

Water Supply



Sunnyvale

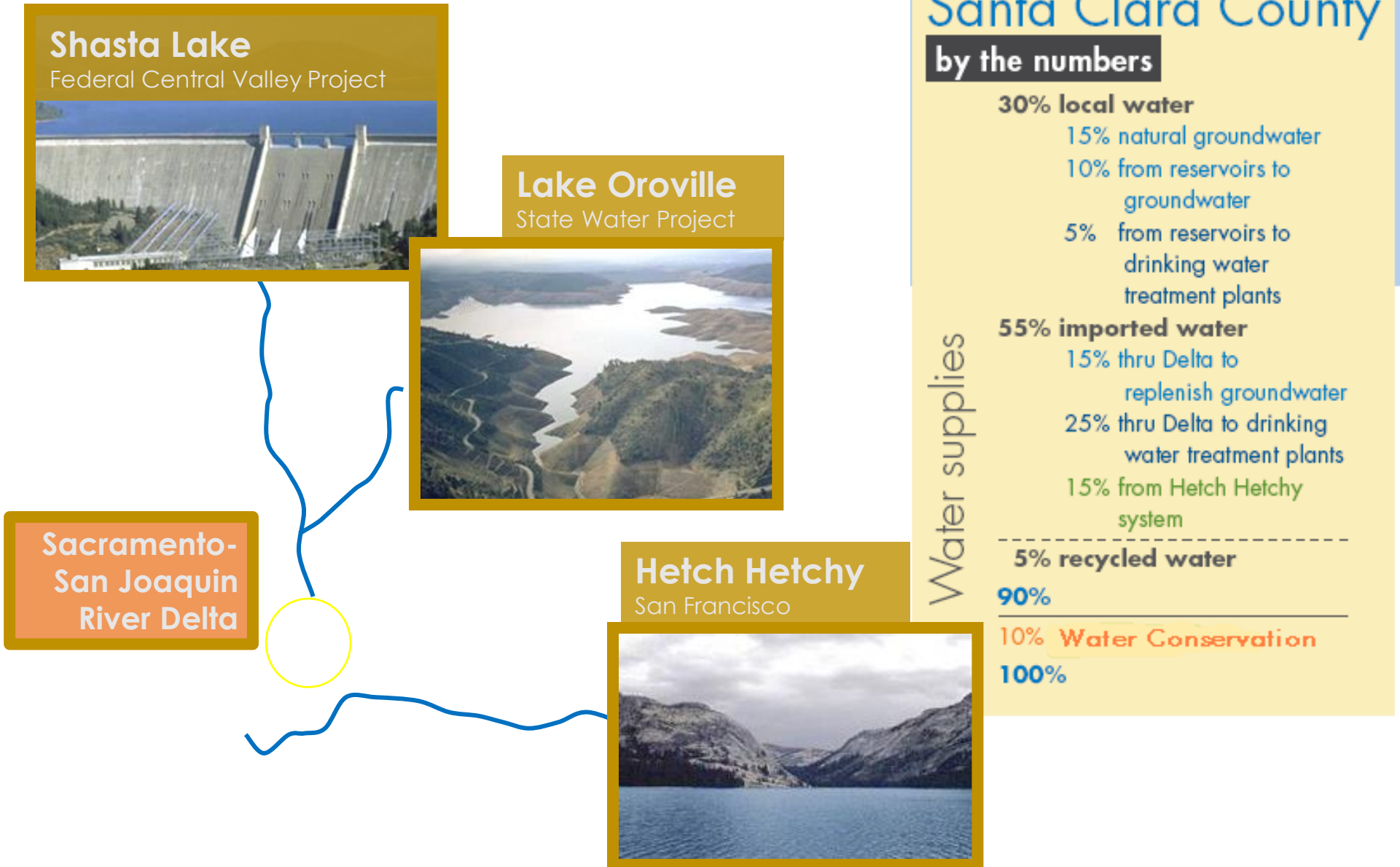
April 11, 2024

Mansour Nasser P.E.

