

CACHUMA PROJECT



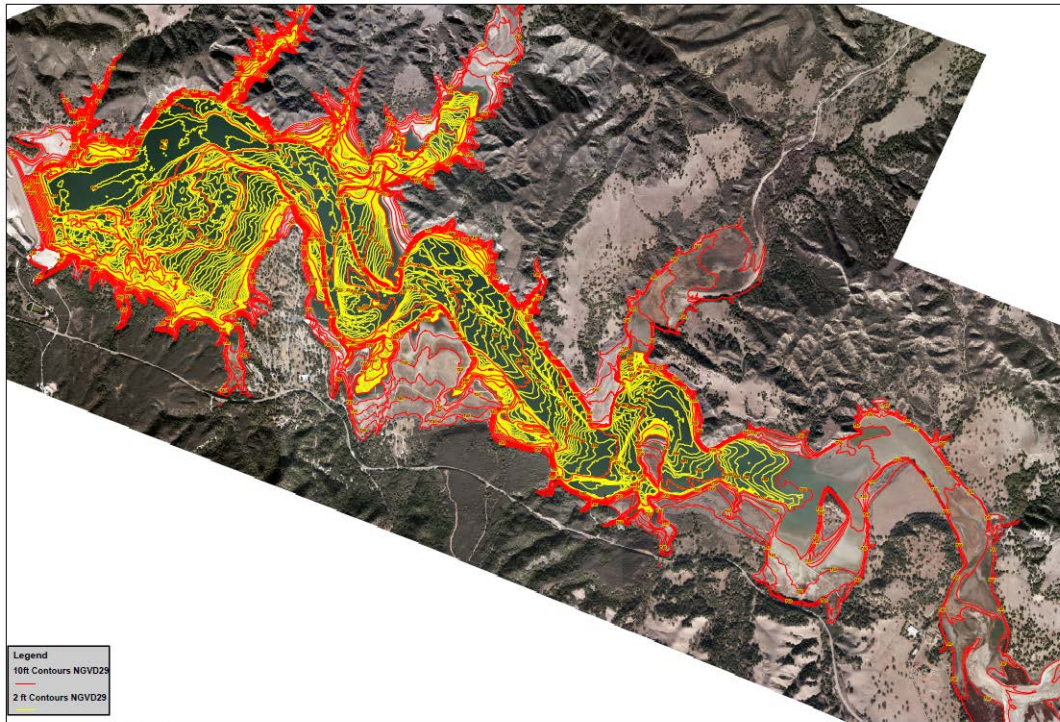
**Board of Directors – County Water Agency
July 12, 2016**

WATER AGENCY INFORMATION

- Cachuma Volume Re-Survey (2013)
- Forecasted Lake Levels
 - Based on given assumptions including water use, Evaporation, State Water Project deliveries, Downstream Releases, Fish Releases
- Cachuma “Mass” Bar Graph
 - Shows Remaining Water in Lake
- Cachuma Member Unit Monthly Water Balances
 - Available Water by Member Unit

2013 CACHUMA VOLUME SURVEY

- Loss of ~2,000 AF since prior Survey (2008)
- Zaca Fire Impacts



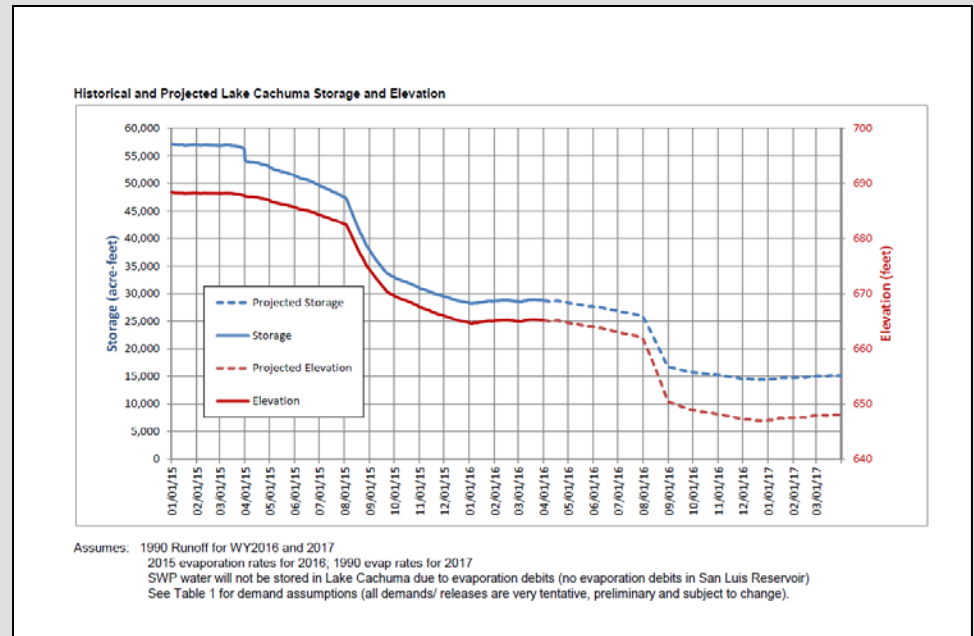
County of Santa Barbara
Public Works Department
Water Agency
Lake Cachuma
Formed by Bradbury Dam
Results of 2013
Survey & Sedimentation Update

