



# Recycled Water

PAST, PRESENT & FUTURE

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Contra Costa Taxpayers Association  
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**Dublin San Ramon  
Services District**

*Water, wastewater, recycled water*



# Discussion items

- ▶ Overview
- ▶ Recycled water supply and demand
- ▶ Potable reuse
- ▶ Next steps





# What is Dublin San Ramon Services District (DSRSD)?

Independent

Enterprise

Community  
Services

Special  
District





# DSRSD remains in charge of water in all its forms

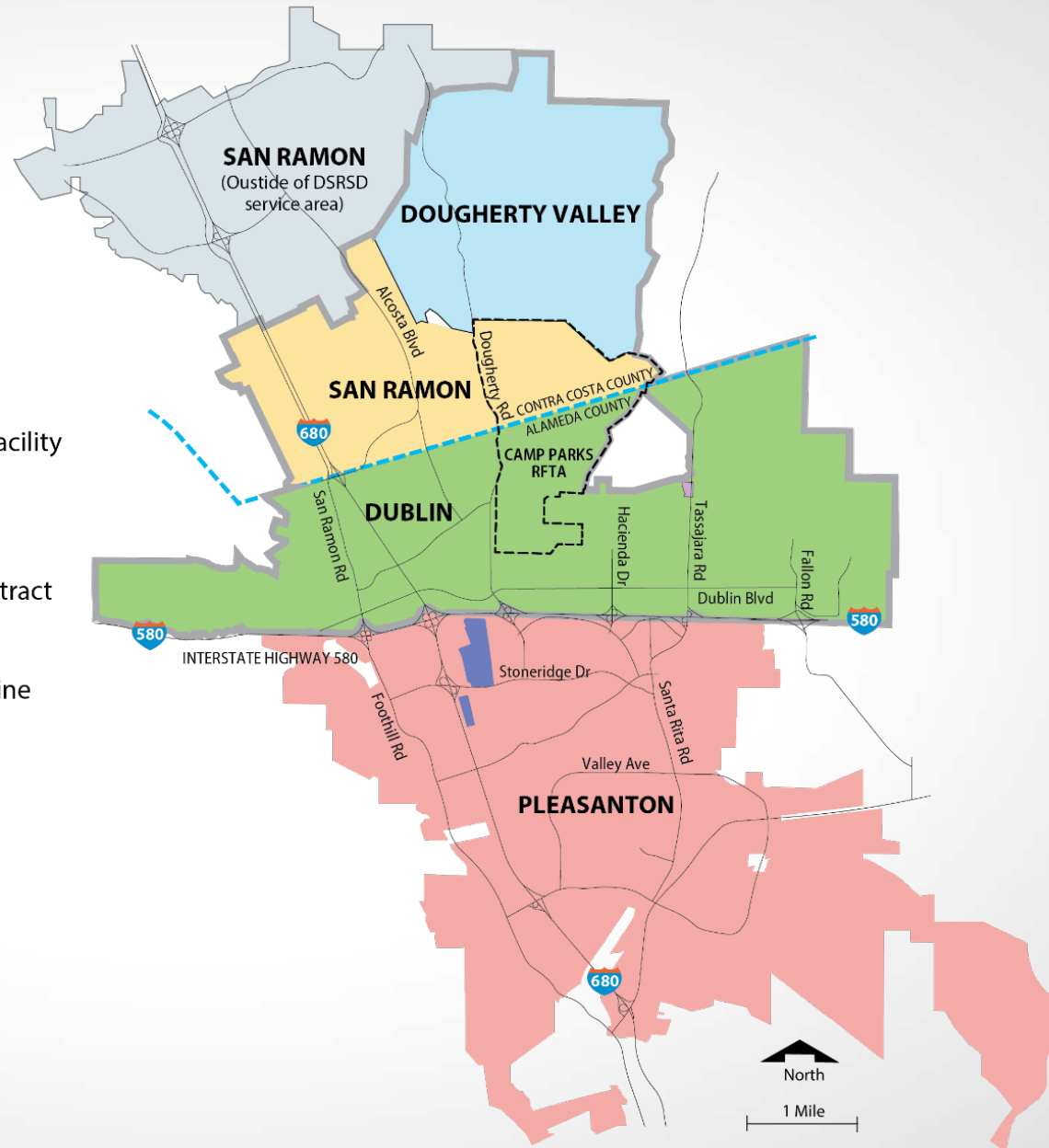


# Areas we serve

Total water and wastewater customers served: 188,000

## Map Legend

- DSRSD Regional Wastewater Treatment Facility
- DSRSD Water Only Service Area
- DSRSD Wastewater Only Service Area
- DSRSD Wastewater Treatment Under Contract
- DSRSD Water & Wastewater Service Area
- Alameda Contra Costa County Dividing Line
- DSRSD Boundary
- Camp Parks (Parks RFTA) Boundary







RECYCLE

or not to

RECYCLE

*that is the question*

Treated secondary effluent destined for San Francisco Bay!



Public sends this  
to the plant

After primary and  
secondary treatment  
effluent is pumped to  
SF Bay

After tertiary  
treatment, this is sent  
to irrigation customers

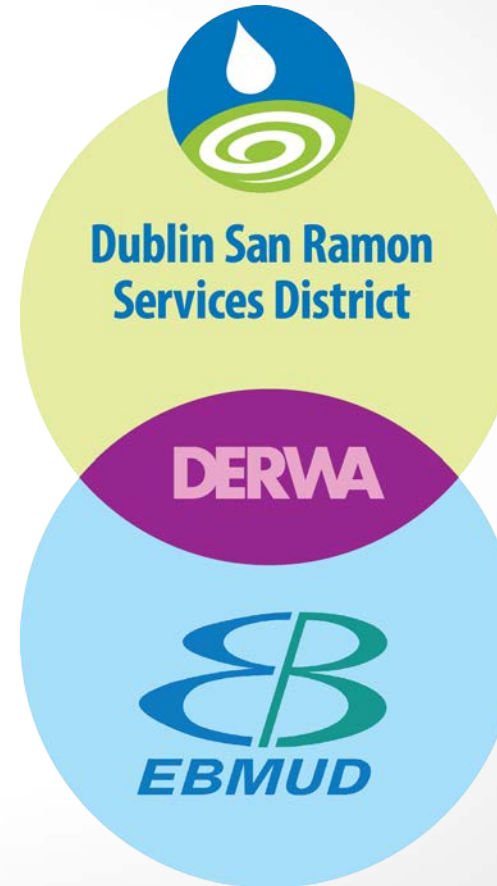
TYPICAL USES FOR RECYCLED WATER





# Recycled water partnership

- ▶ A formal partnership between DSRSD and East Bay Municipal Utility District (EBMUD)
- ▶ San Ramon Valley Recycled Water Program
- ▶ EBMUD provided financial support and strength for a partnership
- ▶ DSRSD provided wastewater, and land for a recycled water plant





# Pleasanton joined in 2014

- Pleasanton is the third agency receiving water from the San Ramon Valley Recycled Water Program