Water and Sewer Division Manager



Sources of Supply for Santa Clara County



Current Conditions

California

Map released: Thurs. April 4, 2024
 Data valid: April 2, 2024 at 8 a.m. EDT

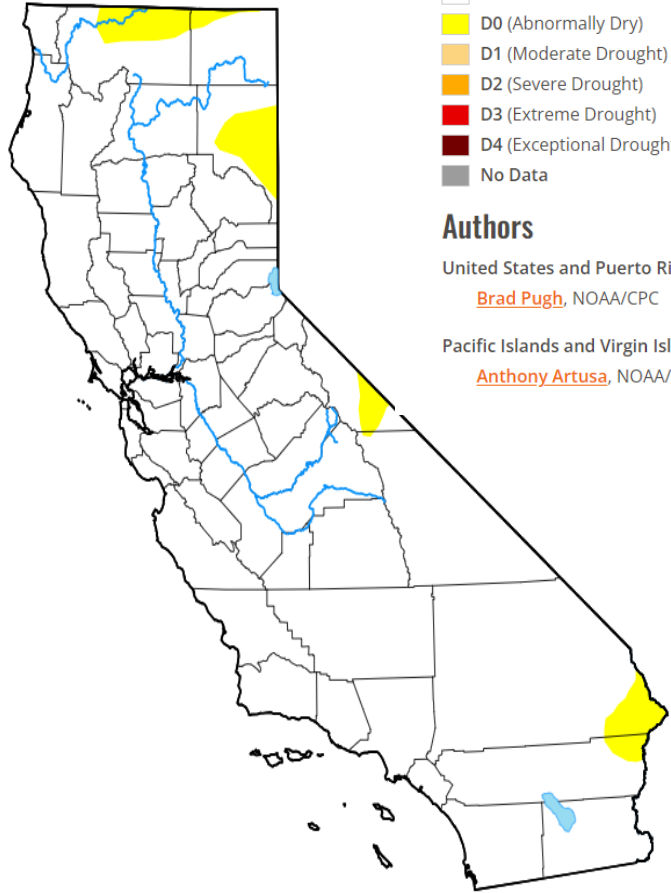
Intensity

- None
- D0 (Abnormally Dry)
- D1 (Moderate Drought)
- D2 (Severe Drought)
- D3 (Extreme Drought)
- D4 (Exceptional Drought)
- No Data

