



**A JOINT MEETING OF THE OPERATING COMMITTEE  
of the  
CENTRAL COAST WATER AUTHORITY  
and  
SAN LUIS OBISPO COUNTY FLOOD CONTROL AND WATER  
CONSERVATION DISTRICT STATE WATER SUBCONTRACTORS ADVISORY  
COMMITTEE**

will be held immediately following the Regular CCWA Operating Committee

at 10:30 a.m., on Thursday, January 14, 2021

via URL: <https://meetings.ringcentral.com/j/1490813471>

or via telephone by dialing 1(623) 404-9000 and entering code 149 081 3471#

Committee meetings are conducted pursuant to California Government Code Section 54953 and Governor Newsom's Executive Orders (N-25-20, N-29-20 and N-35-20), temporarily suspending portions of the Brown Act in response to the COVID-19 pandemic. Members of the Committees will participate in this meeting by video call or telephone.

Public Comment on agenda items may occur via video call or telephonically, or by submission to the CCWA Board Secretary via email at [lfw@ccwa.com](mailto:lfw@ccwa.com) no later than 8:00 a.m. on the day of the meeting. In your email, please specify (1) the meeting date and agenda item (number and title) on which you are providing a comment and (2) that you would like your comment read into the record during the meeting. If you would like your comment read into the record during the meeting (as either general public comment or on a specific agenda item), please limit your comments to no more than 250 words.

Every effort will be made to read comments into the record, but some comments may not be read due to time limitations. Please also note that if you submit a written comment and do not specify that you would like this comment read into the record during the meeting, your comment will be forwarded to Board members for their consideration.

Pursuant to Government Code section 54957.5, non-exempt public records that relate to open session agenda items and are distributed to a majority of the Committee less than seventy-two (72) hours prior to the meeting will be available on the CCWA internet web site, accessible at <https://www.ccwa.com>.

- I. Call to Order and Roll Call**
- II. Public Comment – (Any member of the public may address the Committees relating to any matter within the Committees' jurisdiction. Individual Speakers may be limited to five minutes; all speakers to a total of fifteen minutes.)**
- III. \* Water Management Strategies Study Stakeholder Presentation and Needs Analysis to Maximize State Water Supplies in Santa Barbara and San Luis Obispo Counties**
  - \* A. Present Draft Needs Assessment Findings
  - B. Present Draft Selection Criteria
  - C. Present Regional Water Management Capability
  - D. Present Introduction to Water Management Components Identification
- IV. Date of Next Regular Meeting:  
April 8, 2021**
- V. Adjournment**

\* Indicates attachment of document to agenda packet

# Water Management Strategies

## Stakeholder Meeting

January 14, 2021

# Agenda



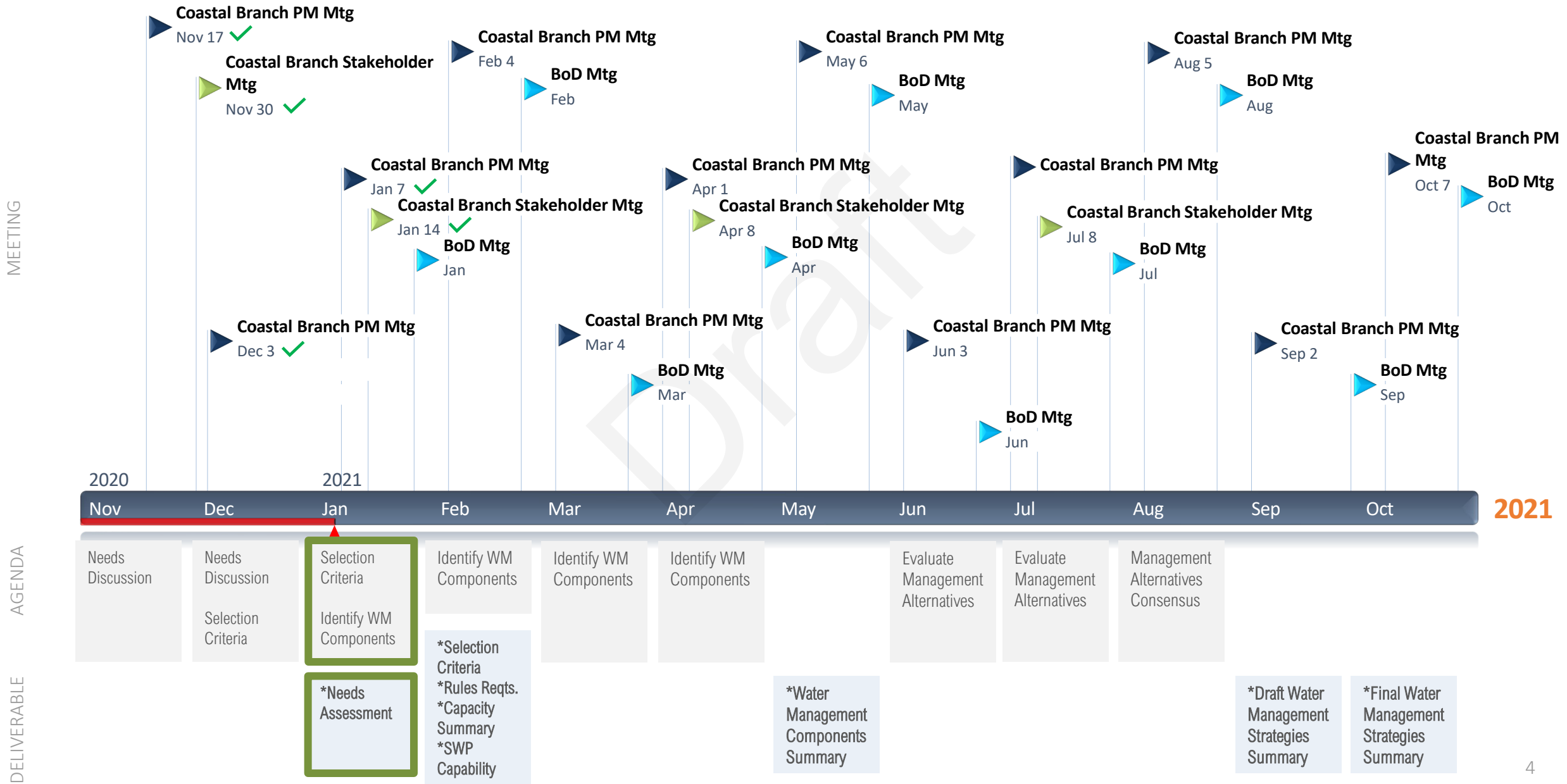
- Introductions
- Purpose and Goals
- Needs Assessment
  - Feedback
- Selection Criteria
  - Feedback
- Regional Capabilities
- Water Management
- Next Steps

# Purpose and Goal

To develop water management strategies to maximize yield of the State Water Project for San Luis Obispo and Santa Barbara counties through an iterative process of stakeholder engagement.



