Spreading

Direct Injection

Topic 1: Update CEC monitoring requirements



Panel Schedule

July 19 and 21, 2017	Public Meeting #1, Costa Mesa, CA
December 15, 2017	Public Meeting #2 Sacramento, CA or Webcast
January 2018	Draft Report released for 30 day public comment
February 2018	Final Report

Staff will consider Panel's findings when amending the CEC monitoring requirements in the Policy



Topic 2: Re-evaluate recycled water goals and mandates

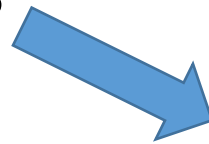
- The Policy currently has:
 - Recycled water use goals
 - Recycled water use mandates
 - Storm water use goals
 - Conservation goals



Topic 2: Re-evaluate recycled water goals and mandates

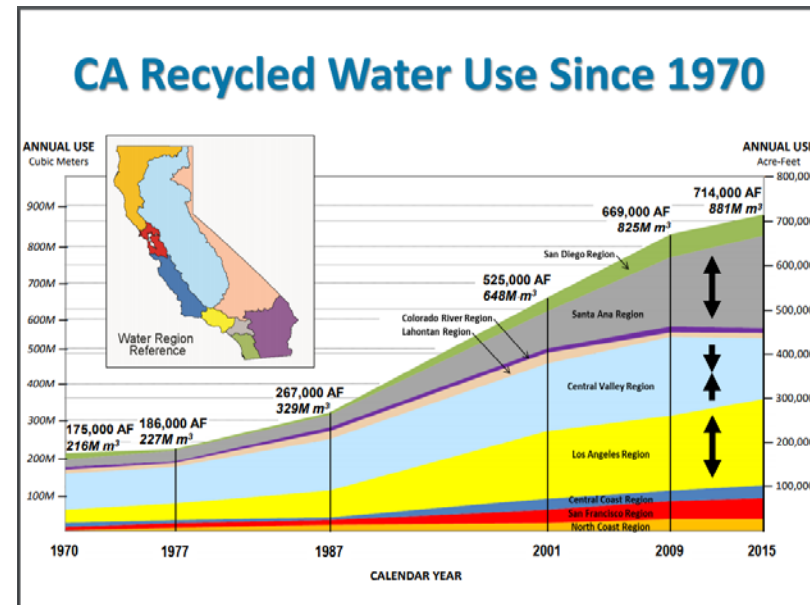
- Proposed amendment may:

- Recycled water use goals
- ~~Recycled water use mandates~~
- ~~Storm water use goals~~
- ~~Conservation goals~~



Topic 3: Tracking recycled water production, use, and potential

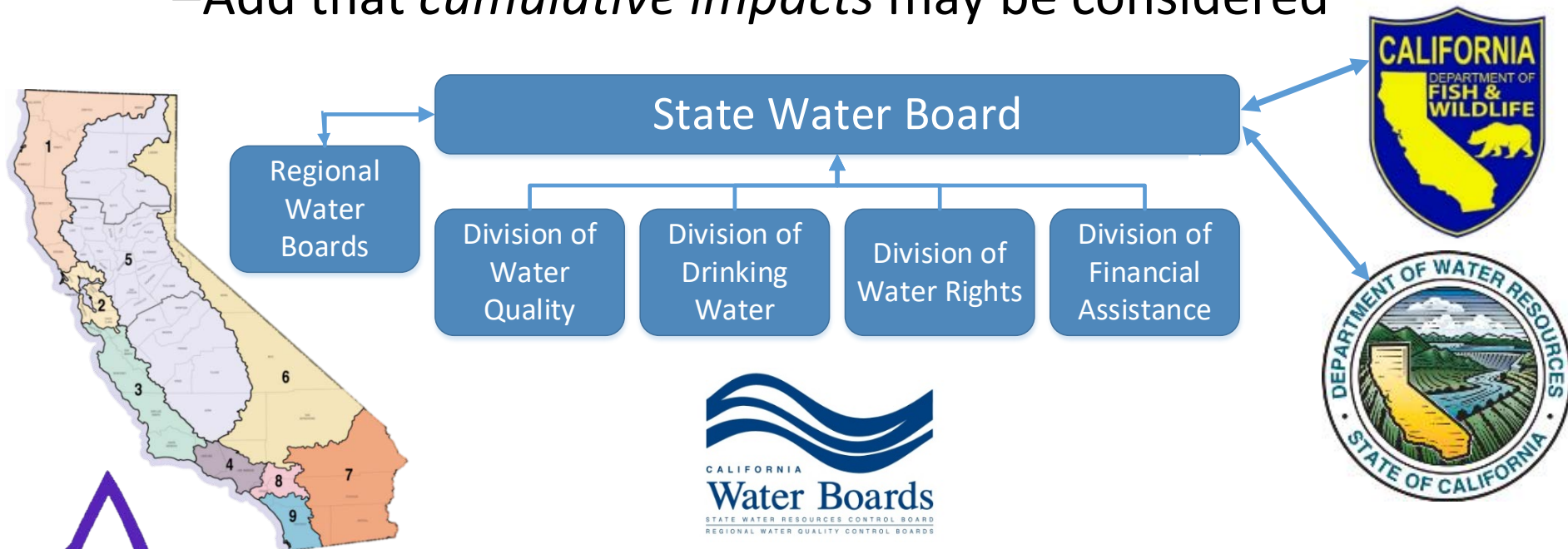
- Currently data is gathered through recycled water surveys
- Proposed amendment may:
 - Require statewide tracking and reporting
- Potential data of interest:
 - Volume of recycled water produced by facility
 - Volume of recycled water used for several categories (e.g., groundwater recharge, irrigation, etc.)
 - Volume of potential recycled water



