

Integrating Water Reuse into a Regional Approach to Water Management

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Bay Area One Water Network Water Reuse

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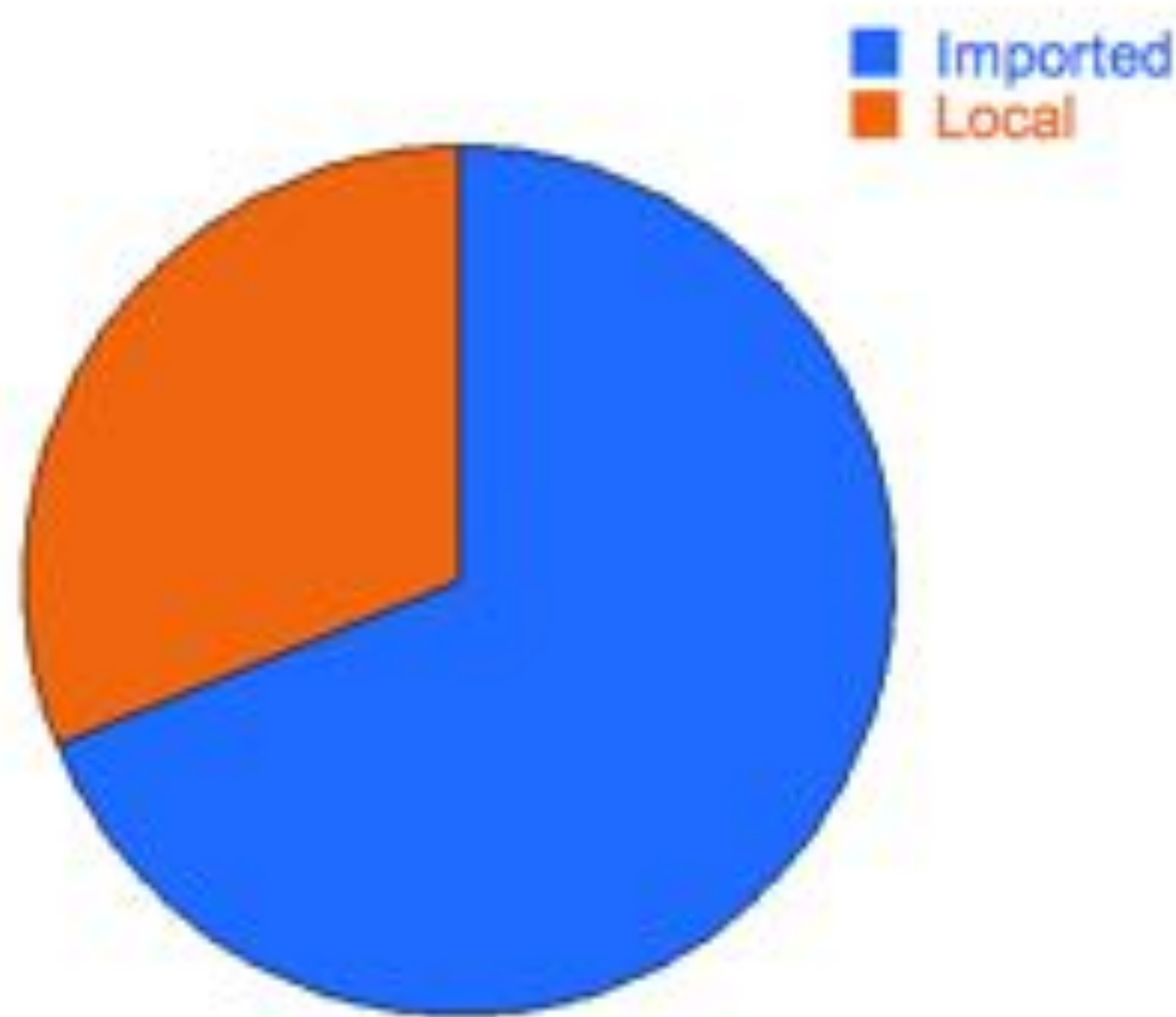


California's Imported Water Supply



The Bay Area's Water Portfolio

2016 Water Portfolio



Total = 1.3 billion gallons/day

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2016 Water Portfolio



Total = 1.3 billion gallons/day



Imported Water



Local Supplies



Demand Management



Water Reuse



Desalination

Water Reuse to the Rescue

SENATE BILL

NO. 332

SB 332, also known as the Local Water Reliability Act, promotes the development of local water supplies by requiring wastewater treatment facilities to reduce the volume of treated wastewater discharged into the ocean annually by 50% in 2030 and 95% by 2040.

