

2024 Santa Barbara County Water Supply Update



October 15, 2024

Matt Young
Santa Barbara County Water Agency



Historical Rainfall Record

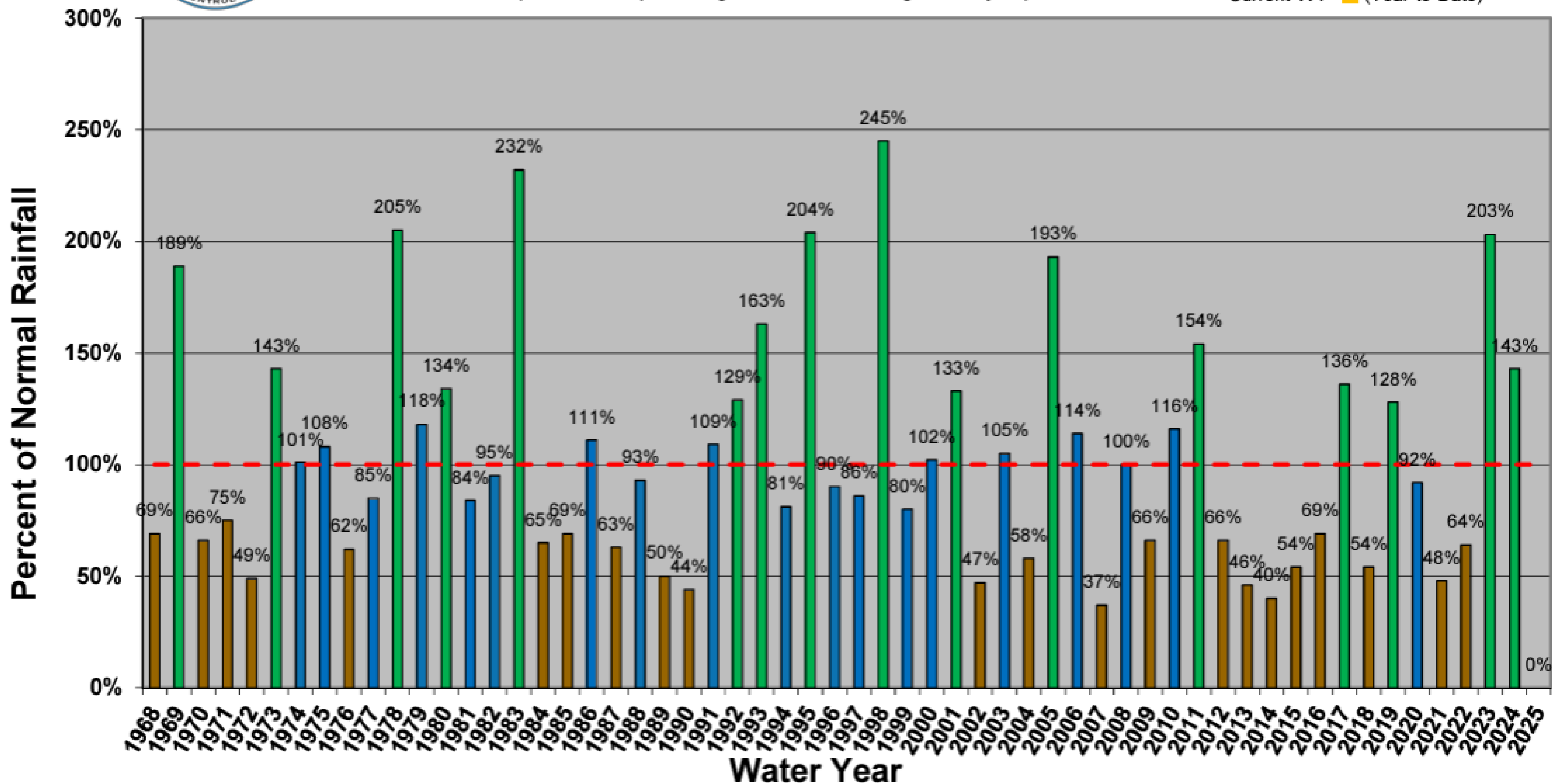


Countywide Percent-of-Normal Water-Year Rainfall

Updated through October 1, 2024

(Rainfall as a percentage of an entire average water-year)*

- Wet Years (>120% Normal Rain) ■
- Dry Years (< 80% Normal Rain) ■
- Avg Years (within ±20% Normal) ■
- Current WY (Year-to-Date) ■



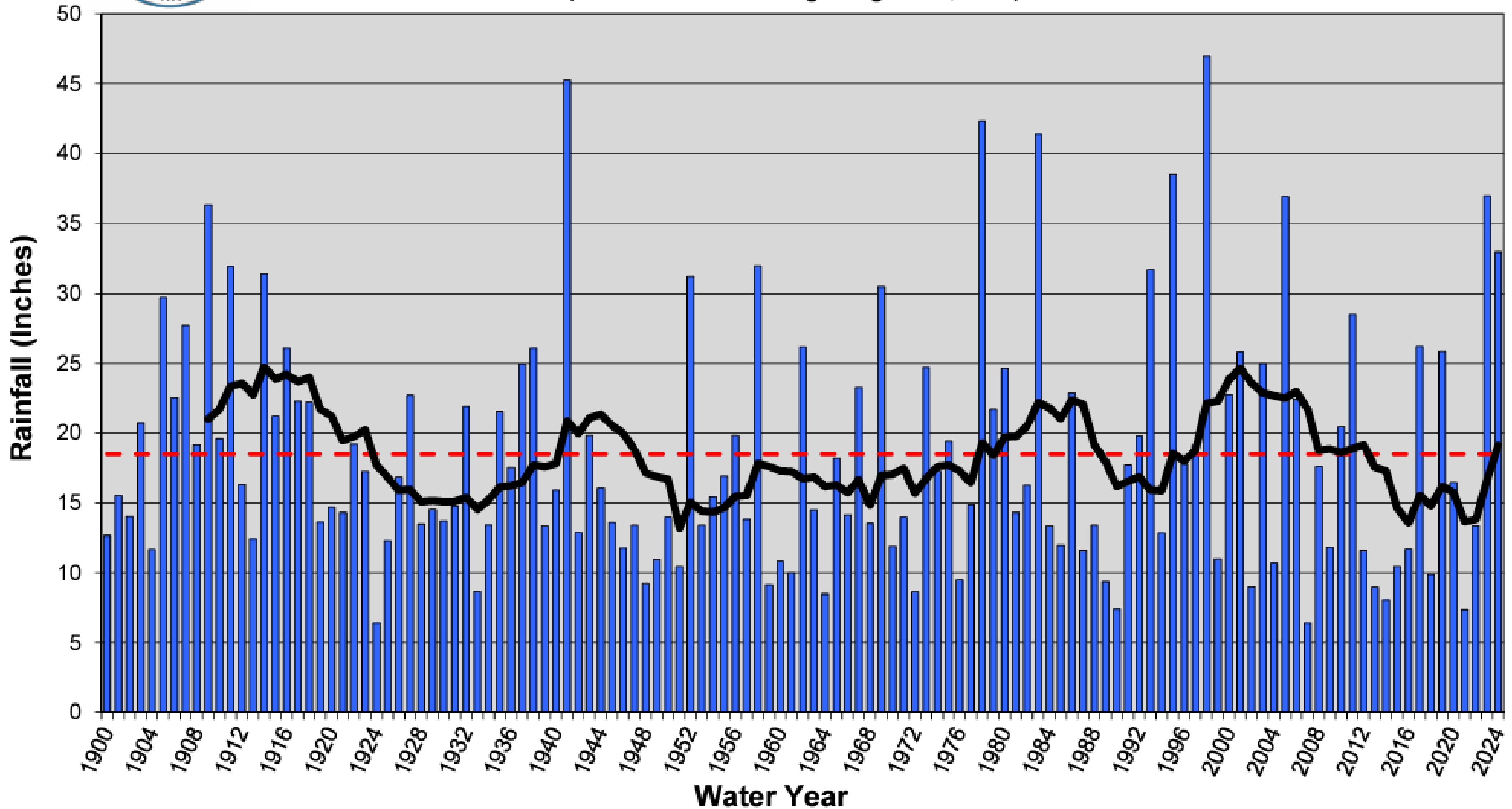
* Based on 14 Countywide Primary Rain Gauge Sites