This figure is an aerial map of Lake Cachuma with various colored overlays representing sedimentation or volume changes. The colors include blue, purple, green, yellow, and red. A legend in the bottom-left corner of the map area lists '10ft Contours' with corresponding color swatches: blue (10-150), purple (150-200), green (200-250), yellow (250-300), and red (300-350).

Prepared by Wallace Group
Survey Date: December 2013
Report Date: February 17, 2014

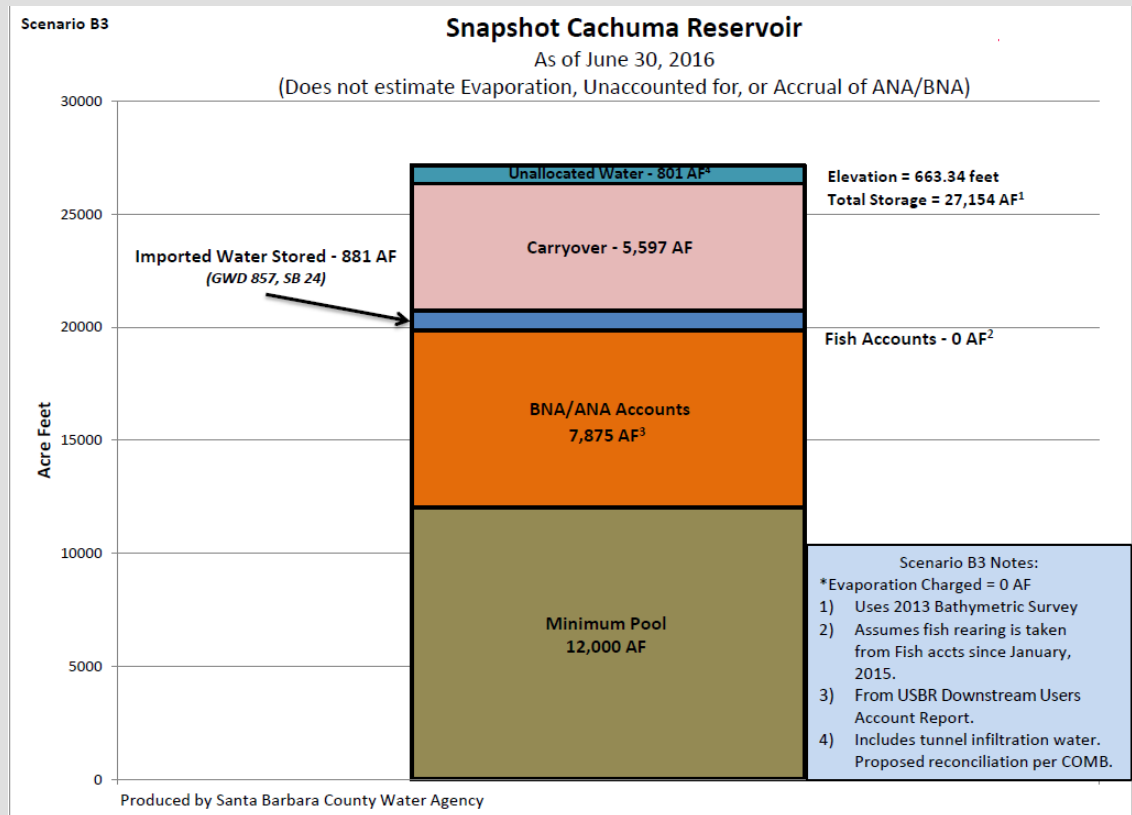
LAKE LEVEL FORECAST MODEL

- Forecasts Lake volume/elevation
- Assumptions
 - SWP Deliveries to Lake
 - Member Unit Diversions
 - Water Rights Releases
 - Fish Releases
 - Evaporation
- Forecasts Water Available
 - Barge Installation
 - Relocation