Authors

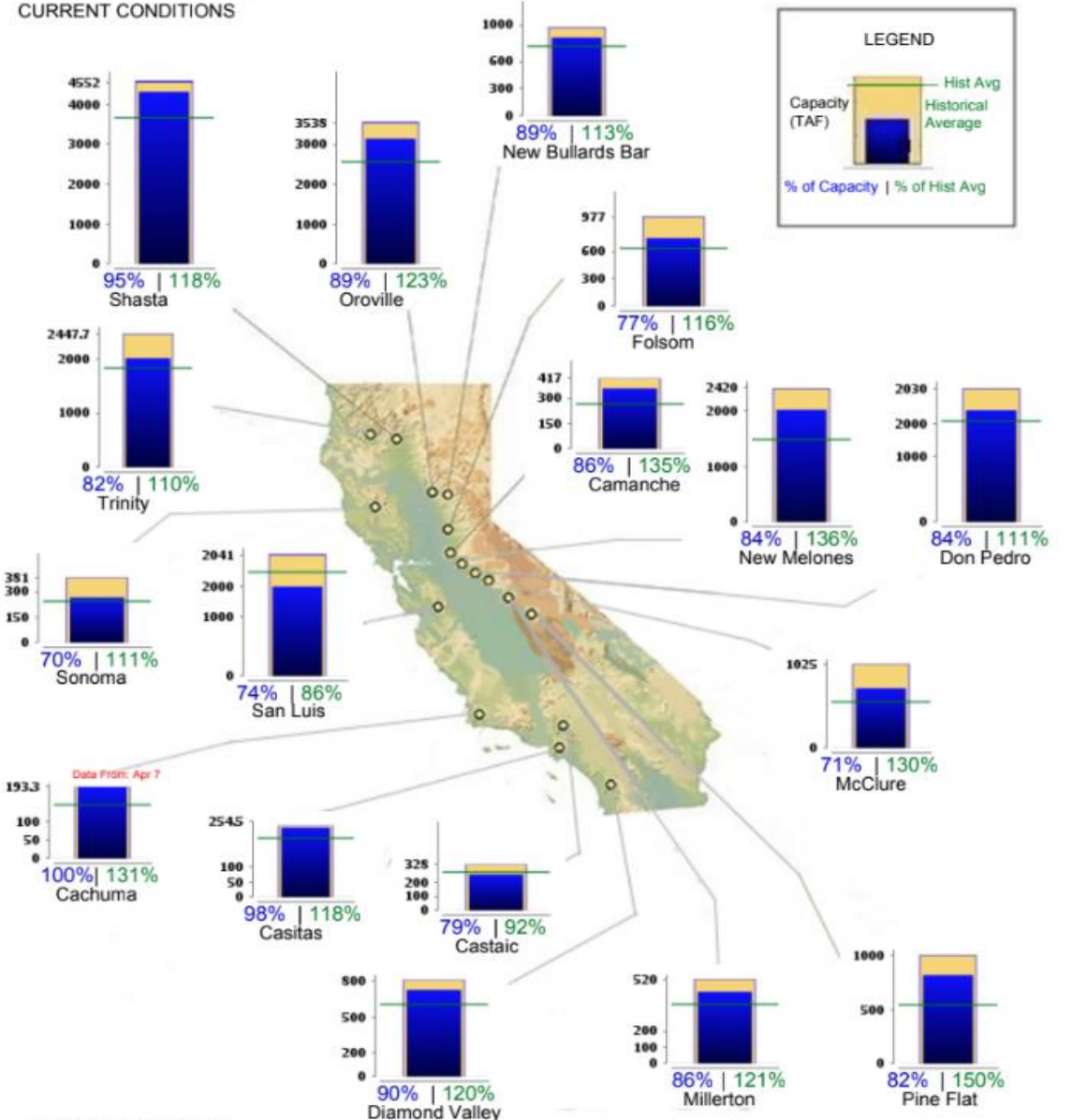