(Water-Year starts Sept 1 and ends Aug 31)

Historical Rainfall Record



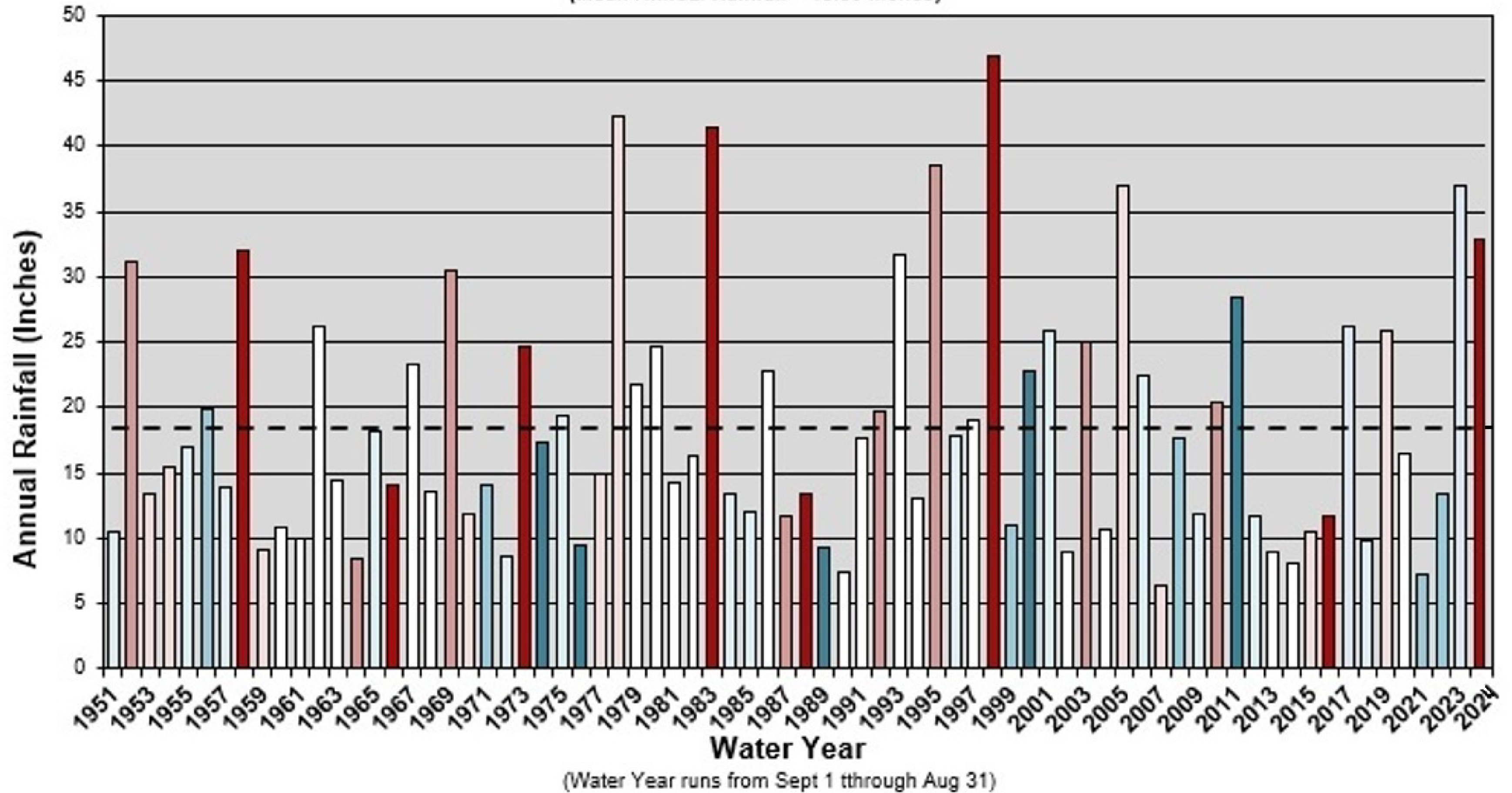
Santa Barbara - Rainfall 1900 - 2024 (125 Years) Annual, Mean, and 10 Year Moving Average (Mean = 18.51" - through August 31, 2024)



Water Year 2025, What will La Niña Bring?



**Santa Barbara - Annual Rainfall
El Nino & La Nina Years
1951 - 2024**
(Mean Annual Rainfall = 18.39 inches)



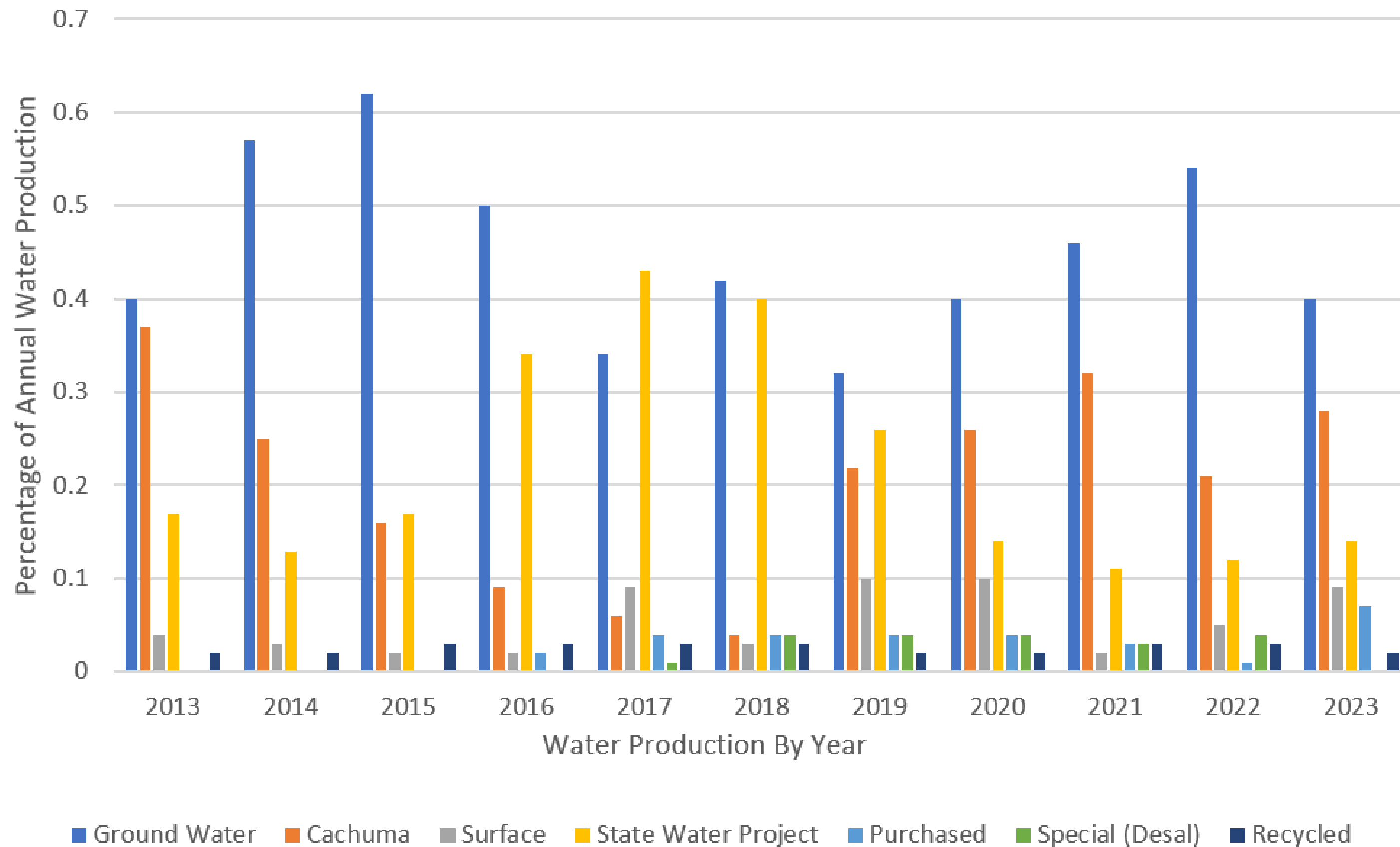
(Water Year runs from Sept 1 through Aug 31)

