Scoping Meeting: Purified Water Project Environmental Impact Report

Presented by: Kirsten Struve, Assistant Officer Jim O'Toole, Project Director, ESA





Scoping Meeting Purpose

- Provide orientation and updates on the Purified Water Project and EIR
- Provide opportunity for suggestions regarding the EIR scope and content
- Provide opportunity to further define environmental issues, feasible alternatives and mitigation measures
- Comments received will be considered in prepared the Draft EIR





Droughts

Economic impacts

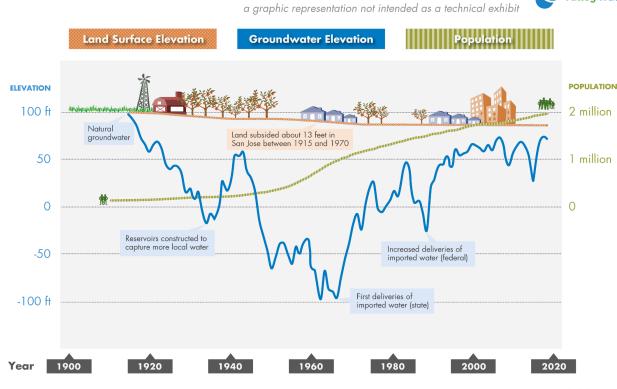


Climate Change Risks Continue to Drive Urgency for Addressing Water Supply Reliability

SANTA CLARA COUNTY GROUNDWATER AT-A-GLANCE



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Last updated February 1, 2019

Valley Water

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



- Local Water (30%)
 - Groundwater aquifer
- Reservoirs



- Delta conveyed
- Hetch Hetchy



- Recycled Water (5%)
 - Wastewater Treatment
 - Advanced Purification



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- Conservation (15%)
 - Residential
 - Commercial, Agriculture

Purpose of this Project

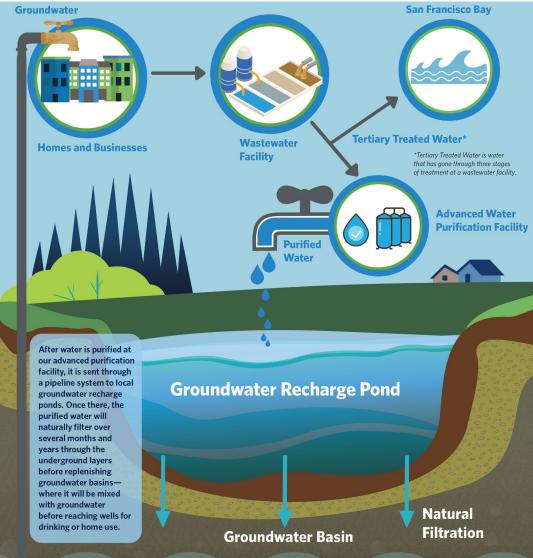
- Recycled and purified water is a droughtresilient and locally controlled water supply
- Improve supply reliability consistent with Water Supply Master Plan 2040
- Meet our goal of about 10% of Santa Clara County's water demand from water reuse





Recycled and Purified Water

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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.

