



siliconvalley  
ADVANCED WATER PURIFICATION CENTER

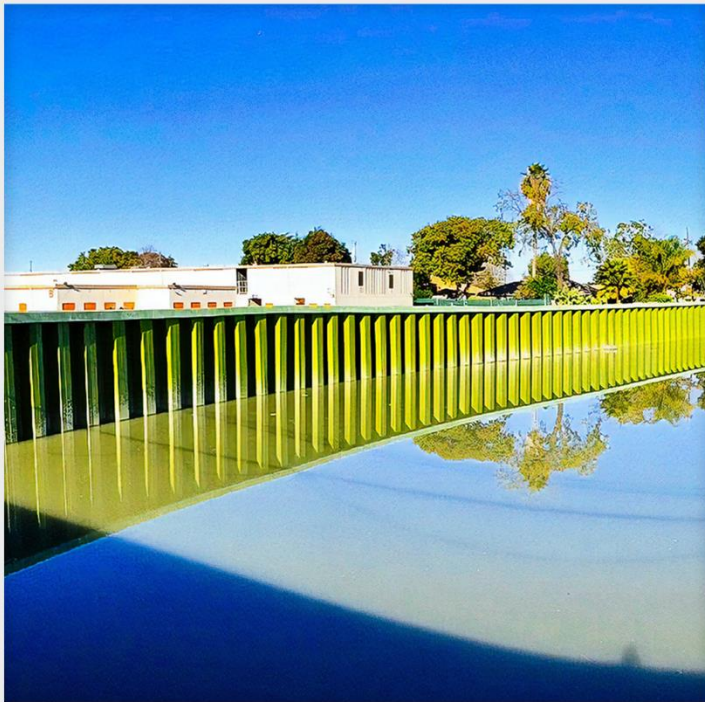


Valley Water

# Valley Water provides:



**CLEAN, RELIABLE WATER**

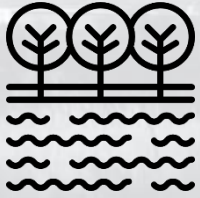


**FLOOD PROTECTION**



**HEALTHY CREEKS  
AND ECOSYSTEMS**

# By the Numbers



**294**

**miles** owned  
out of 800 miles of  
streams in Santa  
Clara County



**10**

dams and surface  
water reservoirs



**3**

water  
treatment plants



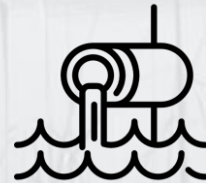
**1**

advanced water  
purification center



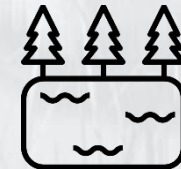
**1**

state-of-the-art water  
quality laboratory