	El Nino			La Nina			Neutral
ENSO Condition	Strong	Moderate	Weak	Strong	Moderate	Weak	White

Source: Rainfall Data - County of Santa Barbara, El Niño/La Niña Data - NOAA CPC

Countywide Public Water Systems Water Supply Portfolio 2013-2024

SANTA BARBARA COUNTY WATER PRODUCTION 2013-2023



Statewide Drought Emergency Declaration:

- 2014-2017
- 2020-2023



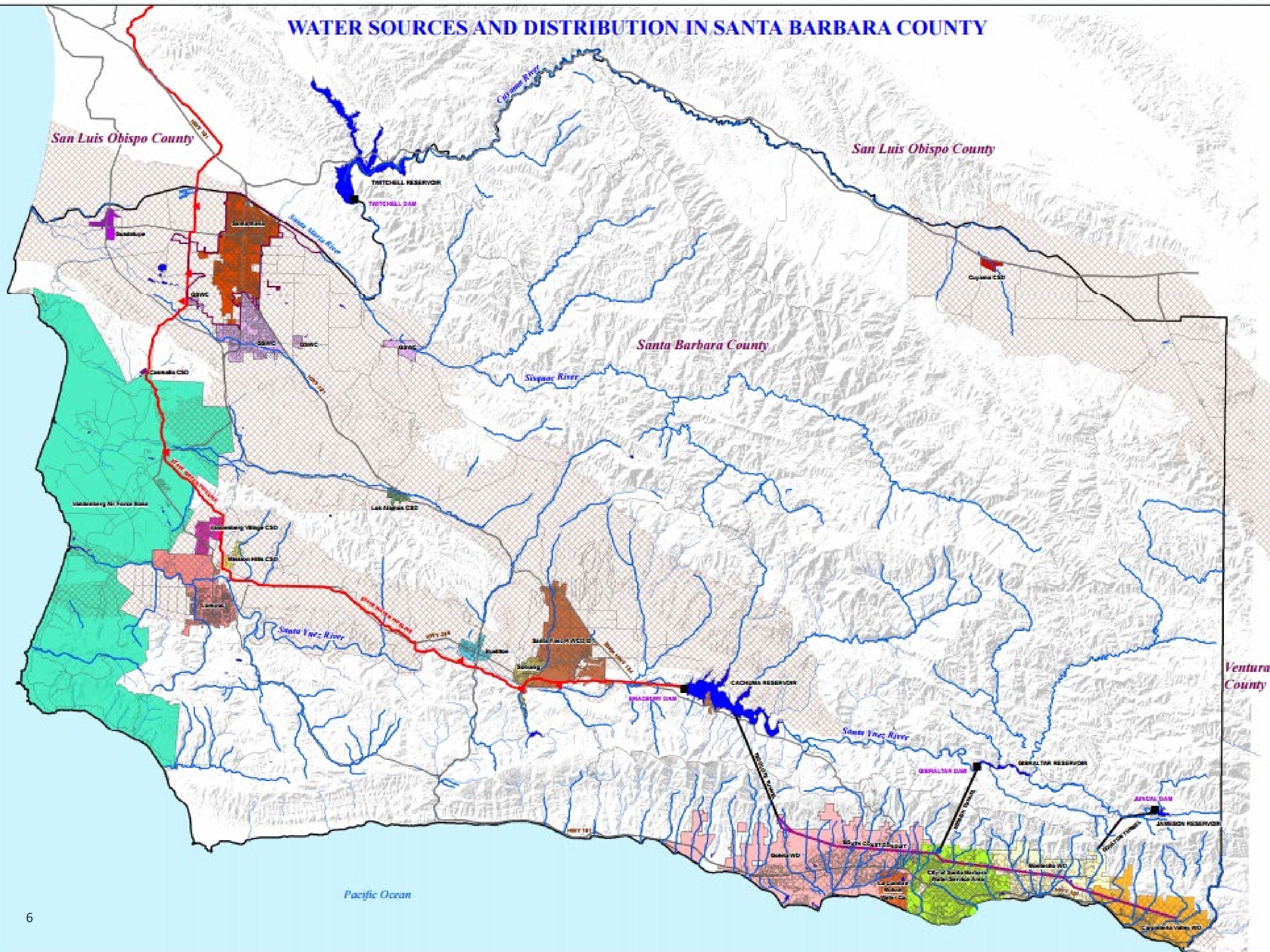
Water Purveyors

WATER SOURCES AND DISTRIBUTION IN SANTA BARBARA COUNTY

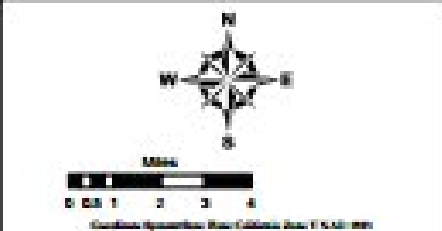


Legend

- Dams
- SWP Turnout
- City Boundary Line
- State Water Project Pipeline
- Rivers
- South Coast Conduit
- Tunnel
- Roads
- Highways/Freeways
- Groundwater Basins
- Lakes & Reservoirs
- Caswell CSD
- City of Santa Barbara Water Service Area
- County boundary
- Santa Maria
- Vandenberg Air Force Base
- La Cumbre Mutual Water Co
- Goleta WD
- Buellton
- Carpinteria Valley WD
- Cayama CSD
- Guadalupe
- Lompoc
- Los Alamos CSD
- Mission Hills CSD
- Montecito WD
- Vandenberg Village CSD
- Golden State Water Co (GSWC)
- Solvang
- Santa Ynez R WCD IDI
- Pacific Ocean



This map is for reference only. Although every effort has been made to ensure the accuracy of information shown and conditions engineering from physical sources used in deriving the data, the user should be advised that the County shall not be liable for any errors or omissions that may result from inappropriate use of this data. The actual situation should be used to obtain conditions, rules, regulations, or distances.



