



# Overview of Las Posas Aquifer Storage and Recovery Wellfield

PURVEYOR MEETING  
DECEMBER 10, 2024

## Water Supply Under Normal Conditions

- ▶ Metropolitan water (State Water Project water) via the Santa Susana Tunnel in Chatsworth



# Water Supply Under Outage Conditions

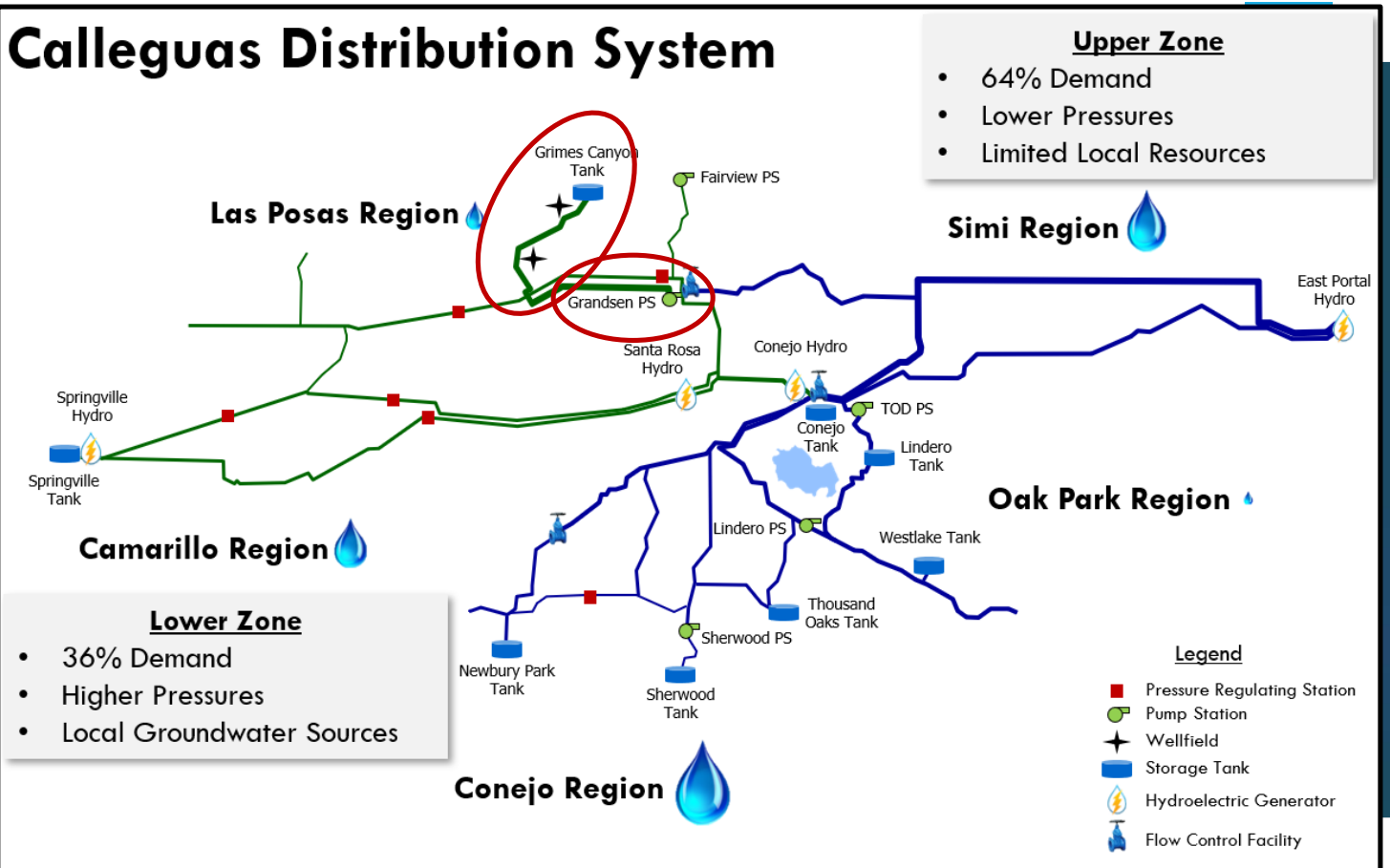
## Existing

- ▶ Lake Bard via Lake Bard Water Filtration Plant (95 cfs for ~5.5 weeks)
- ▶ Las Posas Aquifer Storage and Recovery Wellfield (55 cfs)
- ▶ Crestview Interconnection (3 cfs)