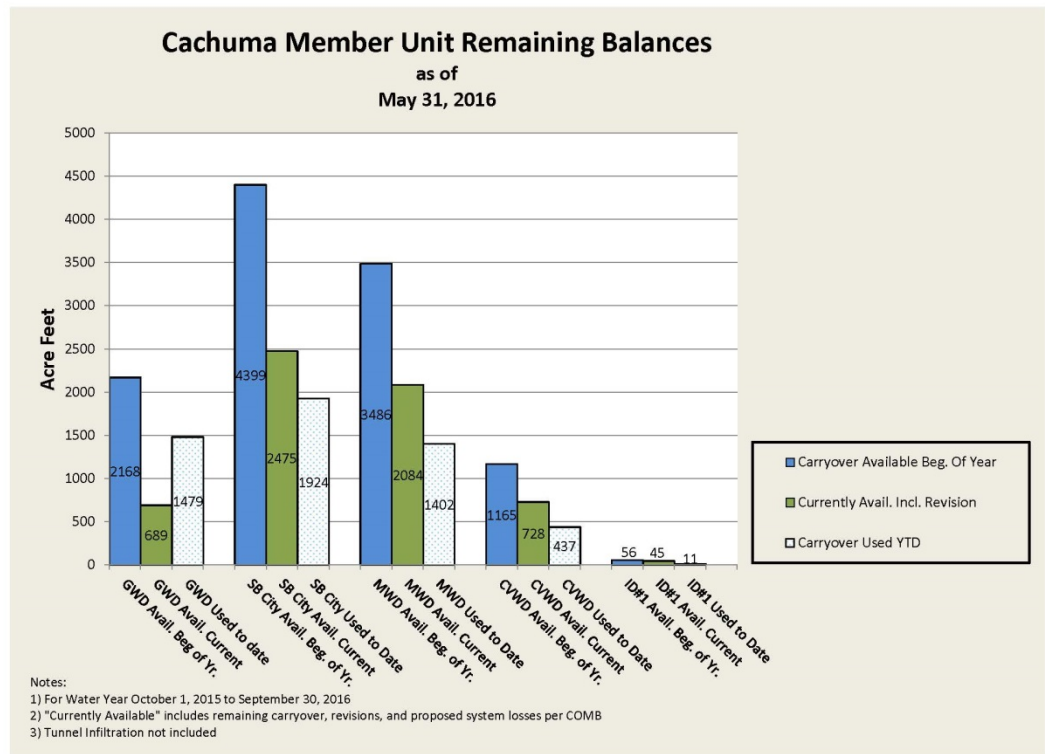
CACHUMA MONTHLY “MASS” BAR GRAPH

- Accounts for Allocated Water
- Shows Actual Water Available
- Monthly



MEMBER UNIT WATER ACCOUNTING

- Graphically Shows Water Available / Used
- Data Source – COMB Reports
- Monthly



CACHUMA SAFE YIELD

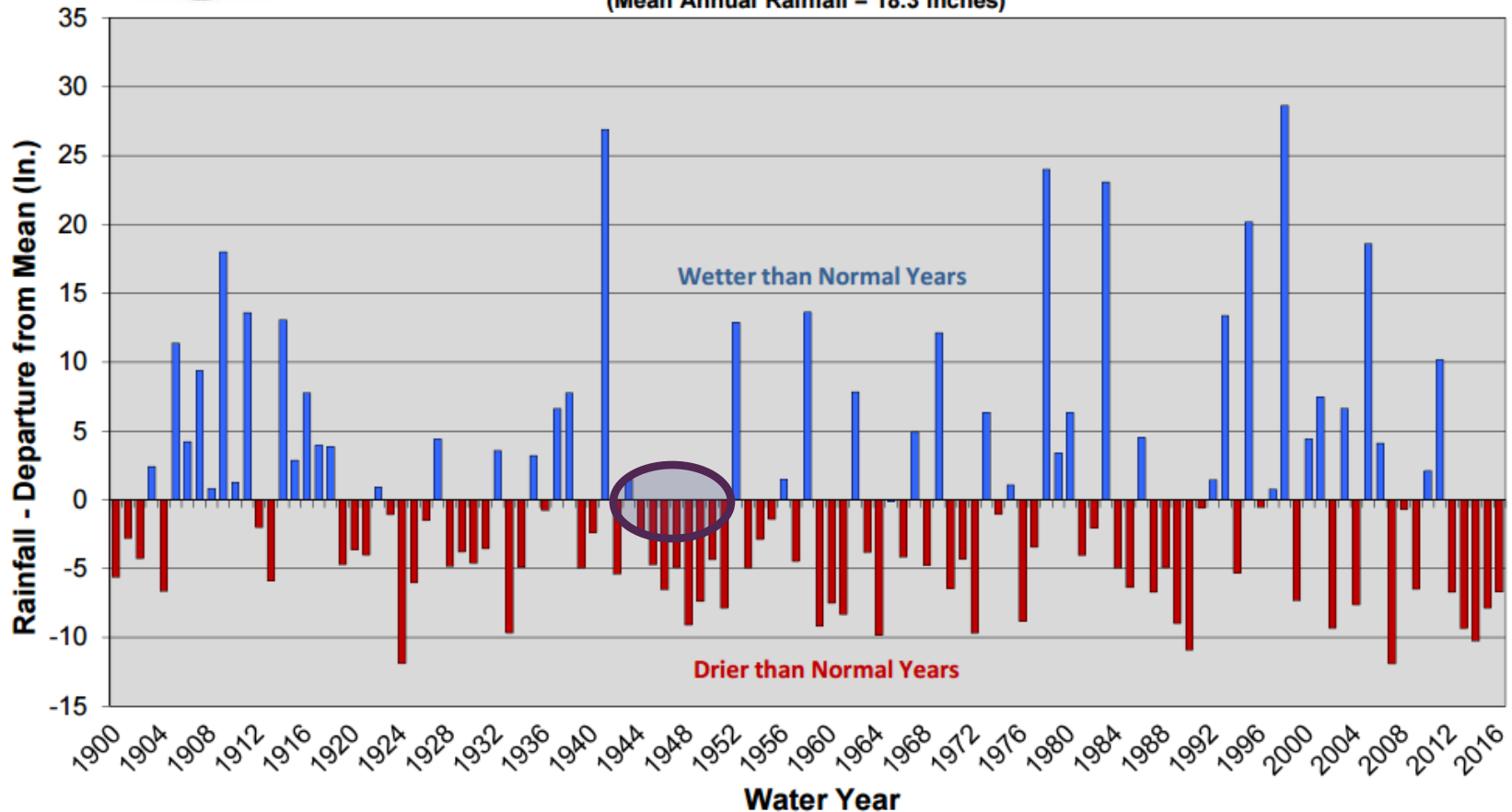
- Initiated Safe Yield Study in 2014
- Not Complete Until New Factors Known:
 - Are we redefining the Critical Drought Period?
 - What will steelhead releases be in the future? (USBR–NMFS Consultation)
 - Downstream Water Rights