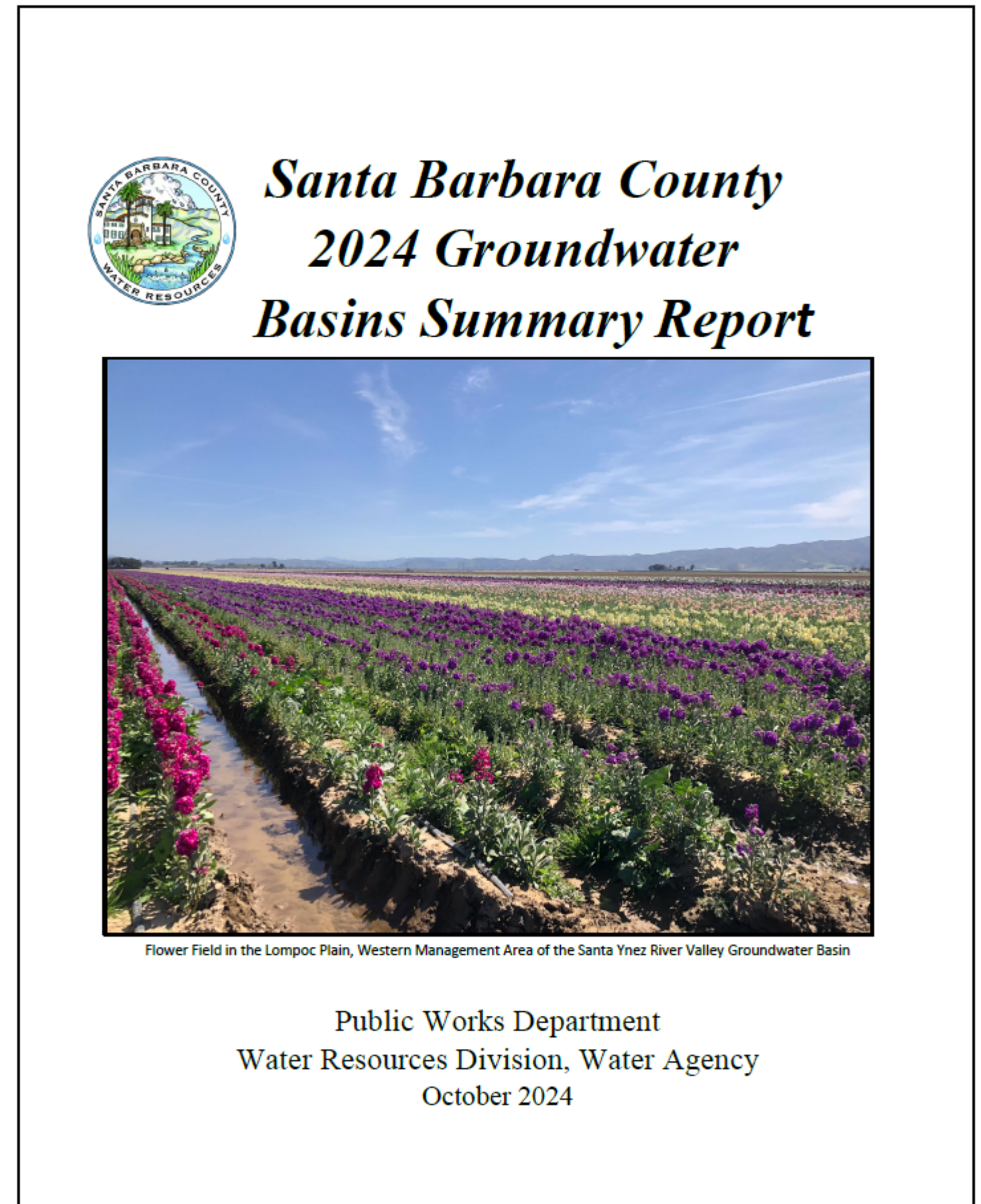
WATER SOURCES AND DISTRIBUTION IN SANTA BARBARA COUNTY


Santa Barbara County, California


Compiled by the Public Works Department of Santa Barbara County, 2011

Groundwater

- Largest water source in the County;
~80% including agriculture
- Sustainable Groundwater Management Act (SGMA)
 - GSAs beginning to actively manage groundwater
- Portions of most basins were at or near historical lows prior to 2023/24
- Most basins showing signs of recovery, especially near rivers and streams
- Details by basin in *2024 Groundwater Basins Summary Report*



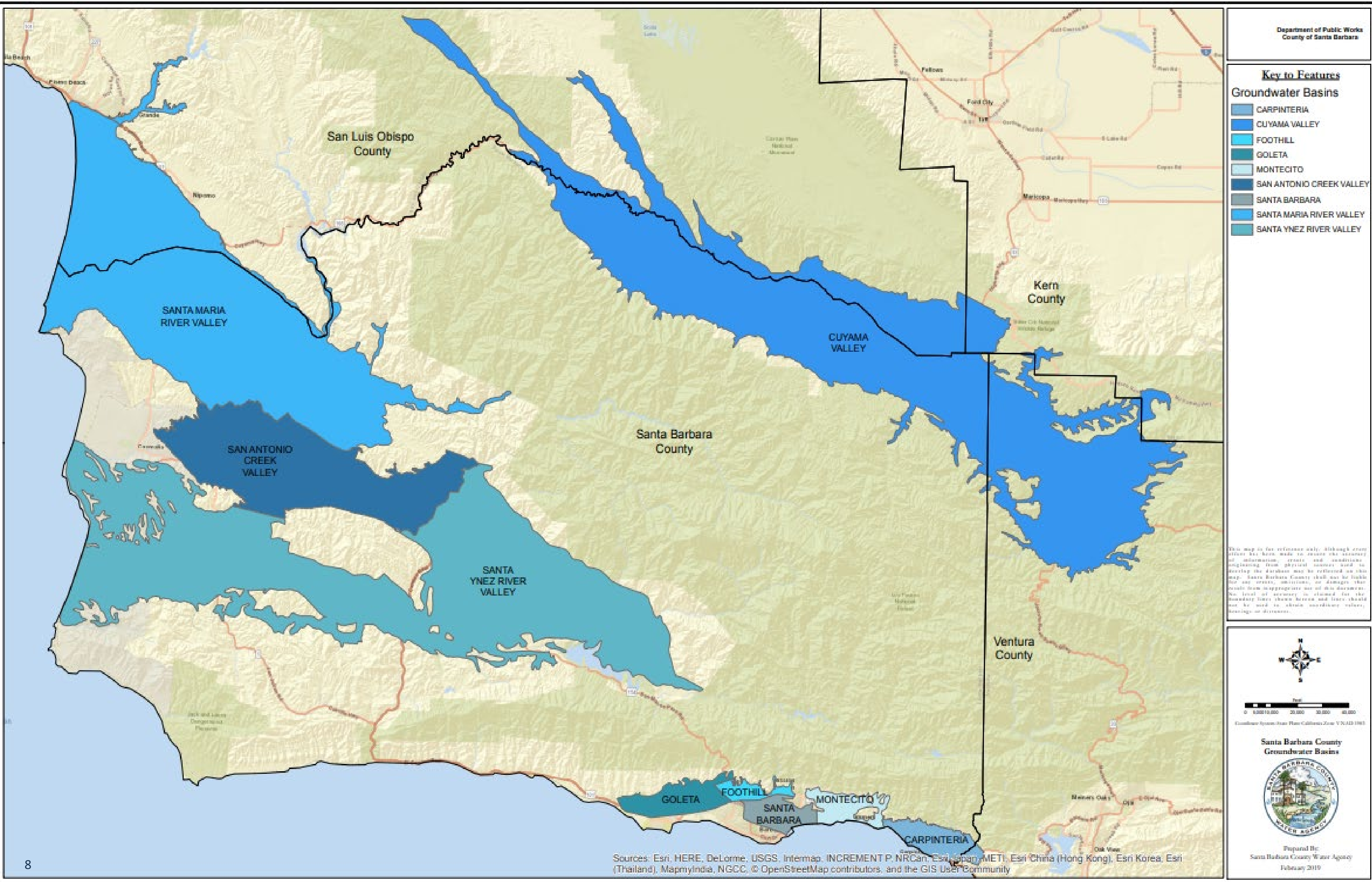
 ***Santa Barbara County***
2024 Groundwater
Basins Summary Report



Flower Field in the Lompoc Plain, Western Management Area of the Santa Ynez River Valley Groundwater Basin