**142**

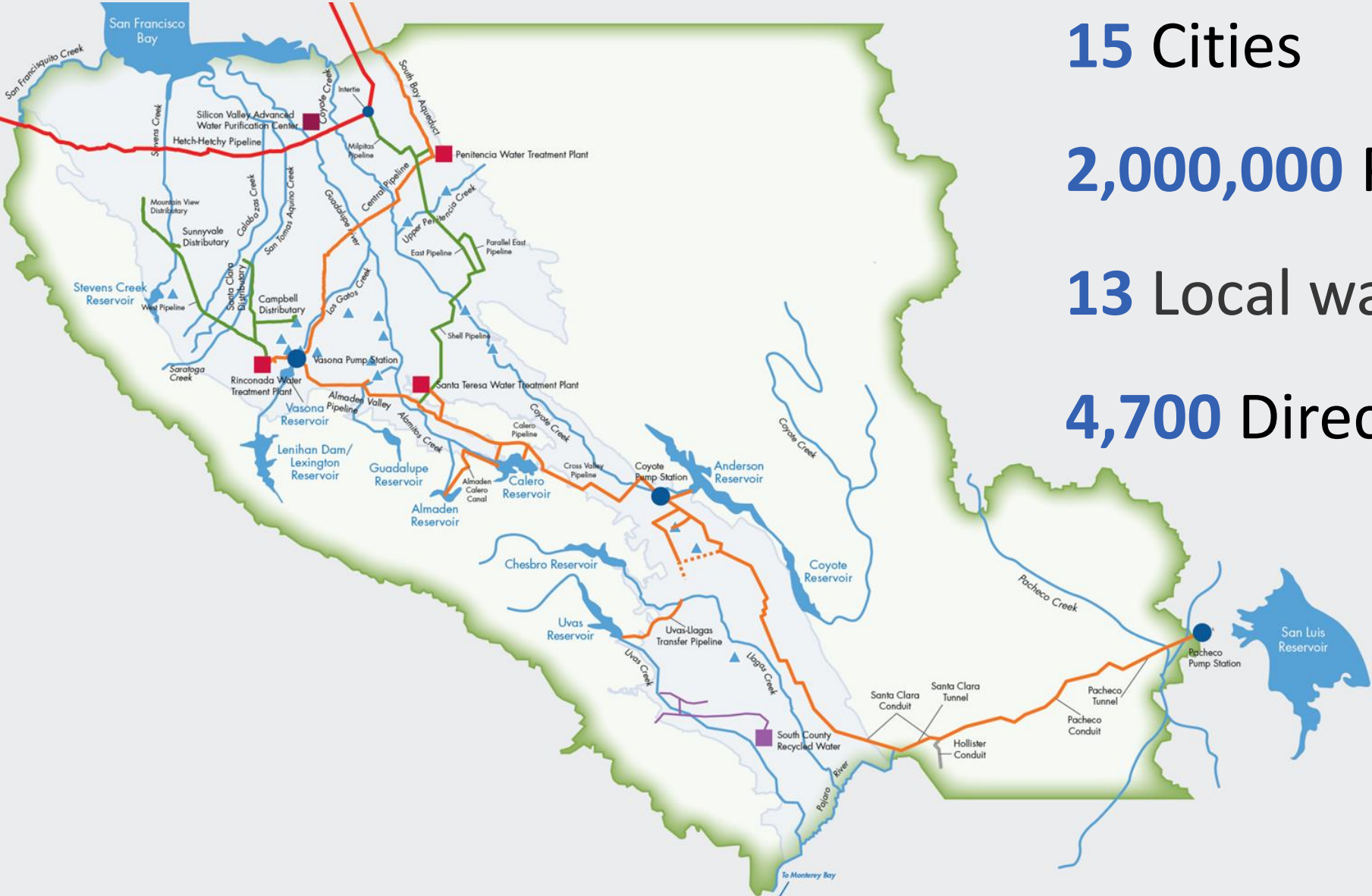
miles of  
pipelines



**102**

groundwater recharge  
ponds covering 277 acres

# Comprehensive Water Supply System



**15** Cities

**2,000,000** People

**13** Local water providers

**4,700** Direct well owners

# Water Supply Breakdown

## Santa Clara County **WATER SUPPLIES**

**Imported Water 50%**  
Water from the Sierra  
Snowpack that melts and  
fills state reservoirs

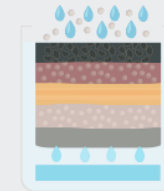
40% Delta supplies  
10% Hetch Hetchy



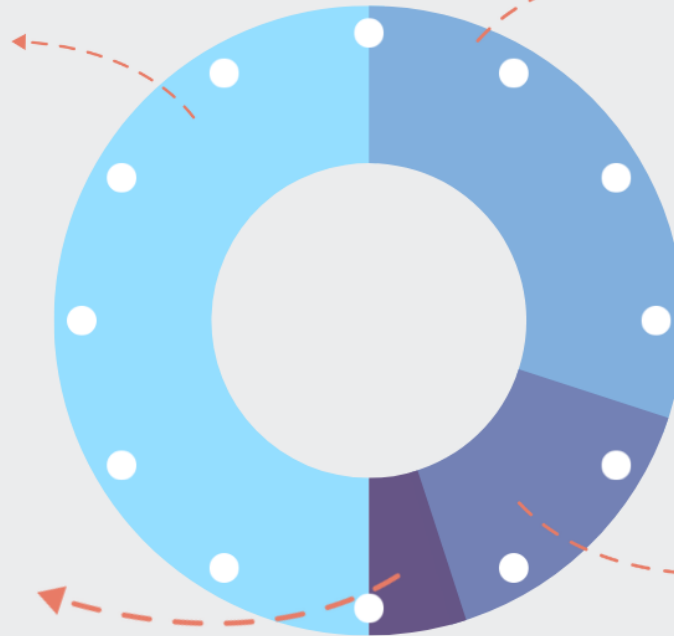
**Water Reuse 5%**  
Treated wastewater  
used as recycled water