## Under Development

- ▶ LVMWD Interconnection (testing and start up)
- ▶ Ventura Interconnection (design)
- ▶ WRIST Projects (concept)

## Calleguas Distribution System



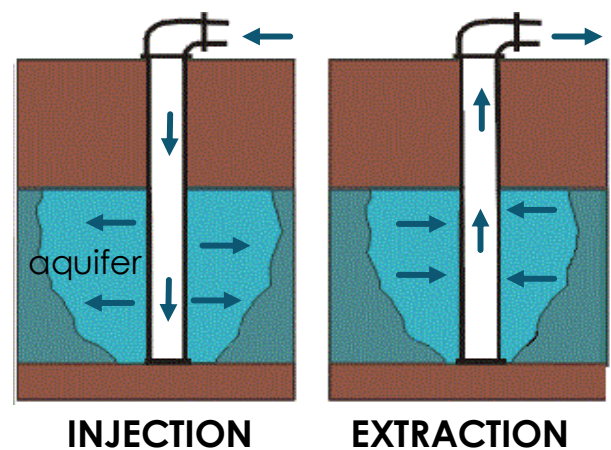
# Aquifer Storage & Recovery

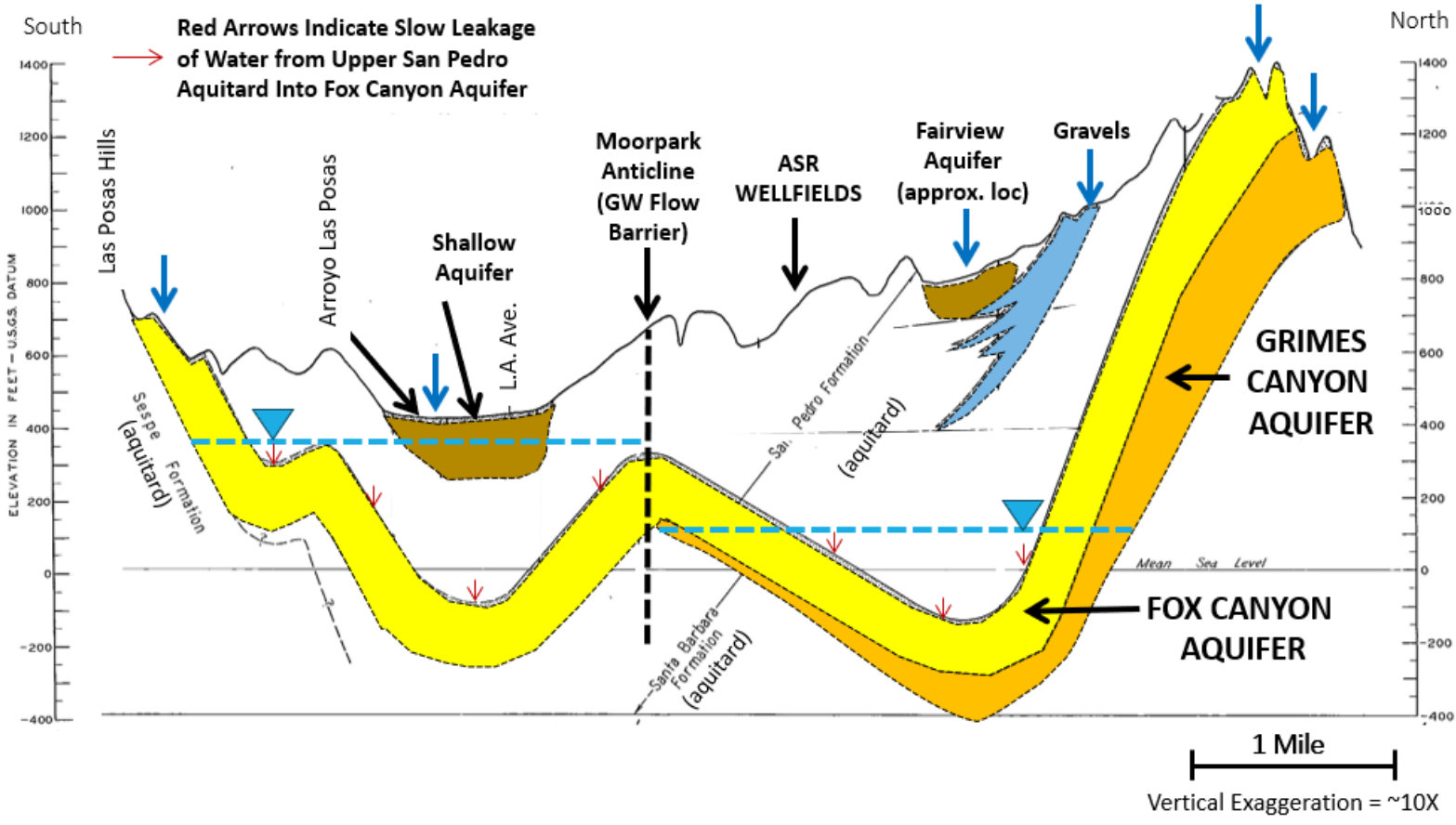
- ▶ Inject imported water
  - ▶ Shutdown (short-term) and outage/emergency (longer-term) supplies
- ▶ In-lieu storage program
  - ▶ Imported water deliveries to participating pumpers
  - ▶ Unpumped water credited to Calleguas by FCGMA for future recovery
  - ▶ Six entities have historically participated
- ▶ No allocation: report activity to FCGMA



