



# Pure Water Monterey

A Groundwater Replenishment Project

*The Future of Water is Here*

**FORA Board of Directors  
May 8, 2015**



## What is Pure Water Monterey?

Pure Water Monterey is a groundwater replenishment project that will provide a safe, environmentally sustainable and economically responsible water supply for years to come

## What is Groundwater Replenishment?

Groundwater Replenishment utilizes water that has been purified through a four-step Advanced Water Treatment process and then introduced into the aquifer where it mixes with existing groundwater



## Why Pure Water Monterey?

Pure Water Monterey is a:

- **multi-benefit,**
- **multi-region,**
- **multi-agency**

project that will provide pure drinking water for the Monterey Peninsula and additional irrigation water for the Salinas Valley.



# Where Does the Water Come From?

- **Wastewater**
- **Produce Wash Water**



# Where Does the Water Come From?



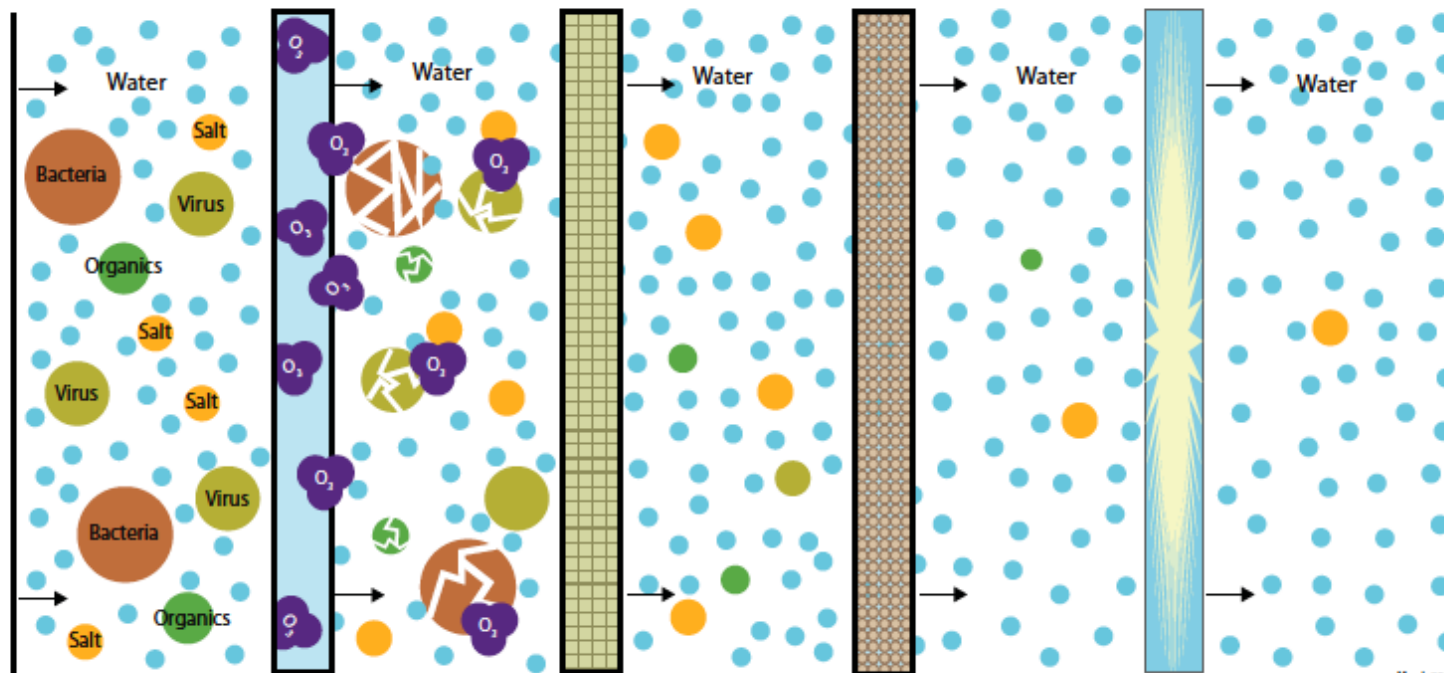
- **Storm Water**
- **Agricultural Return Flows**



# How Does It Work?

## Proposed Water Purification Process

Water Source(s)	Ozone (O <sub>3</sub> ) Pretreatment	Membrane Filtration	Reverse Osmosis	UV Disinfection & Hydrogen Peroxide
Includes secondary-treated wastewater and other water sources (to be determined).	When ozone, a powerful disinfectant, is added to the water, it destroys bacteria and other pathogens.	Water is pumped through tiny straw like tubes that filter out contaminants from the water.	Water is forced through membranes under high pressure to remove nearly all remaining impurities.	Hydrogen peroxide is added and reacts with exposure to ultraviolet light, breaking down trace compounds and leaving pure water.



