

Salt/Nutrient Management Plan (SNMP) for the Central Basin & West Coast Basin (CBWCB)



October 21, 2013

CEQA Scoping Meeting

Presentation Overview

- Background on Basins
- SNMP Water Quality Assessment
- Implementation Measures
- CEQA Analysis and Environmental Impacts

The Central Basin and West Coast Basin (CBWCB) are highly managed and monitored by multiple stakeholder agencies



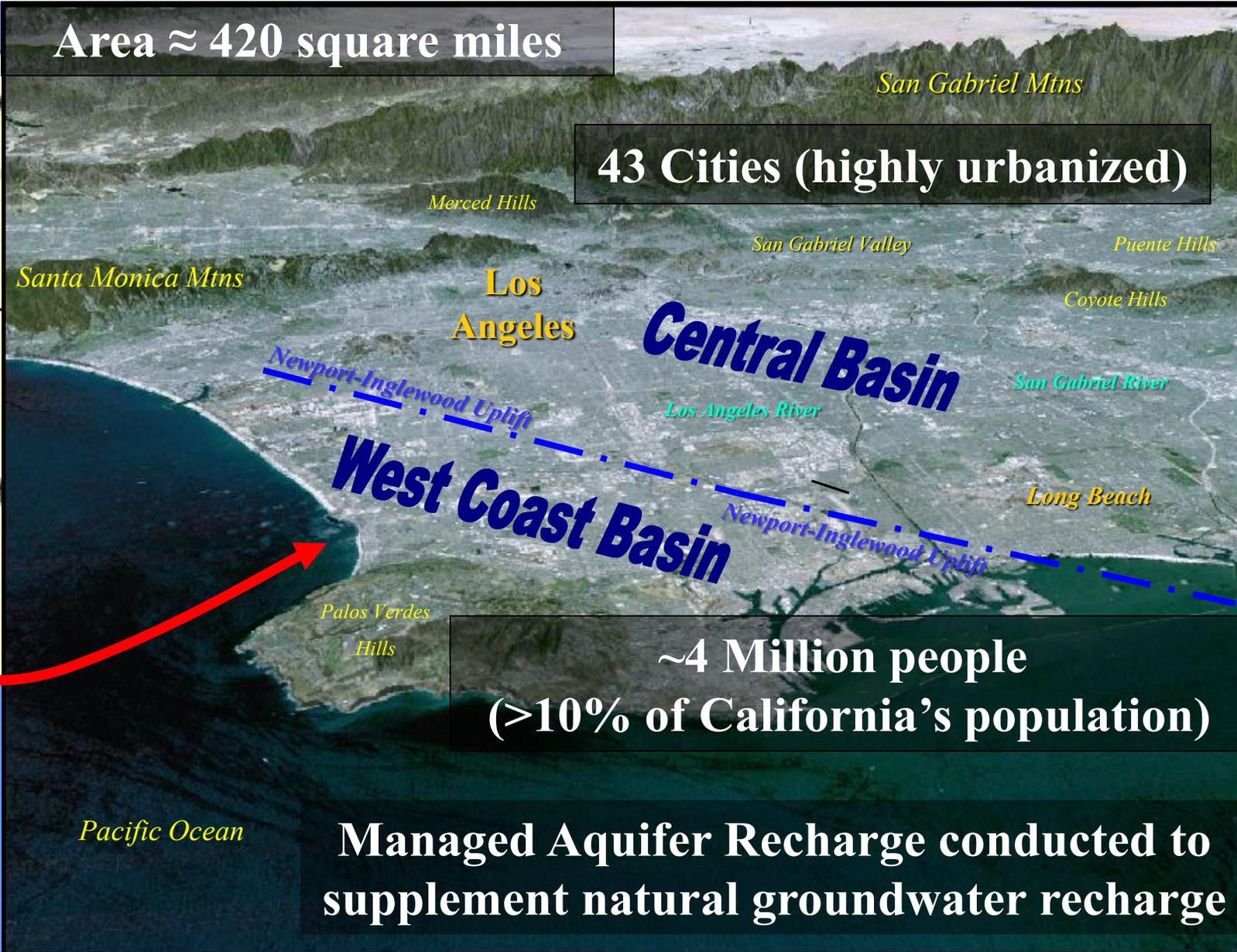
SANITATION DISTRICTS OF LOS ANGELES COUNTY



SNMP Study Area (CBWCB)