Topic 4: Clarify process to comply with Water Code section 1211

Proposed amendment may:

- Add clarity regarding intra- and interagency coordination of wastewater change petitions
- Add that *cumulative impacts* may be considered



Topic 5: Re-evaluate priority pollutant monitoring for landscape irrigation

Proposed amendment may:

- Reduce or remove priority pollutant monitoring requirements for landscape irrigation projects



Info Doc Topic #8



Topic 6: Review and update outdated recycled water permits

Proposed amendment may:

- Establish a time schedule for Regional Water Boards to review and update recycled water permits and orders that are not consistent with existing regulations



Info Doc Topic #9



Topic 7: Rescind general order for landscape irrigation uses

Proposed amendment may:

- Transfer enrollees
 - Landscape irrigation general order → 2016 Water Reclamation Requirements
- Rescind landscape irrigation general order because
 - Few enrollees
 - 2016 WRRs cover same uses

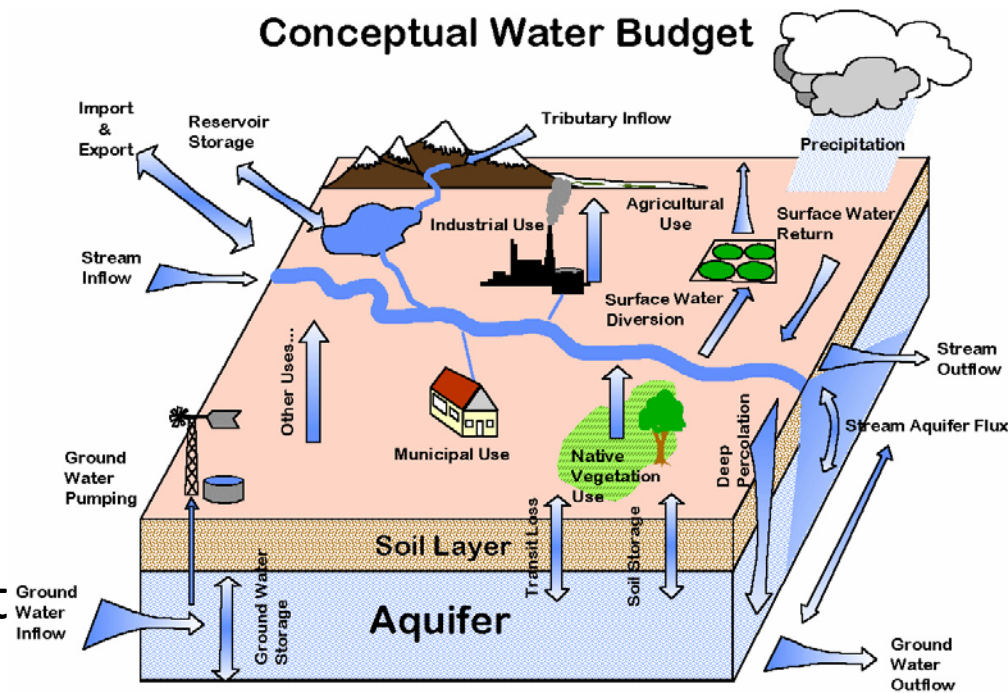


Info Doc Topic #10



Topics 8 & 9: Address Salt and Nutrient Management Plans (SNMPs)