# Water Management Strategies Schedule







# NEEDS ASSESSMENT

# Categories of Needs



# Regions

## Central Coast Water Authority

### North County

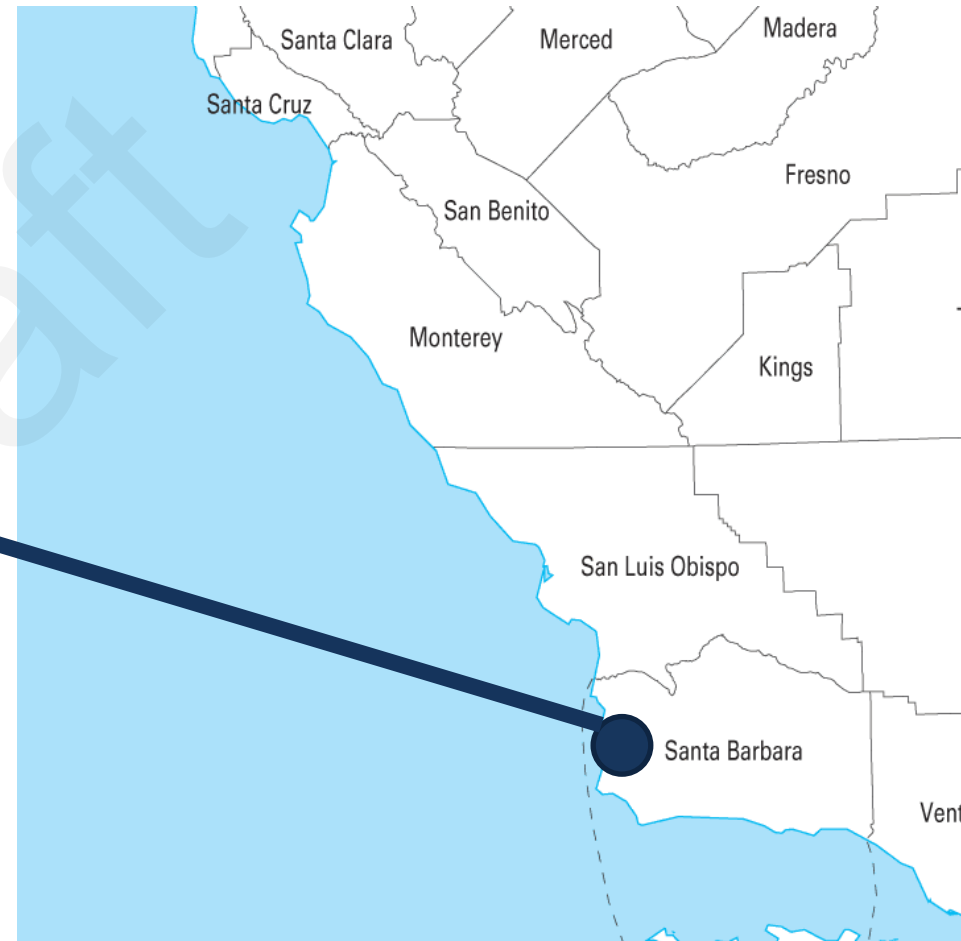
- City of Santa Maria
- Golden State Water Company
- City of Guadalupe

### Mid County

- City of Buellton
- Santa Ynez RWCD, Improvement District #1
- City of Solvang
- Vandenberg Air Force Base

### South Coast

- Goleta Water District
- City of Santa Barbara
- Montecito Water District
- Carpinteria Valley Water District
- La Cumbre Mutual Water Company





# Regions

## San Luis Obispo County Flood Control and Water Conservation District

### North SLO

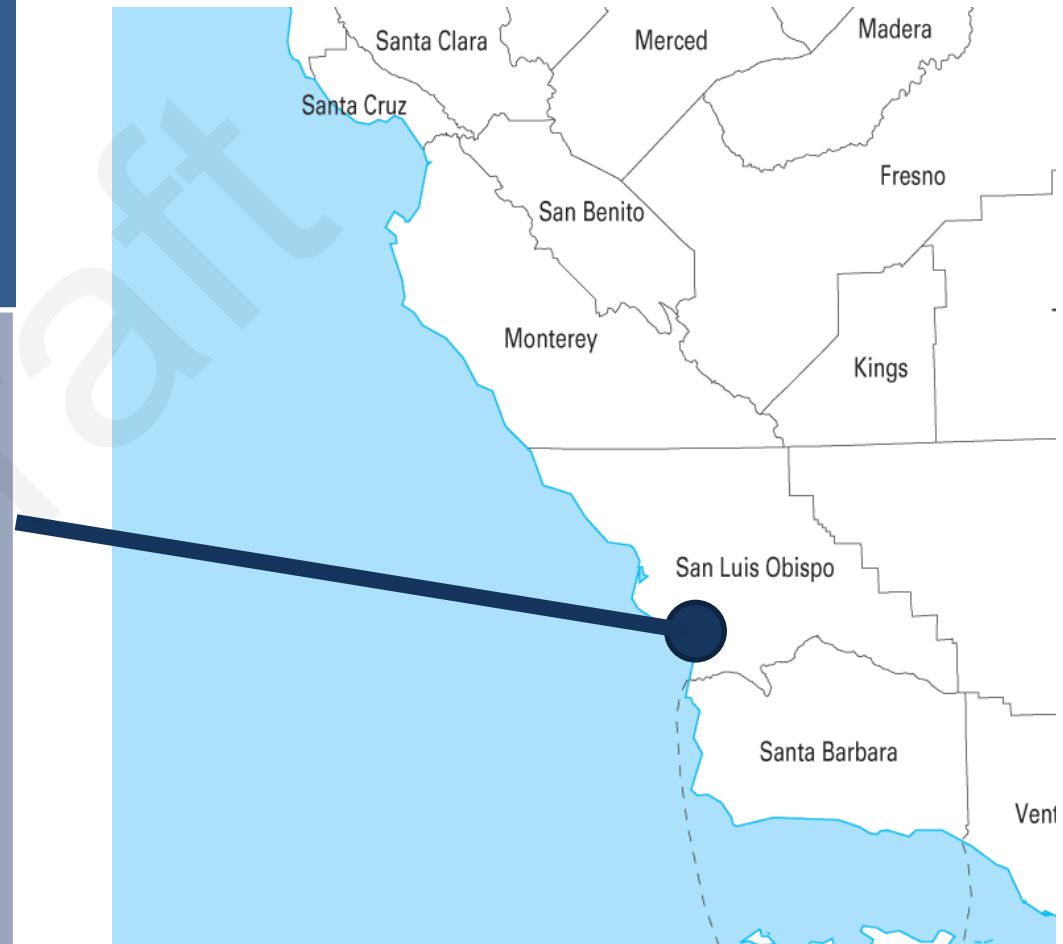
- County of SLO C.S.A. No. 16, I.D. #1 (Shandon)

### Central SLO

- California Men's Colony (State)
- County of SLO (Op Center & Reg. Park)
- City of Morro Bay
- SLO Co. Comm. Coll. District (Cuesta College)

### South SLO

- Avila Beach Community Services District
- Avila Valley Mutual Water Company, Inc
- Oceano Community Services District
- City of Pismo Beach
- San Luis Coastal Unified School District



# CCWA Needs Overview

- KEY:**
- ✓ Information provided by survey response.
  - Information derived from existing reports.
  - ⊗ Information not available.