An act to add Section 13557.5 to the Water Code, relating to water.

LEGISLATIVE COUNSEL'S DIGEST

SB 332, as amended, Hertzberg. V

Silicon Valley Leaders Tout \$612 Million Plan to Convert Toilet Water to Drinkable Water

By Bay City News

Published Apr 27, 2015 at 8:53 PM | Updated at 11:30 AM PDT on Apr 28, 2015



From toilet to tap: On Monday, Silicon Valley leaders announced plans to expand a water recycling plant. The goal is to eventually turn sewer water into drinking water. Marianne Favro reports. (Published Monday, April 27, 2015)

The San Diego Union-Tribune

ENVIRONMENT

Focus: San Diego will recycle sewage into drinking water, mayor declares



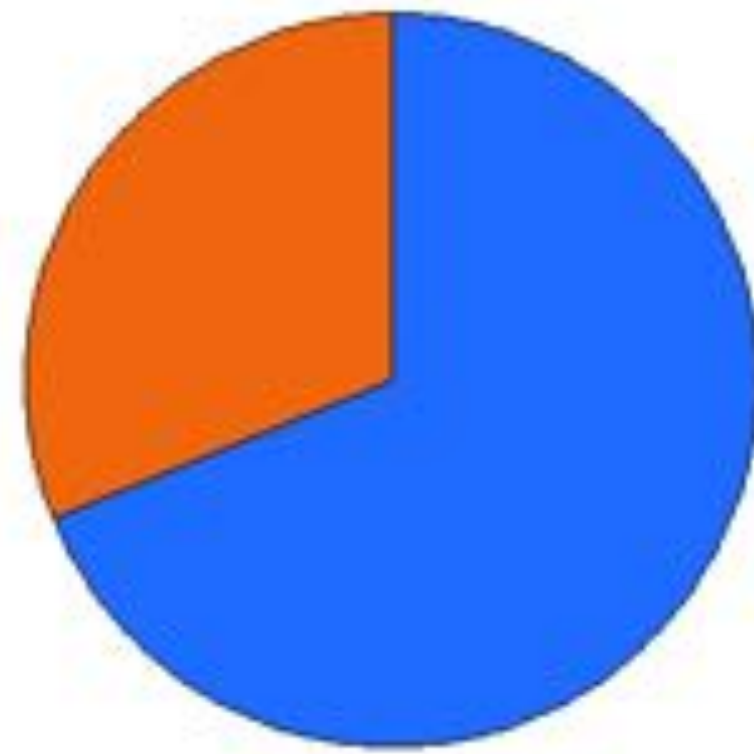
The Pure Water project is expected to break ground next year and ultimately generate a third of San Diego's drinking water by 2035.

Eric Garcetti | How can we help? | About Mayor Garcetti | Meet the Team | Our Work | Press Room