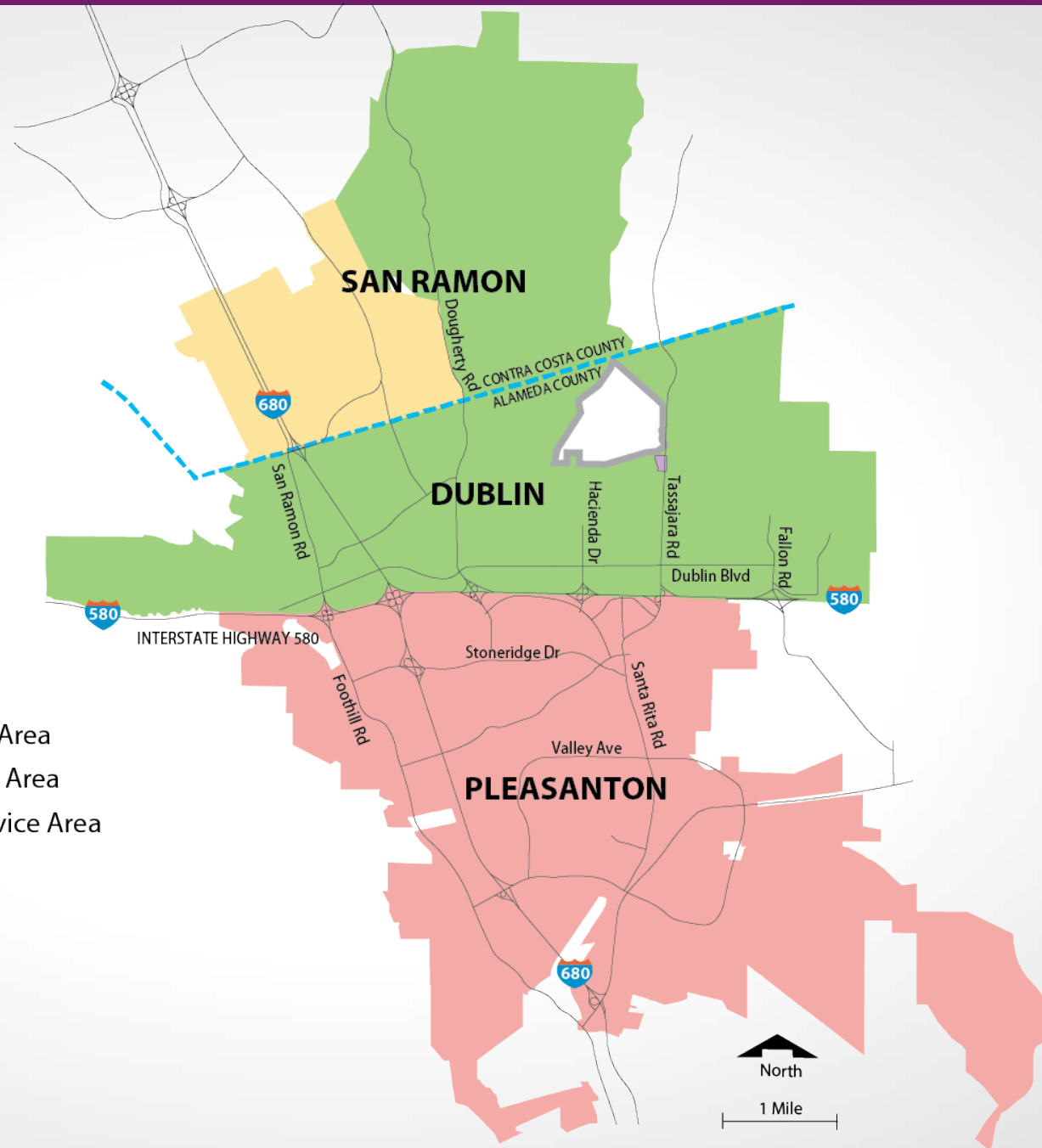




# Recycled water service areas

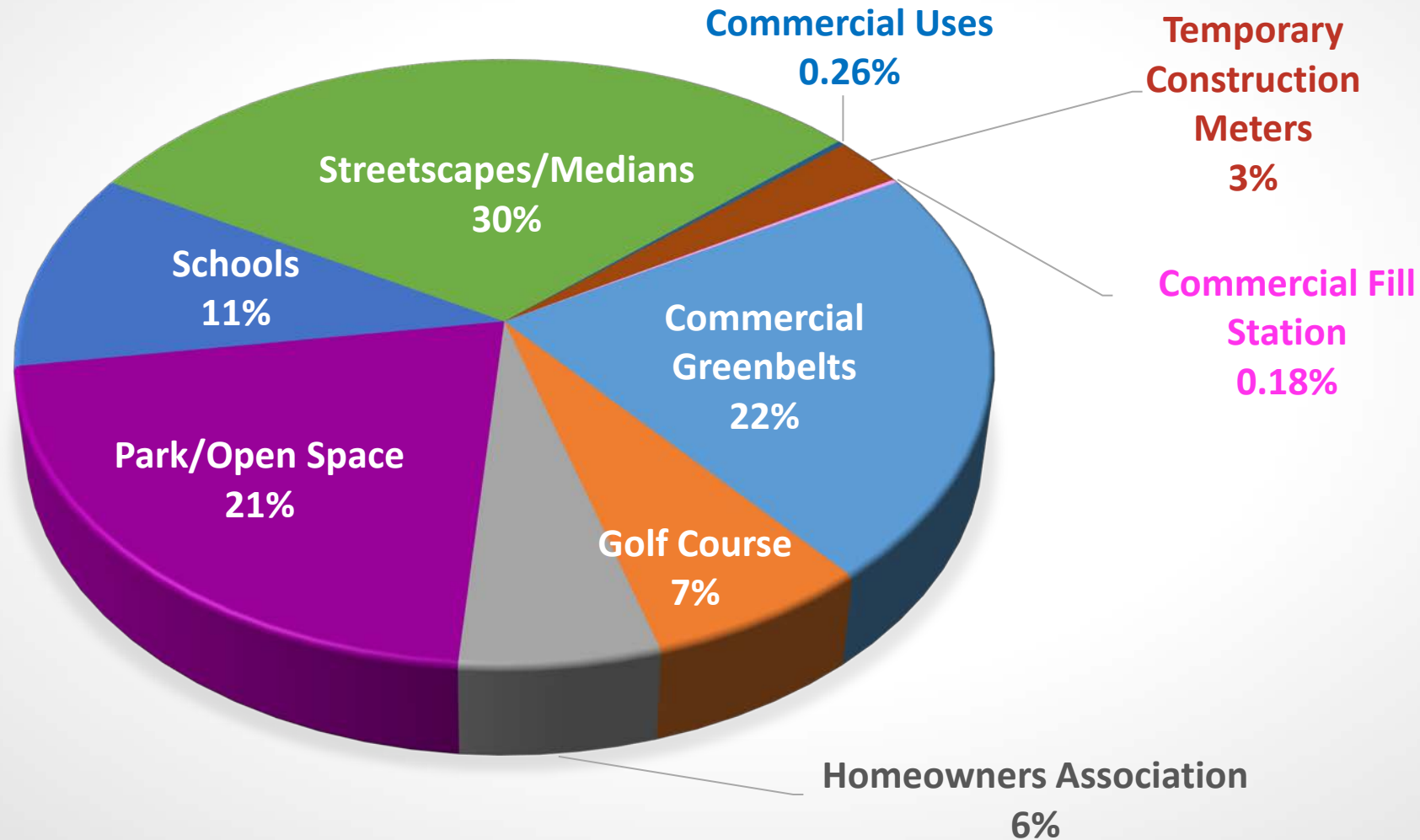
## Map Legend

- DSRSD Recycled Water Service Area
- EBMUD Recycled Water Service Area
- Pleasanton Recycled Water Service Area
- County Line