**Local Water 30%**  
Rainwater captured in  
Valley Water reservoirs and  
natural groundwater



**Conservation 15%**  
Consistent short and long-  
term reductions in water  
use



# A new source of water

A partnership with cities of San Jose and Santa Clara



## 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



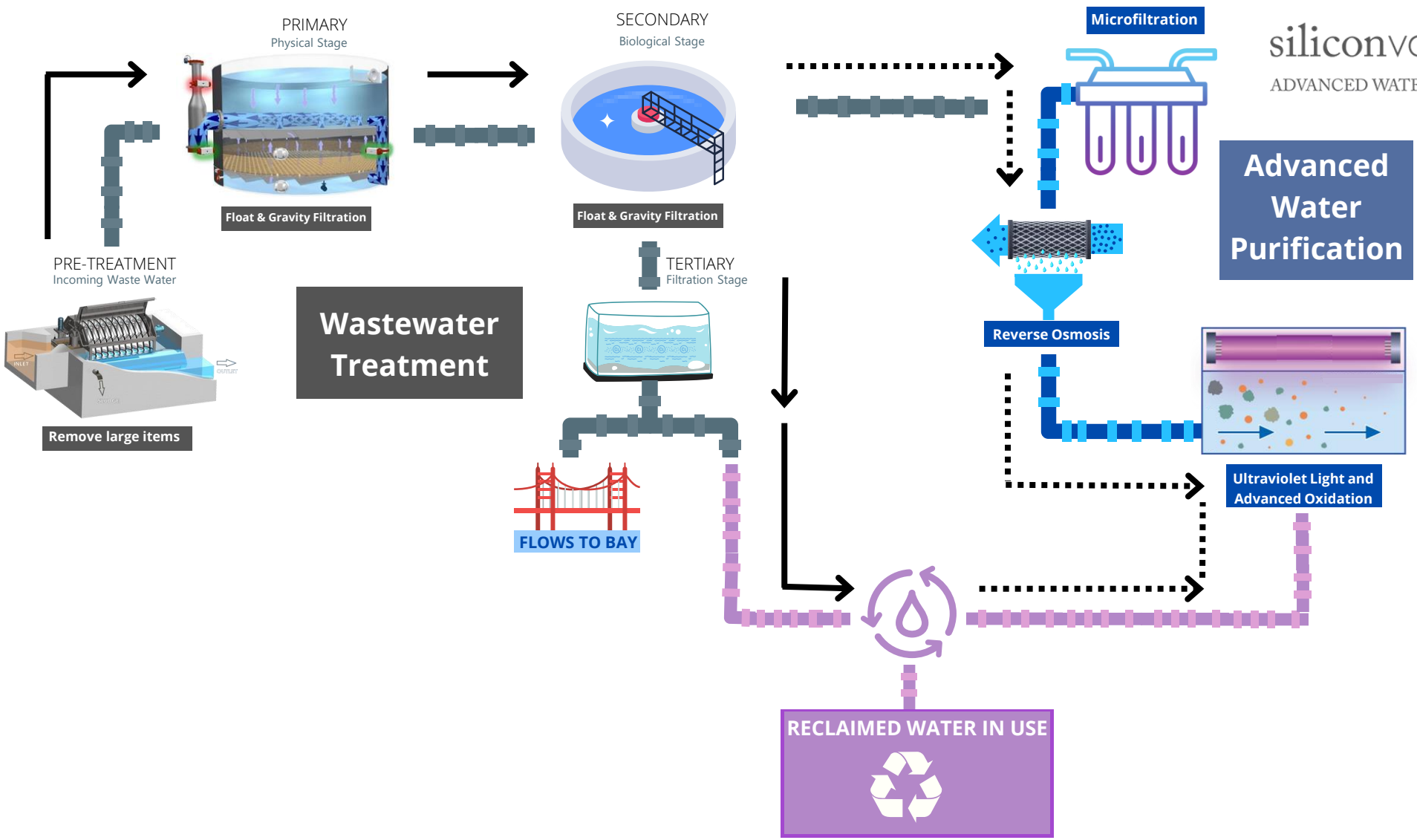
#2 REVERSE OSMOSIS



#3 UV LIGHT DISINFECTION AND ADVANCED OXIDATION

- Opened in early 2014
- Provides purified water to enhance the quality of SBWR's recycled water
- Serves as a demonstration, research, and educational facility
- Hosts educational tours provided on-site and virtual