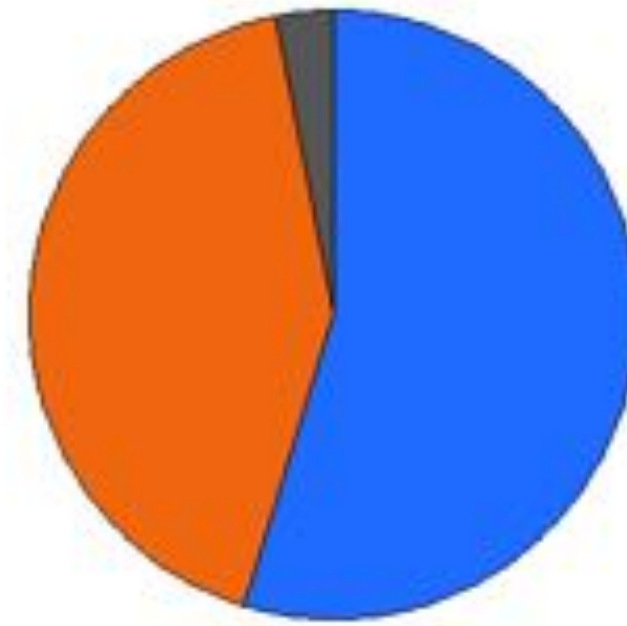
MAYOR GARCETTI: LOS ANGELES WILL RECYCLE 100% OF CITY'S WASTEWATER BY 2035