Area \approx 420 square miles

43 Cities (highly urbanized)



San Gabriel Mtns

Merced Hills

Santa Monica Mtns

Los Angeles

San Gabriel Valley

Puente Hills

Coyote Hills

San Gabriel River

Long Beach

Palos Verdes Hills

Pacific Ocean

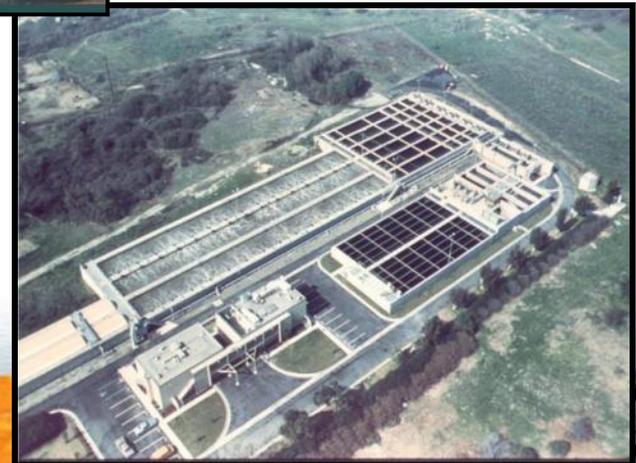
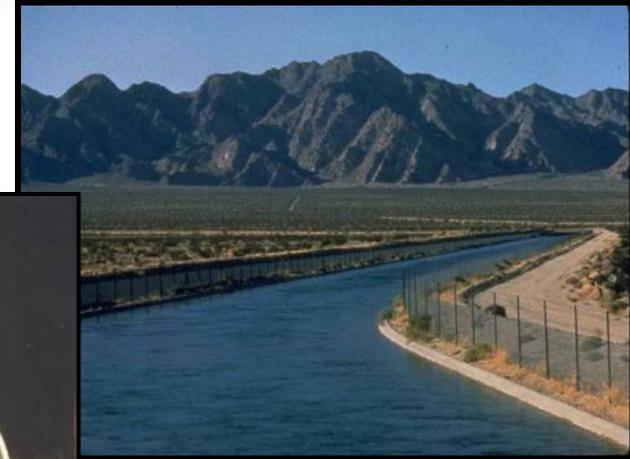
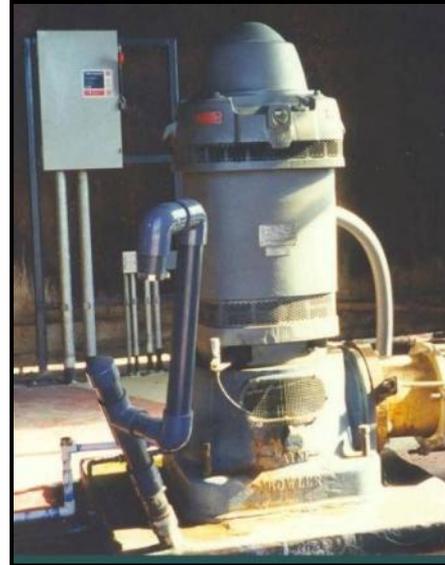
\sim 4 Million people

(>10% of California's population)