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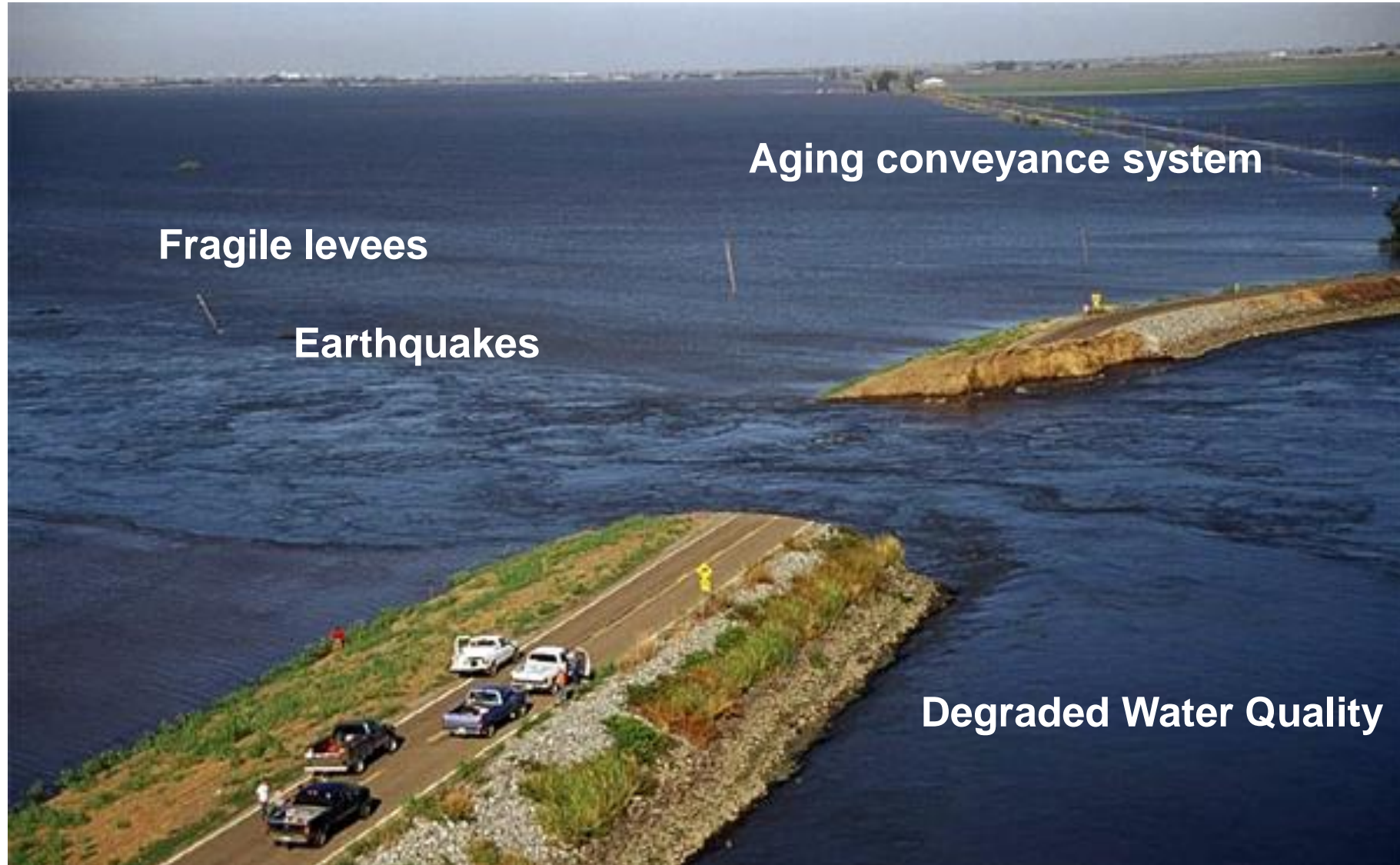