CRITICAL DROUGHT PERIOD



**Santa Barbara Rainfall
Departure from the Mean**
1900 - 2016 (thru 6/1/16)
(Mean Annual Rainfall = 18.3 inches)

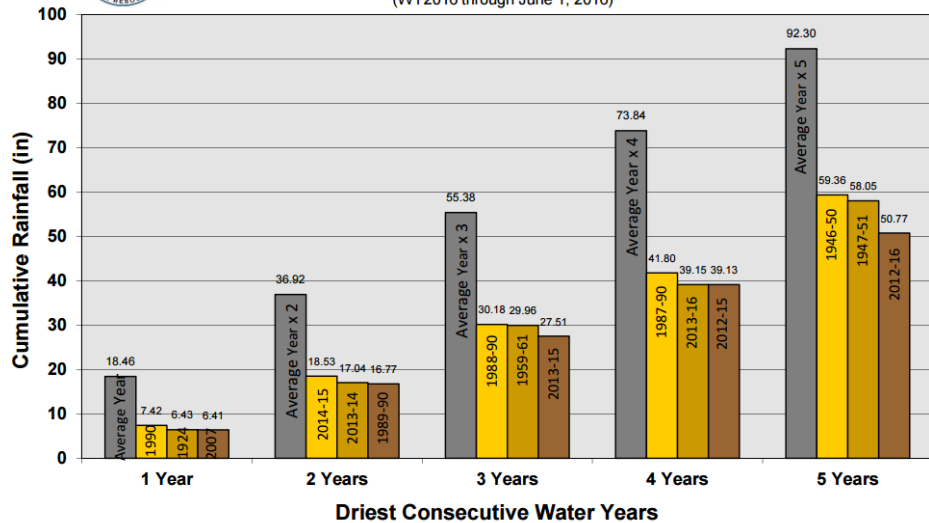


CRITICAL DROUGHT PERIOD (CONT.)



Driest Consecutive Years - Santa Barbara
117 Years of Rainfall (1900-2016)
 (WY2016 through June 1, 2016)