	NEEDS												
	Supply			Storage and Regulation			Conveyance Capacity			Quality		Other	
	Groundwater	Surface Water	Dry Year Supply	Groundwater Banking	Surface Water Storage	Exchange / Transfer	Aqueduct	Coastal Branch	Other	Groundwater	State Water Project	Cost Control	Others
<b>Central Coast Water Authority</b>												✓	
<b>North County</b>													
■ City of Santa Maria										✓	✓	✓	
⊗ Golden State Water Company	?	?	?	?	?	?	?	?	?	?	?	?	?
■ City of Guadalupe												✓	
<b>Mid County</b>													
⊗ City of Buellton	?	?	?	?	?	?	?	?	?	?	?	?	?
⊗ Santa Ynez RWCD, Improvement District #1	?	?	?	?	?	?	?	?	?	?	?	?	?
■ City of Solvang			✓	✓	✓	✓						✓	
⊗ Vandenberg Air Force Base	?	?	?	?	?	?	?	?	?	?	?	?	?
<b>South Coast</b>													
■ Goleta Water District			✓	✓	✓	✓						✓	
■ City of Santa Barbara			✓	✓	✓	✓						✓	
■ Montecito Water District			✓	✓	✓	✓						✓	
■ Carpinteria Valley Water District			✓	✓	✓	✓						✓	
⊗ La Cumbre Mutual Water Company	?	?	?	?	?	?	?	?	?	?	?	?	?
⊗ Other Potential CCWA Water Users	?	?	?	?	?	?	?	?	?	?	?	?	?

- Cost control and affordability
- Northern need for SWP water quality
- Mid County and South Coast supply need during dry years

# SLO CFWCD Needs Overview

- KEY:**
- ✓ Information provided by survey response.
  - Information derived from existing reports.
  - ✗ Information not available.

	NEEDS												
	Supply			Storage and Regulation			Conveyance Capacity			Quality		Other	
	Groundwater	Surface Water	Dry Year Supply	Groundwater Banking	Surface Water Storage	Exchange / Transfer	Aqueduct	Coastal Branch	Other	Groundwater	State Water Project	Cost Control	Others
<b>San Luis Obispo County Flood Control and Water Conservation District</b>												✓	
<b>North SLO</b>													
■ County of SLO C.S.A. No. 16, I.D. #1 (Shandon)												✓	
<b>Central SLO/Chorro Valley Turn Out</b>													
✓ California Men's Colony (State)	✓	✓		✓	✓	✓						✓	
✓ County of SLO (Op Center & Reg. Park)												✓	
✓ City of Morro Bay												✓	
■ SLO Co. Comm. Coll. District (Cuesta College)												✓	
<b>South SLO/Lopez Turn Out</b>													
✓ Avila Beach Community Services District	✓	✓		✓	✓	✓						✓	
✓ Avila Valley Mutual Water Company, Inc	✓	✓		✓	✓	✓						✓	
■ Oceano Community Services District												✓	
✓ City of Pismo Beach	✓	✓		✓	✓	✓						✓	
✗ San Luis Coastal Unified School District	?	?	?	?	?	?	?	?	?	?	?	?	?
✓ San Miguelito Mutual Water Company	✓	✓		✓	✓	✓						✓	
✗ Other Potential SLO Water Users	?	?	?	?	?	?	?	?	?	?	?	?	?

- North SLO cost control for SWP supplies
- Central and Southern SLO cost control and dry year need



# SELECTION CRITERIA

# Approach

- Subjective application
- Developed by considering both local needs and regional goals
- Proposed selection criteria address the key objectives apart from flood control, infrastructure maintenance and groundwater management
- Groundwater management could be utilized as a management measure but should not be a selection criteria on its own.



