

Purified Water Project









Droughts

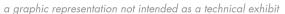
Economic impacts

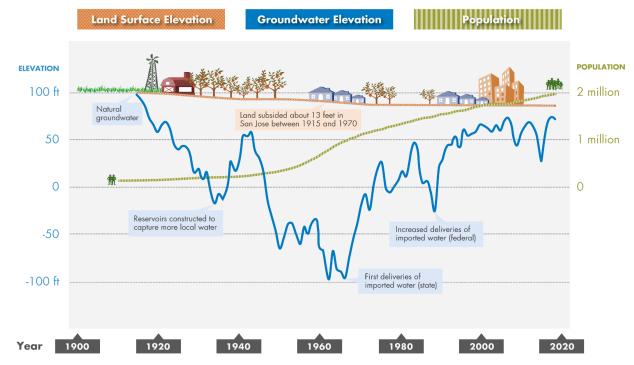
Land subsidence risk

Climate Change Risks Continue to Drive Urgency for Addressing Water Supply Reliability

SANTA CLARA COUNTY GROUNDWATER AT-A-GLANCE









Recycled and Purified Water is an important component of the water supply portfolio



Local Water (30%)

- Groundwater aquifer
- Reservoirs



Imported Water (50%)

- Delta conveyed
- Hetch Hetchy



Recycled Water (5%)

- Wastewater Treatment
- Advanced Purification

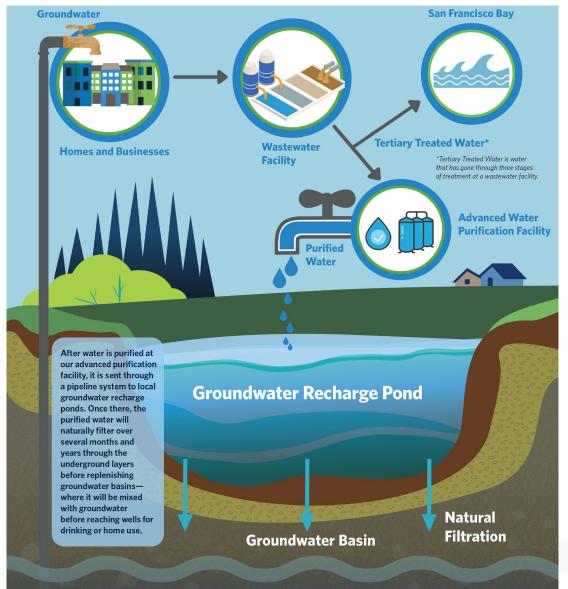


Conservation (15%)

- Residential
- Commercial, Agriculture



Recycled and Purified Water



ADVANCED WATER PURIFICATION PROCESS

HIGHLY TREATED WASTEWATER

This water originally comes from the drains of homes and businesses and is treated three times at a wastewater facility.