- Many groundwater basins are impacted by salts and nutrients
- Salt and nutrient management plans (SNMPs)
 - Address salts and nutrient on a basin-wide scale
 - Challenges with SNMPs

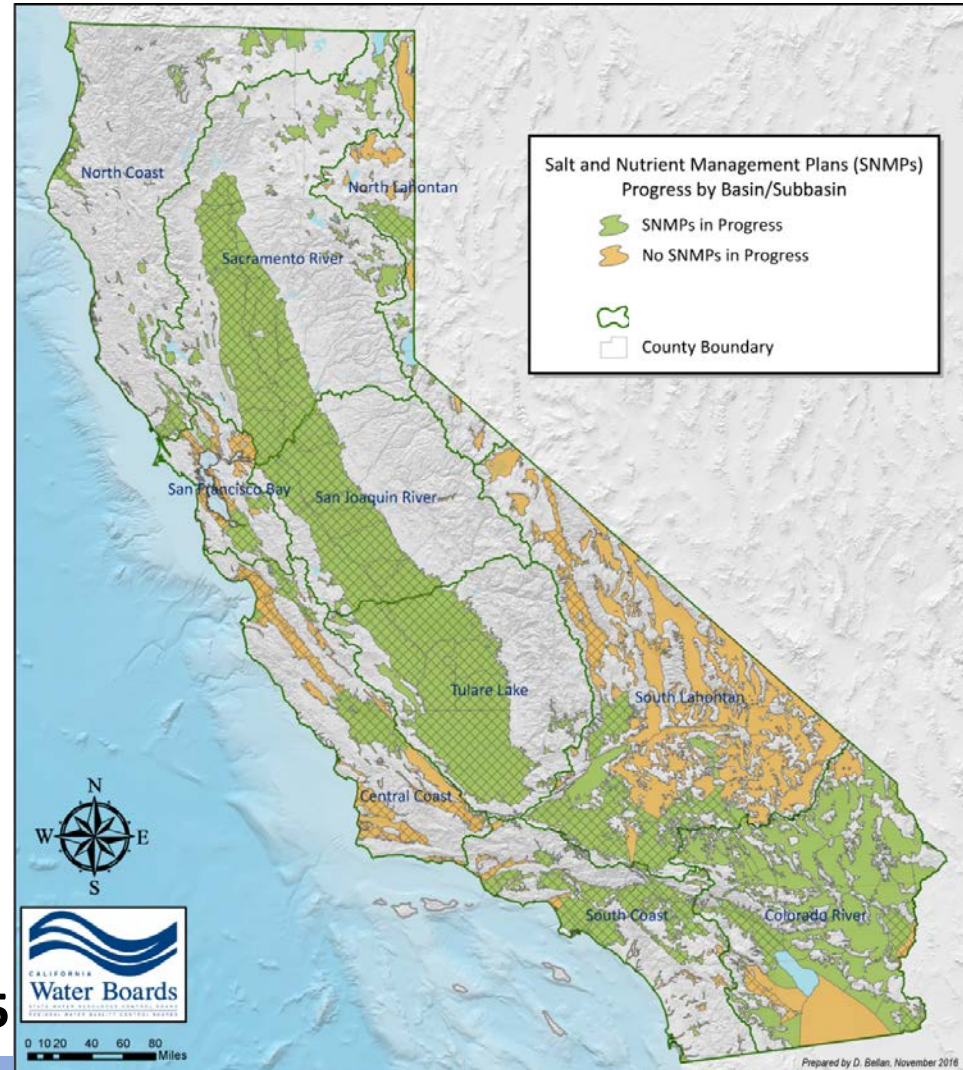


Info Doc Topics #5 & 7



Topic 8: Require basin prioritization and guidance on SNMP updates

- Salt and nutrient management plans
 - Prioritize basins
 - Assess all basins and prioritize where to focus on developing SNMPs
 - Periodic updates