Public Works Department
Water Resources Division, Water Agency
October 2024

Groundwater



Santa Ynez River Reservoirs

WATER DISTRIBUTION FROM SANTA YNEZ RIVER RESERVOIRS

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Legend

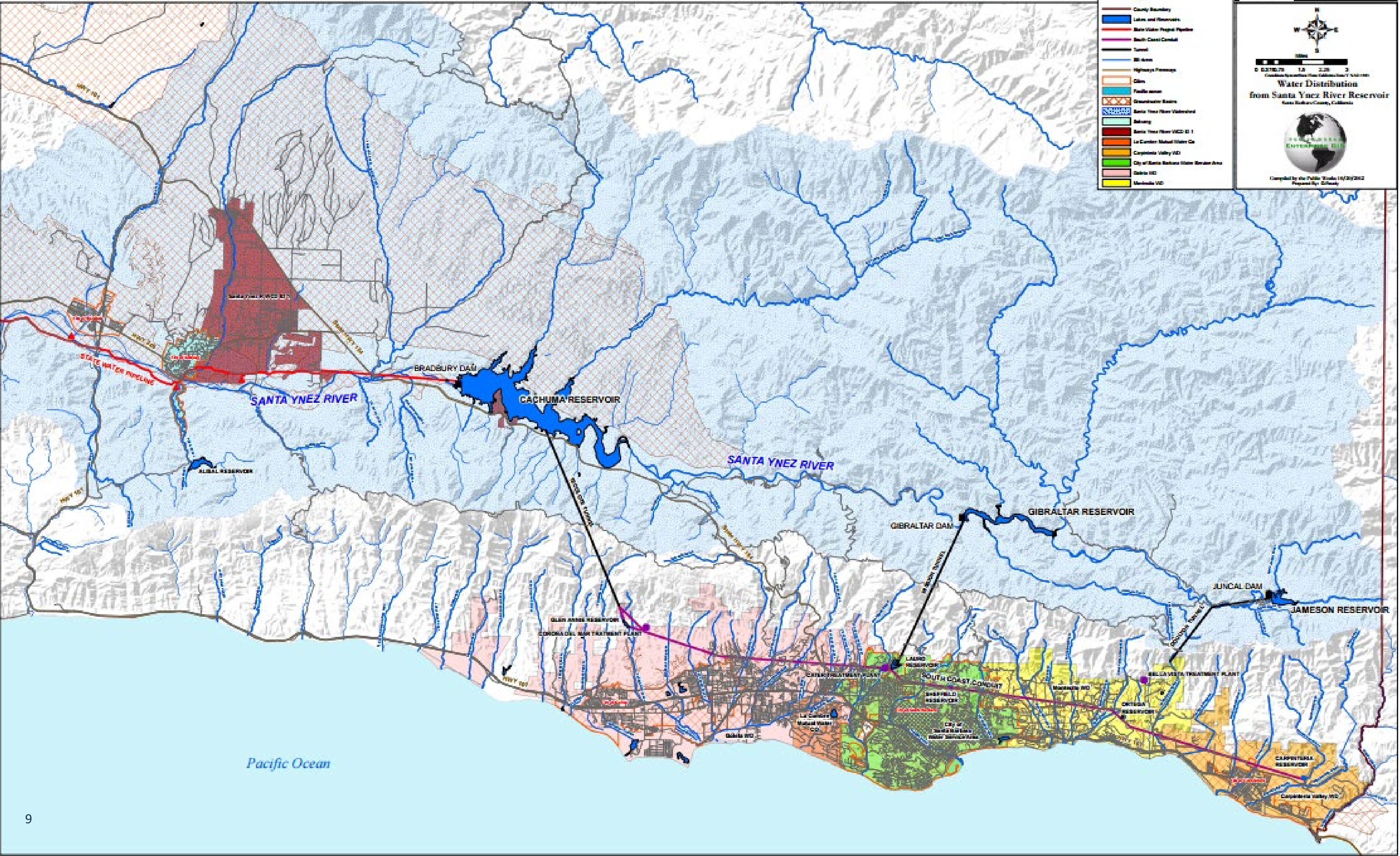
- ▲ BWP Tunnel
- Dam
- Water Treatment Plant
- Road
- County Boundary
- Lake and Reservoir
- State Water Project Pipeline
- South Coast Conduit
- Tunnel
- All Area
- Highway Rightway
- Dike
- Pipeline
- Groundwater Basin
- Santa Ynez River Watershed
- Salinity
- Santa Ynez River VAD: 0-1
- La Cumbre Mutual Water Co
- Carpinteria Valley VAD
- City of Santa Barbara Water Service Area
- Santa VAD
- Morro VAD

Department of Public Works
County of Santa Barbara

0 0.25 0.5 1.0 1.5 2.0 Miles

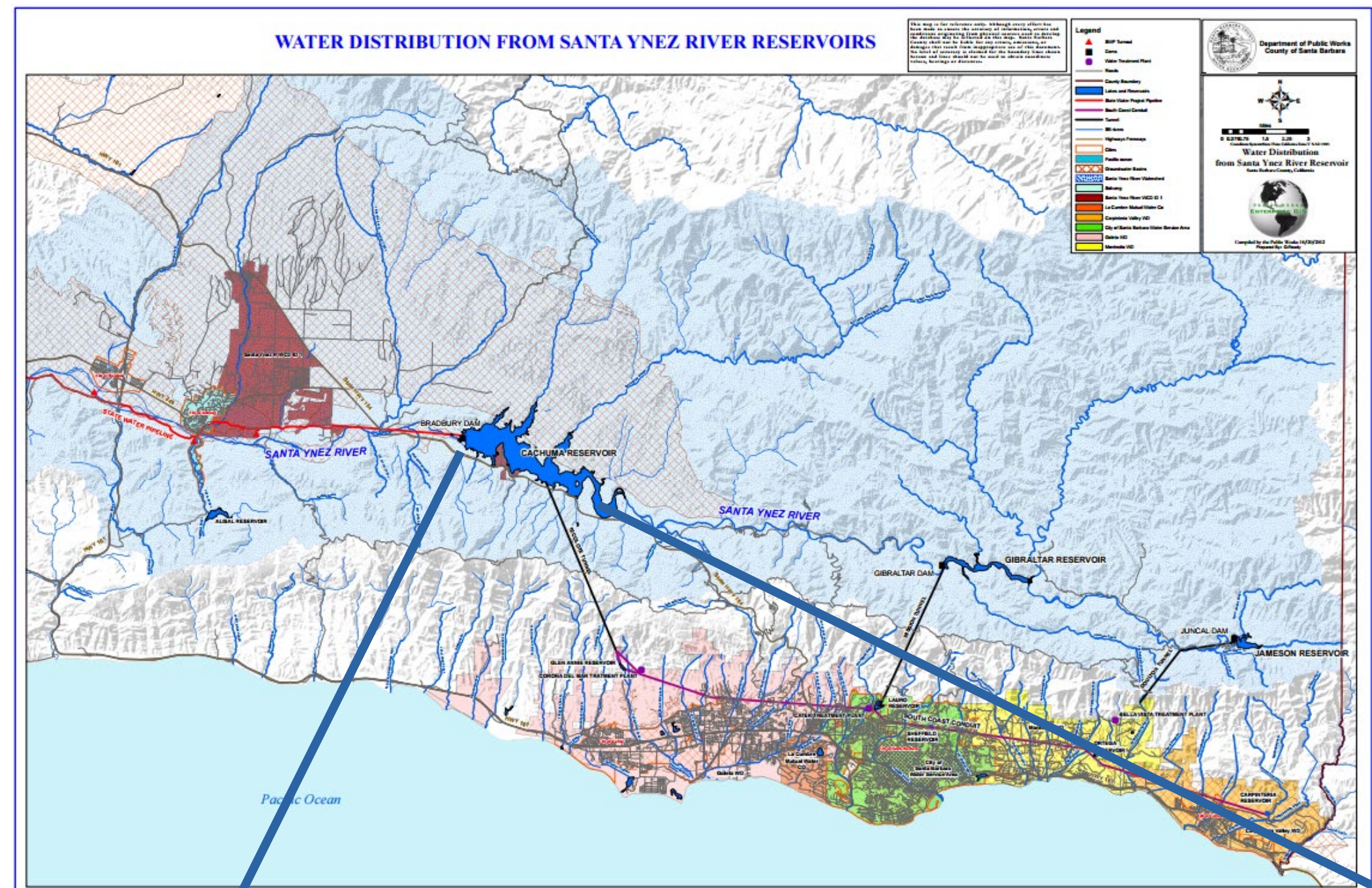
Water Distribution
from Santa Ynez River Reservoir
Santa Barbara County, California