CALIFORNIA MAJOR WATER SUPPLY RESERVOIRS

Midnight - April 8, 2024



Delta Risks to Water Supply



Aging conveyance system

Fragile levees

Earthquakes

Degraded Water Quality

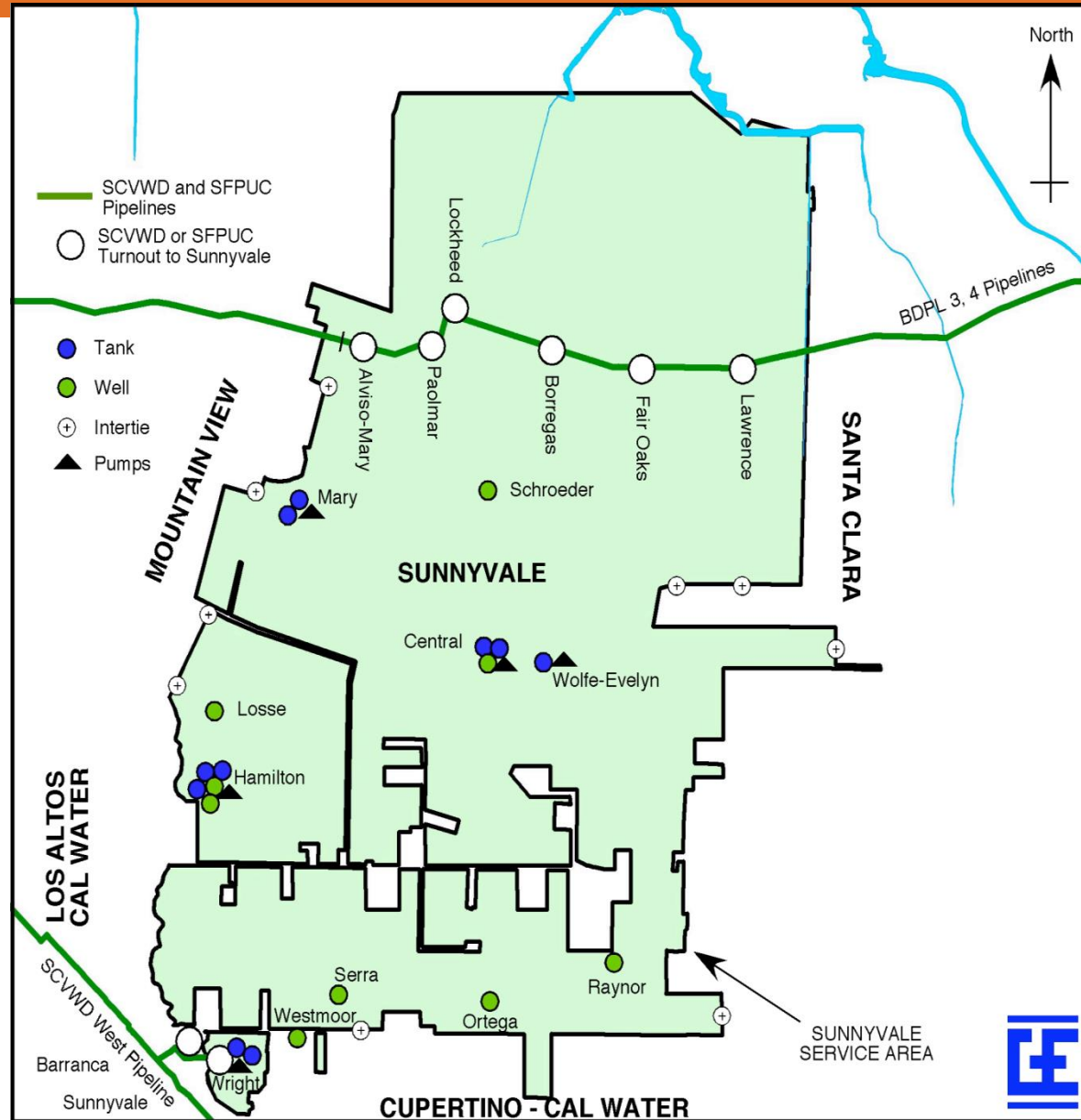
Sunnyvale Sources of Supply:

- San Francisco's Hetch Hetchy Reservoir
- Santa Clara Valley Water District
 - 1- Delta
 - 2- Central Valley Project (San Luis Reservoir)
- Wells
- Recycled Water

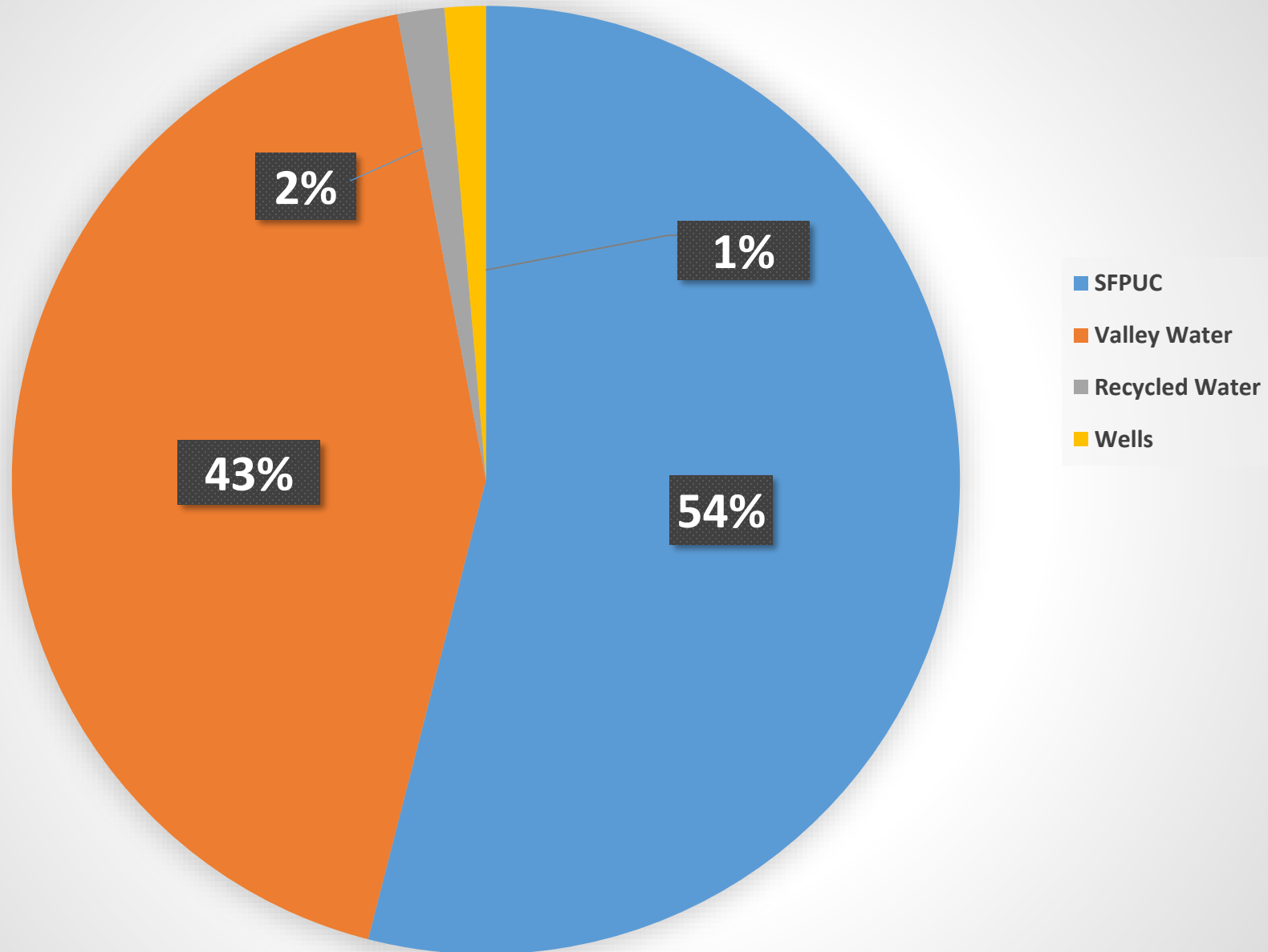
Hetch Hetchy System

- Provides water to 2.4 million people in Bay Area
- Underwent \$4.3 billion upgrade
- Generates \$500 million - \$1.5 billion in electricity
- Sunnyvale receives approximately 9.0 million gallons per day
- Sunnyvale has supply guarantee of 12.58 million gallons per day
- Hetch Hetchy represents 50% of total Sunnyvale's water supply
- Hetch Hetchy represents 16% of water supply countywide

