# Countywide Water Reuse Master Plan

August 24, 2018

Luis Jaimes, P.E., P.M.P.
Senior Project Manager
Recycled and Purified Water Unit



## District Mission



CLEAN, RELIABLE WATER



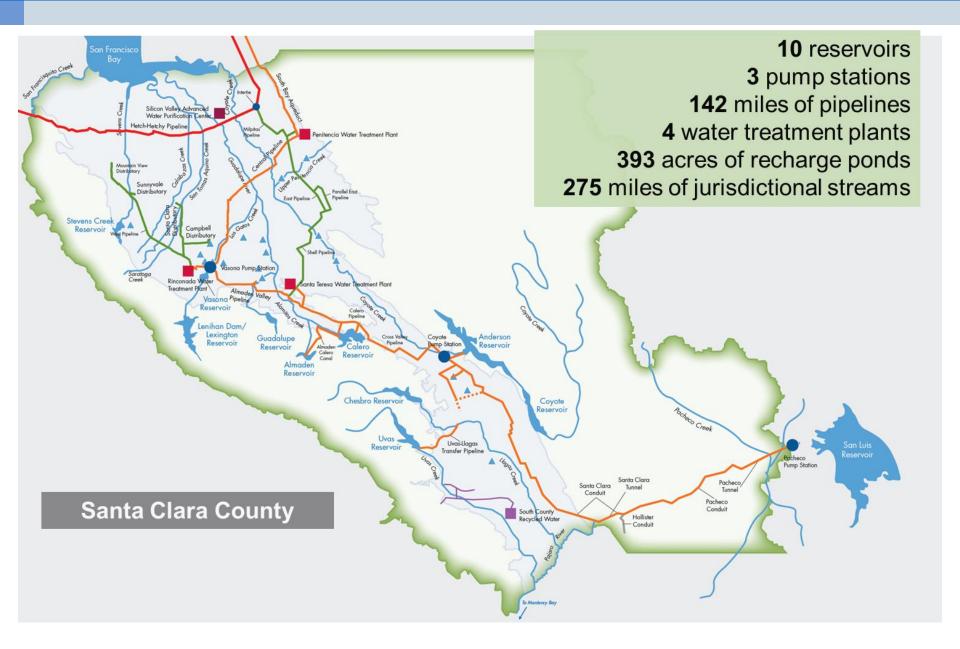
FLOOD PROTECTION



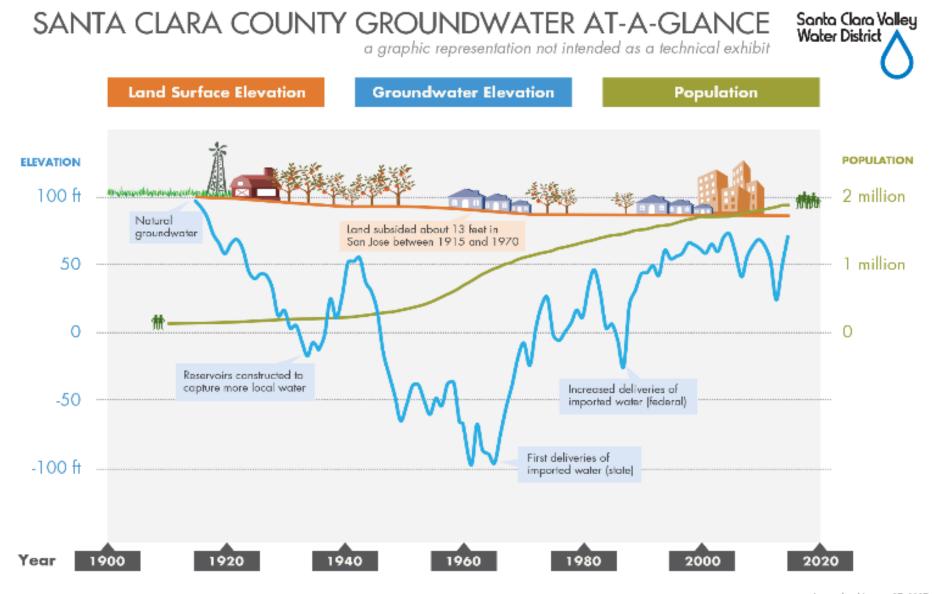
HEALTHY CREEKS & ECOSYSTEMS



## A Comprehensive, Flexible Water System



## Santa Clara County Groundwater



## Sources of Our Water



### **Local Water**

- Natural groundwater
- Reservoirs

### **Imported Water**

- Delta conveyed
- Hetch Hetchy



## **Recycled Water**

- Wastewater Treatment
- Advanced Purification

# Policy and Master Planning Goals

**Ends Policy E-2** states that there is a reliable, clean water supply for current and future generations. Accordingly, the following goals and objectives are adopted:

#### **OBJECTIVES**

2.1.4. Protect, maintain and develop recycled water.

#### **OUTCOME MEASURES**

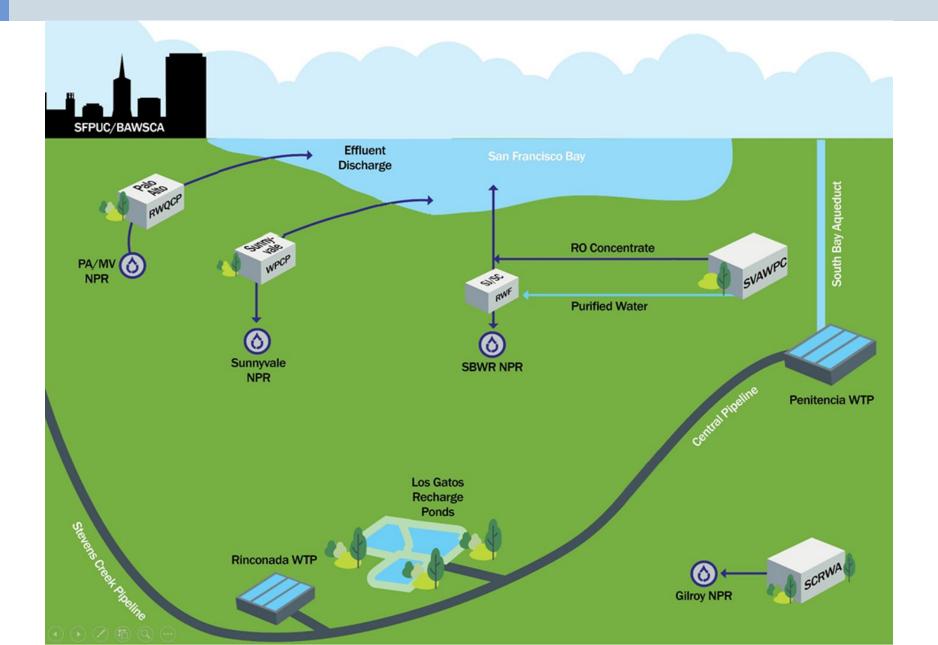
2.1.4.a. At least 10% of annual recycled water production as a percentage of total County water demands by 2025

#### **WATER SUPPLY MASTER PLAN**

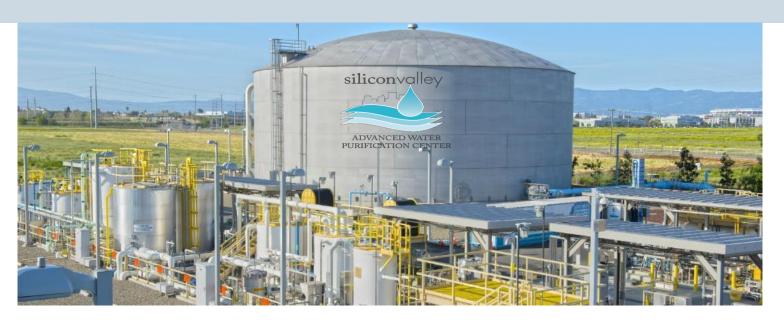
24,000 AFY Potable Reuse Capacity by 2025



# Existing Systems in Santa Clara County



### Silicon Valley Advanced Water Purification Center



- Online in March 2014, provides up to 8MG of purified water from secondary effluent.
- Purpose:
  - ▶ To reduce salinity (TDS) of South Bay Water Recycling System.
  - Platform to conduct potable reuse studies and pilot projects.
  - ▶ To engage the public.