Managed Aquifer Recharge conducted to supplement natural groundwater recharge

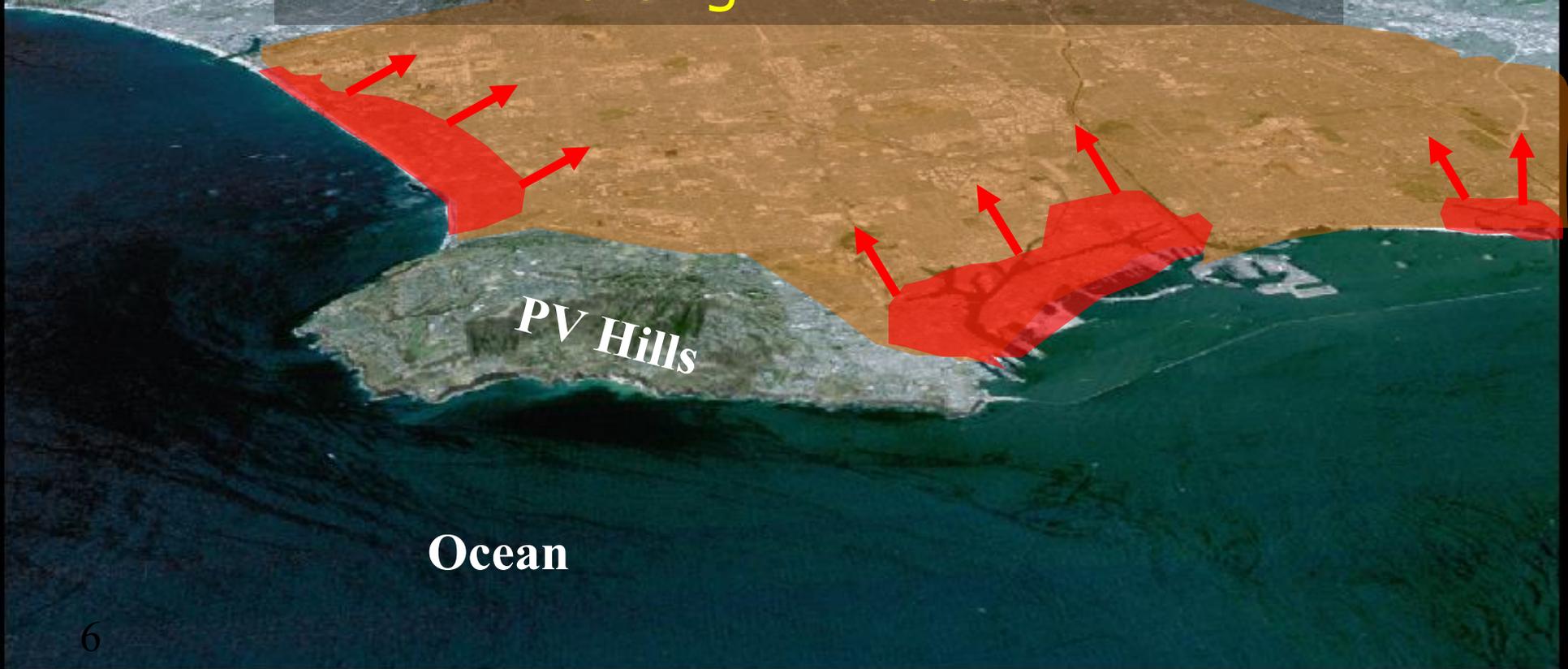
Sources of Water in CBWCB

- **IMPORTED WATER:** 60%
from State Water Project,
Colorado River, or
LA Aqueduct
- **GROUNDWATER:** 40%
>400 Active Production Wells
Pump ~245,000 acre-feet/yr
- **RECYCLED WASTEWATER:** Growing
uses (irrigation, industrial applications,
groundwater recharge)