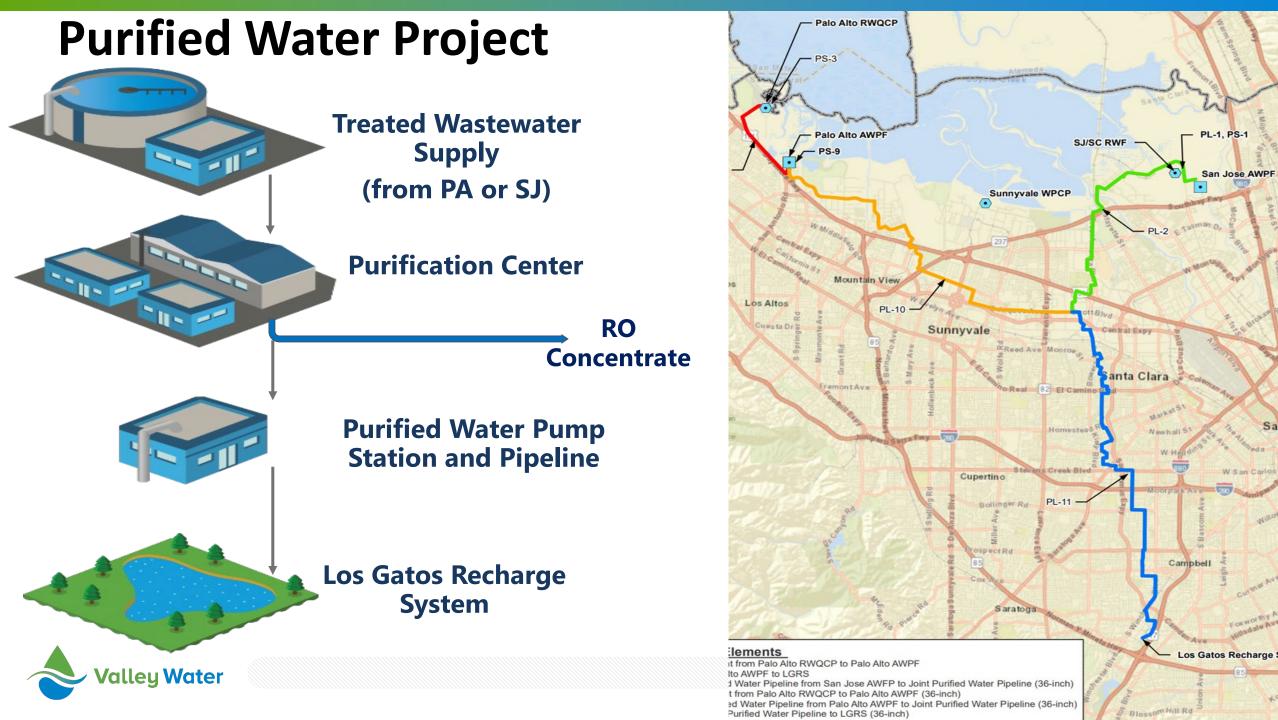




#2 REVERSE OSMOSIS



#3 UV LIGHT DISINFECTION AND ADVANCED OXIDATION



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California Environmental Quality Act EIR Process

Notice of Preparation

Initial Public & Agency Comment Period

Public & Agency Scoping Meeting/ Additional Public & Agency Comment Period

Draft Environmental Impact Report

45-Day Public Comment Period/Public Meeting

Final Environmental Impact Report (EIR)

Final Environmental Impact Report Certification

Notice of Determination

Consider scoping comments received

- Identify Alternatives
- Describe Baseline Conditions
- Identify Potential Effects
- Determine Significance
- Develop Mitigation Measures
- Prepare Responses to Public Comment
- Revise Draft EIR as Necessary
- Finalize Mitigation Measures

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CEQA Project Objectives

- Support Valley Water's water supply reliability goals, including the provision of at least 10% of all water supplies through recycled water.
- Develop the use of purified water, consistent with Valley Water's adopted WSMP 2040.
- Implement a potable reuse supply project that provides 10 MGD to 12.5 MGD production capacity for an annual yield of approximately 11,200 AFY of sustainable purified water supply for long-term/future demands.
- Implement the project in a manner that reduces or minimizes environmental impacts.
- In partnership with recycled water producers, develop new, local, drought-resilient water supplies in a cost efficient and timely manner.



Project EIR Approach

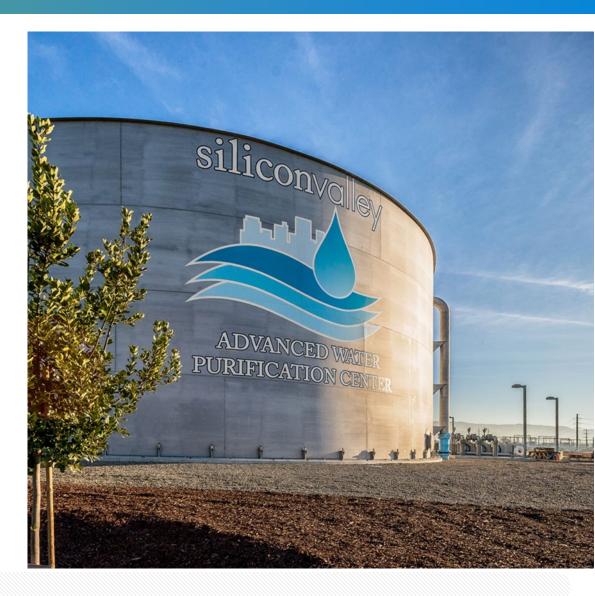
- Project EIR
 - Evaluate the site adjacent to San Jose SVAWPC as Valley Water's Preferred Project
 - Examine the Palo Alto FLATP Site Alternative at an equal level of detail
 - Compare and contrast the distinctions between the two sites