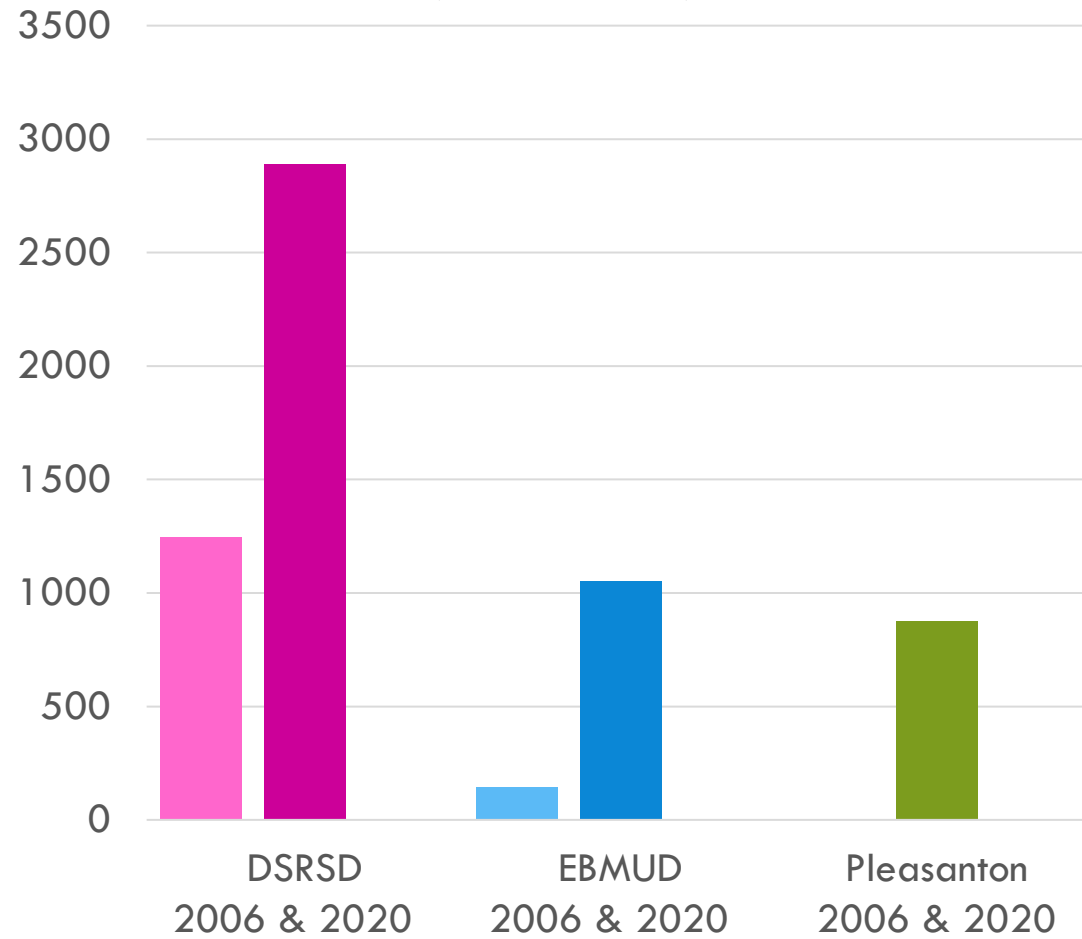
# DSRSD recycled water uses





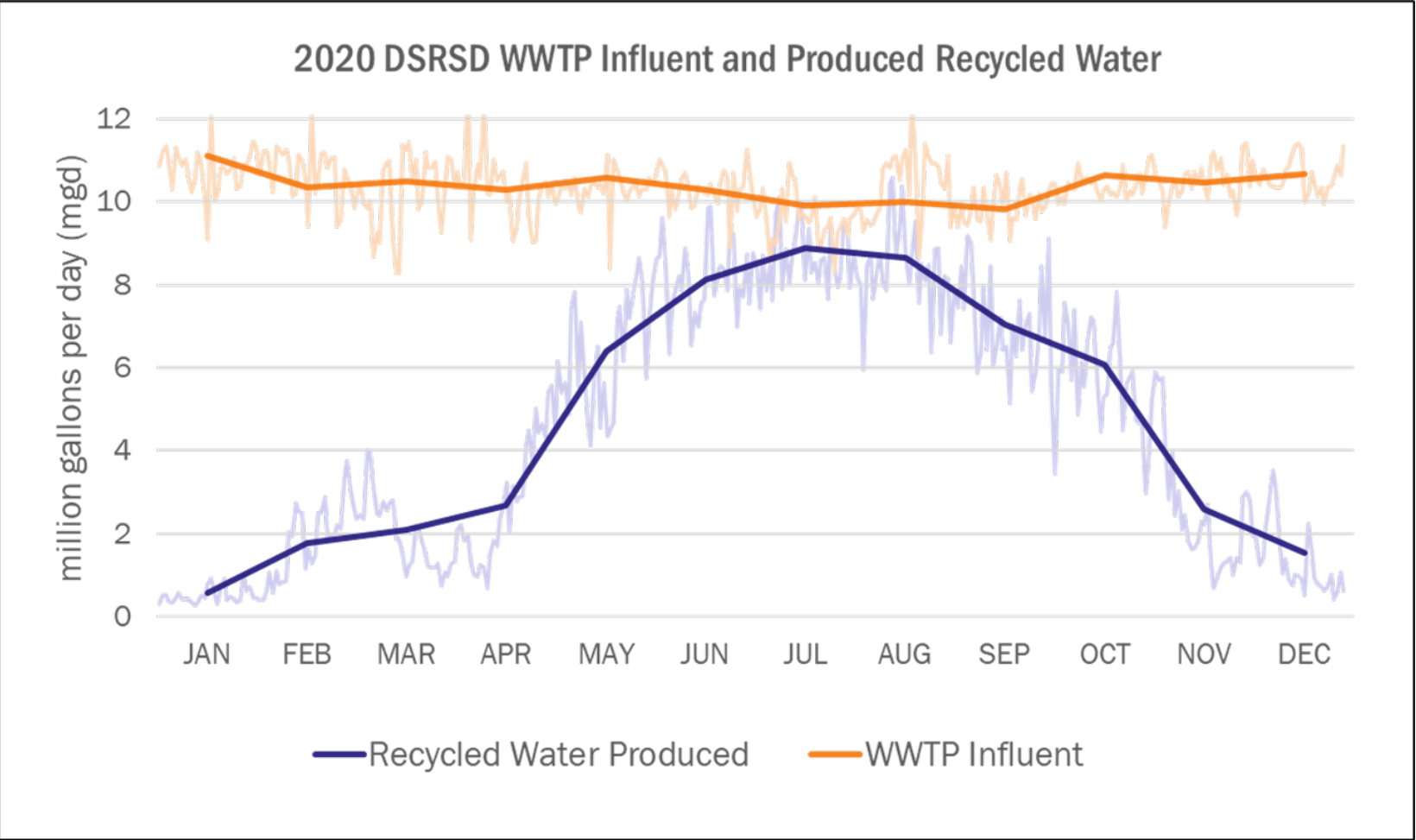
## Growth of Recycled Water Demand

(in Acre Feet)