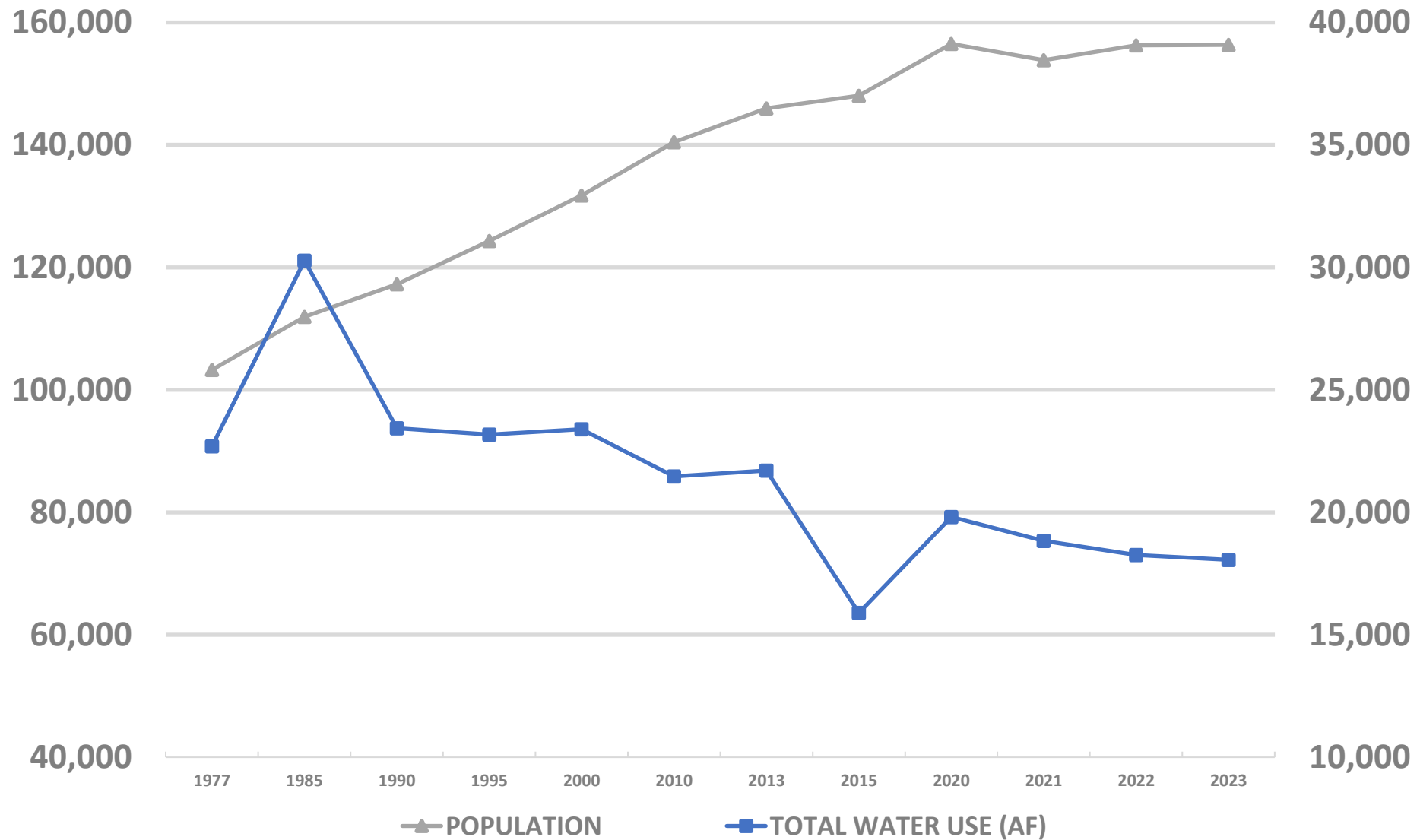
Sunnyvale System with Facilities



Sources of Supply 2022-2023



Water Use vs. Population



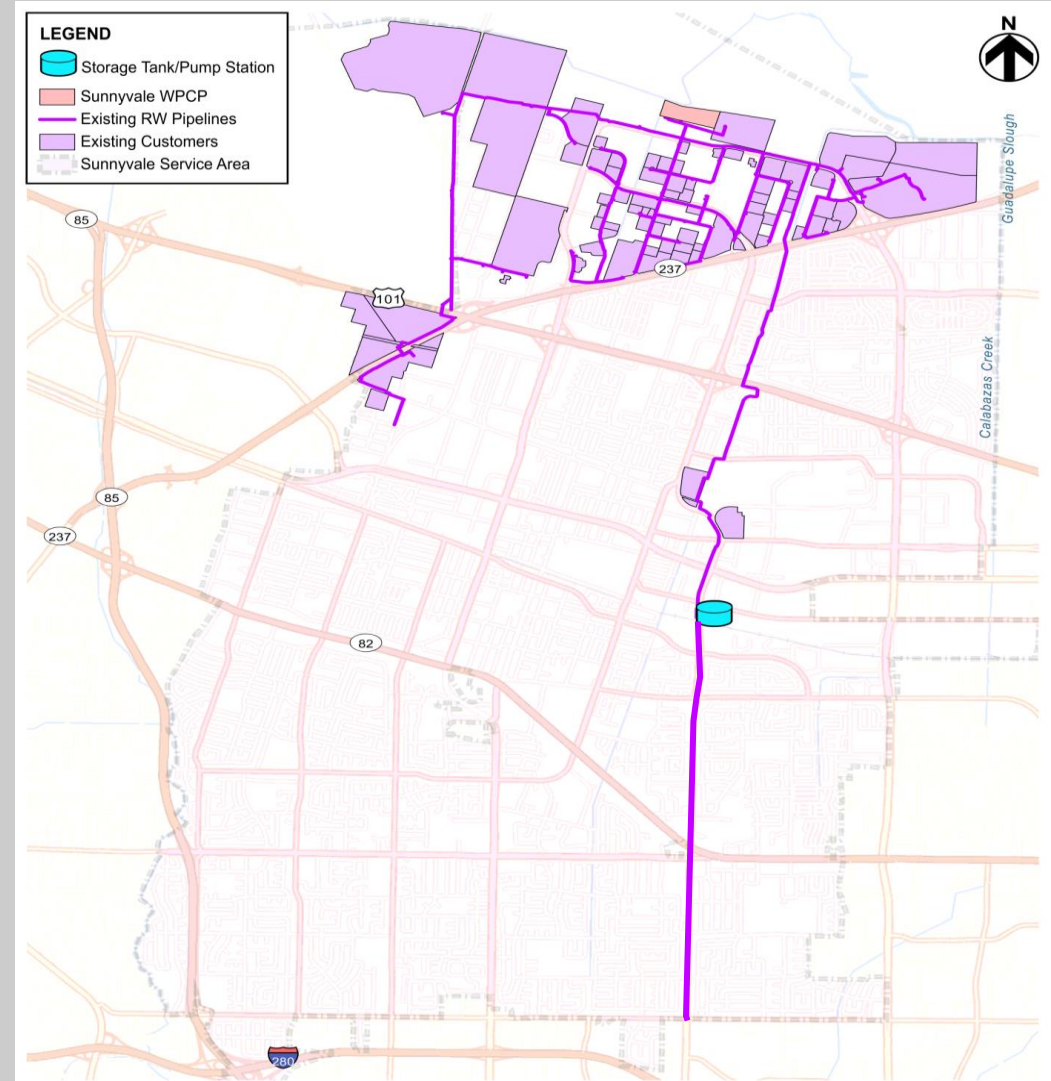
Sunnyvale Per Capita Water Use

YEAR	POPULATION	TOTAL WATER USE (AF)	DAILY PER CAPITA WATER USE (GAL)
1977	103,255	22,696	196
1985	111,924	30,277	241
1990	117,229	23,432	178
1995	124,333	23,177	166
2000	131,760	23,392	158
2010	140,450	21,465	136
2013	145,973	21,702	133
2015	148,028	15,897	96
2020	156,503	19,811	113
2021	153,827	18,841	109
2022	156,234	18,264	104
2023	156,317	18,062	103

Recycled Water

Sunnyvale Distribution System

- Approximately 75,000 ft of distribution “purple” pipes
- Service provided to more than 100 sites
- San Lucar Storage and Pumping Facility provides 2.5 million gallons of storage
- Flexibility of adding potable water as a backup source of supply



Water Conservation Programs

1. Residential Programs
2. Landscape Programs
3. Commercial, Industrial, Institutional Programs
4. Agricultural Programs
5. Outreach/Education



Programs for Residents

- Water Wise Survey Program