# The Purification Process





**SVAWPC**

8MGD (2014)  
New Project (2028)  
Est 2014



**Pure Water Soquel**

7.5 MGD (2024)  
Est 2014



**Monterey One Water**

6MGD  
Est 1972





LA (Hyperion) LASAN

170MGD 2035  
LA Recycle 100%  
of Water



Orange County (GWRS)

130MGD\* (2023)  
Est 2008

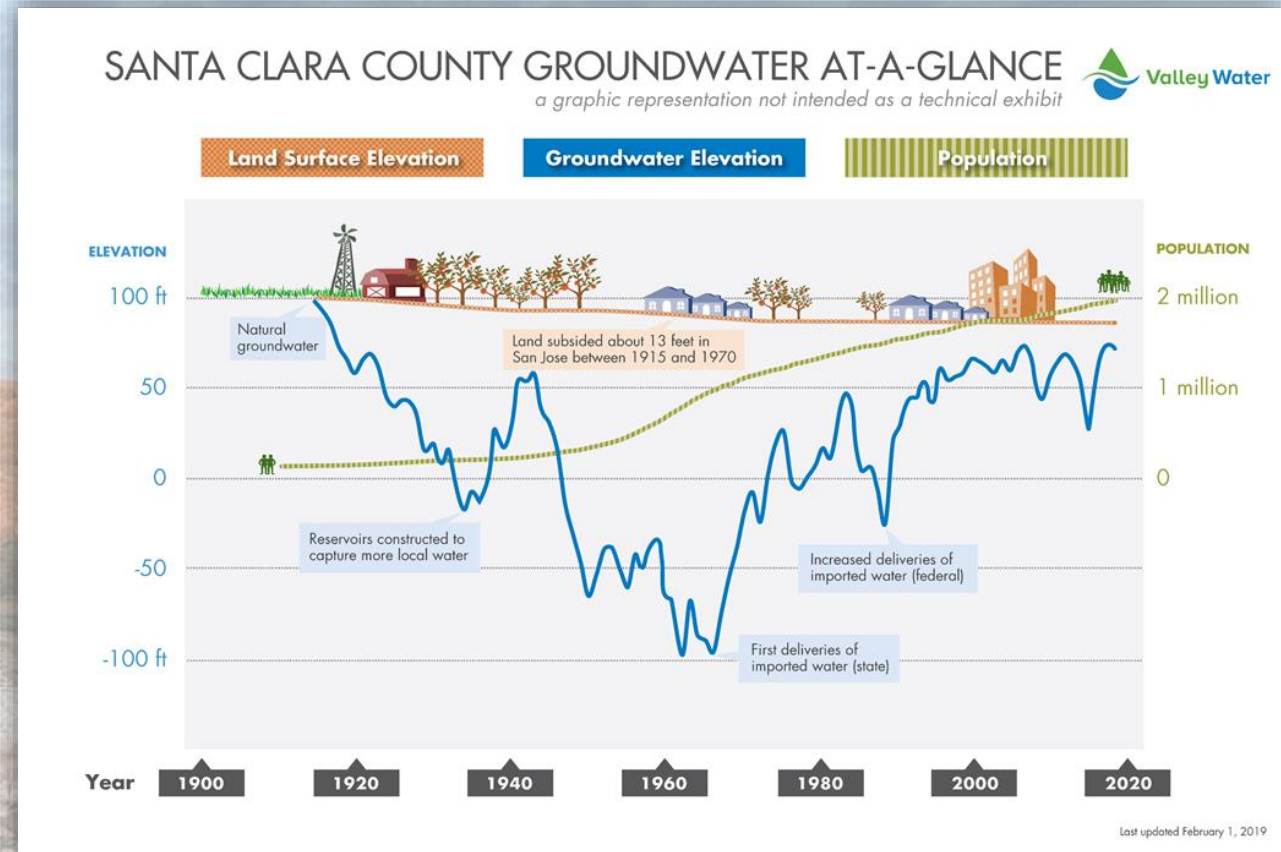


Pure Water SD

30MGD (2021)  
83 MGD (2035)  
Est 2001

# Why Water Reuse

- Protects us from impacts of climate change
- Creates a new drought-resilient and locally controlled water supply
- Reduces dependency on imported water
- Protects our region's groundwater supplies and protects against subsidence