Project Components

- Advanced Water Purification Facility
 - 10 mgd capacity
 - Adjacent to Existing SVAWPC
- Source Water and Concentrate Management Pipelines to/from the SJ/SC Regional Wastewater Facility
- Conveyance Pipeline to Los Gatos Pond Complex







 New advanced water purification facility located immediately adjacent to the existing SVAWPC, located on Zanker Road in San José.



Purified Water Treatment Process

ROFLUSH TANK PURIFIED WATER CLEAR WELLAND PUMP INTERPROCESS EQUALIZATION STATION DECARBONATOR FILTER TANK TANK AUTO UV/AOP UF RO STRAINER TO LOS TERTIARY GATOS -RECHARGE EFFLUENT PONDS SULFURIC ACID ANTISCALANT BACKWASH/CLEAN-SODIUM HYPOCHLORITE LIME HYDROGEN PEROXIDE **AMMONIUM HYDROXIDE** SODIUM HYPOCHLORITE **IN-PLACEWASTE** TO WWTP TO ROCM Valley Water

ADVANCED WATER PURIFICATION PROCESS

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#1 MICROFILTRATION

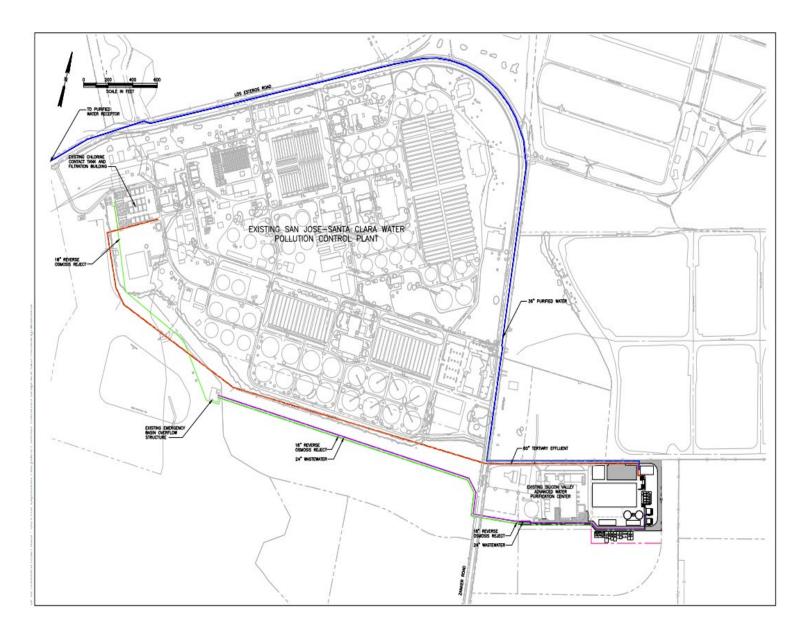


#2 REVERSE OSMOSIS



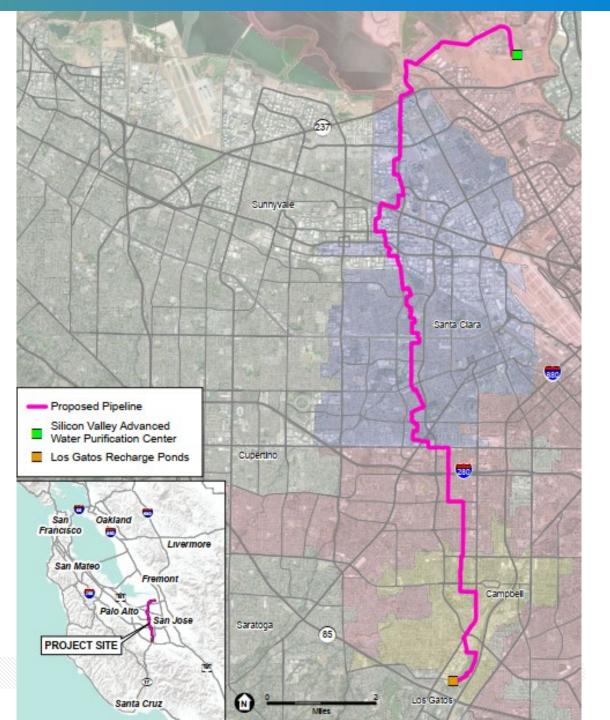
#3 UV LIGHT DISINFECTION AND ADVANCED OXIDATION

 Source Water and Concentrate
Management
Pipelines to/from
the SJ/SC Regional
Wastewater
Facility)





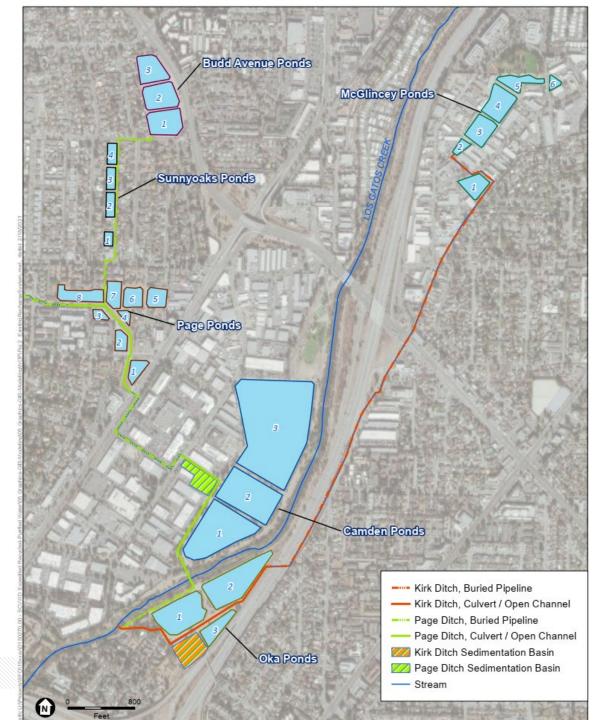
 Conveyance Pipeline: Approximately 18-mile water pipeline constructed within existing roadways





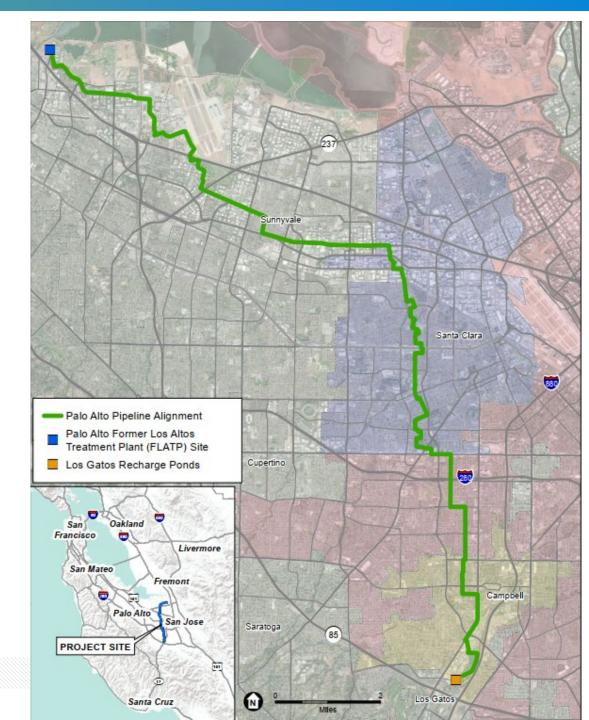
- Purified water conveyed to Los Gatos Recharge System
- Integrated into supply sources for groundwater recharge
- Indirect Potable Reuse

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Alternative: Palo Alto FLATP

- Former Palo Alto Los Altos Treatment Plant (FLATP) Site
 - 10 mgd Advanced Water Purification Facility
 - Source Water and Concentrate Management Pipelines
 - Conveyance Pipeline to Los Gatos Recharge Complex



Alternative: Palo Alto FLATP (cont.)