Water Portfolio Diversification

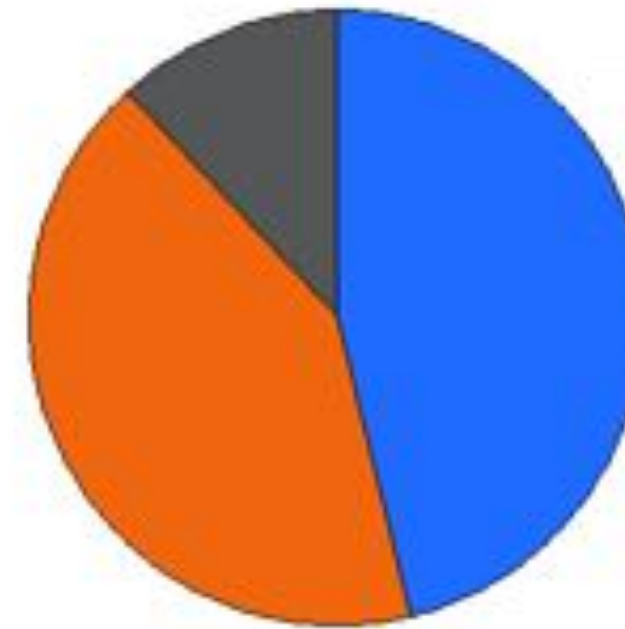
2015



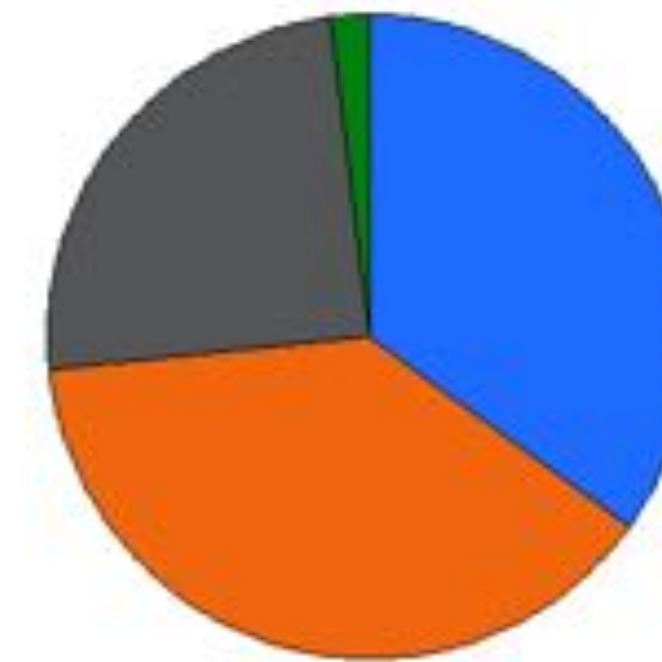
2025