# Water Supply Master Plan

## Ensure Sustainability Strategy



1. Secure  
existing  
supplies and  
infrastructure

2. Expand  
conservation  
and reuse

3. Optimize  
the system

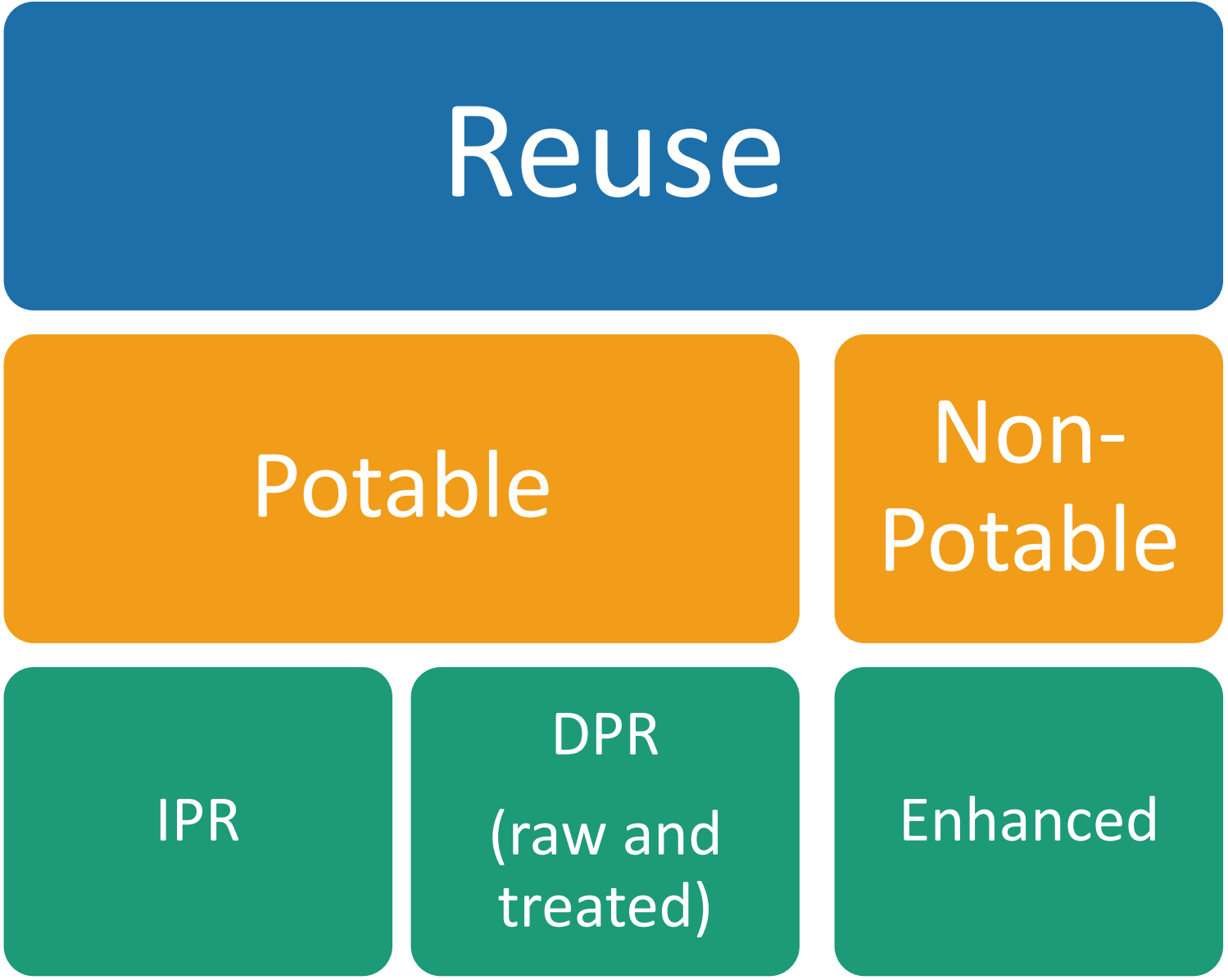
# Countywide Water Reuse Master Plan (CoRe Plan)