# Regional Objectives

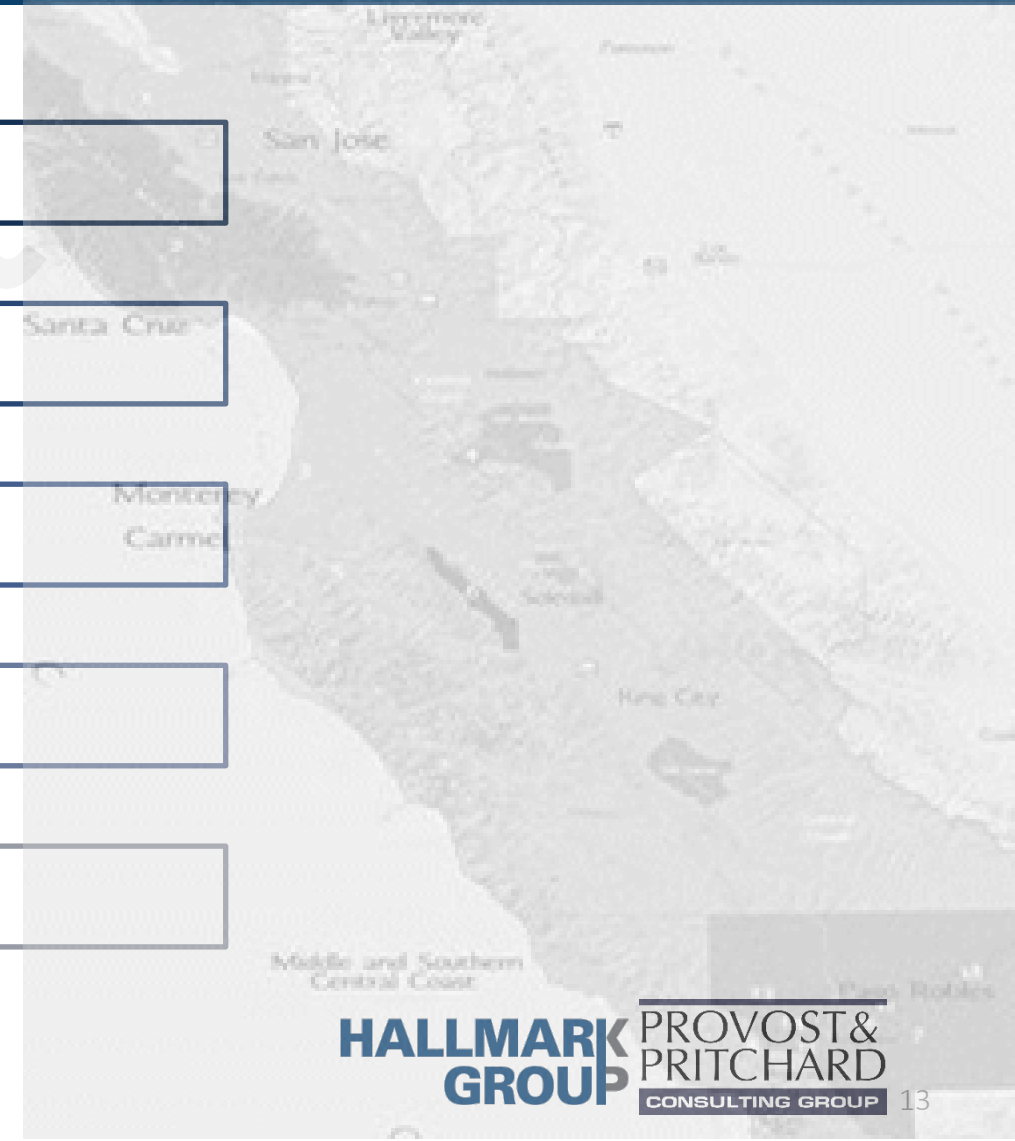
Water Supply

Groundwater Monitoring and Management

Ecosystem and Watershed Goal

Flood Management

Water Resources Management and Communications



# Selection Criteria

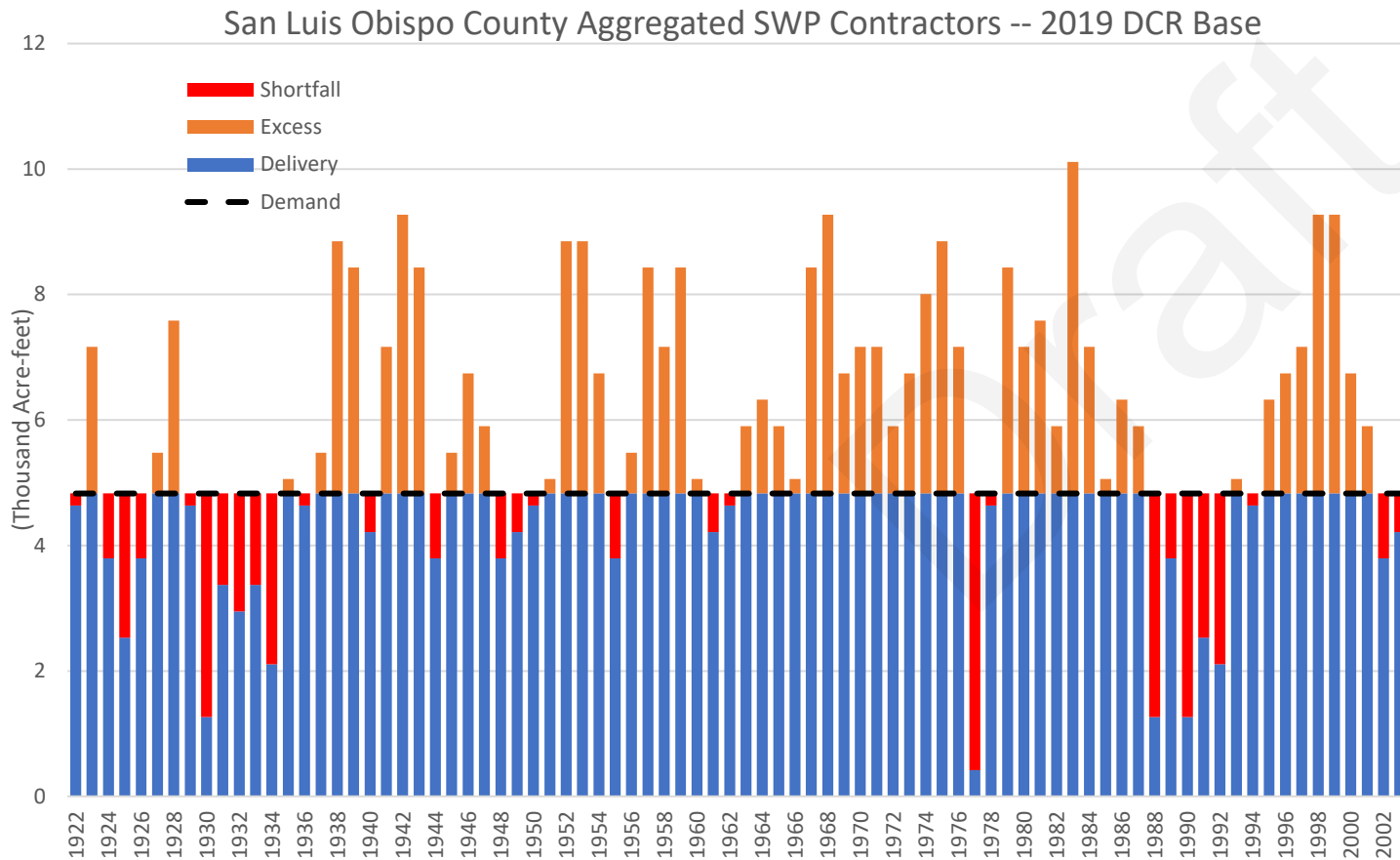
To best determine if a management measure should be implemented

Criteria	Measure	Considerations
Water Supply	acre-feet cubic feet per second	Does the amount of volume or flow satisfy the participant need under a particular condition?
Water Quality	Maximum level and concentration	Is there difference in resulting water supply; how well does water supply meeting water quality needs; are there any negative adverse water quality effects?
Ability to Permit	Weeks	How lengthy and difficult would permitting process be?
Cost	Dollars	Is it affordable for the short term? Long term?
Proximity	Yes or no	Is the measure local or imported? Will it shift supply to a more sustainable/long-term solution?
Equity	Yes or no	Do alternatives maintain or improve DAC and tribal access to adequate water supplies?