Compiled by the Public Works (1/20/2012)
Prepared by: Citywide



Cachuma Reservoir

- Built by US Bureau of Reclamation in 1954
- Capacity reduced because of sedimentation and fisheries constraints
- No reserved flood control space
- Modified storm operations protocol last two winters
 - Allows for some downstream flood protection while maximizing water supply
- Reclamation conducting Value Planning Study on fish passage options

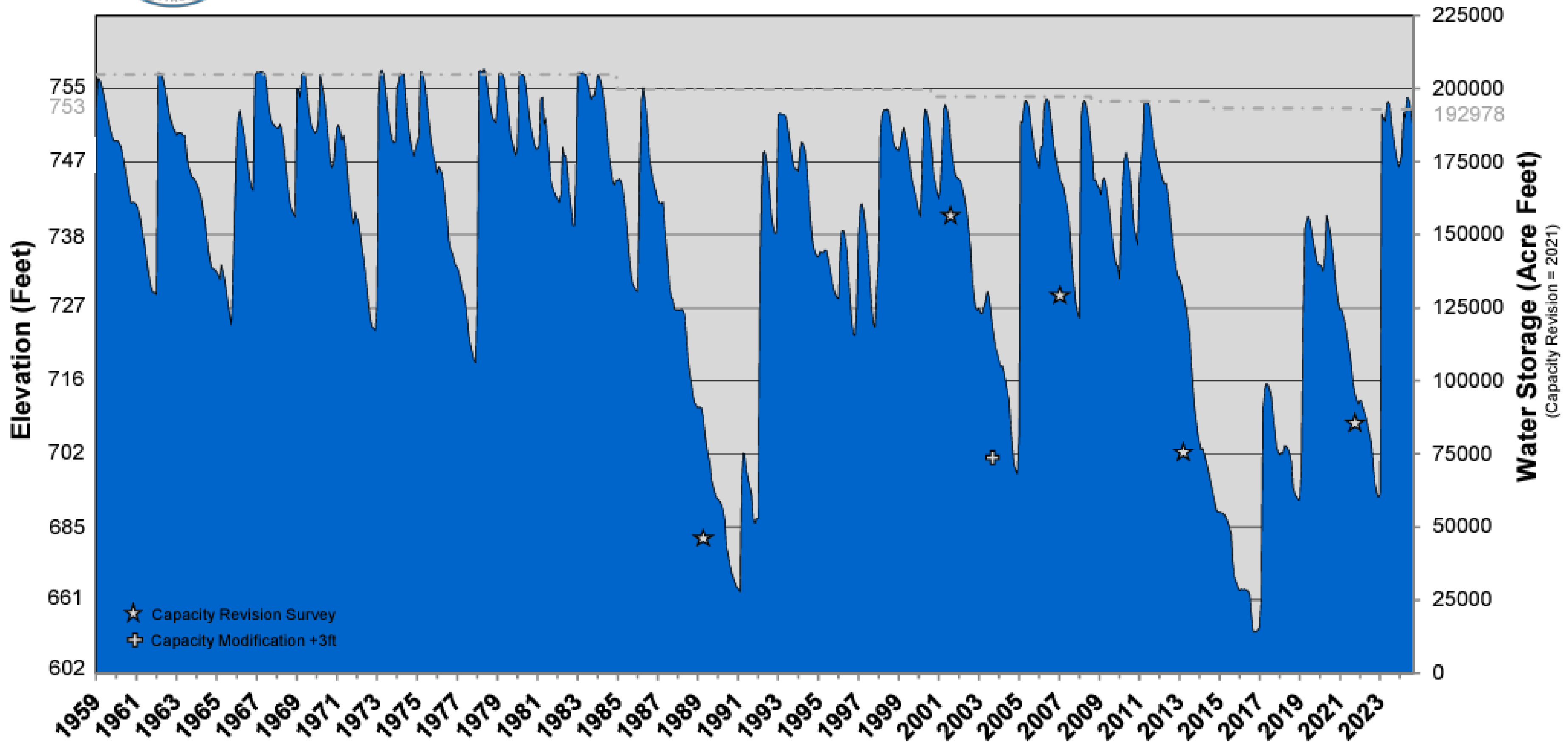


Cachuma Reservoir



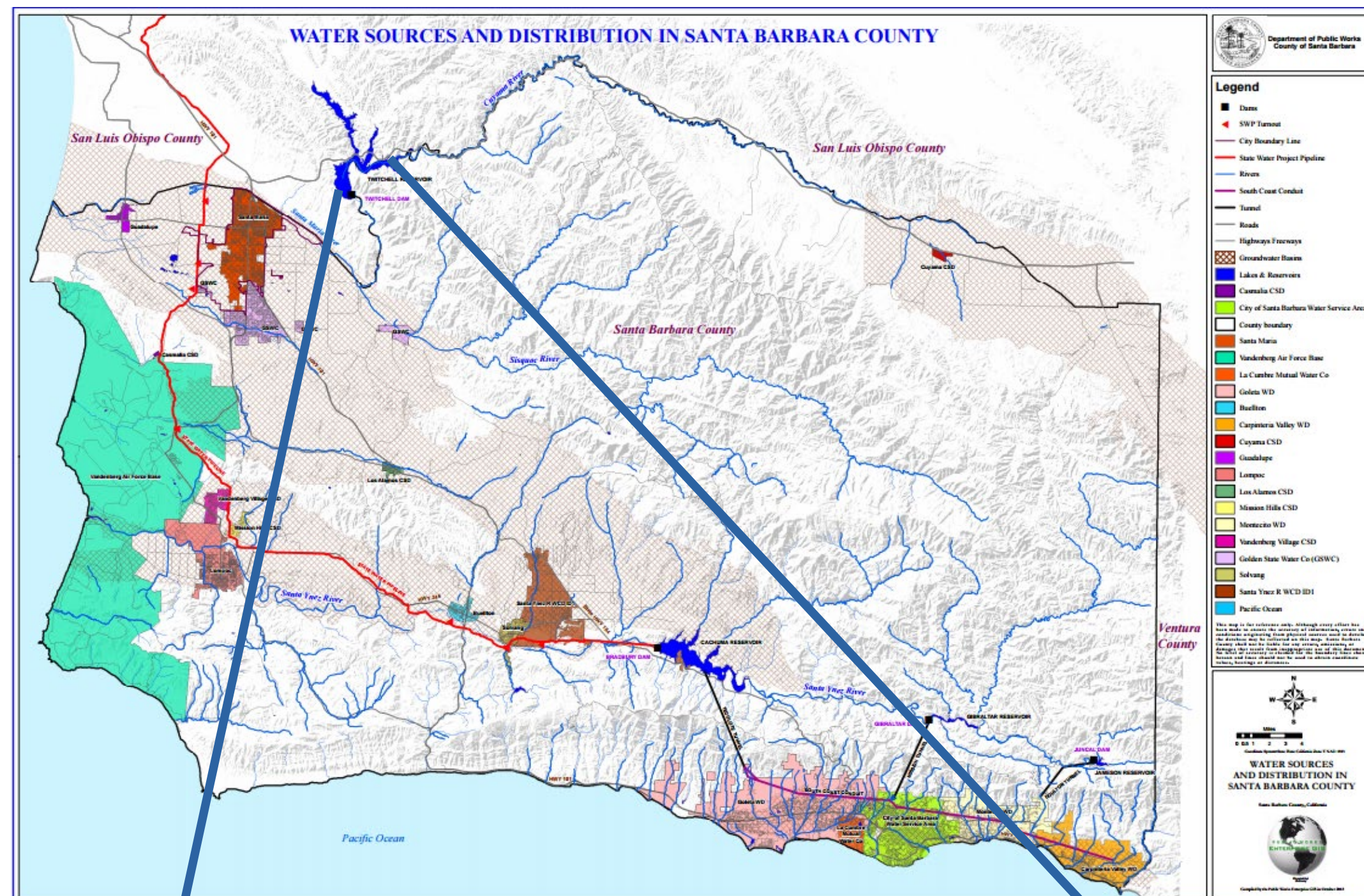
Cachuma Reservoir - Historical Water Storage Levels