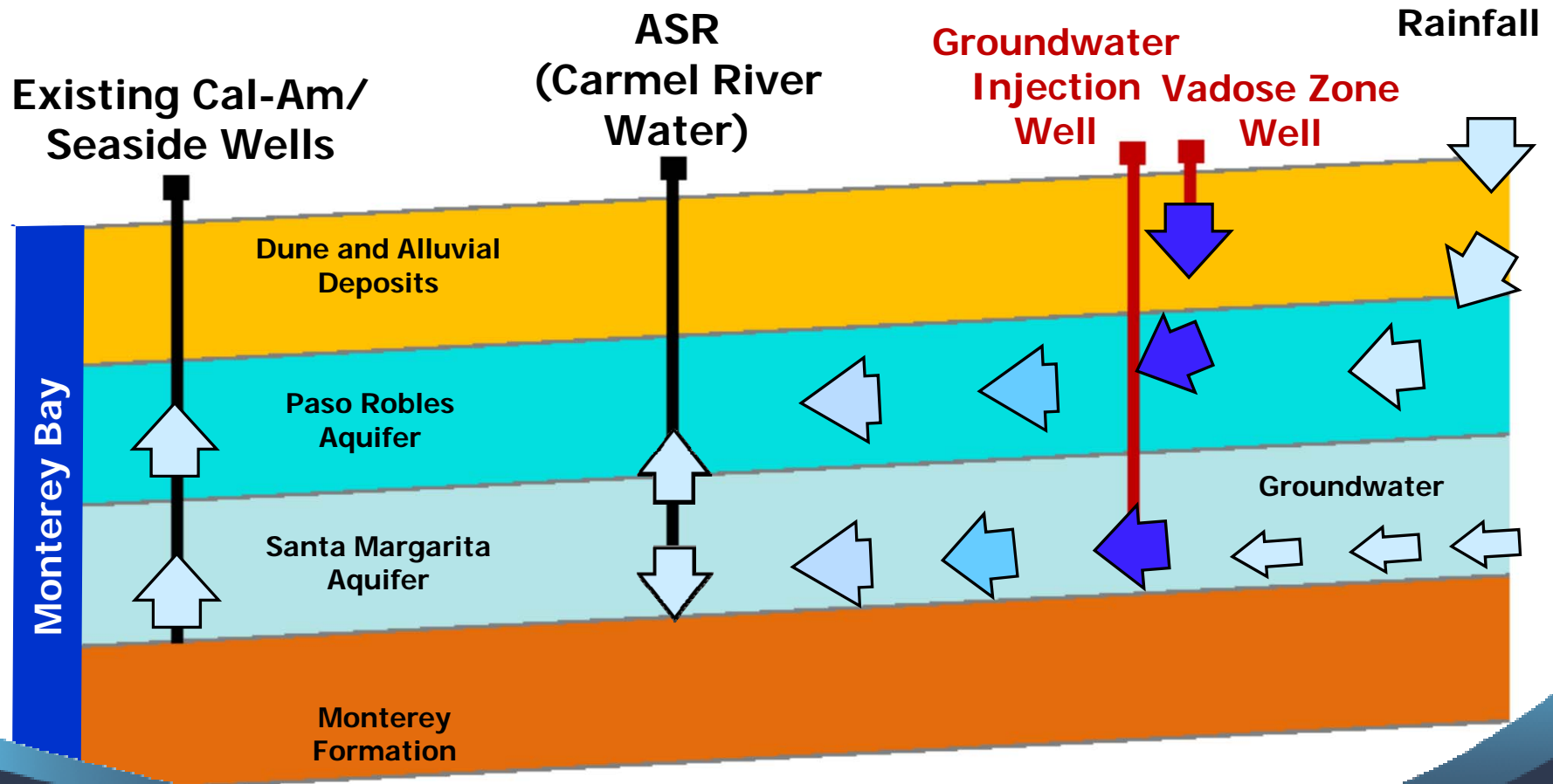
March 2014