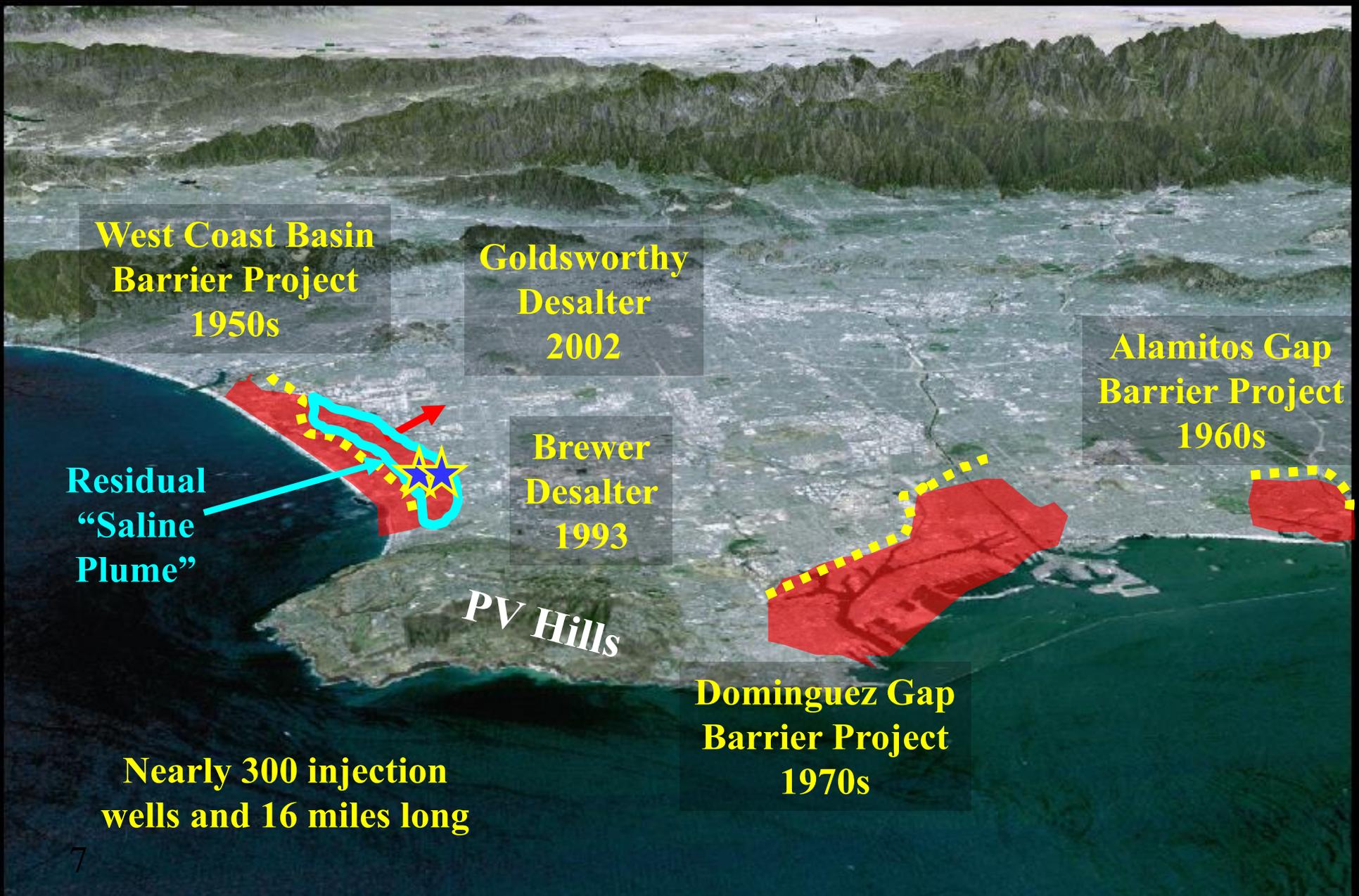


Overpumping between 1900 and 1950s
caused groundwater levels to be below
sea level in significant portions of the basins

Resulting in seawater intrusion
along the coast



Major Salinity Control Measures



**West Coast Basin
Barrier Project
1950s**

**Goldsworthy
Desalter
2002**

**Alamos Gap
Barrier Project
1960s**

**Residual
“Saline
Plume”**

**Brewer
Desalter
1993**

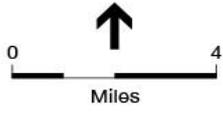
PV Hills

**Dominguez Gap
Barrier Project
1970s**

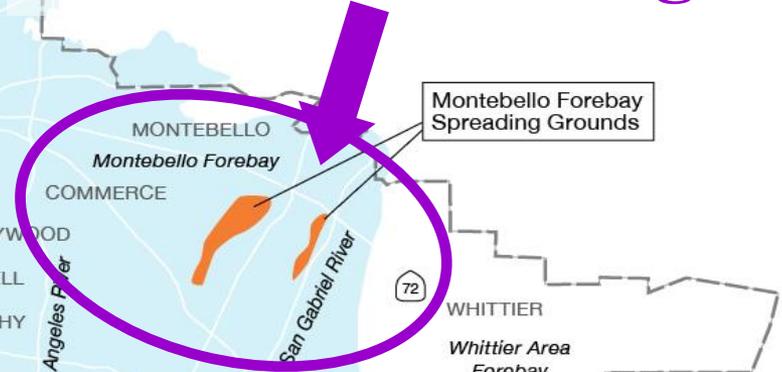
**Nearly 300 injection
wells and 16 miles long**