# REGIONAL WATER MANAGEMENT CAPABILITIES

# State Water Project Water Management Water Management Needs



- Use 2019 SWP Delivery Capability Report Data
- Limited carryover storage in San Luis Reservoir
- 4,830 AF nominal SLO County SWP demand
- 10,537 AF SLO County SWP Contractor Table A
- SWP supply meets demand about 67% of years

# Water Management Strategy Alternatives

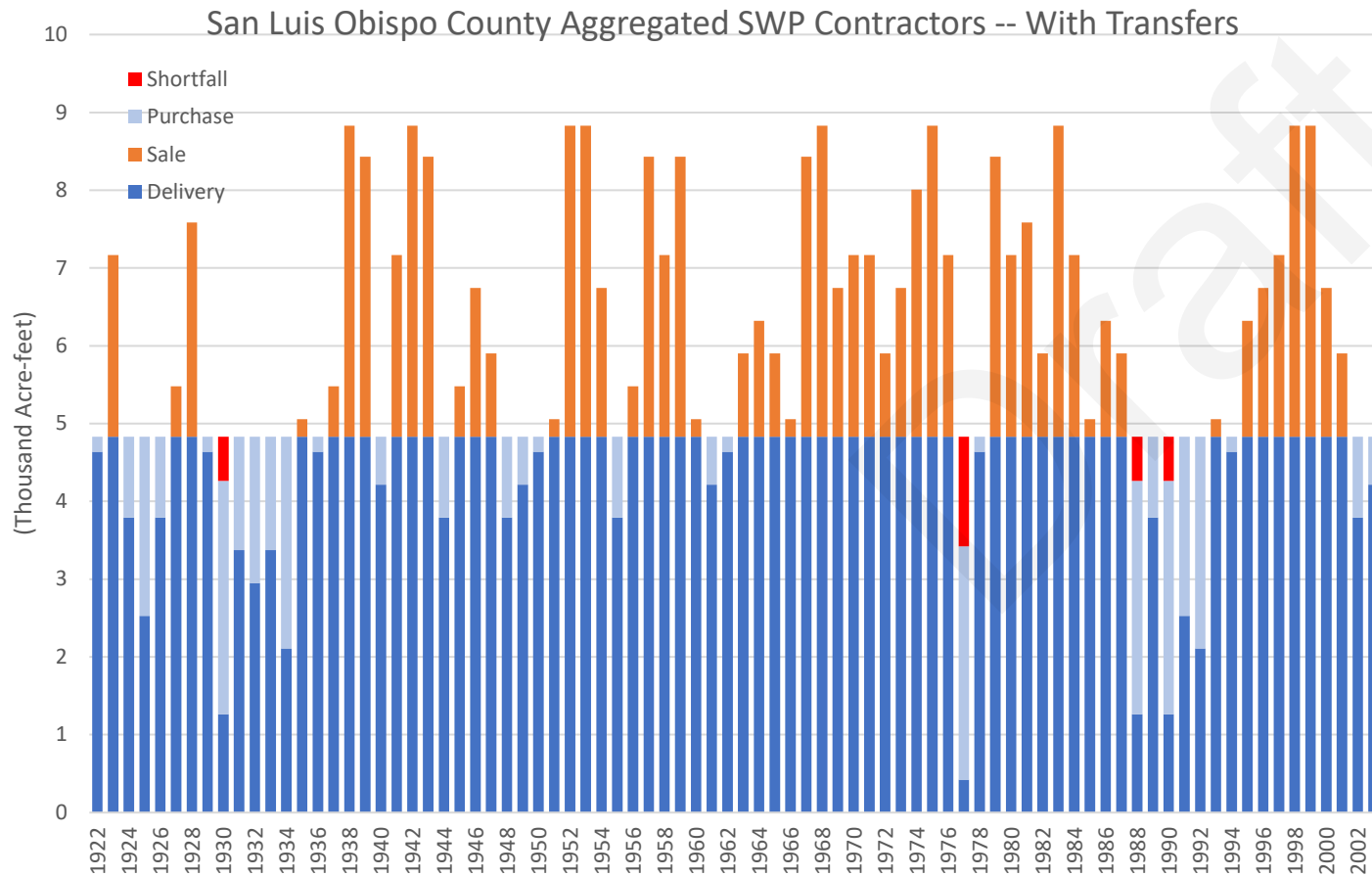
- Transfers
  - Can include sales in wet years and purchases in dry years
  - Focus on SWP Table A, but could also include other supply sources
- Exchanges
  - Water given to another agency in wet years, with return of lesser amount in dry year
- Banking
  - Participate in banking program in groundwater or surface reservoir
- Management Strategy can include combinations of these tools



# Transfers Management Strategy

- Sell “Excess” water in wetter years – generally lower cost
- Purchase water in drier years – generally higher cost
- Provides significant flexibility
- Dry year water transfer availability subject to significant uncertainty and unpredictable (generally high) costs