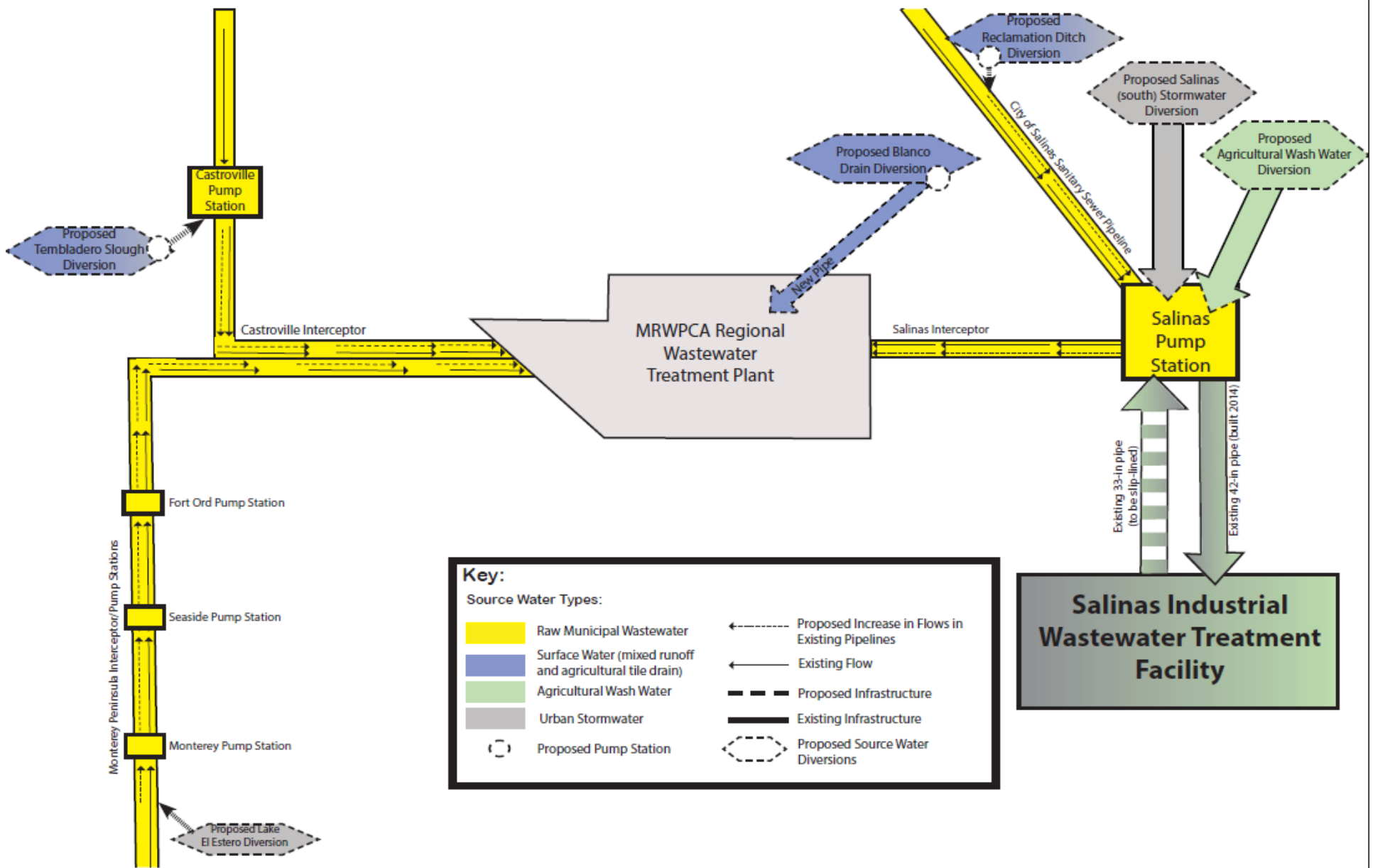
# Where Does the Pure Water Go?