## PROGRAM OBJECTIVES

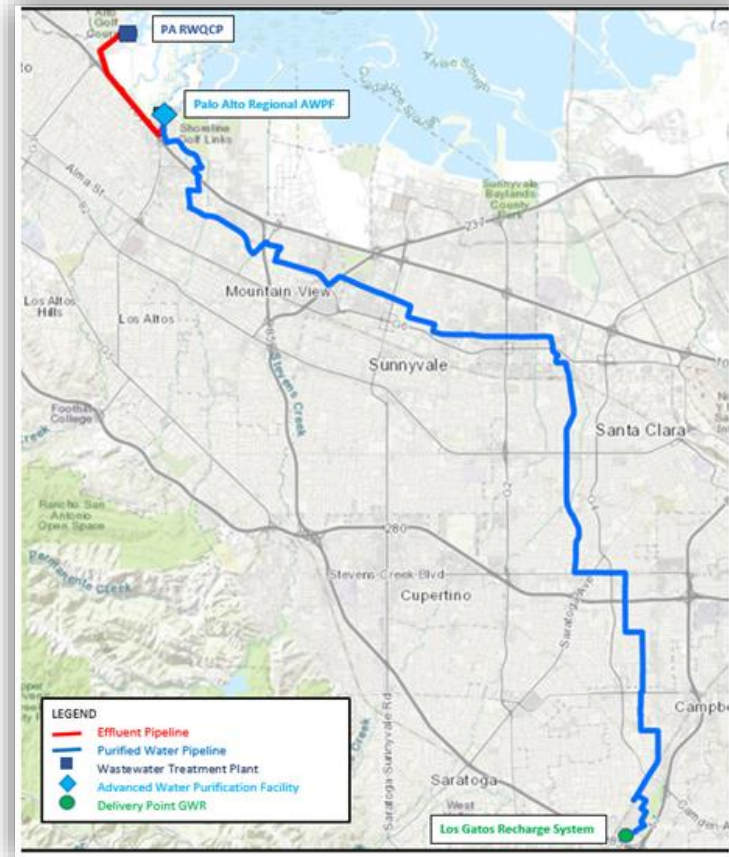
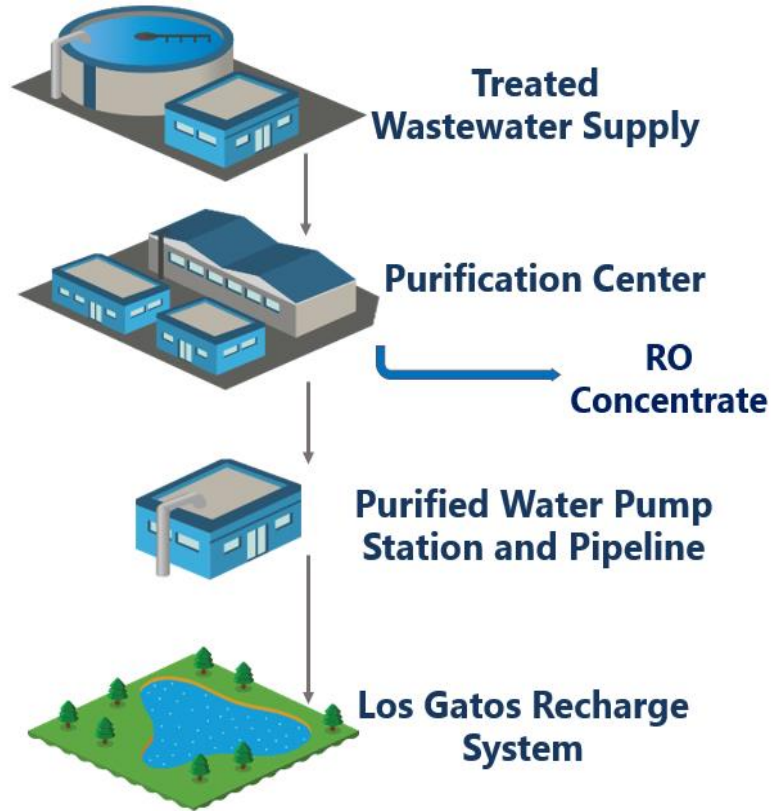
- Identify **water available** for potable and non-potable reuse
- Evaluate opportunities for **system integration**
- Guide expansion via **interagency agreements** and governance structures
- Generate support by **engaging stakeholders**
- **Goal: 24,000 AF of Potable Reuse**