Main Groundwater Recharge Areas

- Water Replenishment District Boundary
- West Coast Basin
- Central Basin



Surface Recharge

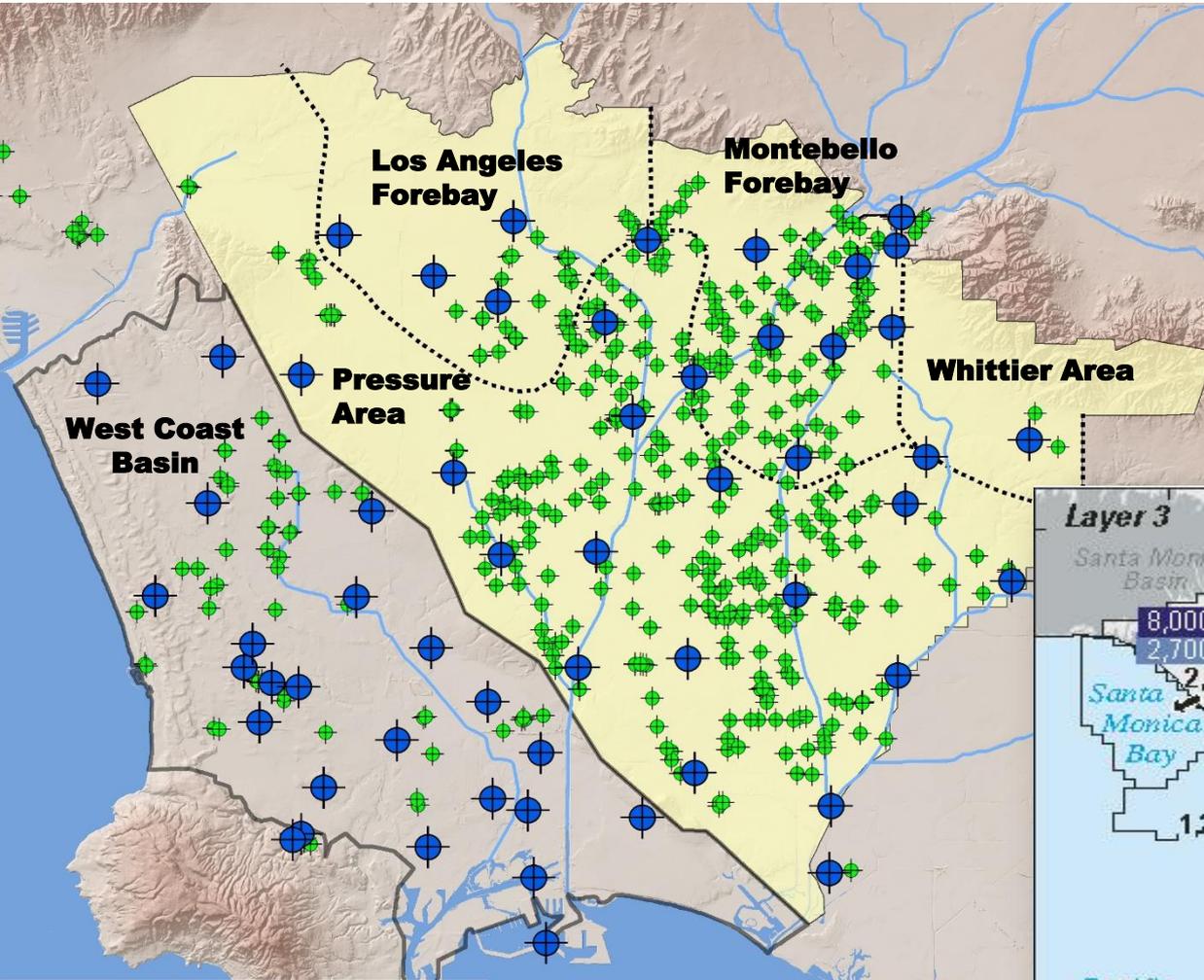


Coastal Injection

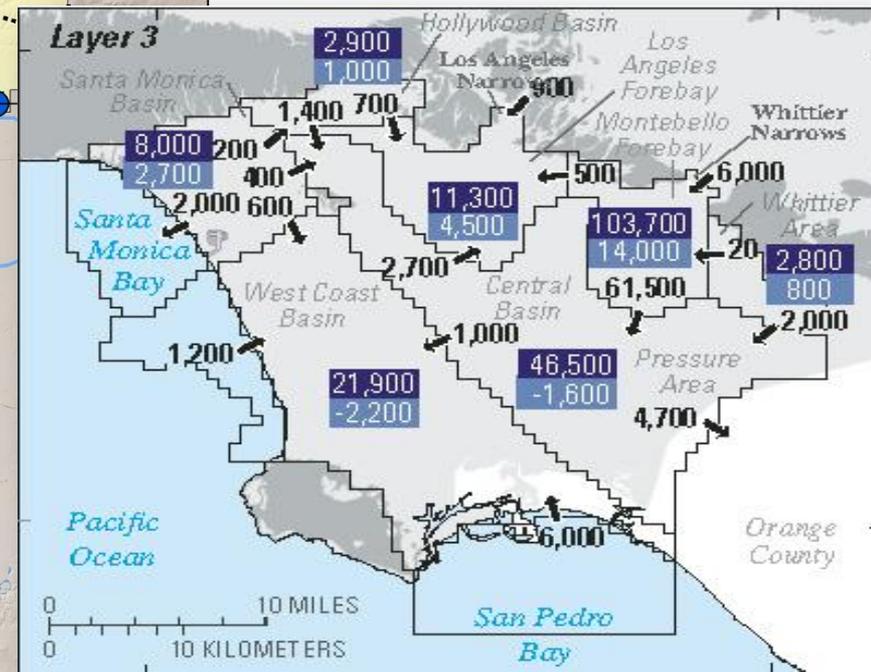


SNMP Water Quality Assessment

- Compiled all available WQ data



- WQ assessed by Subareas/Model Layers
- Existing regional GW model (USGS)
- Developed mixing model