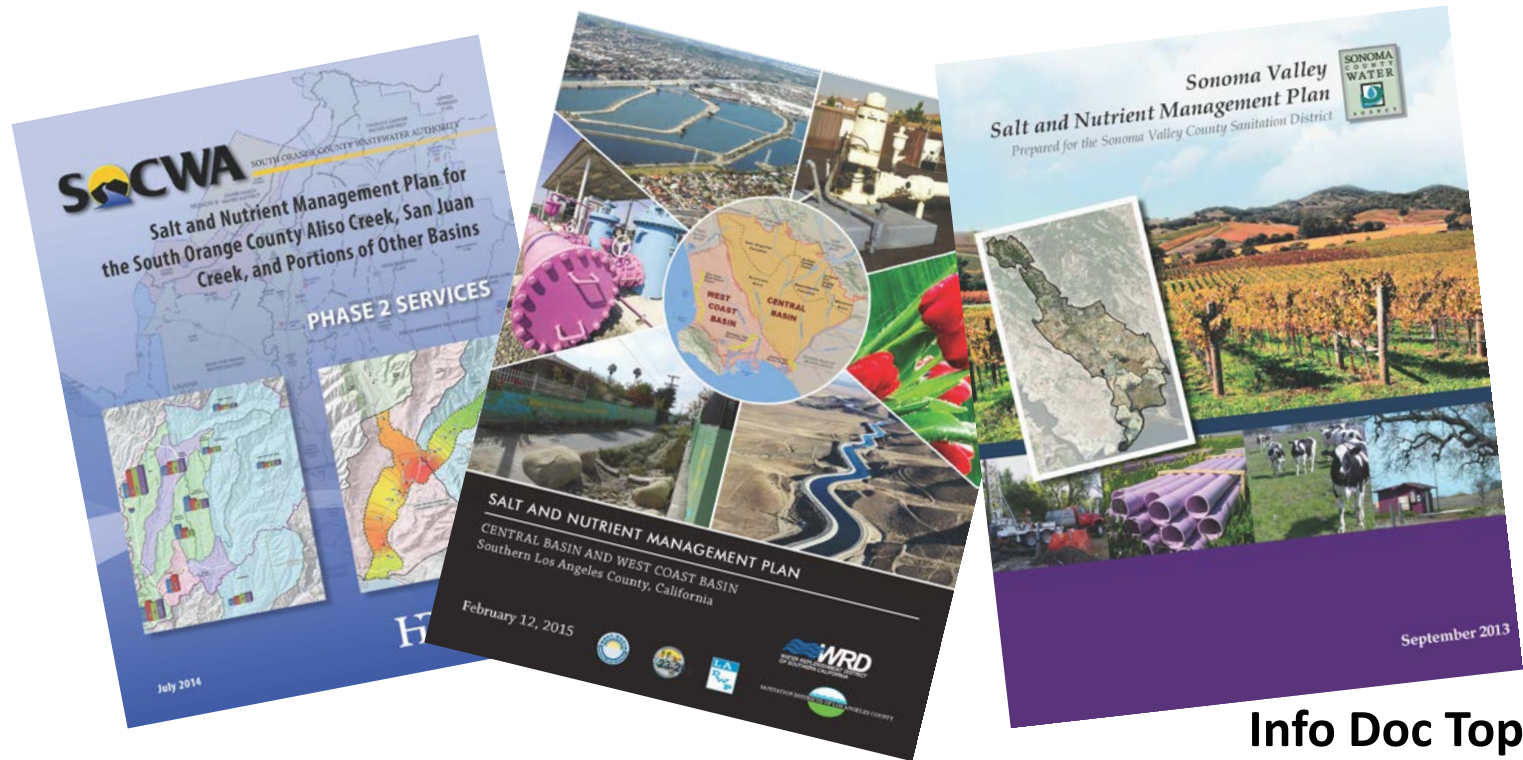


Info Doc Topic #5



Topic 9: Clarify process for accepting SNMPs

- For SNMPs that do not result in a basin plan amendment



Info Doc Topics #7



Project Description

Potential topics in the proposed amendment

Topics for which no fair argument exists that they could result in any reasonably foreseeable significant adverse environmental impacts:

1. Update CEC monitoring requirements
2. Re-evaluate recycled water goals and mandates
3. Tracking recycled water production, use and potential
4. Clarify process to comply with Water Code section 1211
5. Re-evaluate priority pollutant monitoring for landscape irrigation
6. Regional Board review of existing recycled water permits
7. Rescind the 2009 landscape irrigation general order
8. SNMP development: prioritize basins and periodic updates
9. Clarify process for SNMPs that do not result in basin plan amendments

Topics that **may have** reasonably foreseeable significant adverse **environmental impacts**:

10. Clarify permit requirements for projects in basins with no SNMP and the intent and use of interim assimilative capacity criteria



Topic 10: Clarify permit requirements for projects in basins with no SNMP

- Current Policy lacks permitting guidance for projects in basins without SNMPs
 - These facilities can enroll under Order WQ 2016-0068-DDW (2016 WRRs) if they meet the requirements
 - Otherwise, they would need a project-specific permit
- Proposed amendment may:
 - Include criteria that if met would demonstrate that the project complies with the Antidegradation Policy (Resolution No. 68-16)