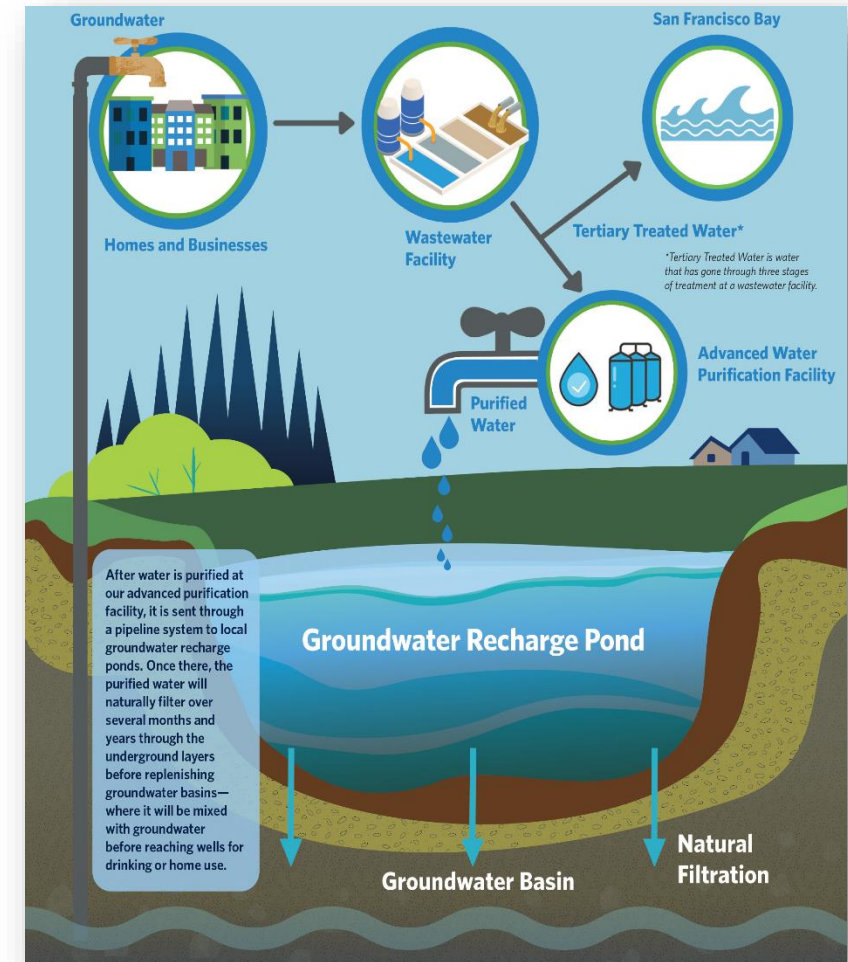
**Countywide  
Water Reuse  
Master  
Planning  
Encompassed  
Various  
Projects**