SNMP Implementation Measures

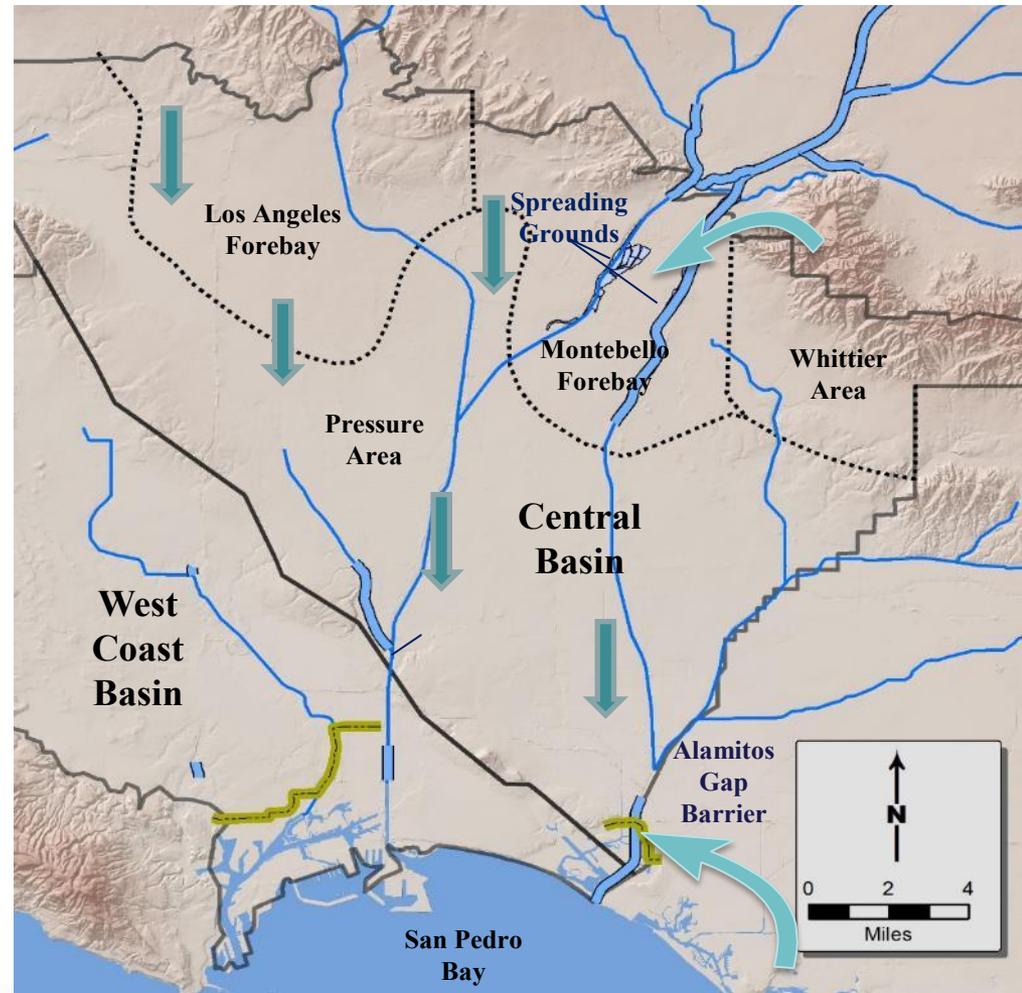
- 2 Types of Implementation Measures:
 - Current: Existing implementation measures
 - Planned: Implementation measures that begin operations before 2025
- Categories of Implementation Measures:
 1. Improve Surface Water Quality
 2. Improve Imported Water Quality
 3. Improve Recycled Water Quality
 4. Improve Groundwater Quality
 5. Increase Surface Water Capture
 6. Increase Recycled Water Use

SNMP Implementation Measures

Category of Implementation Measure	Examples of Existing Implementation Measures	Examples of Planned Implementation Measures
Improve Surface Water Quality	TMDLs, Stormwater BMPs, Low Impact Development (LID), MS4 Permit, WQ monitoring, outreach & education	Additional LID projects & stormwater BMPs, stormwater capture projects
Improve Imported Water Quality	MWD's Salinity Source Water Control Program, outreach & education (Southern California Salinity Coalition), WQ monitoring	Continue with existing implementation measures
Improve Recycled Water Quality	Nitrogen treatment, industrial source controls, public education on water softeners, WQ monitoring, existing permits and regulations	Expansion & modifications of existing treatment plants
Improve Groundwater Quality	Seawater intrusion barriers, desalters, LA County First Flush Policy, WQ monitoring, Basin Adjudication	Increase advanced recycled water at seawater barriers, expansion of desalter
Improve Surface Water Capture	Montebello Forebay Spreading Grounds (MFSG), Dominguez Gap Spreading Grounds (DGSG), Torrance stormwater retention ponds	Improvements at MFSG & DGSG, Additional LID projects & stormwater BMPs
Increase Recycled Water Use	Advanced treated recycled water at seawater barriers, recycled water at MFSG, recycled water for irrigation and industrial uses	Groundwater Reliability Improvement Project, irrigation, seawater barriers