• Former Palo Alto Los Altos Treatment Plant (FLATP) Site





Alternative: Palo Alto FLATP (cont.)

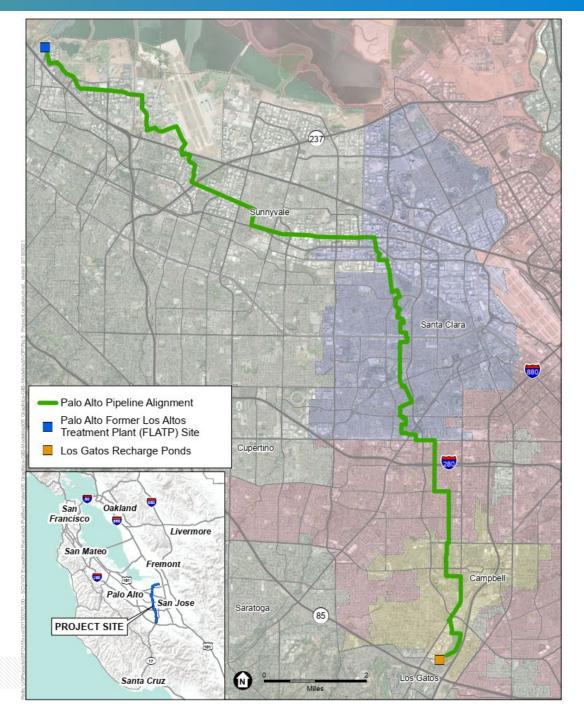
 Source Water and Concentrate Management Pipeline Connections to/from Palo Alto RWQCP





Alternative: Palo Alto FLATP (cont.)

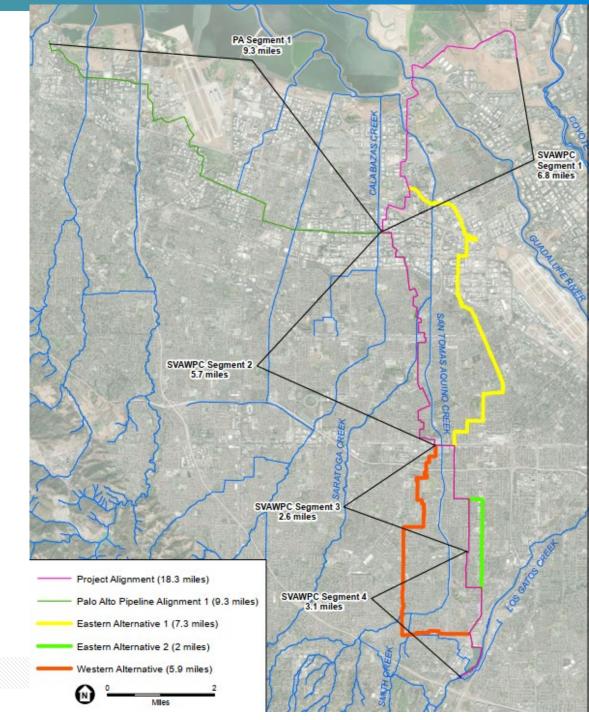
• Conveyance Pipeline Route





Project Alternatives

- No Project Alternative
- Alternative Pipeline Routes
 - Western and Eastern Alignments
- Concentrate Management Alternatives
- Reduced Project Alternatives