# Transfer Management Strategy

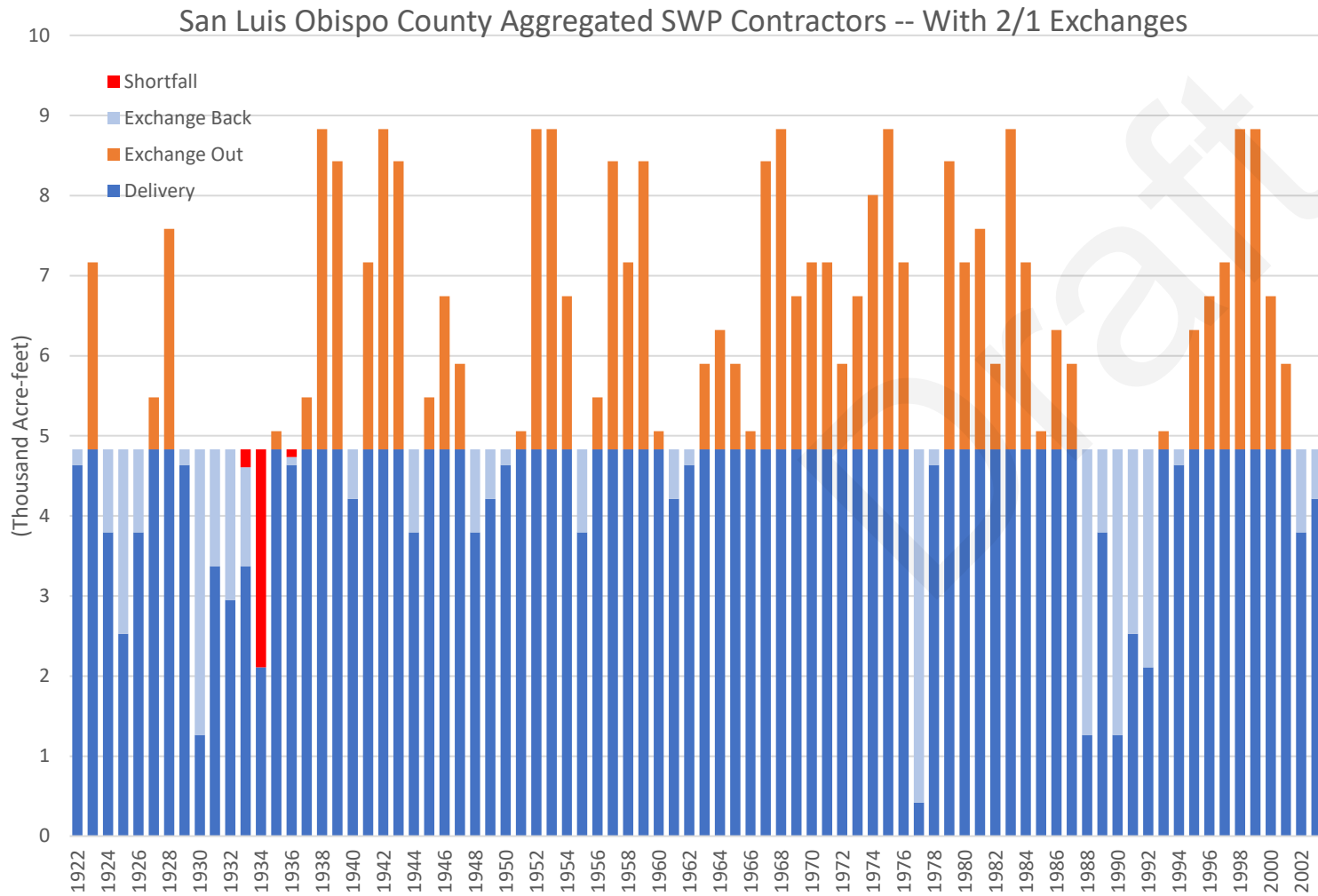


- Includes caps on sales and purchases in single years
- Total net cost likely decision variable
- Difficulty predicting sale or purchase cost
- Retains maximum flexibility
- Hypothetical transfers program meets demand about 95% of years

# Exchange Management Strategy

- Assign “surplus” SWP supply in wet years to Exchange Partner
- Recover a share of exchange in dry years
- Exchange ratios and costs subject to caps per new SWP Water Management Tools Amendment
- Agencies without storage capabilities likely to use exchanges as tool to obtain additional dry year water – Typical Central Coast scenario
- Agencies with storage capability can use exchanges as tool to obtain either additional wet year water

# Exchange Management Strategy



- Hypothetical exchange includes 1:2 return
- Assume initial 20,000 acre-feet already exchanged
- Costs and return ratios defined in agreement
- Dry year return capability needs verification
- Hypothetical exchange program meets demand about 97% of years

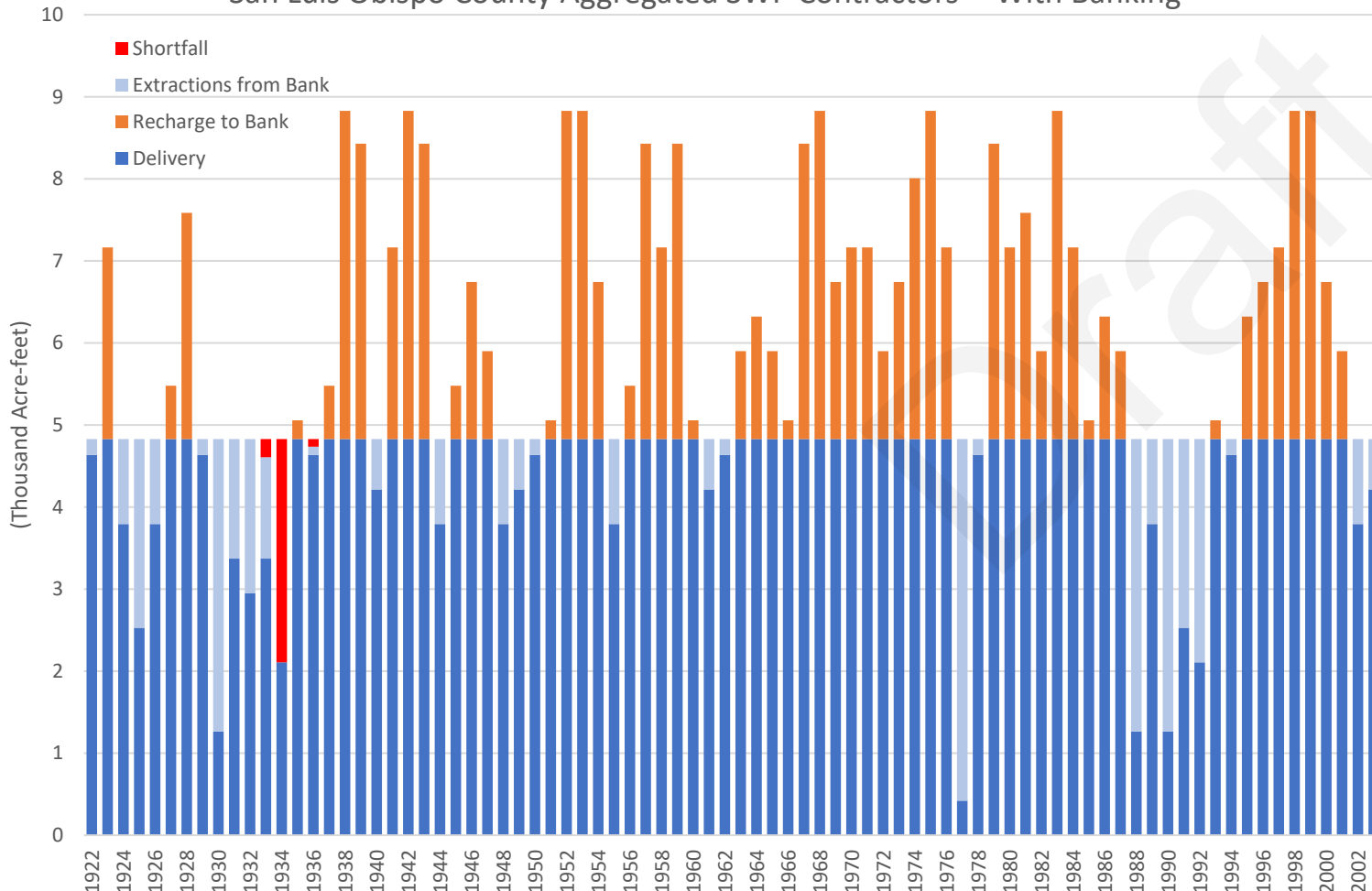
# Banking Management Strategy

- Store “surplus” SWP supply in storage bank (normally groundwater) in wet years
- Supplies subject to defined loss (typically 10-25%, but can be higher)
- Storer pays for operational costs and share of project development costs