# Recycled water is limited by wastewater availability



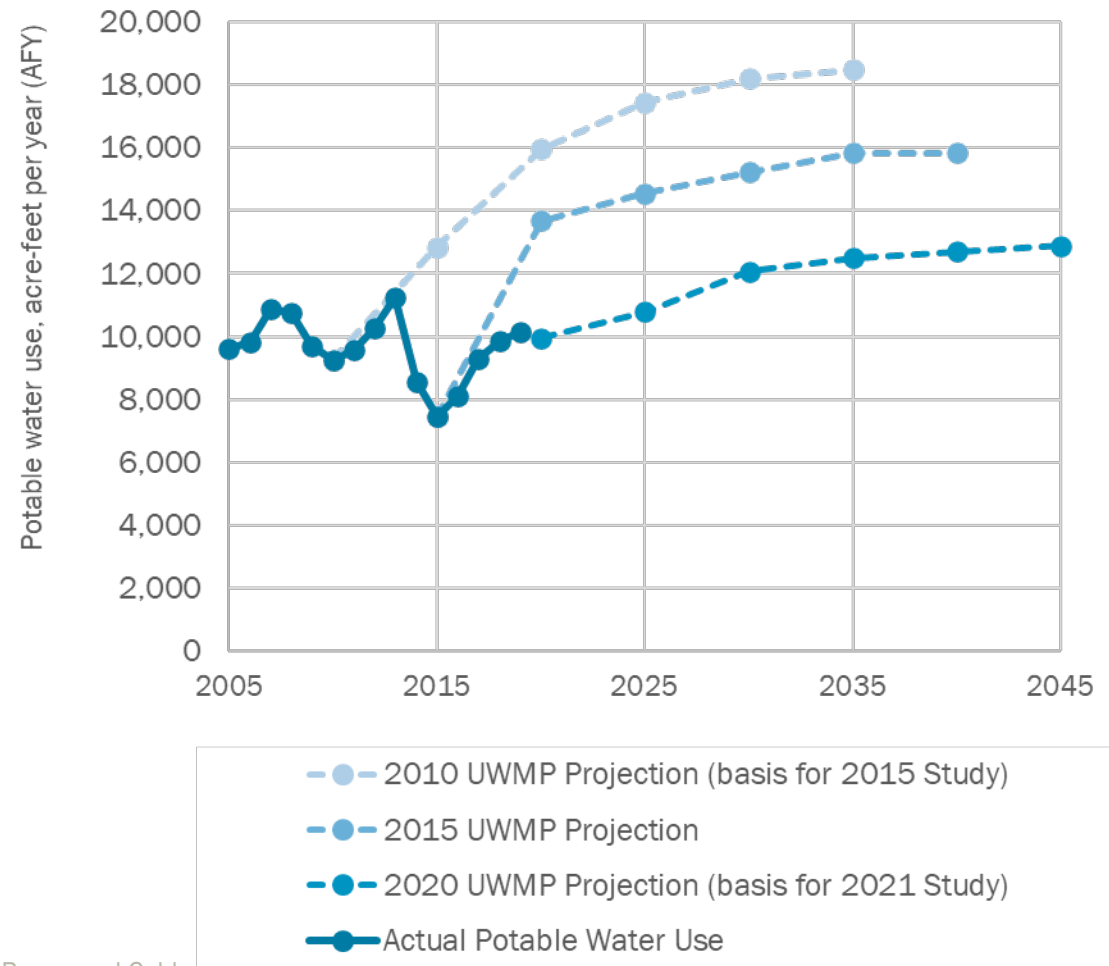
## Seasonal storage

Storing recycled water in winter months for later use in summer months

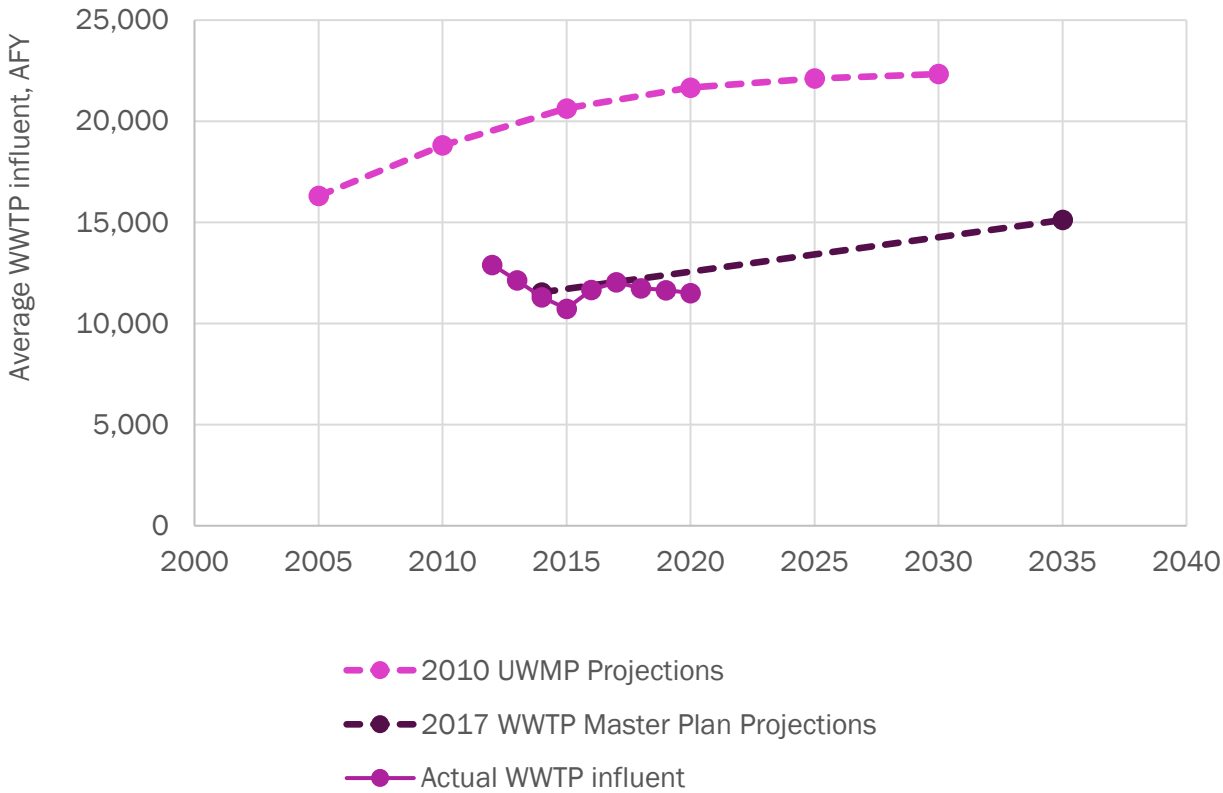


# Conservation has had a major effect on wastewater flows

DSRSD's potable water demand projections over time