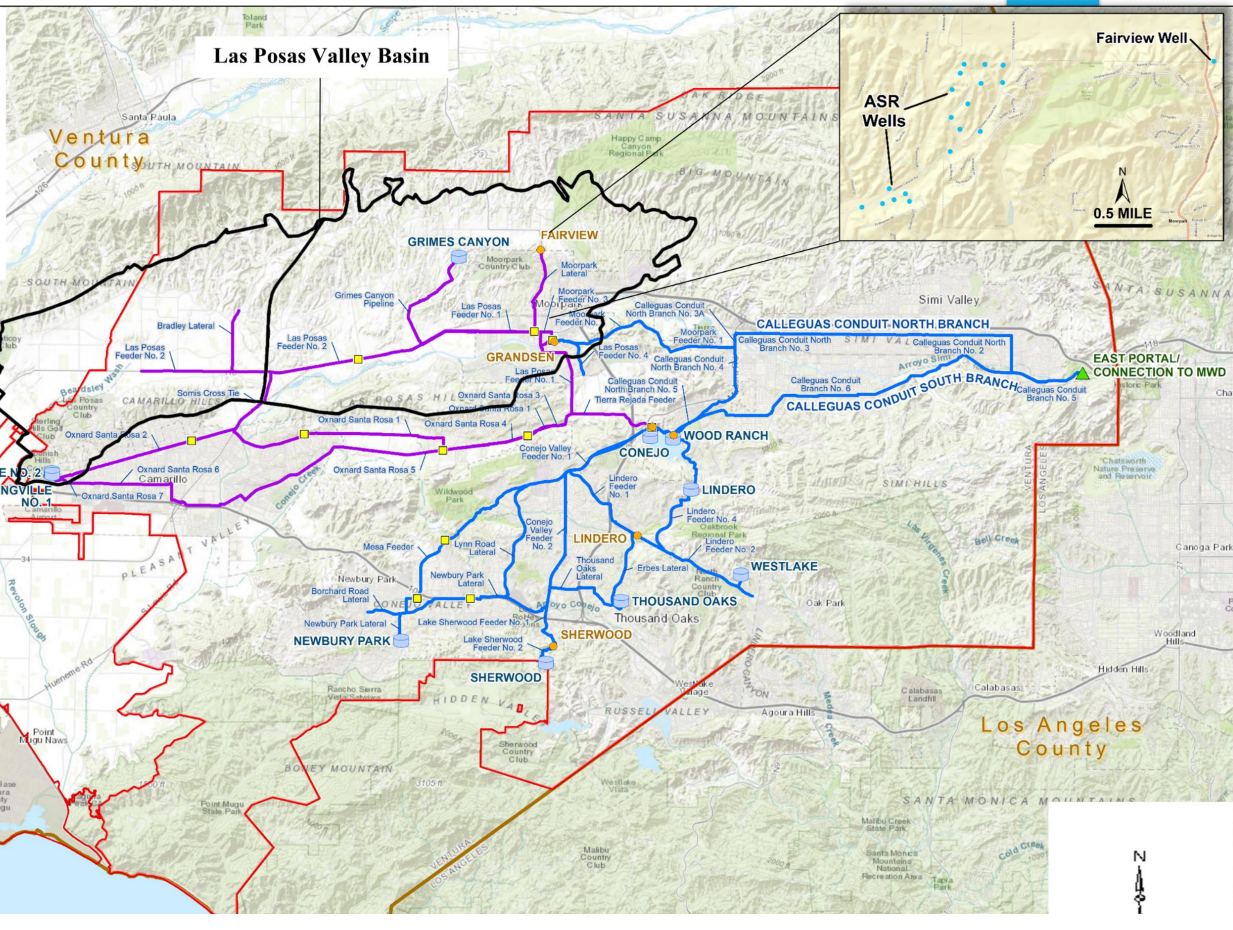
# Aquifer Storage & Recovery

- ▶ Imported water is injected into the wells and stored in the aquifer.
- ▶ Stored water is extracted during outages of imported supply.





- Legend**
- CMWD Service Area Boundary
  - Potable Distribution System Lower Zone
  - Potable Distribution System Upper Zone
  - Pressure Regulating Station
  - Pump Station
  - Tanks
  - Las Posas Valley Basin





## Las Posas Basin ASR Wellfield Facilities

- ▶ 18 Wells
- ▶ Grimes Canyon Disinfection Facility
- ▶ Grimes Canyon Reservoir
- ▶ Standby Generators

## Wells

- ▶ 18 injection and extraction wells
- ▶ “Regular” wells with additional pipe, valves, and controls that allow water to be run “backwards” into the aquifer.
- ▶ Injection capacity is about 60% to 80% of extraction capacity.





# Grimes Canyon Disinfection Facility

- Chloramination achieved through injection of ammonia and gaseous chlorine



## Grimes Canyon Reservoir

- ▶ 5 million gallons
- ▶ Provides balancing storage between wells and transmission system





## Standby Generators

- ▶ Sufficient diesel back up generation to power all 18 wells and ancillary facilities (10 MW)
- ▶ Four 20,000-gallon diesel fuel tanks