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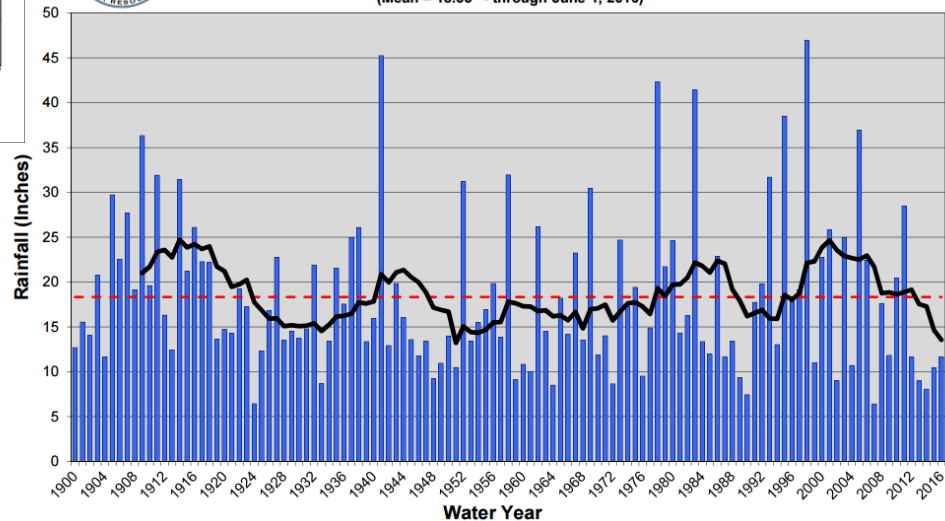


Driest 5 Consecutive Years of Record



Santa Barbara - Rainfall
1900 - 2016 (117 Years)
Annual, Mean, and 10 Year Moving Average
 (Mean = 18.33" - through June 1, 2016)

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CACHUMA WATER SUPPLY CONTRACT

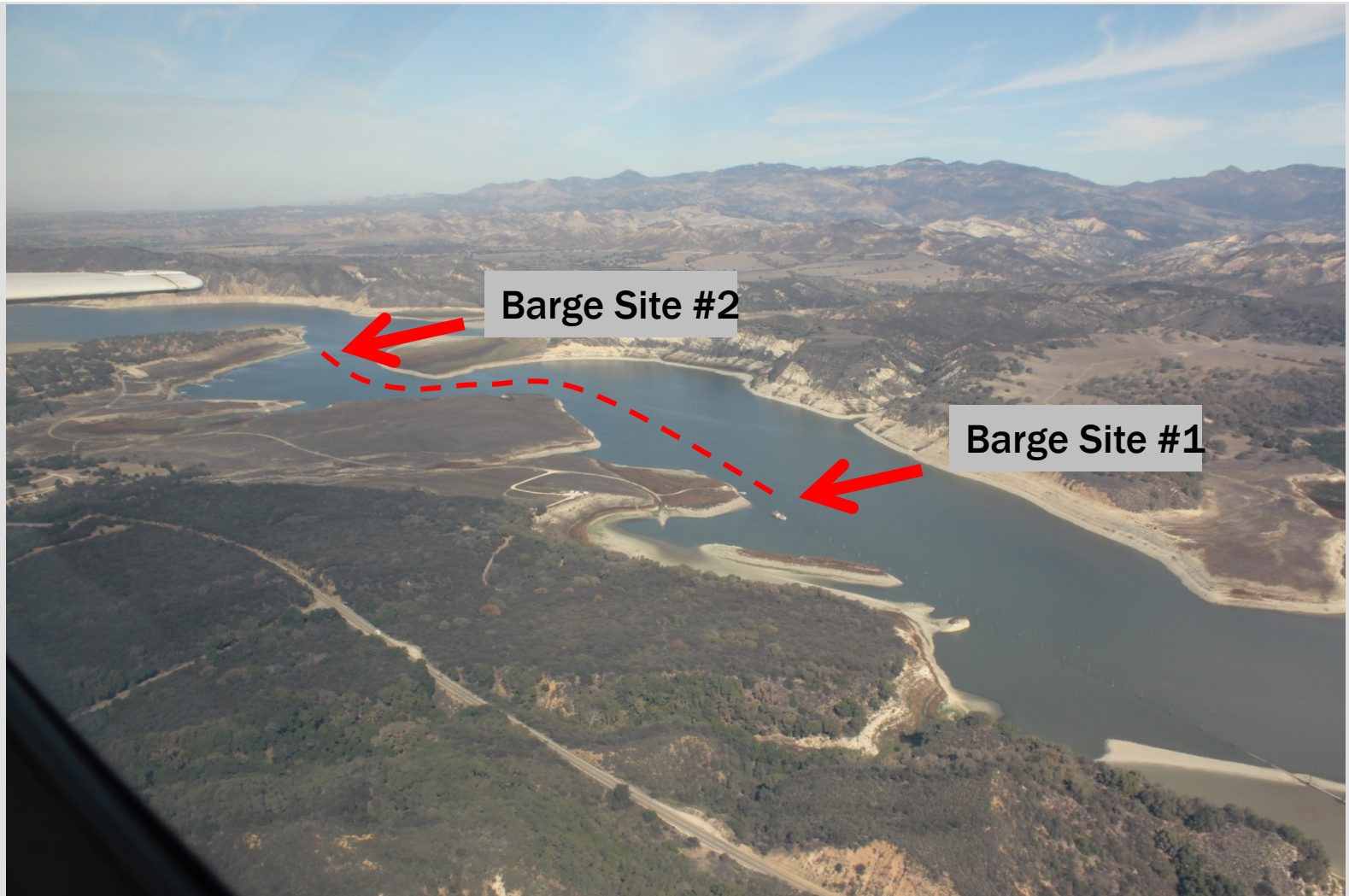
- Current Contract expires September 30, 2020
- Contract requires initiation of new Contract two (2) years prior (2018)
- Water Agency holds current Contract
- Issues include: Stable Water Supply, Downstream Water rights, Environmental, Recreation
- Process is unknown
- Seeking direction to determine course of New Contract and return to the Board for decision.