DSRSD WWTP influent projections over time





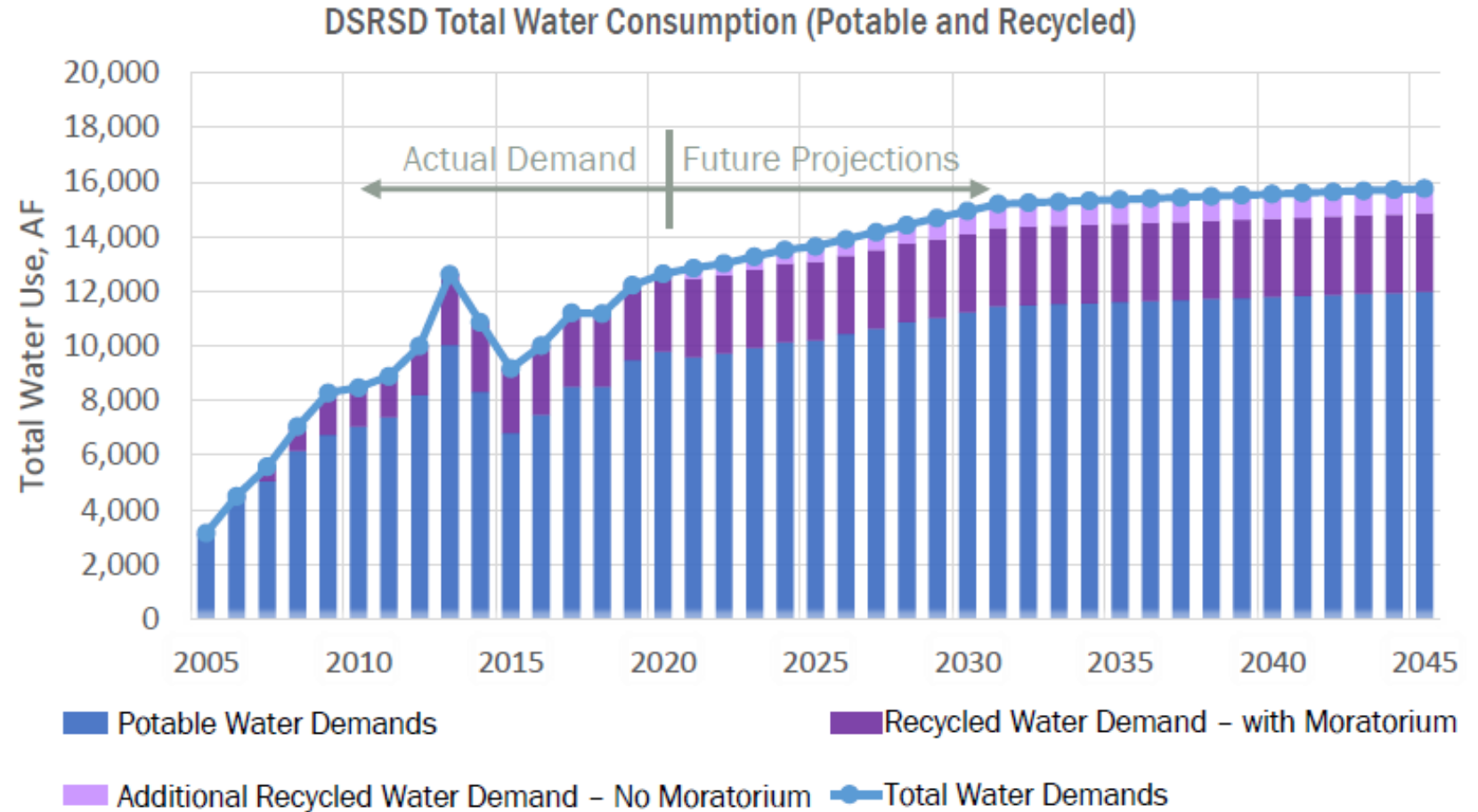
# DSRSD future demand for recycled and potable water

## Projected water demand in 2045

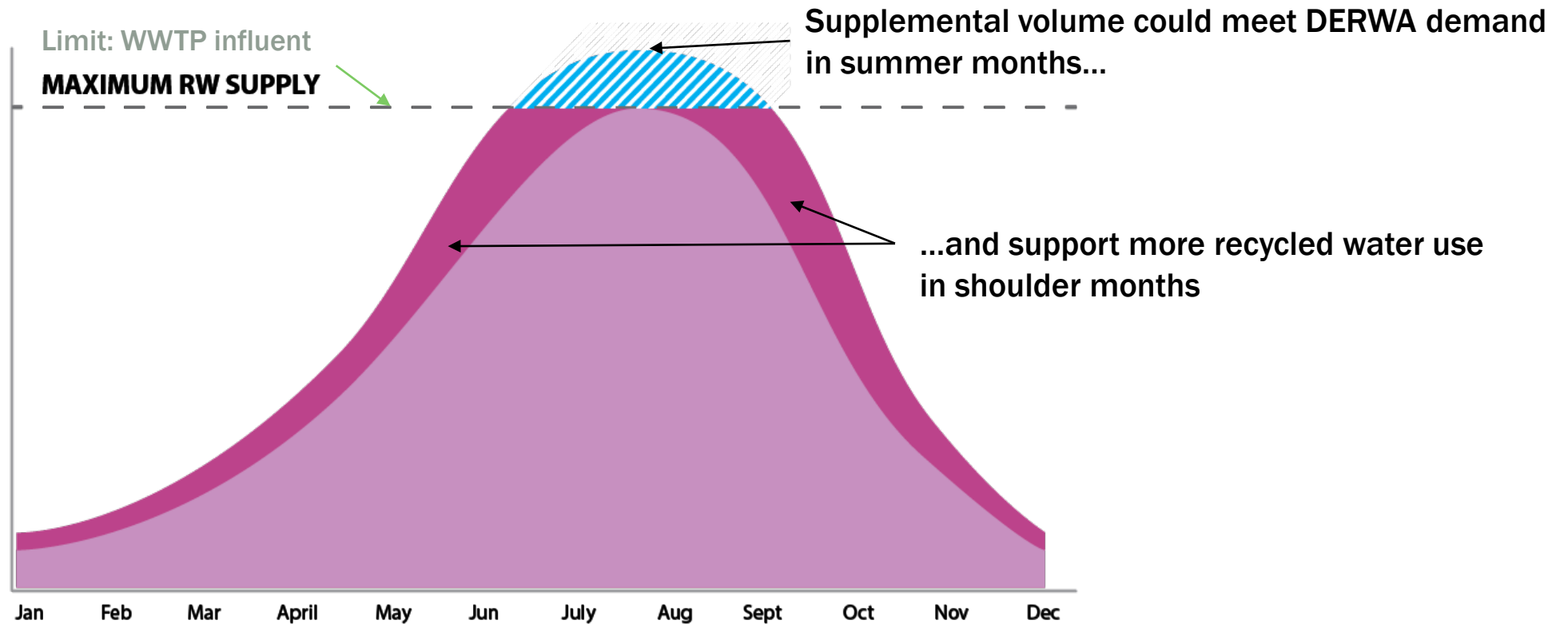
- Total: ~16,000 AFY
- Increase: ~2,900 AFY

## Recycled water

- Potential to offset ~30% of demand increase
- Contingent on wastewater availability