65 Years - 1959 to 2024
(through September 1, 2024)



Twitchell Reservoir

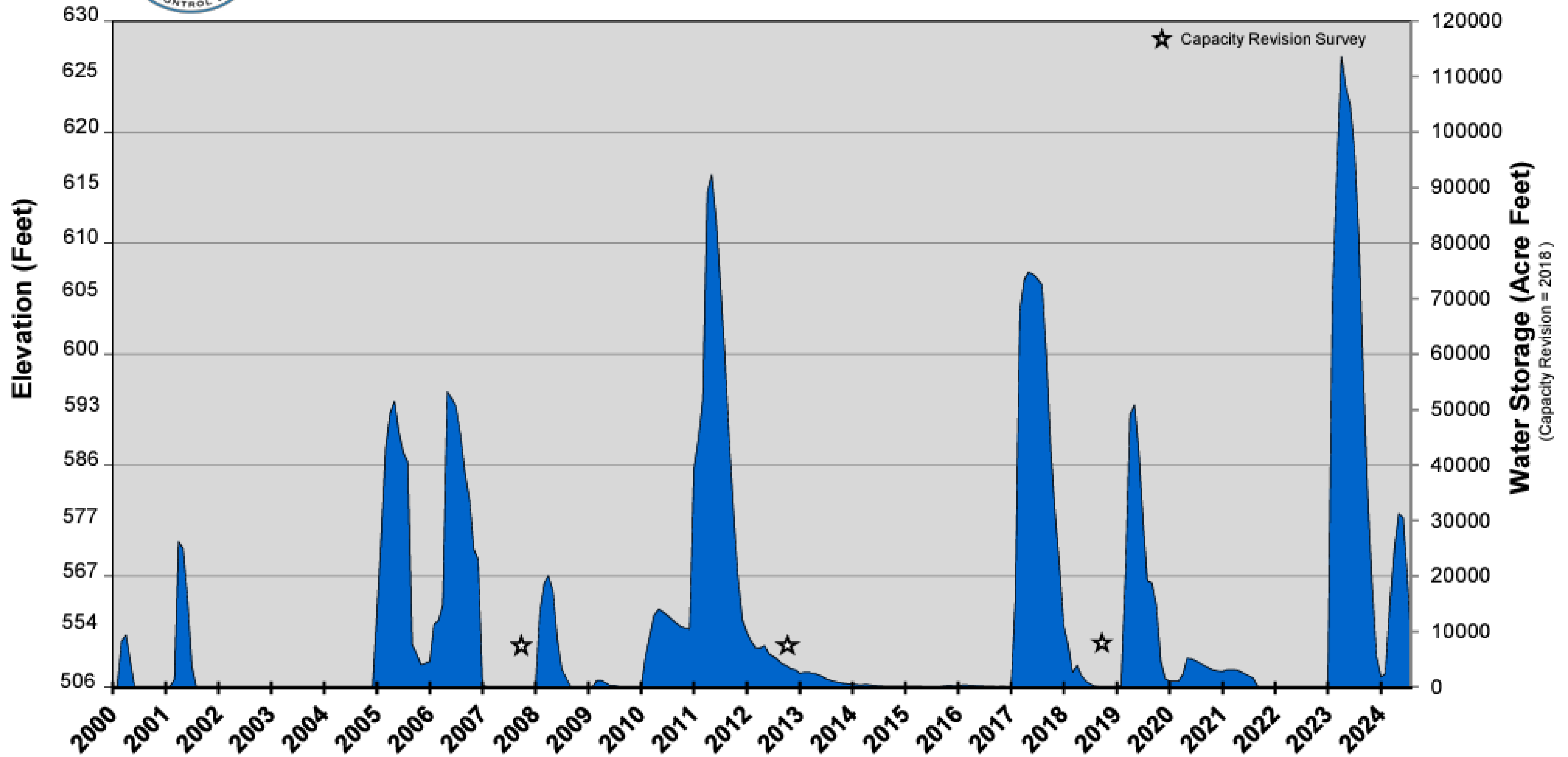
- Constructed in 1958 by US Bureau of Reclamation.
- Water conservation releases recharge SM Groundwater Basin.
- Operated and maintained by Santa Maria Valley Water Conservation District
- Roughly half of reservoir storage reserved for flood control, with releases managed per US Army Corps of Engineers Water Control Plan
- Water Agency working with federal and local partners to update Water Control Plan to enhance storage and better manage releases.



Twitchell Reservoir

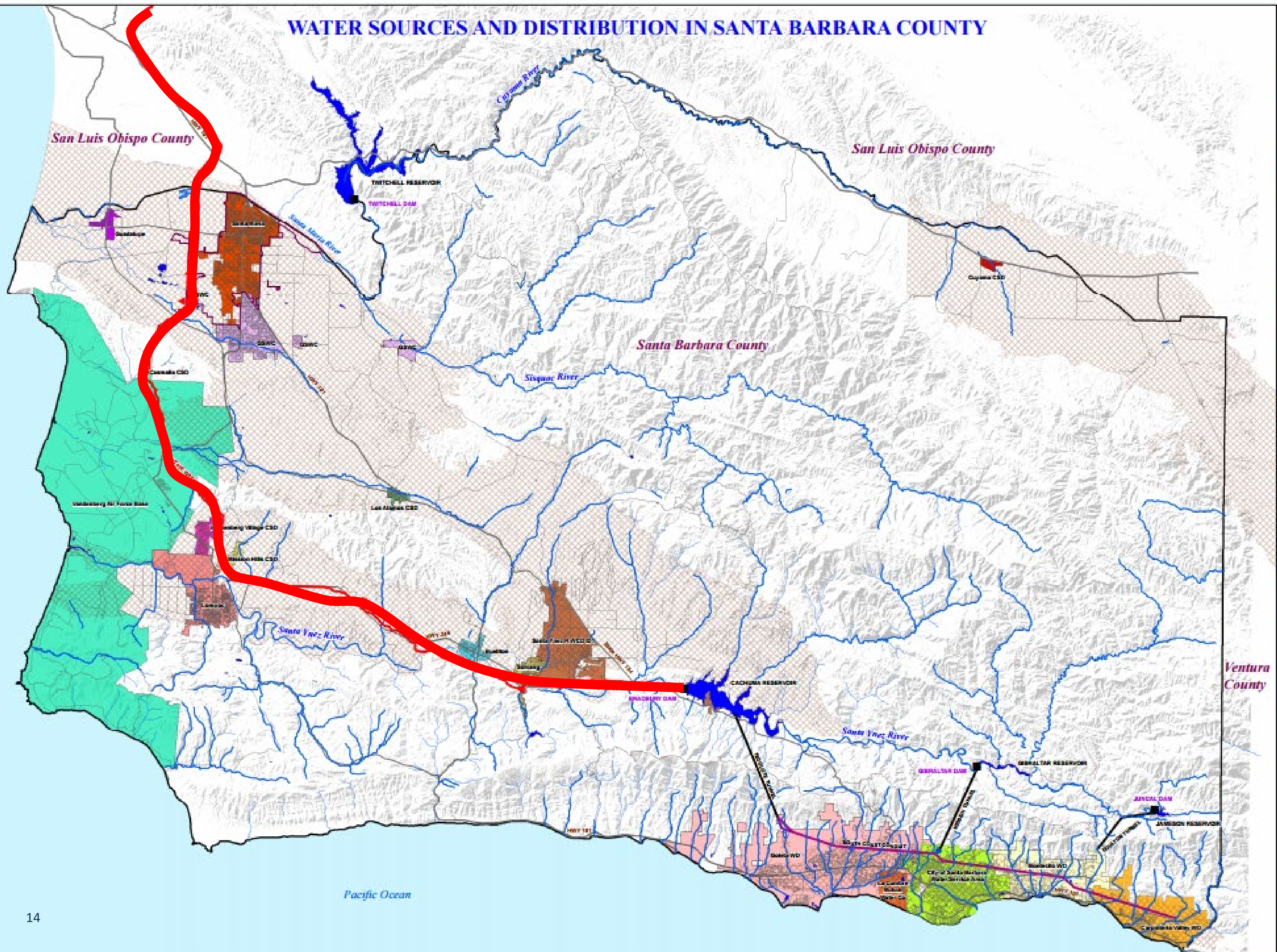


Twitchell Reservoir - Historical Water Storage Levels 24 Years - 2000 to 2024 (through August 1, 2024)