OTHER ISSUES / UPDATES

- **Fish Releases**
 - USBR reduced releases from 8 AF/day to 4 AF/day in May.
 - New Consultation (USBR–NMFS) underway.
- **Pump Barge**
 - Pump Barge Relocated (deeper water) in June
- **State Water / Imported Water at Capacity (42 AF/day)**
- **2015 Summary of Water Supply Sources**



CACHUMA PUMP BARGE



CACHUMA PUMP BARGE SITE #1



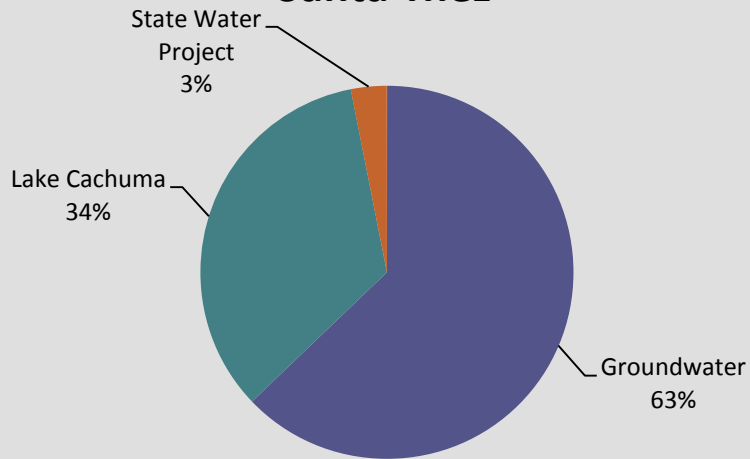
CACHUMA PUMP BARGE SITE #2

07/07/2016 09:57:15
Cachuma_(SB_County_FCD)

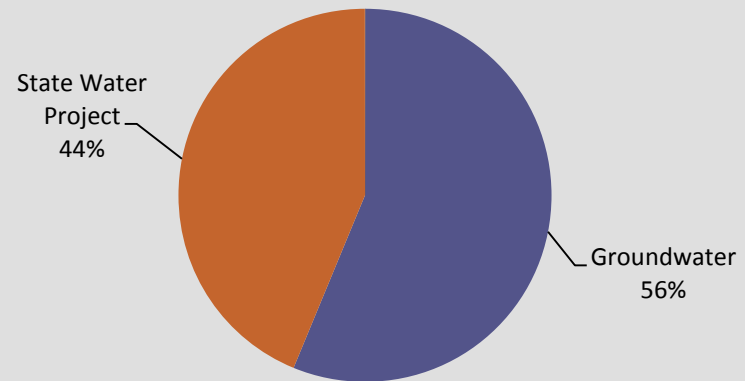


NORTH COUNTY WATER SOURCES (2015)