# Expanding recycled water increases potable supply reliability



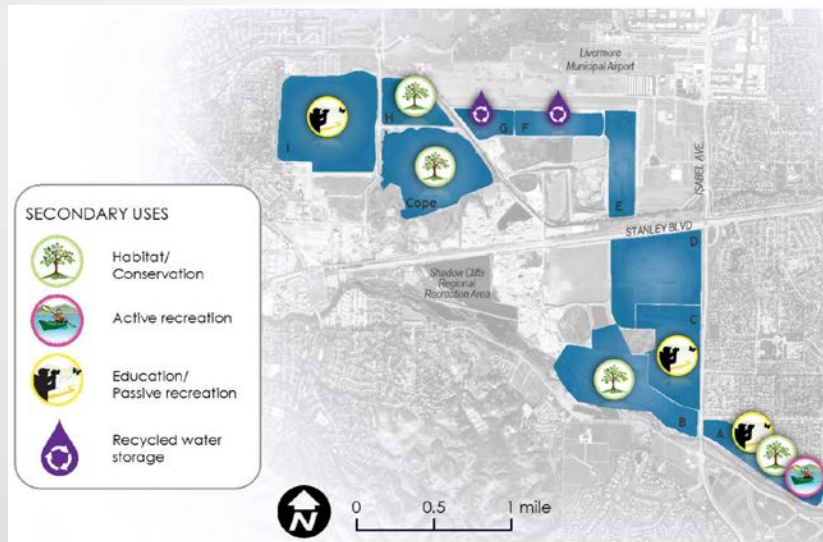
## Benefits

- Maximizes recycled water supply
- Leverages existing infrastructure
- Reduces peak potable demands
- Offsets the need for new supplemental potable supply

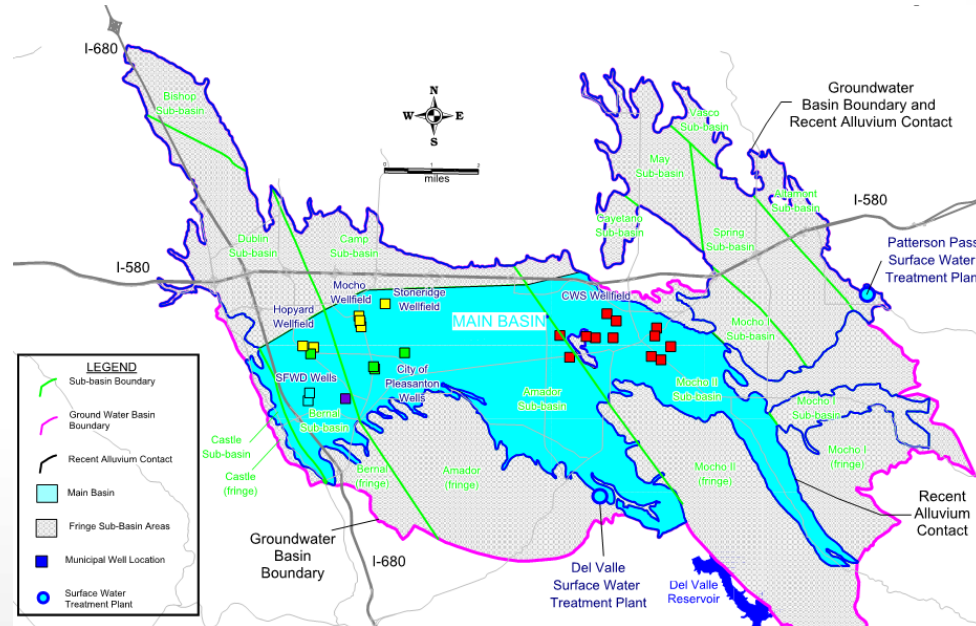


# Supplemental recycled water sources

- ▶ Seasonal storage
- ▶ Groundwater
- ▶ Supplemental wastewater from a neighboring agency