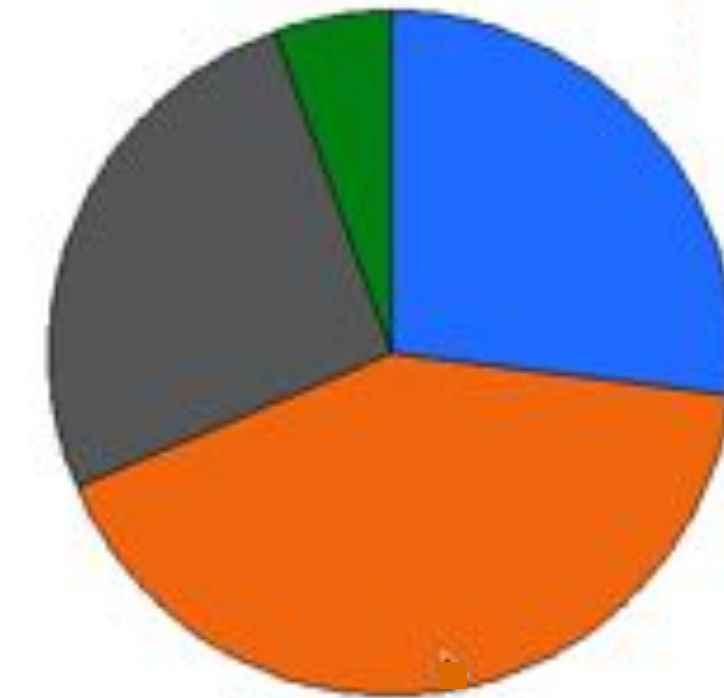
2030



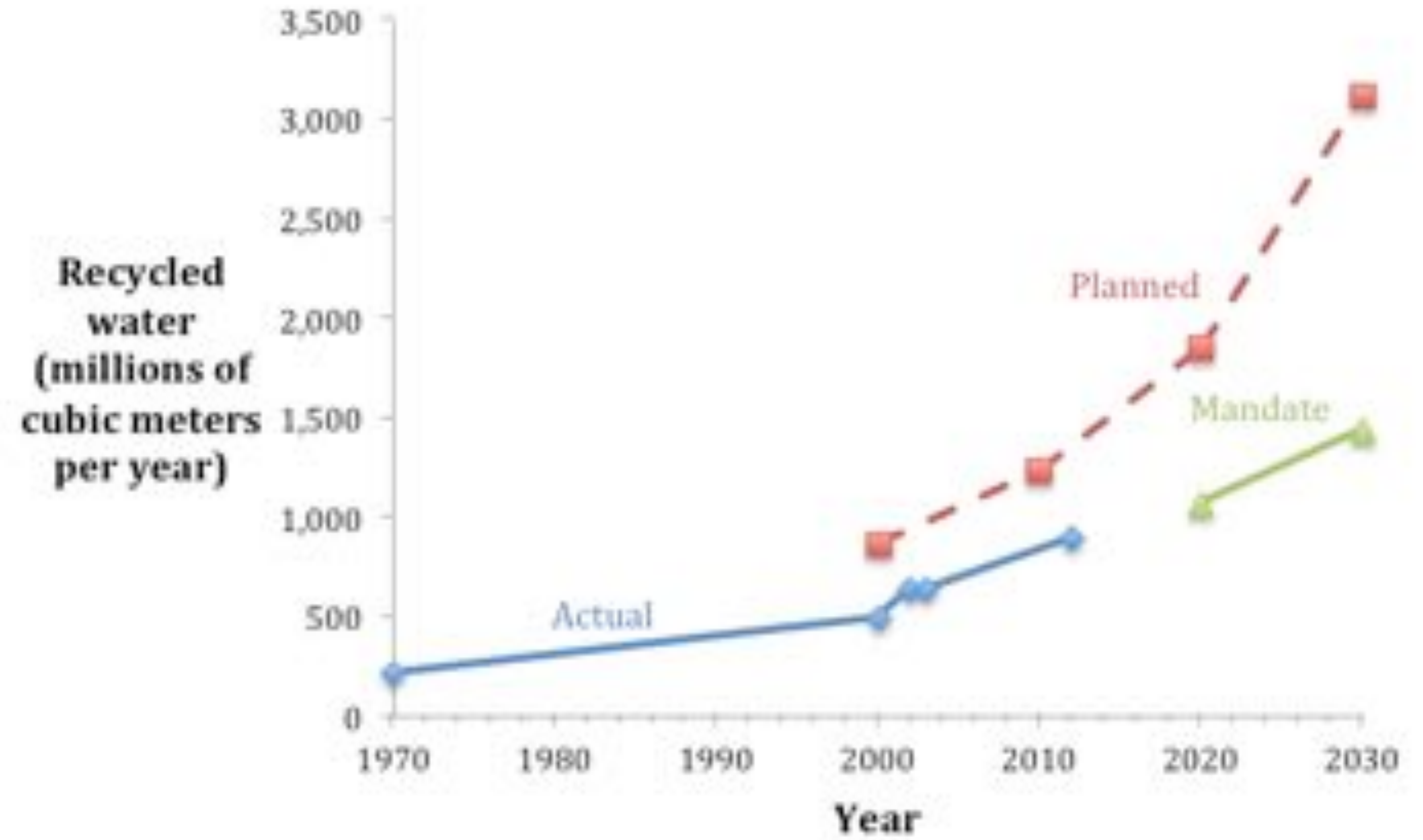
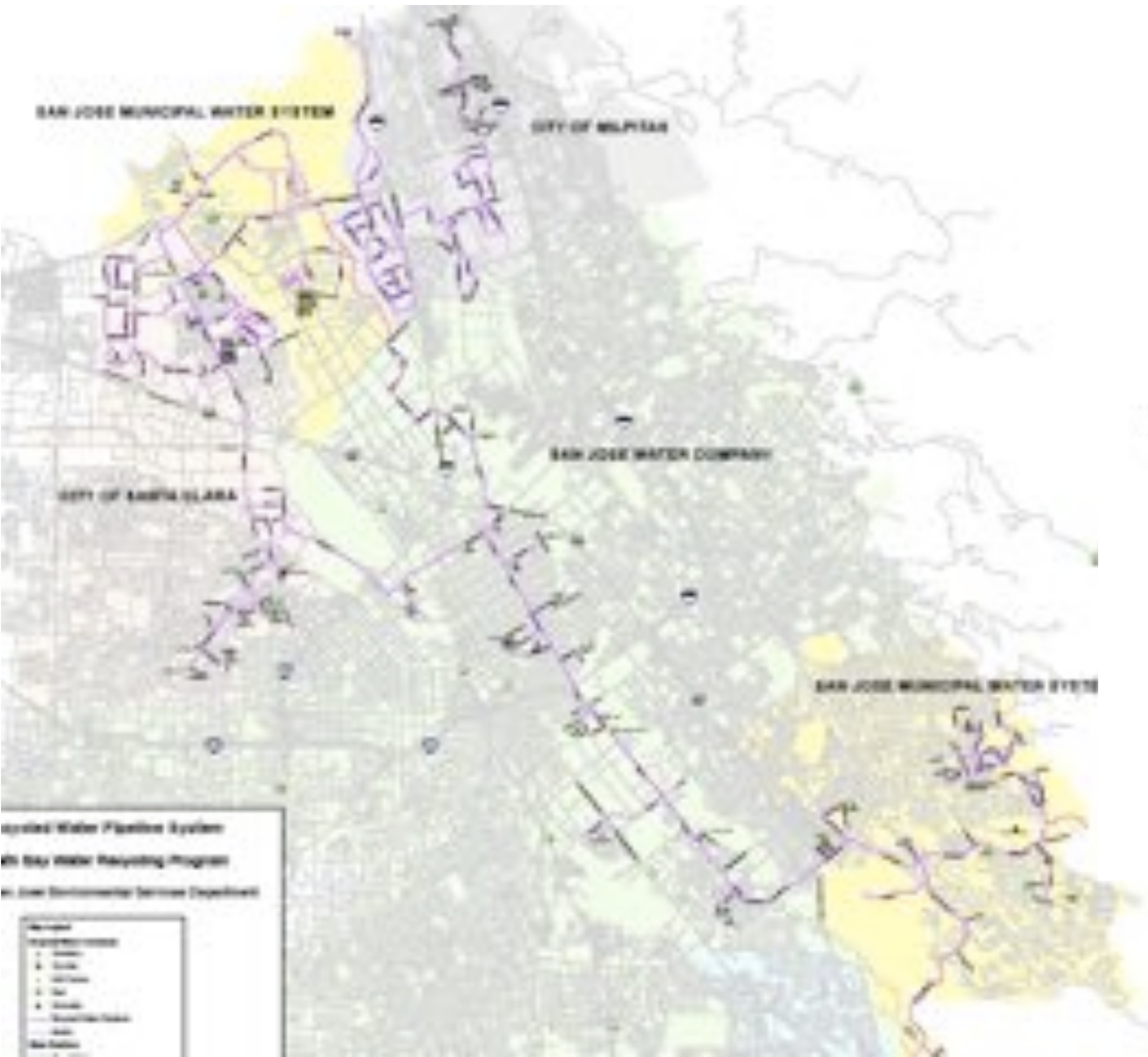
2040