Analysis Topics

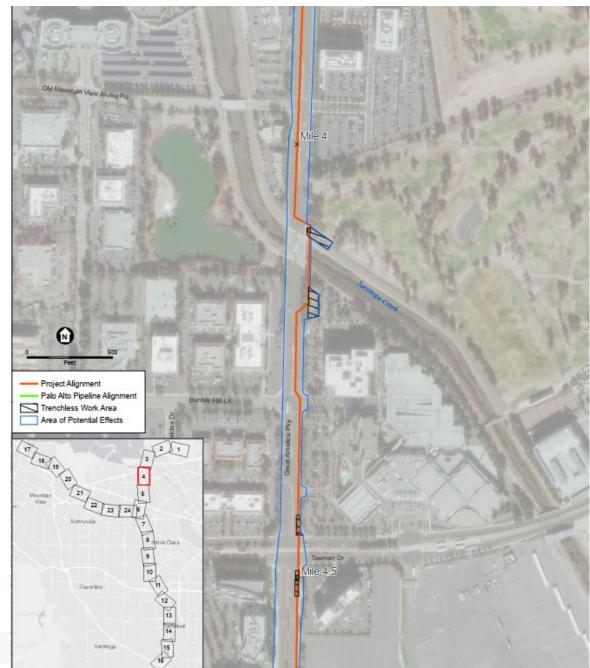
- Aesthetics
- Agricultural and Forestry
- Air Quality
- Biological Resources
- Cultural Resources
- Energy
- Geology and Soils
- Greenhouse Gas Emissions
- Hazards and Hazardous Materials
- Hydrology and Water Quality

- Land Use and Planning
- Mineral Resources
- Noise
- Population and Housing
- Public Services
- Recreation
- Transportation
- Tribal Cultural Resources
- Utilities and Service Systems
- Wildfire



Key Issue Areas

- Construction Impacts:
 - Temporary Impacts: traffic, noise, air quality, water quality
 - Valley Water BMPs will be applied.
- Biological Resources
 - Majority of Project in Roadways
 - Some wetland resources on project and alternative sites
- Cultural Resources
 - Potential Effects at Project Site/Pipeline Routes



Key Issue Areas (cont.)

- Water Quality:
 - Purified using Reverse Osmosis Process: similar to SVAWPC
 - Groundwater Recharge Los Gatos Pond Complex
 - In compliance with DDW Groundwater Replenishment Standards
 - Concentrate Management: Preferred Project
 - Blended and discharged with treated effluent under NPDES Permit
 - Other options to be examined



Schedule

- NOP and Scoping Meetings
 - March 2021
- Draft EIR
 - October 2021
- Final EIR
 - December 2021
- Certification
 - January 2022





Scoping Comment Process



Public Scoping Comment Period:

Comments due by:

April 27, 2021





Written Scoping Comments:

- Email:

EDurand@valleywater.org

- Letters:

Santa Clara Valley Water District Attn: Elise Latedjou-Durand 5750 Almaden Expressway San Jose, CA 95118

QUESTIONS

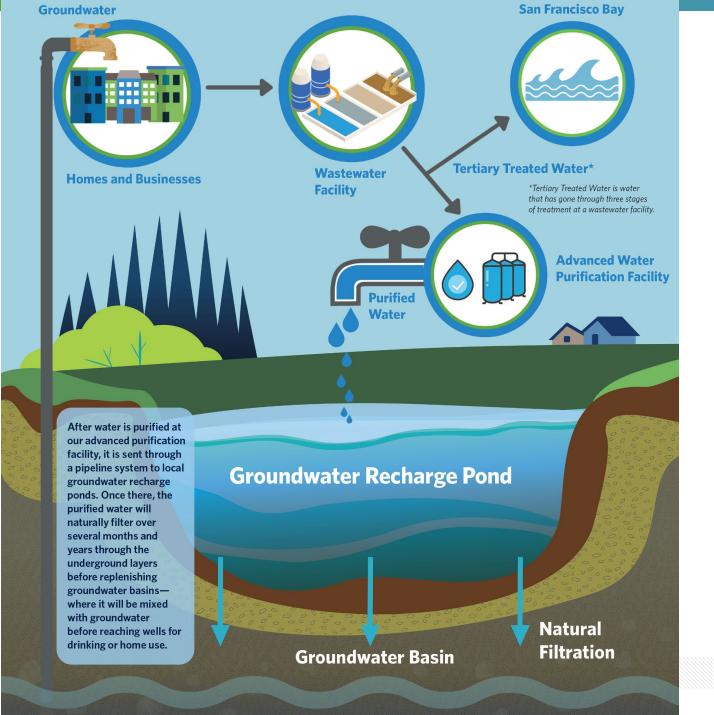






Valley Water

Clean Water • Healthy Environment • Flood Protection



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