Info Doc Topic #6



Topic 10: Clarify intent and use of interim assimilative capacity criteria

- Current Policy refers to interim assimilative capacity criteria
 - 10% of capacity for a single project, 20% of capacity for multiple projects
 - To be used in interim period while SNMPs were being developed – by 2016
- Proposed amendment may:
 - Extend the time period for use since original interim period has ended
 - Limit the types of projects they apply to



Info Doc Topic #6



Topic 10: Clarify permit requirements for projects in basins with no SNMP and the intent and use of interim assimilative capacity criteria

- Potential to indirectly result in adverse impacts to the environment
 - Permit requirements for projects in basins with no SNMP may include criteria that if met would demonstrate that the project complies with the Antidegradation Policy
 - Extend the use of interim assimilative capacity criteria beyond original SNMP deadlines



Info Doc Topic #6



CEQA Scoping Public Comment Submission

**Written comments due:
12 noon Friday December 22, 2017**

- Email: commentletters@waterboards.ca.gov

Please title the subject line: “Comment Letter – Proposed Recycled Water Policy Amendment Early Public Consultation”

- Paper: Jeanine Townsend
State Water Resources Control Board
1001 I Street, 24th floor
Sacramento, CA 95814



Upcoming Key Dates

Upcoming Events	Date
CEC Science Advisory Panel meeting Sacramento, Cal EPA building	December 15, 2017
CEQA Scoping Comments Due	December 22, 2017
CEC Panel Draft Report released for 30-day public comment period	Early January 2018
Public Stakeholder Meeting Sacramento, Cal EPA Building	January 4, 2018
Public Stakeholder Meeting Fountain Valley, Orange County Water District	January 11, 2018



Stay up-to-date and involved

- Email notifications

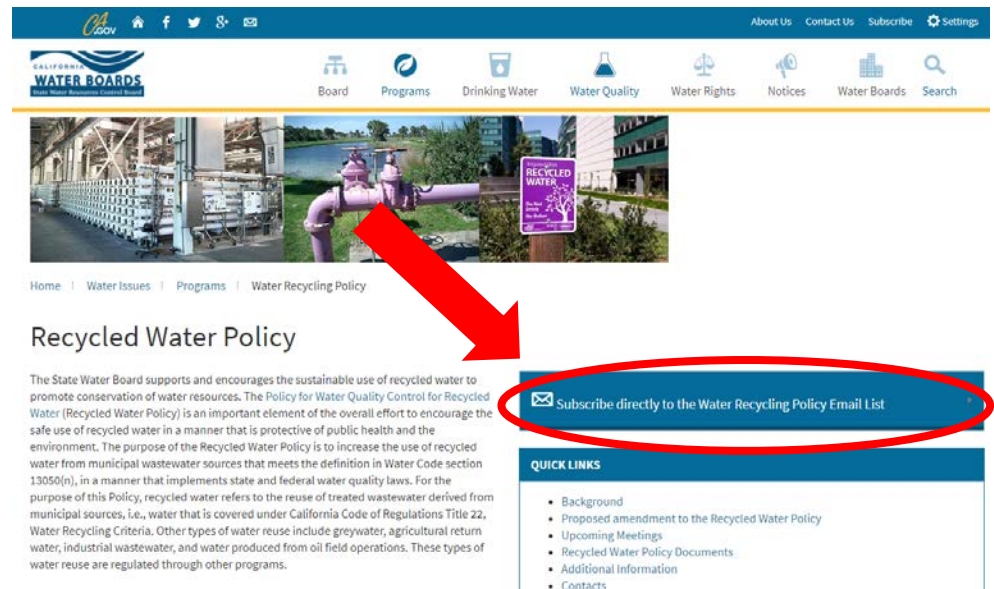
https://www.waterboards.ca.gov/water_issues/programs/water_recycling_policy/

- Project Contact:

Laura McLellan

Laura.McLellan@waterboards.ca.gov

(916) 319-8288



The screenshot shows the California Water Boards website. The main navigation bar includes links for Board, Programs, Drinking Water, Water Quality, Water Rights, Notices, and Water Boards. The page title is "Recycled Water Policy". Below the title, there is a paragraph of text explaining the policy. A red arrow points to a button that says "Subscribe directly to the Water Recycling Policy Email List". Below this button is a "QUICK LINKS" section with a list of links: Background, Proposed amendment to the Recycled Water Policy, Upcoming Meetings, Recycled Water Policy Documents, Additional Information, and Contacts.



Public Forum