## Grandsen Pump Station

- ▶ Phase 1: Pumping to Lower Zone (65 cfs)
- ▶ Phase 2: Pumping to Upper Zone (60 cfs)
- ▶ Sufficient diesel back up power for all facilities on site (5.5 MW)



# History of the Wellfield

1995: Conjunctive Use Agreement with Metropolitan.

1996-2004: Wellfield Facilities Construction

2009-2010: Metropolitan required that water be produced during drought

2011: Calleguas purchases wellfield (and stored water) from Metropolitan

2017: Las Posas Basin Adjudication initiated

2023: Las Posas Basin Adjudication settlement agreement/physical solution



## Adjudication Settlement

- ▶ Allows Calleguas to operate the Wellfield under the following conditions:
  - ▶ Maintenance Outage
  - ▶ Response to Six Standard Water Shortage Levels
  - ▶ Catastrophic System Outage
  - ▶ Operation and Maintenance



# Adjudication Settlement

- ▶ Requires Calleguas to prepare a Project Operations Plan that includes:
  - ▶ Adaptive Management Plans with triggers to avoid Material Injury
  - ▶ Monitoring Plan
  - ▶ Proposed Mitigation Plan to avoid Material Injury
  - ▶ Evaluation of use of in-lieu to "more optimally achieve Basin management objectives"
  - ▶ Evaluation of "leave behind"
  - ▶ Evaluation of borrowing



Questions?