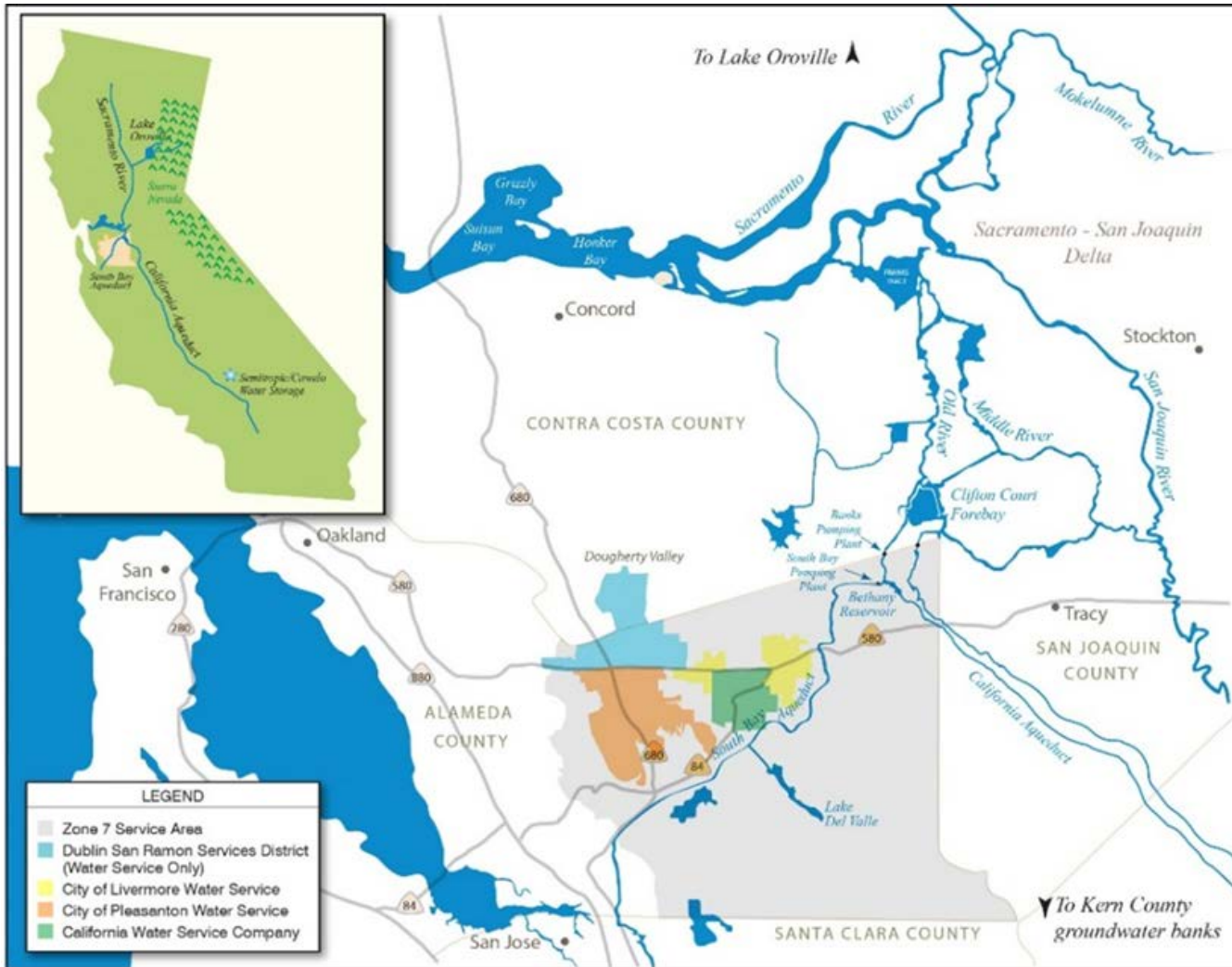


Source: Zone 7 Preliminary Chain of Lakes Evaluation Update, 2020



Source: Zone 7 Groundwater Management Plan, 2005





# Joint Tri-Valley Potable Reuse Technical Feasibility Study



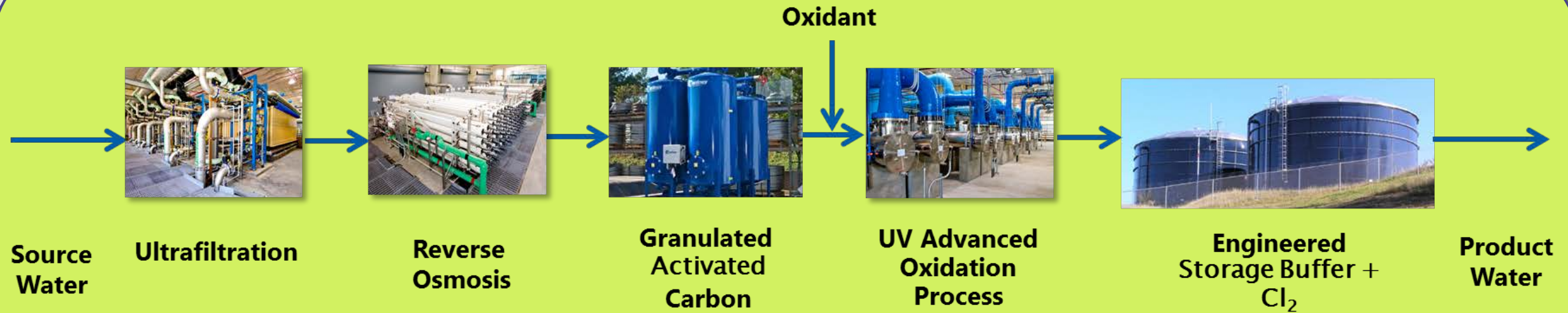
**Dublin San Ramon  
Services District**  
Water, wastewater, recycled water