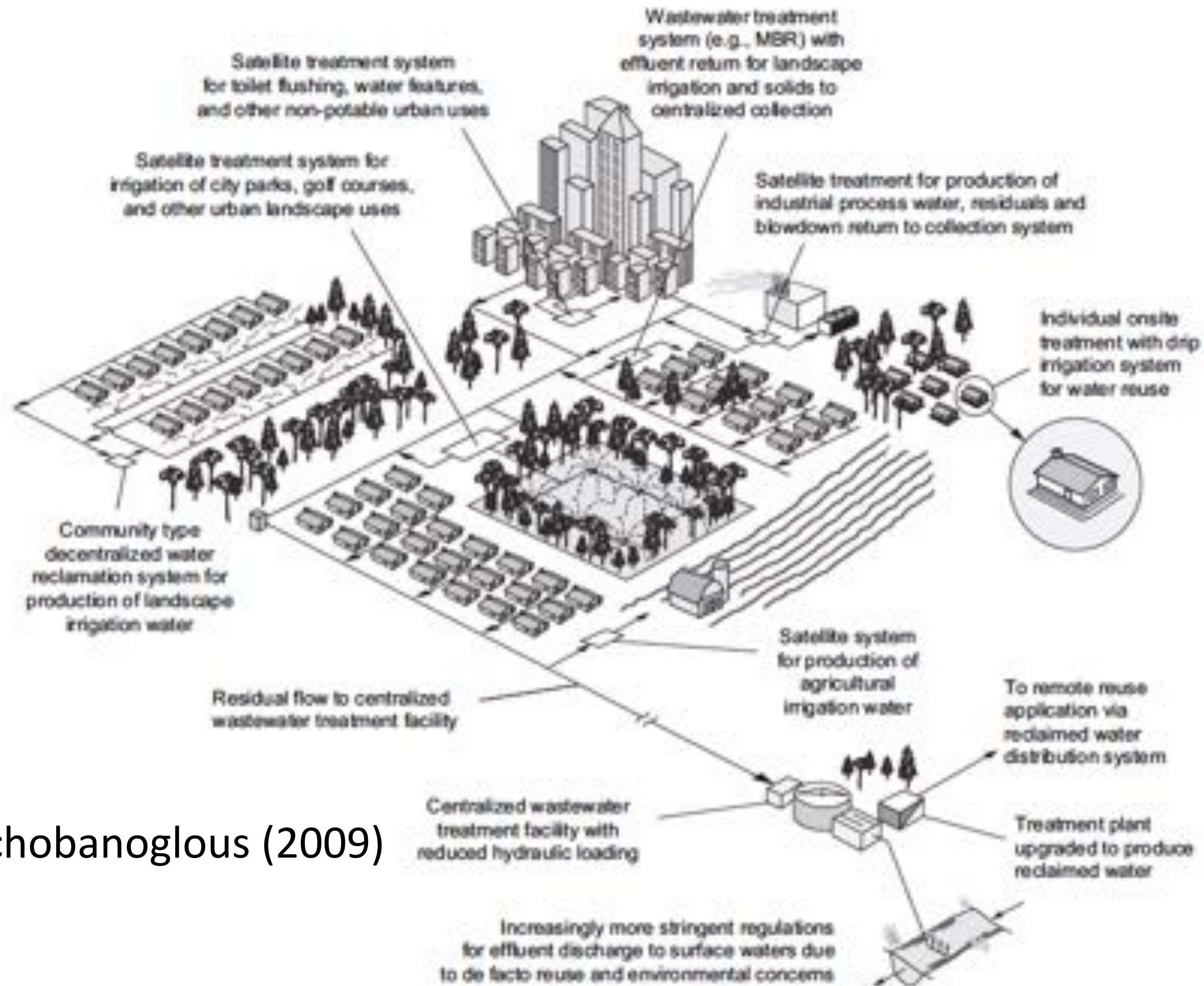
2050



Centralized, Non-Potable Water Reuse