 - Water Wise Outdoor Survey Program
 - Do It Yourself Indoor Survey Kit
 - Free Low Flow Showerheads and Aerators, Toilet Flappers, etc.
- Graywater Rebate Program
- Landscape Rebate Program

• www.watersavings.org



Sunnyvale



Permanent Restrictions in Sunnyvale





Sunnyvale

Outreach Platforms

- City Drought and Water Conservation Webpage
- Postcard
- Yard Signs
- Theater Ads
- Utility Bill Insert
- Sunnyvale Sun Newspaper
- Facebook
- Nextdoor
- Sustainable Sunnyvale Newsletter
- Update Sunnyvale
- Horizon Article
- Community Tabling
- BAWSCA Landscape Webinars
- Outreach at Sunnyvale Public Library
- Other Signage



Sanitary Sewer

- ▶ 313 miles of sanitary main
- ▶ Five lift stations
- ▶ 5300 manholes
- ▶ Hydro-flushing Program
- ▶ CCTV Program
- ▶ Point Repairs (average 277)
- ▶ 3,200 average service requests annually
- ▶ 14 FTEs
- ▶ 1200 customers in Cupertino

Storm Sewer

- ▶ 330 miles of storm main
- ▶ Two pump stations
- ▶ 4200 Storm drain inlets
- ▶ 75 miles of curb & gutter
- ▶ Four large trash capture devices
- ▶ 72 small trash capture devices(in DIs)
- ▶ Next year funded by GF