# Banking Management Strategy

San Luis Obispo County Aggregated SWP Contractors -- With Banking



- Hypothetical banking program with 40% losses
- Assume initial 10,000 acre-feet already stored
- Dry year return capability needs verification
- Hypothetical banking program meets demand about 97% of years

# State Water Project Management Strategy

## Water Management Alternatives

- Identify specific water management alternatives
- Initial list developed based on current and expected projects
- Water management alternatives continually subject to change
- Exchange and Banking program costs and parameters defined in program agreements
- Identify typical Central Coast SWP contractor management needs

# State Water Project Management Strategy

## Initial Water Management Alternatives

- Transfers
  - Extremely variable from year to year
- Exchanges
  - Numerous exchange programs in Kern County
- Banking Programs
  - AVEK Hi Desert Water Bank
  - Aquaterra (Mid Valley) Water Bank
  - Rosedale-Rio Bravo WSD Water Bank
  - Sites Reservoir (North of Delta)
  - Other Programs in development

# Next Steps



Refine Needs Assessment

Refine Selection Criteria

Develop Rules/Capacity/ SWP  
Capability Summary

Engage Stakeholders as needed for  
input

# Contacts

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## › COASTAL BRANCH

Water Management Strategies Development  
Draft Needs Assessment

January 7, 2021

**HALLMARK  
GROUP**

**PROVOST &  
PRITCHARD**  
CONSULTING GROUP

## INTRODUCTION

The Coastal Branch State Water Project (SWP) contractors (Contractors) include a broad group of SWP Table A water users who are seeking to optimize their use of SWP supplies while meeting their overall water supply needs and financial goals. The Contractors include all existing or potential users of SWP Table A water in both San Luis Obispo and Santa Barbara counties. A thorough evaluation of both the variety of water management opportunities and the strategies available to the Contractors to achieve those opportunities begins with a Needs Assessment of the specific needs of each of the Contractors. This initial Needs Assessment provides the basis for evaluating the ability of potential programs to meet identified needs.

### General Categories of Needs

The specific needs of the Contractors fall into a number of categories including water supply, water storage and regulation, conveyance capacity, water quality, and other needs such as cost control. The following sections describe the general categories of needs that have been identified among the Contractors.

#### I. Water Supply – access and availability of an amount of water

In a broad sense, the basic water supply need of each Contractor is straightforward. Simply stated, each Contractor needs to have sufficient water to meet the demands of their service area. However, the specific water supply needs of the Contractors are quite varied as they each seek to optimize the use of the groundwater and surface water supplies uniquely available to them to meet their local demand in the near term and the foreseeable future.

A common need among many Contractors is to adapt to the decline in the long-term availability of the historic groundwater supplies that have provided a baseline supply for their service areas. This could be a result of several factors including implementation of Groundwater Sustainability Plans (GSP) under the Sustainable Groundwater Management Act (SGMA), adjudication decisions, or simply increased demand in the area resulting in groundwater extractions that exceed the safe yield of a basin.

Surface water supply needs relate to access and availability. Some contractors have little or no access to surface water and are considering acquiring new or additional surface supplies to meet their demand shortfalls. Other Contractors with substantial surface water supplies are considering programs that would increase their current access to surface water to meet demands.

There are also situations where a Contractor has plenty of surface water to meet demands, but those supplies are not available at the same time they are demanded. For example, in a wet year, a contractor may have access to more SWP water than they can use in their service area. However, in a dry year, that same Contractor could be short on SWP supplies because of low yield on the SWP.

#### II. Water Storage Options (Homes) – places or programs to store or regulate surface water supplies

When assessed on an average annual yield basis, a Contractor's access to SWP supplies may appear sufficient. However, when actual annual water supply variations are considered, the Contractor will often have inadequate water supply in dry years. Contractors facing these dry-year water supply shortages, who currently lack storage options, may need to develop new "homes" for their water in the wet years to provide supply regulation between wet and dry years. These new "homes" for water allow for the wet-year water to be stored and then returned at a later date to meet future dry-year needs in the Contractor service area.

Water Storage Options (Homes) are places or programs to store or regulate surface water supplies. The most common water storage options are groundwater banks and surface water reservoirs. Both of these types of physical storage facilities require permitting, design, construction, and operation costs. Contractual arrangements, such as exchanges and transfers, can provide homes to surface water in much the same way as physical facilities. An exchange is a contractual arrangement where water is delivered from one SWP water Contractor to another SWP water Contractor for use within their service area. The receiving Contractor then returns some agreed portion of that water in a future year. Transfer agreements can be used similarly, with water sold in wet years when it cannot be directly used and purchased in dry years when it is needed. Unlike physical facilities which require construction, these contractual regulation programs do not require construction of new physical facilities, however they do require permitting and can incur some operating costs.

### III. Conveyance Capacity – facilities and rights that enable water supply to be delivered on a desired schedule

Contractors need assured access to sufficient capacity in the water conveyance facilities to deliver water to their service area or regulatory program facilities. This conveyance capacity is necessary whether they have sufficient surface water supplies to meet their demands or are considering programs to acquire additional surface water supplies. Some Contractors may have sufficient rights to conveyance capacity in existing facilities to accommodate their future needs and to implement any necessary regulatory programs. Other contractors may need to acquire the conveyance capacity that they lack from other entities that have surplus capacity in those existing facilities. Contractors may need to acquire the use of capacity in the California Aqueduct, the Coastal Branch, or existing local conveyance facilities.

Where capacity in existing conveyance facilities is insufficient or unavailable, those facilities may need to be expanded or new facilities may need to be constructed. Contractors will need to evaluate the feasibility and cost effectiveness of these more capital-intensive options to meet their conveyance capacity needs.

### IV. Water Quality – measure of factors relating to purpose of water

Some Contractors rely on the relatively high quality of SWP water to improve the quality of water in local groundwater basins. These Contractors need to be certain that such water quality improvements, realized through the importation and recharge of SWP supplies, continue into the future to ensure compliance with a variety of regulatory compliance programs.

The SWP supply is an important source of drinking water for a large portion of the Contractors' service areas. Contractors using the SWP to meet drinking water demands need to be certain that SWP deliveries will be of sufficiently high quality to meet their long-term drinking water demands without incurring inordinately high treatment costs.

## V. Cost Control – affordability and financial relief

Participation in the SWP, and supporting regional or local conveyance facilities, comes with significant costs to the participating Contractors. In some circumstances, individual Contractors have had a difficult time paying current SWP costs and have identified an inability to absorb all the anticipated cost increases expected in the future. All Contractors are concerned with the rate of cost increase for the development, operation and maintenance of local water supply. There is a need to identify an implementable strategy for addressing such a financial shortfall in much the same fashion that a water supply optimization strategy is required for a supply shortfall.