#1 MICROFILTRATION



#2 REVERSE OSMOSIS

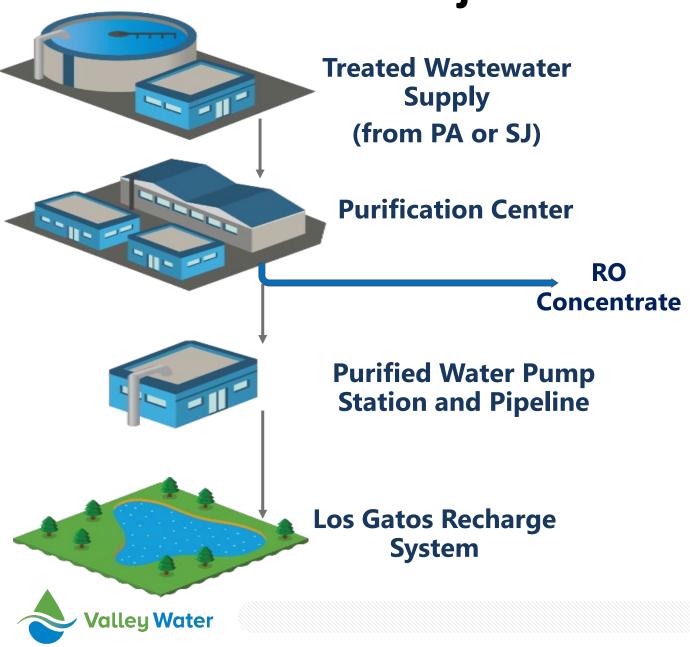


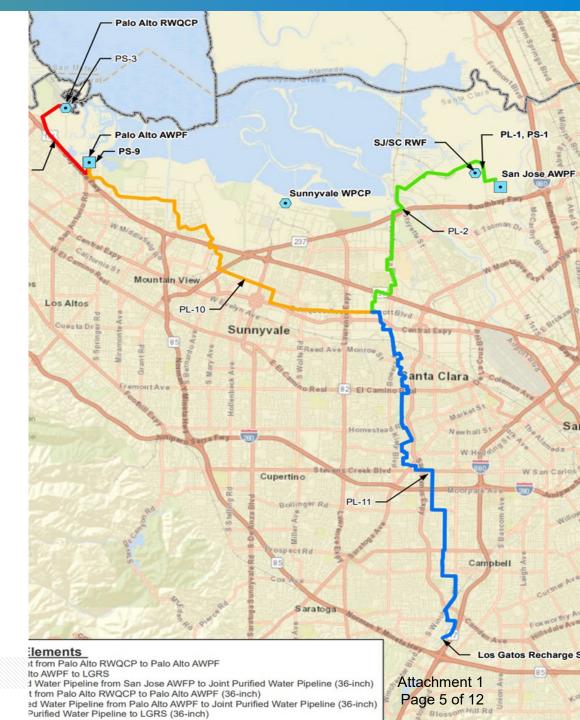
#3 UV LIGHT DISINFECTION AND ADVANCED OXIDATION

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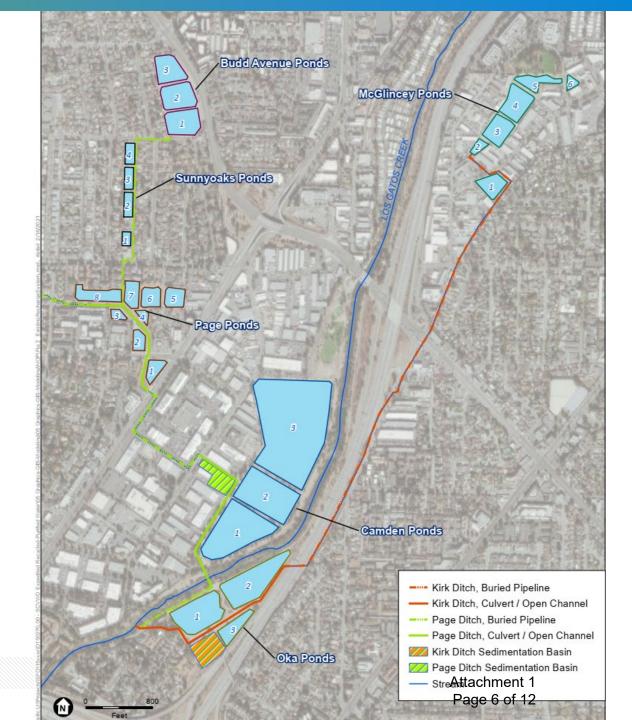
Purified Water Project





Project Components Cont'd

- Purified water conveyed to Los Gatos Recharge System
- Integrated into supply sources for groundwater recharge
- Indirect Potable Reuse





Timeline

• Fall 2021: Board decision on project site

• 2022: Valley Water plans to award the project

 2024: Private partner completes design and permitting (with defined community benefits)



• 2028: Construction will be completed and water flowing to the Los Gatos Recharge system



Environmental/Public Review

 An Environmental Impact Report (EIR) is being created and will be released at a later date.

 EIR Scoping Meeting on March 29, 2021

 Any impacts and mitigations will be identified in the EIR.