# Purified Water Project



Palo Alto/Mountain View



Indirect Potable Reuse

# SWPS Rendering



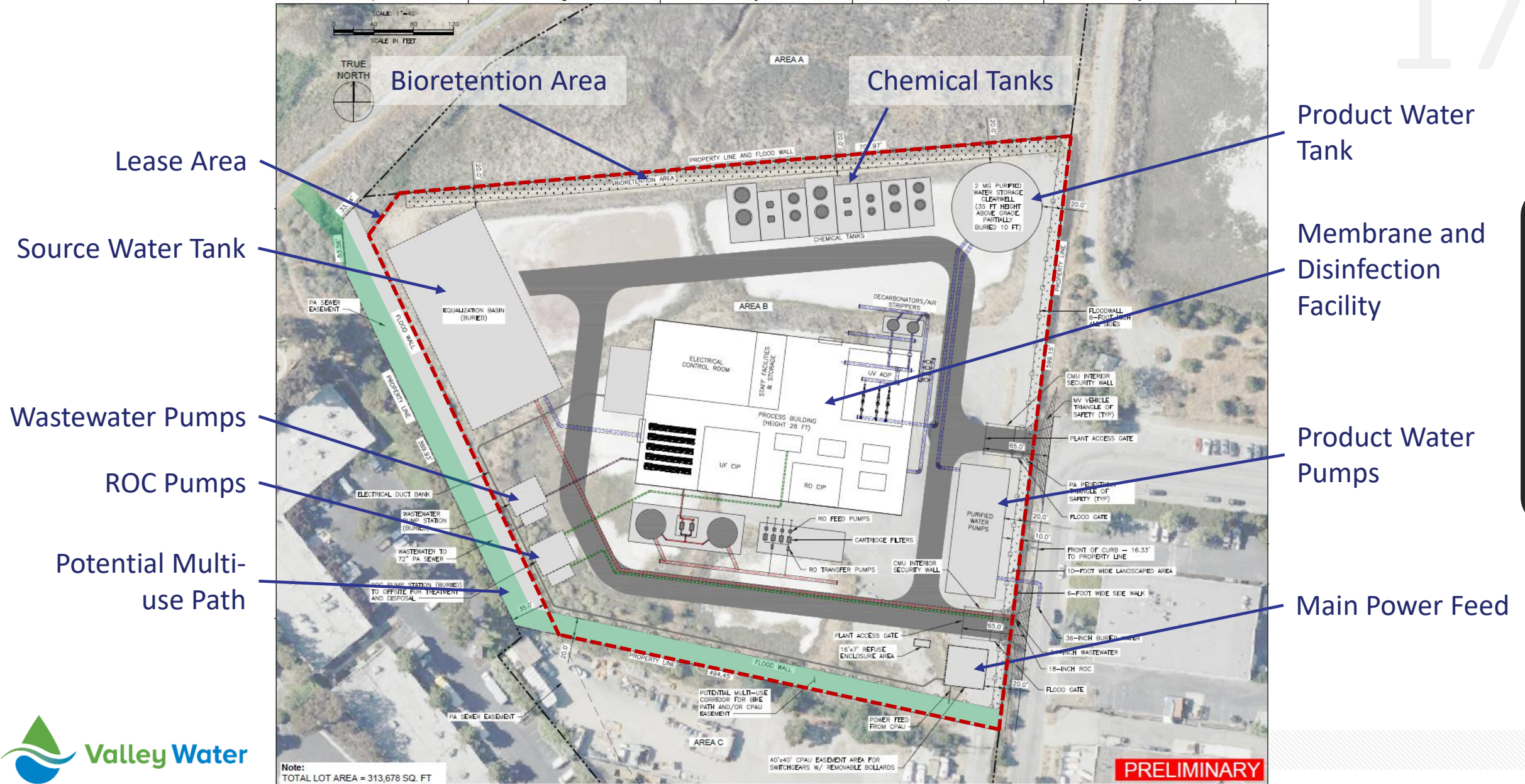
valleywater.org

# AWPF Depiction - Overhead





# AWPF Conceptual Site Plan



Lease Area  
 Source Water Tank  
 Wastewater Pumps  
 ROC Pumps  
 Potential Multi-use Path

Product Water Tank  
 Membrane and Disinfection Facility  
 Product Water Pumps  
 Main Power Feed

# Alternative Project Delivery Method

- Using Design-Build-Finance-Operate-Maintain Delivery Method.  
*A private entity delivers the project, Valley Water retains ownership and partners with the private entity as part of a P3.*
- Cost: about \$1.2 billion



**(P3) Public Private  
Partnership**

# Stakeholder & Community Outreach

- Public Meetings
- Website
- Mailers
- Media campaign
- Public Tours
- Stakeholder meetings
- Continued collaboration with City staff
- Committee and Council updates

# THE Bulletin

Official Magazine of the Santa Clara County Medical Association

Vol. 26 | No. 2 | Second Quarter 2022

**Pure Water.  
Pure Life.**

Hear what Zoe says! ▶

[www.purewater4u.org](http://www.purewater4u.org)

Zoe Lofgren  
Congresswoman  
19th Congressional District



siliconvalley  
ADVANCED WATER PURIFICATION CENTER

Valley Water



**SPECIAL ISSUE**

**WATER AND HEALTH:  
THE COMING WATER CRISIS AND  
WHAT WE CAN DO ABOUT IT**

**Purified Water  
& Conservation**

**Together,  
our future is  
drought-  
proof.**



Valley Water

[watersavings.org](http://watersavings.org)