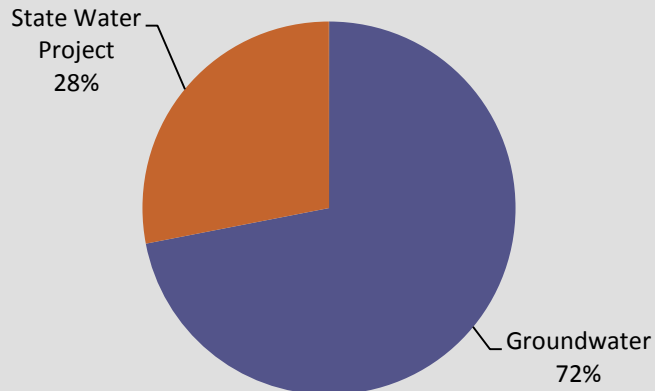
Santa Ynez



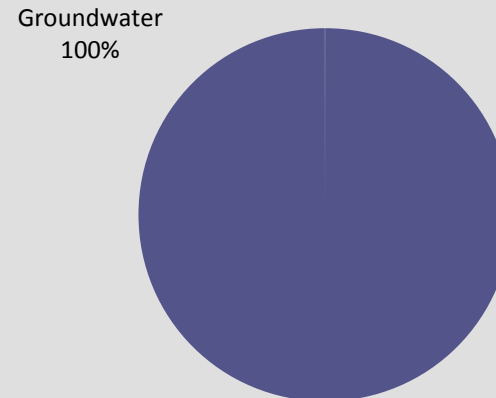
Solvang



Santa Maria

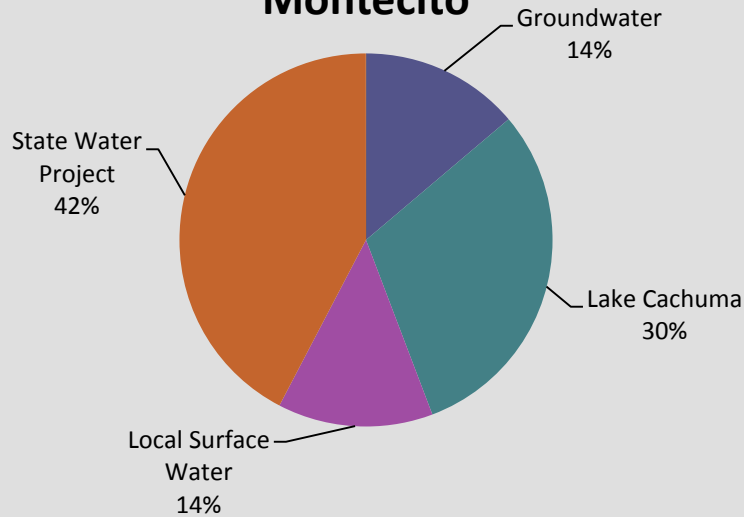


Mission Hills

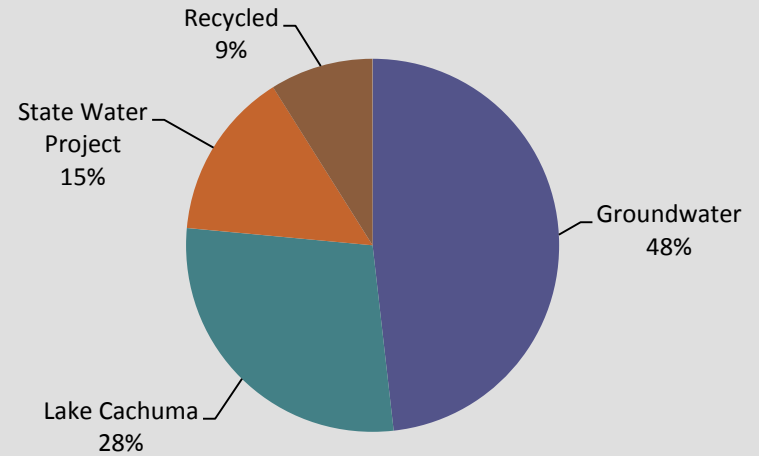


SOUTH COUNTY WATER SOURCE (2015)