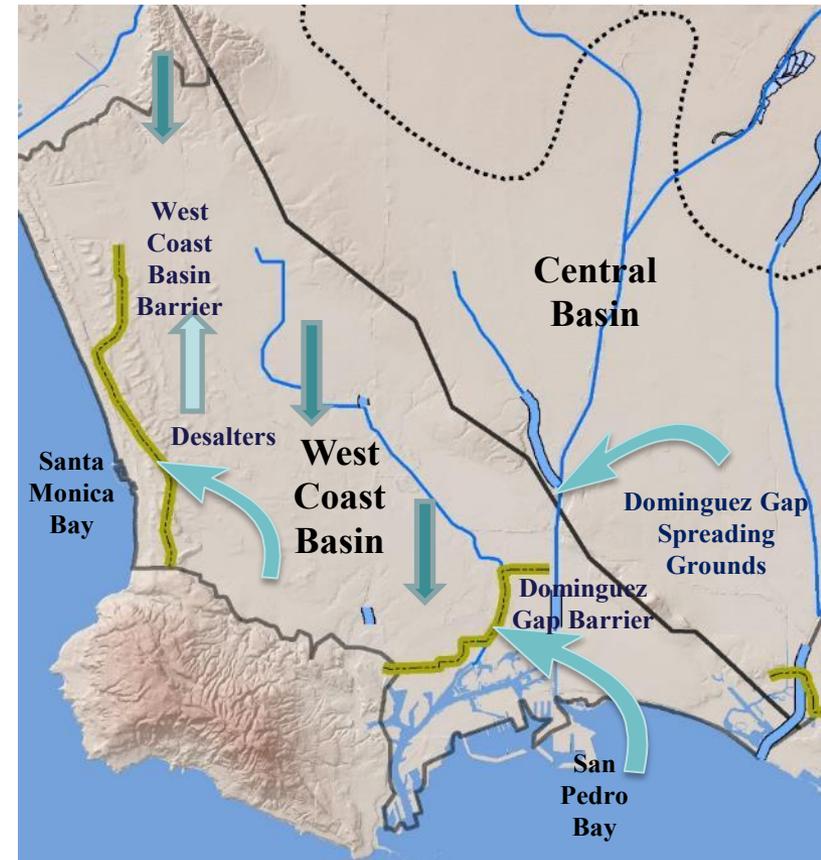
Proposed Projects in Central Basin

- 100% Advanced treated (AWT) Recycled Water (RW) @ Alamitos Gap Barrier, increased recharge volume
- MFSG Groundwater Reliability Improvement Project (GRIP):
 - GRIP A – Replace delivery of 21,000 AFY of imported water with 11,000 AFY tertiary RW & 10,000 AFY AWT RW
 - GRIP B – Replace delivery of 21,000 AFY of imported water with 21,000 AFY tertiary RW
- Increased RW for irrigation



Proposed Projects in West Coast Basin

- 100% Advanced Treated Recycled Water @ West Coast Basin Barrier, increased recharge volume
- 100% Advanced Treated Recycled Water @ Dominguez Gap Barrier, increased recharge volume
- Expansion of Goldsworthy Desalter
- Increased recharge at Dominguez Gap Spreading Grounds
- Increased recycled water for irrigation



Summary of SNMP Results

- In Central Basin, salt and nutrient concentrations are below Water Quality Objectives and will not be exceeded in the future
- In West Coast Basin, water quality is improving and salt & nutrient concentrations will be below Water Quality Objectives in the future
- Current and planned implementation measures (desalters, increased use of advanced treated recycled water) are improving groundwater quality in CBWCB
- Proposed projects that potentially increase salt concentrations in groundwater are more than offset by implementation measures that decrease concentrations in groundwater
- Nitrate concentrations increase very slightly in the CBWCB, but concentrations remain significantly below the Water Quality Objective & the Maximum Contaminant Level (MCL), so nitrate is not a water quality concern

Environmental Checklist

- Water Quality
- Earth
- Noise
- Archeological / Historical
- Plant and Animal Life
- Light and Glare
- Transportation / Circulation
- Recreation
- Land Use
- Aesthetics
- Natural Resources
- Energy
- Air
- Greenhouse Gas Emissions
- Risk of Upset
- Human Health
- Population
- Housing
- Public Service
- Utilities and Service Systems

Potential Environmental Impacts

➤ Water Quality

Will the proposed project result in:

- a. Changes in currents or direction of water
- b. Changes in absorption rates, drainage, or runoff
- c. Flow of flood waters
- d. Amount of surface water
- e. Alteration of surface water quality
- f. Alteration of direction or flow rate of groundwater
- g. Change in quantity or quality of groundwater
- h. Reduction in water for public supplies
- i. Water related hazards such as flooding

Potential Environmental Impacts

➤ Earth

Will the proposed project result in:

- a. Unstable earth
- b. Soil disruptions or compaction
- c. Change in topography
- d. Modification of geologic features
- e. Wind and water erosion
- f. Modification of channels, bays etc.
- g. Geologic hazards (e.g., landslides)

Potential Environmental Impacts

➤ Noise

Will the proposed project result in:

- a. Increases in existing noise levels
- b. Exposure of people to severe noise levels

Potential Environmental Impacts

➤ Archeological / Historical

Will the proposed project result in:

- a. Alteration of a significant archaeological or historical site, object, or structure

Potential Environmental Impacts

➤ Plant Life and Animal Life

Will the proposed project result in:

- a. Change in diversity or number of plant or animal species
- b. Reduction of unique, rare or endangered plant or animal species
- c. Introduction of new species
- d. Reduction in agricultural acreage
- e. Deterioration of existing habitat

Potential Environmental Impacts

➤ Light and Glare

Will the proposed project result in:

- a. Produce new light and glare

Potential Environmental Impacts

➤ **Transportation / Circulation**

Will the proposed project result in:

- a. Generation of additional vehicular movement
- b. Impact on existing parking, new parking
- c. Impact on transportation systems
- d. Alterations to patterns of movement of people or goods
- e. Alterations to water, rail or air traffic
- f. Increase in traffic hazards

Potential Environmental Impacts

➤ Recreation

Will the proposed project result in:

- a. Impacts to quality or quantity of recreational opportunities

Potential Environmental Impacts

➤ Land Use

Will the proposed project result in:

- a. Alteration of land use

Potential Environmental Impacts

➤ Aesthetics

Will the proposed project result in:

- a. Obstruction of scenic vista open to the public
- b. Creation of offensive site open to public view

Potential Environmental Impacts

➤ Natural Resources

Will the proposed project result in:

- a. Increased rate of use of natural resources
- b. Depletion of nonrenewable natural resource

Potential Environmental Impacts

➤ Energy

Will the proposed project result in:

- a. Use of substantial fuel or energy
- b. Increase in demand or development of new sources of energy

Potential Environmental Impacts

➤ Greenhouse Gas Emissions

Will the proposed project result in:

- a. Generate greenhouse gas emissions directly or indirectly and cause significant impact
- b. Conflict with adopted plan or policy for the purpose of reducing greenhouse gases

Potential Environmental Impacts

➤ Air

Will the proposed project result in:

- a. Air emissions, deterioration of air quality
- b. Creation of objectionable odors
- c. Alteration of air movement

Potential Environmental Impacts

➤ Risk of Upset

Will the proposed project result in:

- a. Risk of explosion or release of hazardous substances

Potential Environmental Impacts

➤ Human Health

Will the proposed project result in:

- a. Creation of health hazards
- b. Exposure of people to health hazards

Potential Environmental Impacts

➤ Population

Will the proposed project:

- a. Alter location, distribution, density or growth of human population

Potential Environmental Impacts

➤ Housing

Will the proposed project:

- a. Affect existing housing or create additional demand

Potential Environmental Impacts

➤ Public Service

Will the proposed project have an effect upon, or result in the need for new or altered governmental services in any of the following areas:

- a. Fire protection
- b. Police protection
- c. Schools
- d. Parks or other recreation
- e. Maintenance of facilities including roads
- f. Other government services

Potential Environmental Impacts

➤ Utilities and Service Systems

Will the proposed project result in a need for new systems, or substantial alterations to the following utilities:

- a. Power or natural gas
- b. Communications systems
- c. Water
- d. Sewers or septic tanks
- e. Storm water drainage
- f. Solid waste disposal

Potential Environmental Impacts

➤ **Mandatory Findings of Significance**

Does the proposed project have:

- a. Potential to degrade the environment
- b. Potential to achieve short-term (benefits) to the disadvantage of long-term environmental goals
- c. Cumulatively considerable impacts
- d. Substantial adverse effects on human beings

SNMP Websites

www.wrd.saltnutrient.com

Salt & Nutrient Management Plan for the Central Basin and West Coast Basin

[Home](#) | [Documents & References](#) | [Contact Us](#) | [Participation](#)

Links to Local Agencies and Stakeholders

In February 2009, the State Water Resources Control Board (SWRCB) adopted [Resolution No. 2009-0011](#), which established a statewide Recycled Water Policy. This policy encourages increased use of recycled water and local stormwater. It also requires local

http://www.swrcb.ca.gov/rwqcb4/water_issues/programs/salt_and_nutrient_management/index.shtml

CA.GOV CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY
LOS ANGELES REGIONAL WATER QUALITY CONTROL BOARD

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Office of Governor
Edmund G. Brown Jr.
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Salt and Nutrient Management

The State Water Resources Control Board adopted a Recycled Water Policy in February 2009. The purpose of the Policy is to increase the use of recycled water in a manner that implements state and federal water quality laws. When recycled water is used in compliance with the Policy, Title 22, and all applicable state and

CEQA Comments

Additional Comments Due By: 5:00 PM, Thursday, Oct 31, 2013

1. State comments verbally during this meeting
2. Complete the provided Comment Card & hand to LARWQCB before the end of this meeting
3. E-mail comments to: Ginachi.Amah@waterboards.ca.gov

**(Please indicate “CEQA for Central & West Coast Basins SNMP” as the Subject)*

4. Mail written comments to:

Dr. Ginachi Amah

Los Angeles Regional Water Quality Control Board

320 West 4th Street, Suite 200

Los Angeles, CA 90013

Questions

LARWQCB Contact: Dr. Ginachi Amah
(213) 576-6685
ginachi.amah@waterboards.ca.gov

CBWCB SNMP (WRD) Contact: Ms. Phuong Ly, P.E.
(562) 275-4246
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