State Water Project

WATER SOURCES AND DISTRIBUTION IN SANTA BARBARA COUNTY



- Legend**
- Dams
 - ◀ SWP Turnout
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 - Highways/Freeways
 - ▨ Groundwater Basins
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0 1 2 3 4 Miles

WATER SOURCES AND DISTRIBUTION IN SANTA BARBARA COUNTY

Santa Barbara County, California

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State Water Project

- Coastal Branch authorized by vote 1991
- 45,486 acre-feet per year, but variable allocations
- Allocations have ranged from 5% to 100% in recent years
- Operated by Central Coast Water Authority (CCWA)
- Valuable supplement in 2011-2018 drought



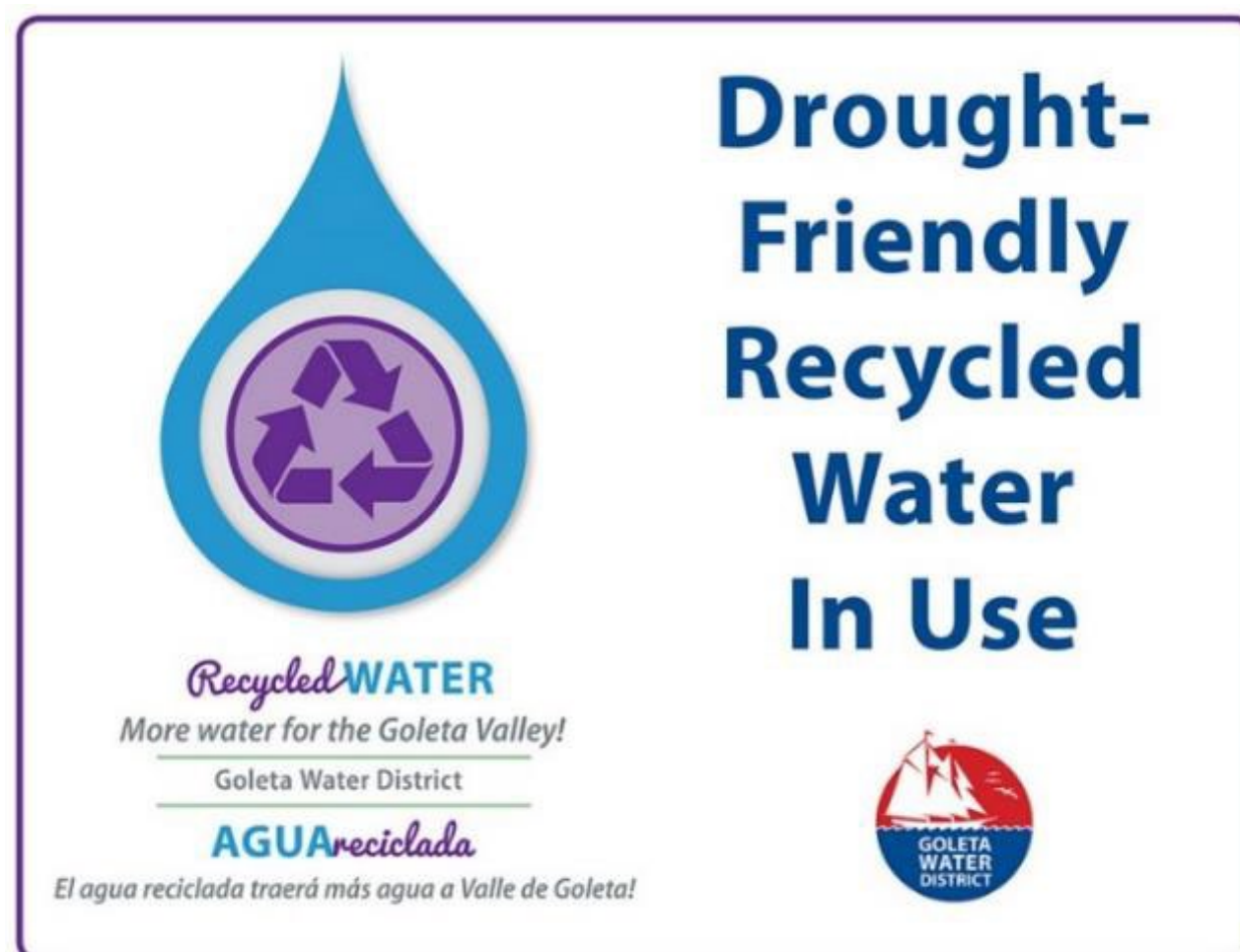
Desalination

- City of Santa Barbara's Desal Plant opened in 1991, subsequently decommissioned
 - Reactivated October 2016
 - Drought-resistant, local supply of 3,125 AFY; permitted for up to 10,000 AFY
 - 50-year agreement to supply Montecito Water District
- SLO and SB County exploring possible regional plant
- VSFB evaluating desal options



Recycled Water

- Recycled water forms:
 - Direct non-potable (landscape / parks)
 - Indirect potable (Injection to groundwater basins as potable)
 - Direct Potable (direct delivery of treated wastewater through potable system)
- Direct non-potable currently produced by purveyors
- Carpinteria Advanced Purification Project in progress (Indirect reuse)
- Water Agency/Laguna Sanitation District Indirect Reuse evaluation completed August 2023
 - Follow on study in progress
- Countywide Indirect Potable Reuse finalized 2023



Water Agency: Partnership and Collaboration

- Coordinate regional programs
 - Integrated Regional Water Management Planning (IRWMP)
 - Regional Water Efficiency Partnership (RWEF)
 - Sustainable Groundwater Management
- Research and planning for water supply enhancement
 - Groundwater monitoring and studies (Cuyama, San Antonio, Santa Ynez)
 - Stormwater and water supply planning
 - Integrated Stormwater Resources Plan (2021)
 - Partnership with Flood Control District on multipurpose basins
 - Reuse studies
 - Precipitation enhancement



Water Conservation Programs

- Water Agency coordinates regional conservation and drought planning with **15 of 18 water purveyors** in the county.
- Public Information
 - WaterWiseSB.org
 - WaterWiseGardeningSB.org
 - Social Media and Media Campaigns
 - GardenWise TV Show



Water Conservation Programs

- Landscaping
 - Green Gardener Classes
 - USBR Landscape Transformation Rebate
 - Mobile Irrigation Lab
 - Garden Recognition Contest
- Commercial/Institutional
 - Water audits for Green Business Program and businesses outside of water districts
 - USBR Landscape Transformation Rebate



Water Conservation Programs

- Youth Education
 - High School Video Contest
 - Care For Our Earth Grants
 - Shows That Teach Assemblies



Recommended Actions

That the Board of Directors:

- Receive and file an update on water resources throughout the County of Santa Barbara;
- Receive and file the Santa Barbara County 2024 Groundwater Basins Summary Report; and
- Determine that these actions are not a project subject to the California Environmental Quality Act (CEQA) pursuant to State CEQA Guidelines Section 15378(b) (5), as they are administrative actions that will not result in direct or indirect changes to the environment.





Questions?

Local Water Conservation Resources & Information:
www.WaterWiseSB.org

Santa Barbara County Water Agency Information:
www.countyofsb.org/189/water-resources