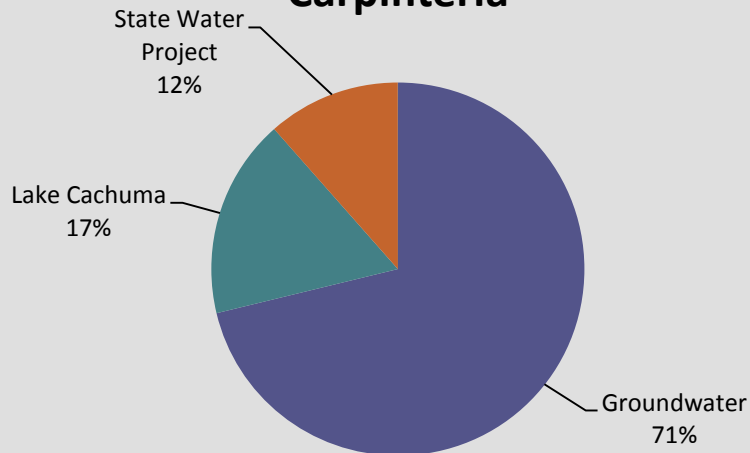
Montecito



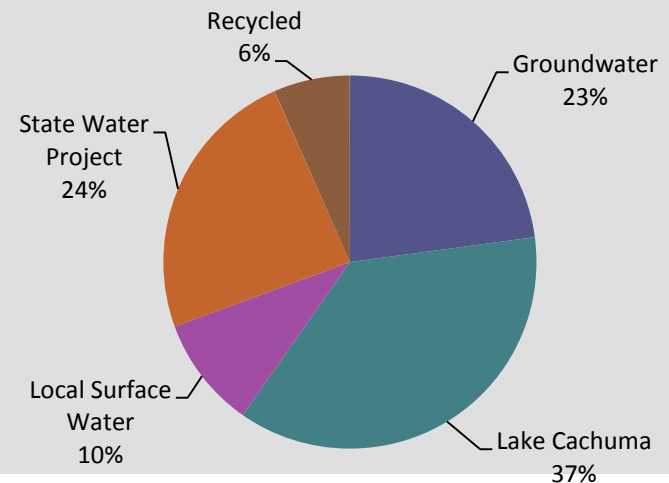
Goleta



Carpinteria



Santa Barbara



COUNTY-WIDE COMBINED WATER SUPPLIES

2015 Water Providers Combined Production

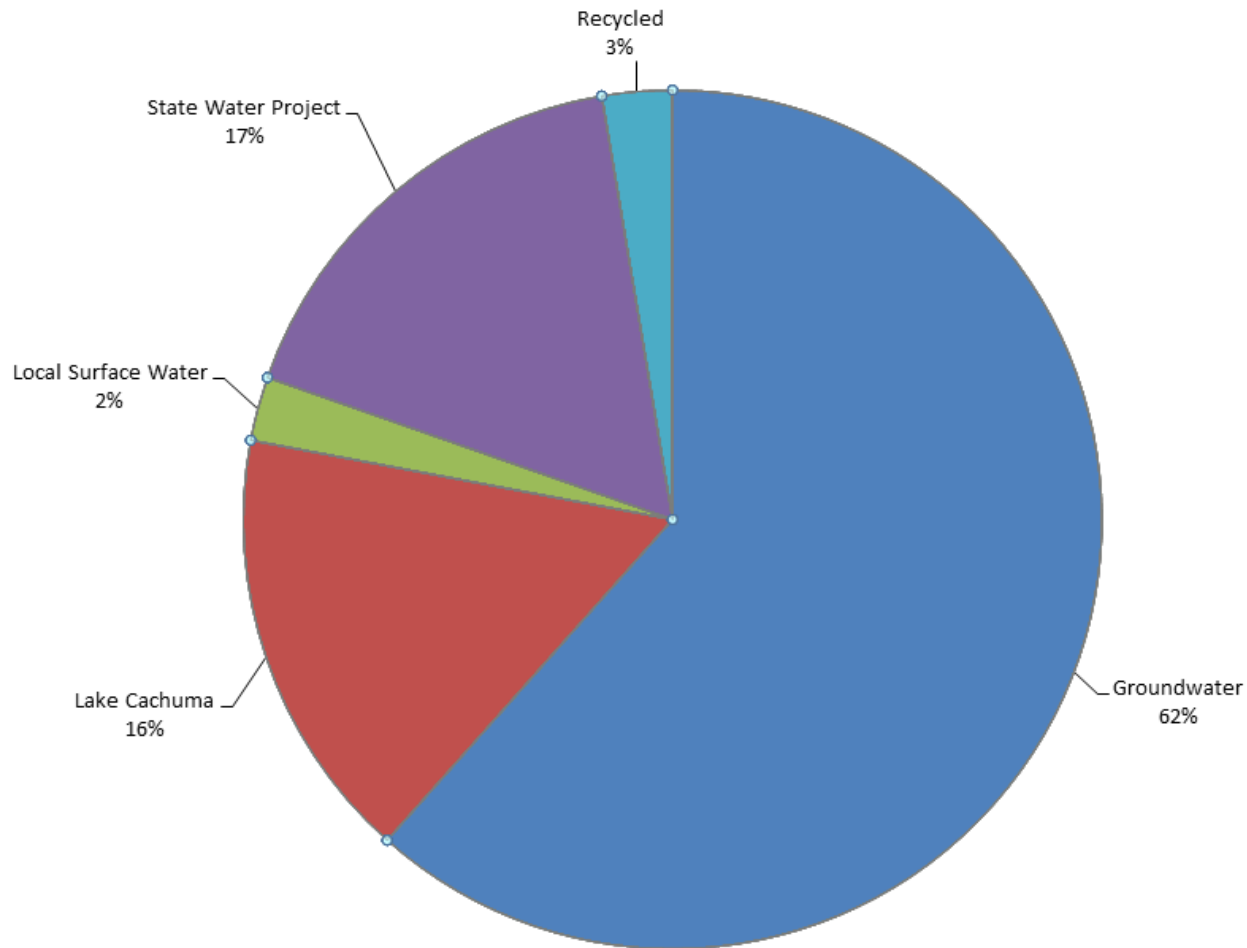


Chart Area

RECOMMENDATIONS

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- An aerial photograph of a large reservoir with a dam in the foreground. The water is a deep blue, and the surrounding land is mostly dry and brown, with some green vegetation on the hillsides. The dam is a long, low structure with a road on top. The reservoir has several smaller bays and inlets.
- Receive and file report
 - Direct staff to contact USBR regarding Contract Renewal Process