CountyWide Reuse Master Plan

Goal:

Identify feasible opportunities for expanding reuse as part of Valley Water's strategy to improve water supply reliability and regional self-reliance

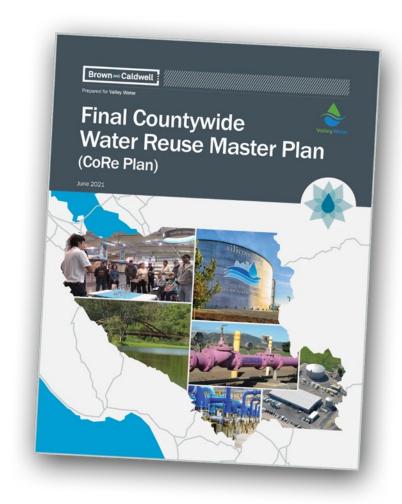
Aligned with Valley Water's One Water Plan and Water Supply Master Plan 2040

Through substantial engagement and collaboration with Partner Agencies

Objectives:

Integrate existing recycled water systems and expand non-potable reuse

Develop purified water systems





Partner Agencies



Palo Alto RWQCP

Sunnyvale WPCP

San José/Santa Clara RWF

SCRWA

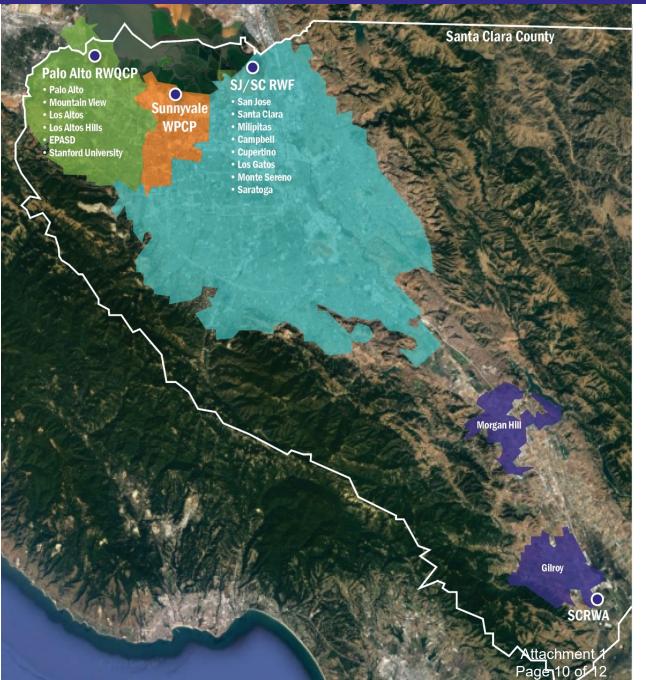


Palo Alto/Mountain View RWS

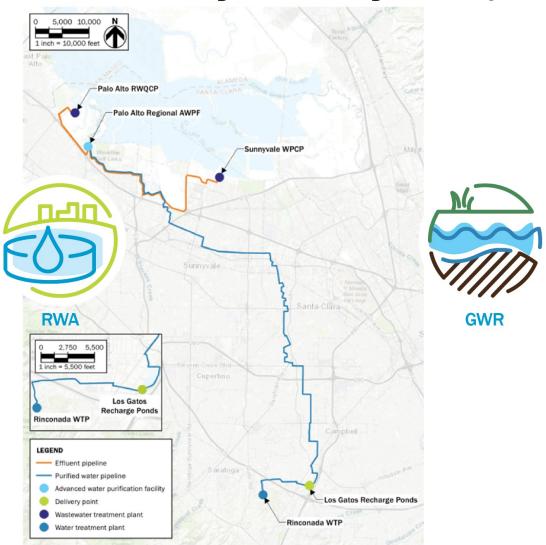
Sunnyvale RWS

South Bay Water Recycling

South County RWS (Gilroy)



Flexibility Analysis (FLEX)



5,000 10,000 Palo Alto RWQCP Palo Alto Regional AWPF Sunnyvale WPCP Mountain View - Whisman Sunnyvale - Mary Sunnyvale -Wolfe Evelyn **GWR** Santa Clara -Jenny Strand Park VW Treated Water Pipeline SJW - Campbell LEGEND Effluent pipeline Purified water pipeline TWA pipeline extension Los Gatos Recharge Ponds Advanced water purification facility Delivery point Wastewater treatment plant

Figure 9-6. Flexible implementation from San José-based AWPF: RWA Flex facility locations and pipeline alignments

Figure 9-7. Flexible implementation from San José-based AWPF: TWA Flex facility locations and pipeline alignments. Attachment 1

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QUESTIONS