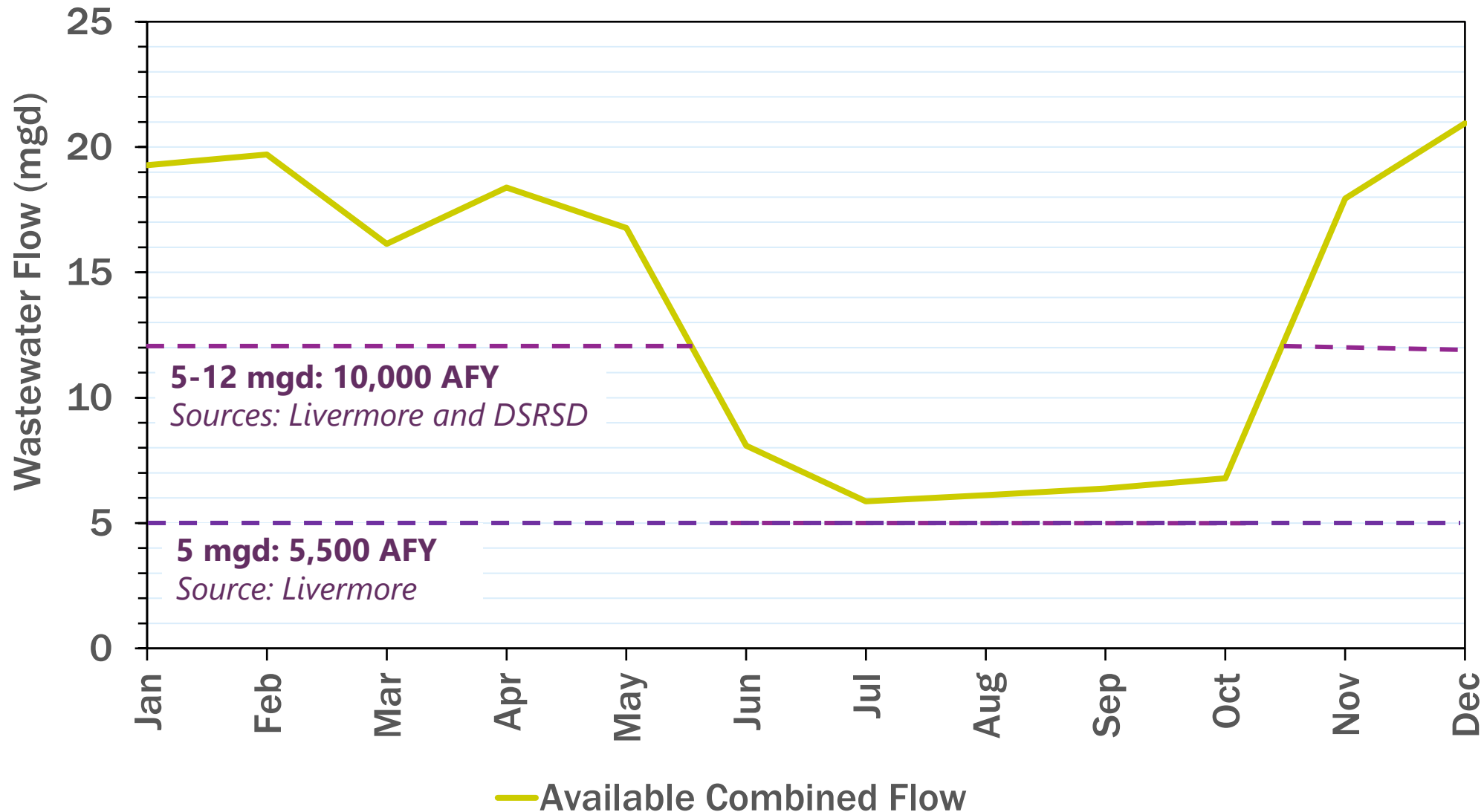
**LIVERMORE**  
CALIFORNIA



# Potable reuse uses multiple barriers for reliable purification to assure protection of public health



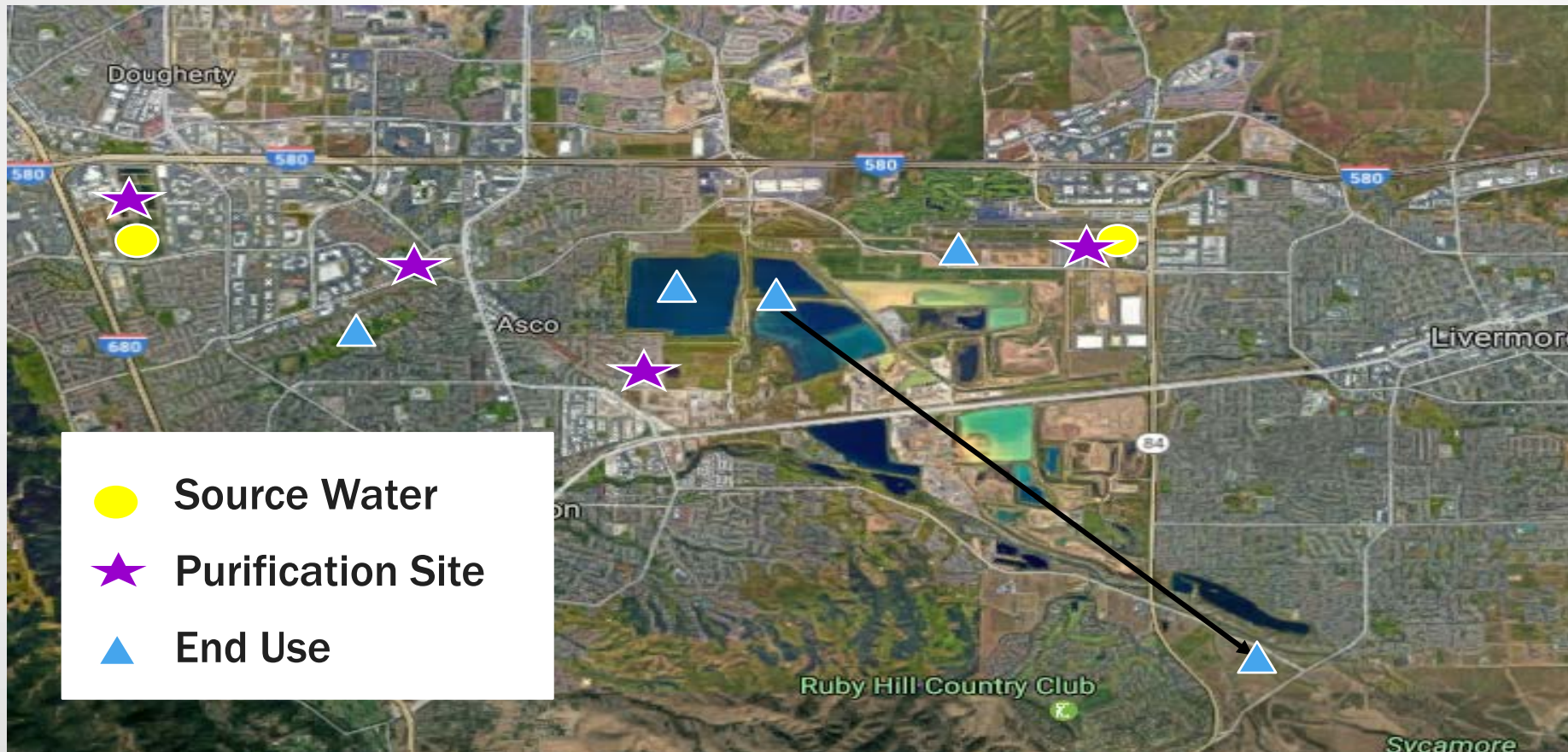
# Range of supplies available





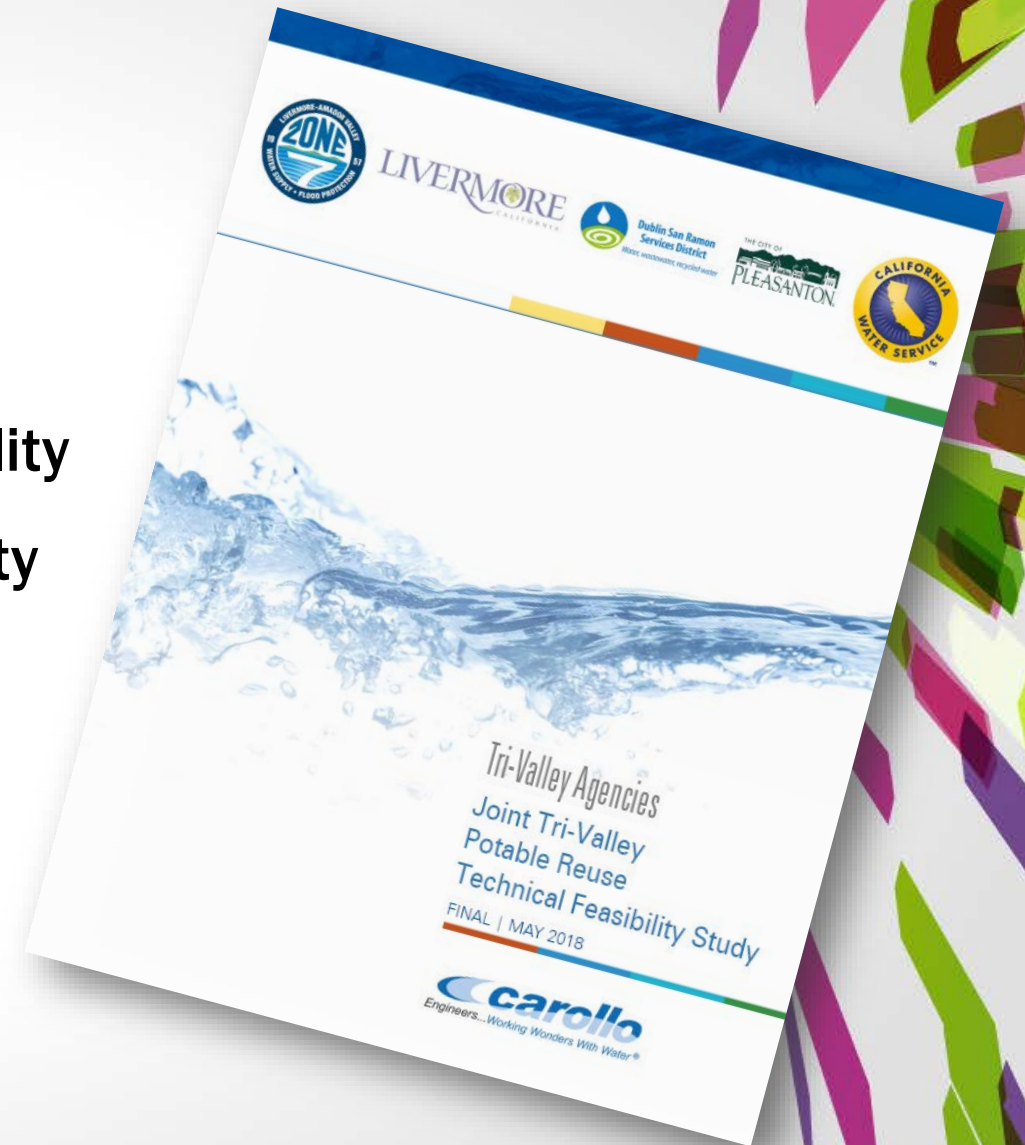
# Short-listed alternatives

*Two sources (DSRSD WWTP and Livermore WRP), four Advanced Water Purification Facility sites, and four end uses (destination of purified water)*



# Summary of study findings

- ▶ Potable reuse for the Tri Valley is technically feasible
- ▶ All alternatives increase water supply reliability
- ▶ All alternatives improve drinking water quality and some improve the overall groundwater basin quality
- ▶ There are good options available to site the AWPf facility





## Next steps

- ▶ Explore opportunities to expand recycled water in partnership with other agencies
- ▶ Evaluate potable reuse as one potential option for increasing overall water supply reliability for the Tri-Valley







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# Questions?

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