# So We've Got Pure Water: What's Next?







# Why Pure Water Monterey?

## Safety:

**Advanced water purification technology is used throughout the world to provide clean drinking water**



# Environmentally Sustainable:

- Minimizes discharge into the Monterey Bay National Marine Sanctuary
- Uses less energy than desalination
- Improves the water quality in the Seaside & Salinas Valley Basins
- Protects against seawater intrusion



# Economically Responsible:

**Pure Water Monterey is locally owned and managed by a public agency partnership insuring transparency and a competitive overall per acre foot cost.**



# Diversifying the Water Supply Portfolio

## Current

Aquifer Storage  
And Recovery

Los Padres Dam  
/ Carmel River

Seaside Basin

## Proposed

Desalination  
Project

Groundwater  
Replenishment

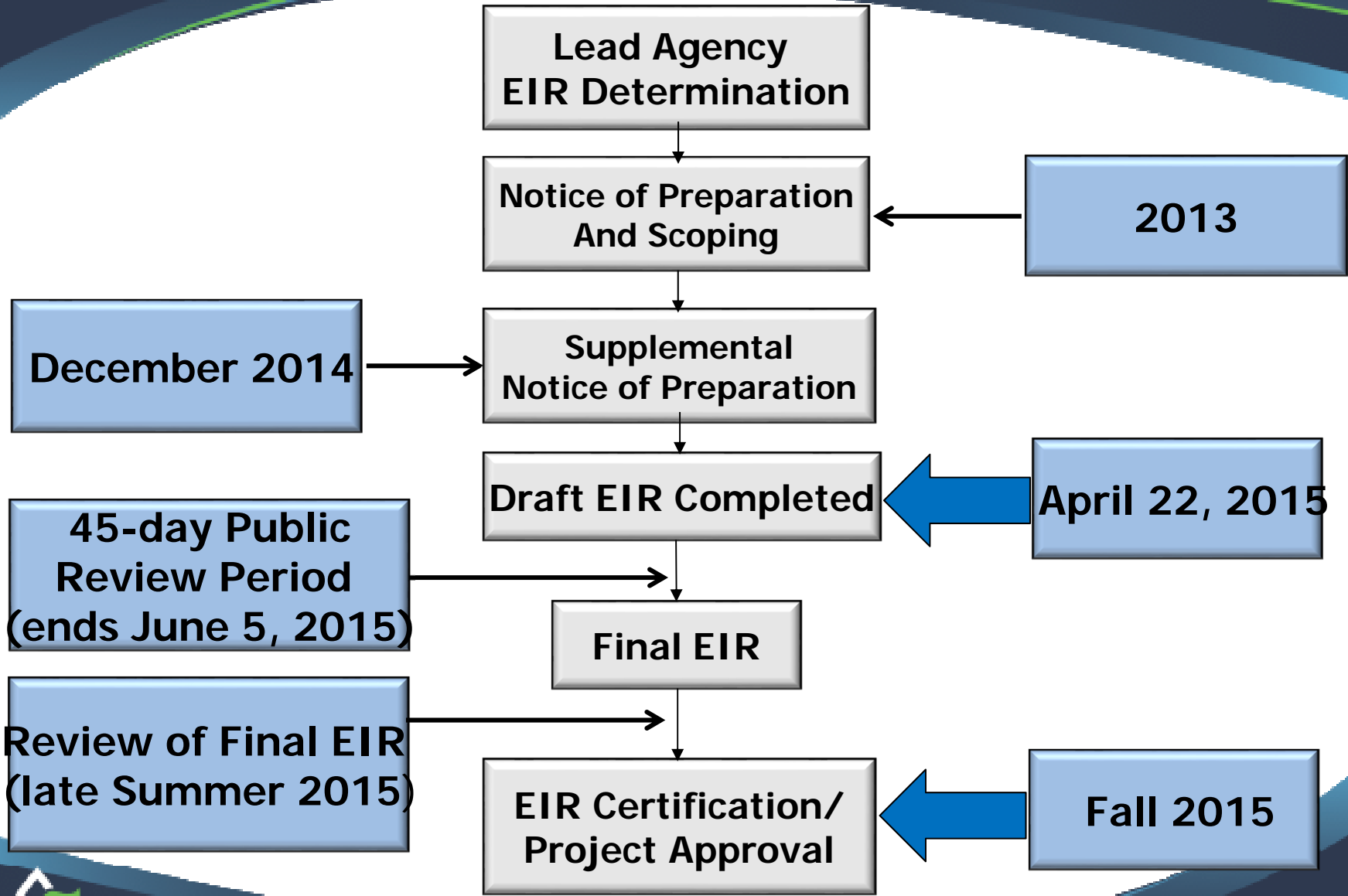
Local Water  
Projects



# Who Has Benefited From Advanced Water Treatment Technology?

- Orange County, CA
- Scottsdale, AZ
- Phoenix, AZ
- El Paso, TX
- Big Springs, TX
- Wichita Falls, TX
- Raleigh, NC
- Fairfax, VA
- Perth, Australia
- NEWater, Singapore
- Windhoek, Namibia
- Santa Clara, CA