# Countywide Master Plan Framework

Governance

Regional Planning
& Integration

Water Treatment & Contributing Sewersheds

Economics & Funding

Stakeholder Engagement Water Quality & Quantity

Infrastructure, Assets, & Land

Environmental, Permitting, Regulations, & RO Conc. Mgmt.

**Public Perception** 

Schedule & Coordination with other Planning Efforts

## Master Plan Objectives

- Identify sources and amounts of water available for reuse
- Determine NPR & PR split
- Evaluate governance roles & responsibilities and provide recommendations
- Evaluate potential regional integration
- Conduct stakeholder engagement

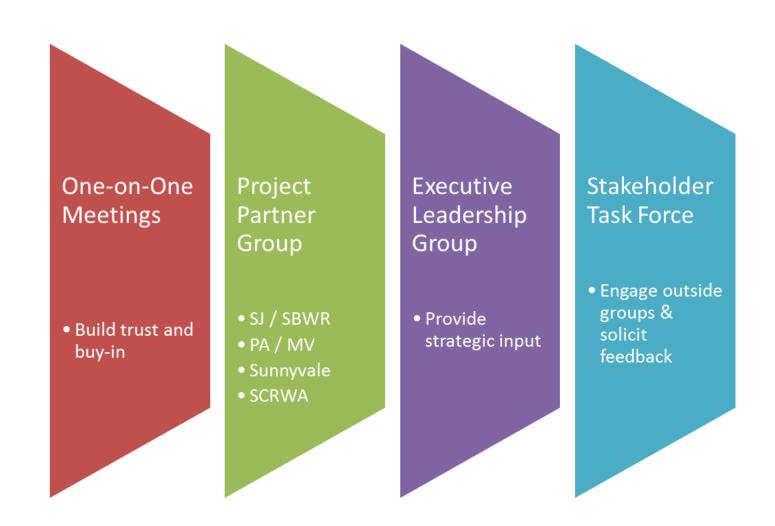
```
NPR = Non-Potable Reuse
PR = Potable Reuse
```

# Countywide Master Plan

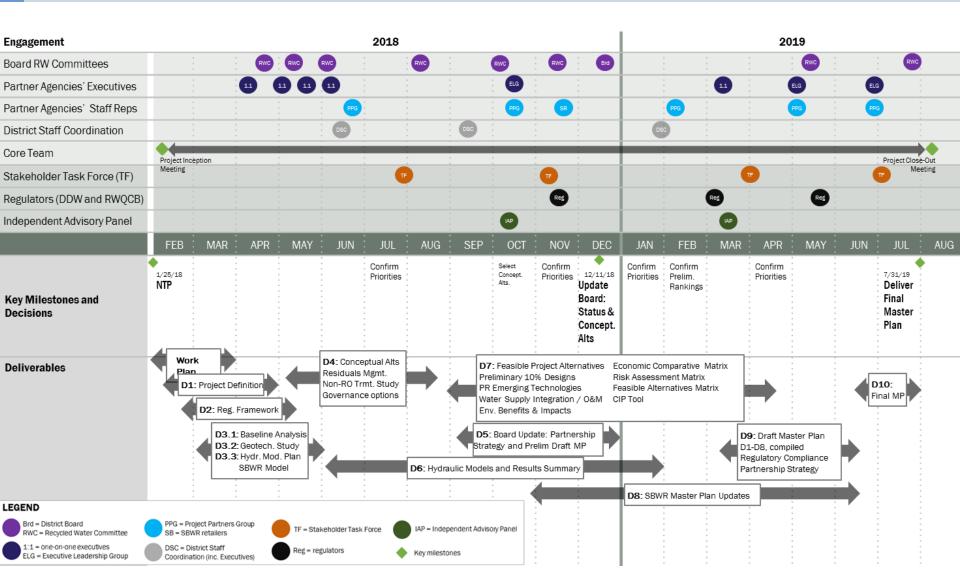
- Stakeholder Workshops
  - Producers, retailers, regulators, businesses, environmental organizations, and community groups



## Stakeholder Engagement & Collaboration



## Countywide Master Plan Schedule



# ROC Management Plans (ROCMP)

- ► ROCMP Components:
  - Review of potential treatment options
  - Site specific evaluations of ROC water quality
  - Stakeholder workshops
  - Engineered treatment cell pilot testing
  - Develop and recommend ROC management plans for each site