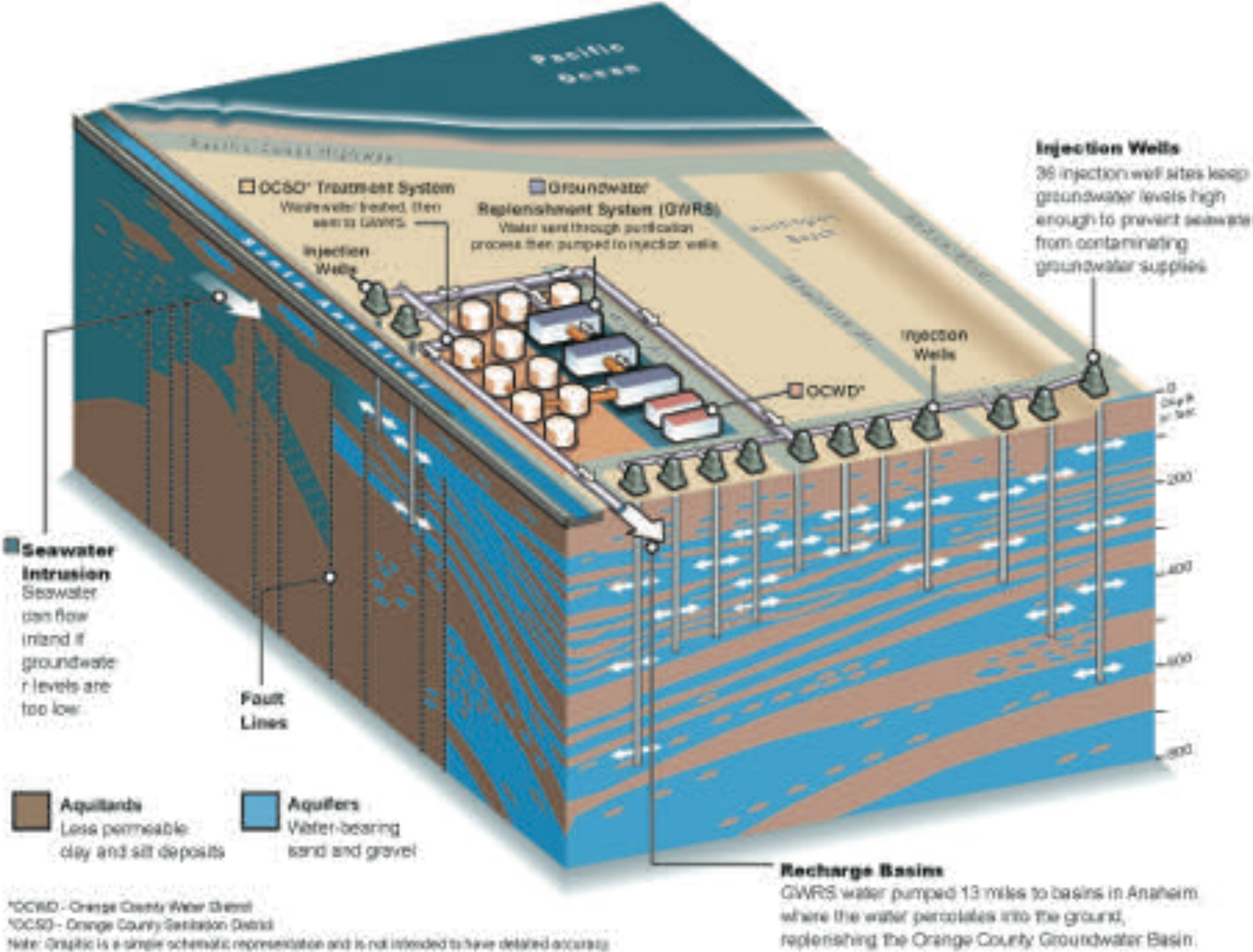
Localized Non-Potable Water Reuse



Gikas & Tchobanoglous (2009)