## EIR Purpose

- Disclose the environmental effects of a proposed project
- Identify mitigation measures to avoid, reduce, minimize significant environmental effects
- Evaluate reasonable alternatives





## Key Topics in EIR

Summary of the EIR –S-1

Project Description – Ch. 2

Water Quality/ Regulatory Compliance – Ch. 3

Groundwater Hydrology/Quality – Ch. 4.10

Surface Water Hydrology/Quality – Ch. 4.11

Alternatives to Proposed Project – Ch. 6



# Public Review of the Draft EIR



April 22, 2015

## NOTICE OF AVAILABILITY OF DRAFT EIR FOR PUBLIC REVIEW and NOTICE OF PUBLIC MEETINGS

The Monterey Regional Water Pollution Control Agency (MRWPCA) has released a Draft Environmental Impact Report (Draft EIR) for the **Pure Water Monterey Groundwater Replenishment Project**. MRWPCA is the Lead Agency under the California Environmental Quality Act (CEQA). The State Clearinghouse number for the project is SCH#2013051094.

**PROJECT DESCRIPTION:** The Pure Water Monterey Groundwater Replenishment Project (GWR Project) would divert new source waters to the MRWPCA Regional Treatment Plant for two purposes: 1) to create purified recycled water for recharge of the Seaside Groundwater Basin to replace 3,500 acre-feet per year of CalAm's current water supplies, enabling CalAm to reduce its diversions from the Carmel River by the same amount, and 2) to provide additional recycled water to growers within the existing Castroville Seawater Intrusion Project service area for crop irrigation. Water sources proposed to be recycled, treated and reused by the GWR Project include municipal wastewater, City of Salinas industrial wastewater, City of Salinas and City of Monterey urban stormwater runoff, and surface water diversions from the Blanco Drain, Reclamation Ditch and Tembladero Slough. Purified water from a new Advanced Water Treatment Facility at the Regional Treatment Plant would be conveyed through a new Product Water Conveyance pipeline and booster pump station to new Injection Well Facilities in the City of Seaside for recharge to the Seaside Basin. CalAm would extract water from its existing wells, and would deliver the water to its customers via two new pipelines and its existing distribution system. Recycled water produced for crop irrigation would be distributed through the existing Castroville Seawater Intrusion Project system. The GWR Project is being proposed by the MRWPCA in partnership with the Monterey Peninsula Water Management District (MPWMD).

**PROJECT LOCATION:** The GWR Project would be located within northern Monterey County and would include new facilities located within unincorporated areas of the Salinas Valley and within the cities of Salinas, Marina, Seaside, Monterey, and Pacific Grove, and within former Fort Ord areas in Seaside and Marina. See attached figure.

**ANTICIPATED IMPACTS:** Significant environmental effects of the Proposed Project are anticipated in the following areas: aesthetics; air quality; biological resources (fisheries); biological resources (terrestrial); cultural and paleontological resources; energy; geology/soils/seismicity; hazards and hazardous materials; hydrology and water quality (surface water); land use and agricultural resources; noise; public services (solid waste); and traffic and transportation. Significant cumulative effects are anticipated in the following areas: air quality, biological resources (marine) and surface water quality (marine).

# How to Comment?

Comments on the EIR must be submitted in writing no later than 5:00 P.M. on **June 5, 2015**

Email: [gwr@mrwpc.com](mailto:gwr@mrwpc.com)

Mail: MRWPCA  
Attn: Bob Holden  
5 Harris Court, Bldg D  
Monterey, CA 93940

Fax: 831-372-6178  
(also send hard  
copy by mail)



# For More Information

## PUBLIC MEETINGS

May 20, 2015 Oldemeyer Center, Seaside  
[6:00 - 8:00 p.m.](#)

May 21, 2015 Hartnell College, Salinas  
[4:00 - 6:00 p.m.](#)



# For More Information

Pure Water Monterey  
*A Groundwater Replenishment Project Website*

<http://purewatermonterey.org>

Complete Draft Environmental Impact Report  
is available on the website



Pure Water Monterey  
A Groundwater Replenishment Project

# Regarding RUWAP

- Presented update to Admin Committee last week
- Received a number of comments regarding GWR and RUWAP
- Currently, MRWPCA is negotiating with MCWD on the RUWAP pipeline
- Should note that GWR is designed to be compatible with RUWAP
- Suggest a future conceptual study to more specifically define options/costs/timing benefits of future RUWAP and Desal



# Questions?



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