Potable Water Reuse

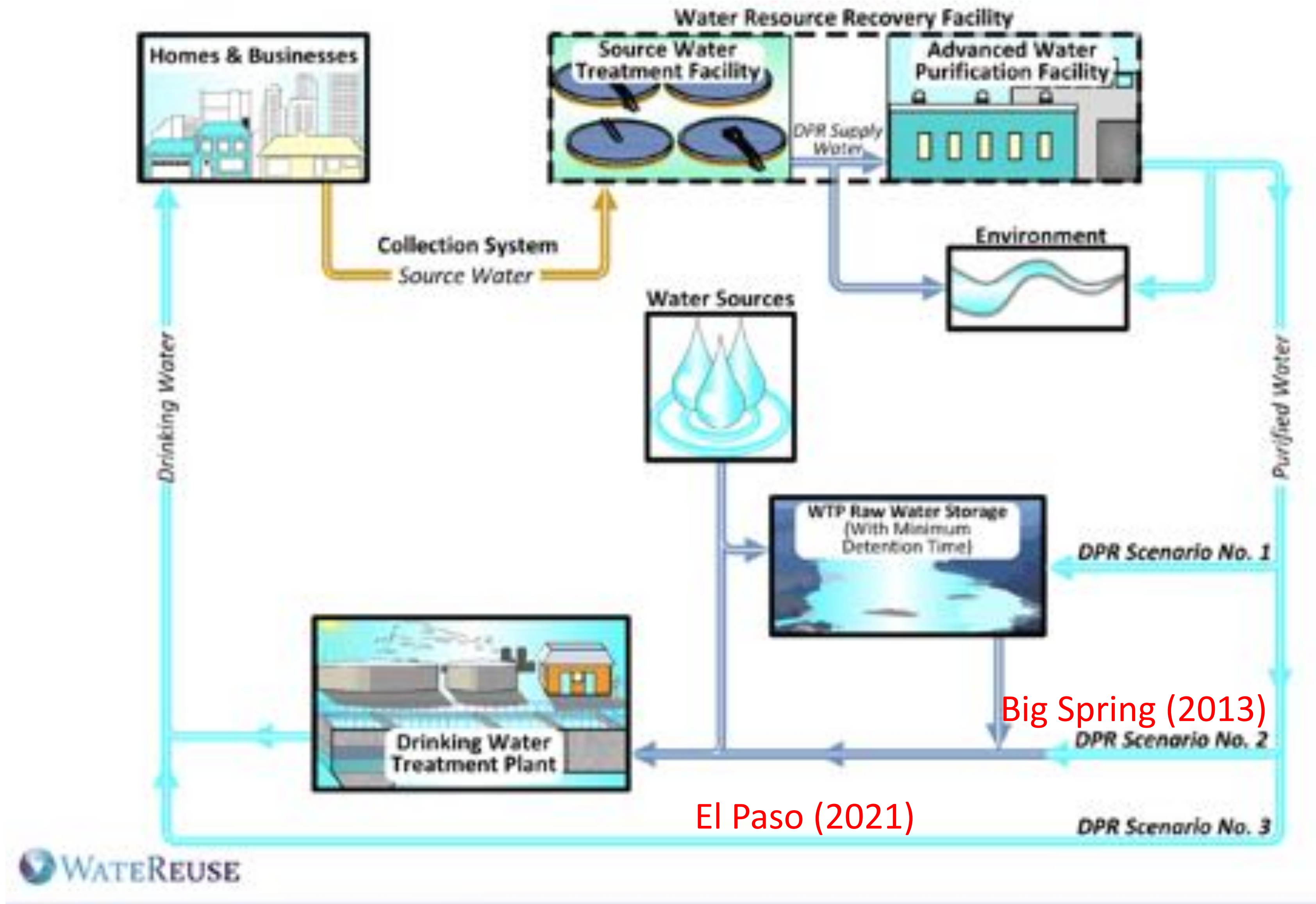
Groundwater Recharge



Surface Water Augmentation



Direct Potable Water Reuse



Anticipating Future Opportunities

A pessimist sees the difficulty in every opportunity; an optimist sees the opportunity in every difficulty.
-Winston Churchill



Consider what happened during the recent drought:

- SGMA passed first groundwater regulations in CA
- SoCal invested in reuse, desal and stormwater
- Greywater regulations passed
- Potable reuse permit issues resolved

What happened in the Bay Area?

How Can A Regional Approach Help?



- Over the next 35 years, the public and elected officials expect that Bay Area communities will recycle their wastewater.
- If we are going to achieve this goal, an “all-of-the-above” strategy may be necessary.
- A regional network can achieve things that would be difficult for individual entities:
 - identifying and fostering partnerships among organizations
 - demonstrating/optimizing new technologies in local context
 - engaging/communicating with the public & elected officials