## VI. Other Needs – unique to individual Contractors

While this needs assessment identifies the categories of needs that are common to all or a significant group of the Contractors, the needs assessment recognizes that in addition to these common needs, there may be unique needs for individual Contractors that must be considered in order to develop a SWP water supply optimization strategy that benefits each Contractor. Those types of needs can be varied. Unique needs of individual Contractors could include considerations such as unique regulatory compliance assistance or promotion of local stakeholder interests.

## Stakeholder Needs Assessment

Each Contractor was asked to complete a Needs Assessment survey. All completed surveys from responding Contractors are included in Appendix C. In addition, a number of previous reports, studies and other documents were compiled into a summary of Contractor Needs, which can be found in Appendix A. Appendix B presents a summary of the needs identified by the individual Contractors (where a survey was completed by the Contractor) or identified in the various resources listed in Appendix A. Key findings of the Needs Assessment review are summarized in the following sections of Central Coast Water Authority and San Luis Obispo County, each with three sub-sections.

### I. Central Coast Water Authority

Since the Central Coast Water Authority serves as a wholesaler of SWP water to its member agencies, it has no additional water supply demands apart from those of its subcontractors. Despite having no direct water supply needs, CCWA does share a common need with all of its subcontractors, which is the need for cost control. Like all water agencies, CCWA consistently looks for means to reduce costs to all of its stakeholders. Examining opportunities to increase affordability of SWP supplies and reduce costs for stakeholders will continue to be a need for CCWA, as well as for all CCWA member units. The three subgroups of member agencies within the Central Coast Water Authority are North County, Mid County, and South Coast.

- a. North County
  - i. City of Santa Maria
  - ii. Golden State Water Company
  - iii. City of Guadalupe

The City of Santa Maria is the largest single contractors for SWP in CCWA. The City identified a significant need to protect or improve the quality of SWP water that is delivered to their service area. The City relies on the quality of the SWP supplies to enable it to comply with wastewater discharge permits and other regulatory

requirements in their groundwater basin. The City of Guadalupe highlighted their need for cost control.

- b. Mid County
  - i. City of Buellton
  - ii. Santa Ynez RWCD, Improvement District #1
  - iii. City of Solvang
  - iv. Vandenberg Air Force Base

In the Mid County portion of CCWA the Santa Ynez RWCD identified a need for additional water supplies to meet demands during dry years. Contractors that identified a similar need for dry year supplies were also assumed to have the need to consider the implementation of storage programs to meet that dry year supply need.

- c. South Coast
  - i. Goleta Water District
  - ii. City of Santa Barbara
  - iii. Montecito Water District
  - iv. Carpinteria Valley Water District
  - v. La Cumbre Mutual Water Company

All Contractors in the South Coast portion of CCWA also identified a need for dry year supplies.

## II. San Luis Obispo County Flood Control and Water Conservation District

The three geographic subgroups within San Luis Obispo County Flood Control and Water Conservation District are North SLO, Central SLO/Chorro Valley Turn Out and South SLO/Lopez Turn Out.

- a. North SLO:
  - i. County of SLO C.S.A. No. 16, I.D. #1 (Shandon)

The County of SLO identified that it had adequate supplies to meet the long term demands within C.S.A. No. 16 and I.D. #1 (Shandon), however it did identify a need for cost control associated with the SWP supplies allocated to these areas.

- b. Central SLO/Chorro Valley Turn Out:
  - i. California Men's Colony (State)
  - ii. County of SLO (Op Center & Reg. Park)
  - iii. City of Morro Bay
  - iv. SLO Co. Comm. Coll. District (Cuesta College)

The California Men's Colony was the only Contractor in the Central SLO region to have an identified need for additional water during dry years. All of the Contractors in this region share the same need as all of the Contractors for cost control.

- c. South SLO/Lopez Turn Out:

- i. Avila Beach Community Services District
- ii. Avila Valley Mutual Water Company, Inc
- iii. Oceano Community Services District
- iv. City of Pismo Beach
- v. San Luis Coastal Unified School District
- vi. San Miguelito Mutual Water Company

With the exception of Oceano Community Services District, all of the Contractors in the South SLO region of the SLOFCD have a need for additional water supplies during dry conditions. All of the Contractors in this region also share the same need as the rest of the Contractors for cost control.

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## APPENDIX A

Resource documents utilized to further inform the needs assessment are listed below:

1. Paso Robles Groundwater Subbasin Water Banking Feasibility Study 2008
2. San Luis Obispo County IRWM Plan 2019
3. San Luis Obispo County Flood Control and Water Conservation District SWP Water Delivery Operations – 2020 Update & 2021 Schedule
4. County of San Luis Obispo Regional Water Infrastructure Resiliency Plan
5. Draft Existing Data and Analysis Memorandum 2020
6. City of Solvang Integrated Water Supply Management Plan 2018
7. Santa Barbara County Integrated Regional Water Management Plan Update 2019
8. Paso Basin GSP Appendix I: Water Supply

Draft



**APPENDIX B: NEEDS ASSESSMENT SUMMARY**

The table below represents a summary of the regional needs as provided by survey response, and existing reports. Several areas, as noted below, did not provide sufficient information to include in the summary.

**KEY:**

- ✔ Information provided by survey response.
- Information derived from existing reports.
- ✘ Information not available.

	NEEDS												
	Supply			Storage and Regulation			Conveyance Capacity			Quality		Other	
	Groundwater	Surface Water	Dry Year Supply	Groundwater Banking	Surface Water Storage	Exchange / Transfer	Aqueduct	Coastal Branch	Other	Groundwater	State Water Project	Cost Control	Others
<b>Central Coast Water Authority</b>													✔
<b>North County</b>													
■ City of Santa Maria										✔	✔		✔
✘ Golden State Water Company	?	?	?	?	?	?	?	?	?	?	?	?	?
■ City of Guadalupe													✔
<b>Mid County</b>													
✘ City of Buellton	?	?	?	?	?	?	?	?	?	?	?	?	?
✘ Santa Ynez RWCD, Improvement District #1	?	?	?	?	?	?	?	?	?	?	?	?	?
■ City of Solvang			✔	✔	✔	✔							✔
✘ Vandenberg Air Force Base	?	?	?	?	?	?	?	?	?	?	?	?	?
<b>South Coast</b>													
■ Goleta Water District			✔	✔	✔	✔							✔
■ City of Santa Barbara			✔	✔	✔	✔							✔
■ Montecito Water District			✔	✔	✔	✔							✔
■ Carpinteria Valley Water District			✔	✔	✔	✔							✔
✘ La Cumbre Mutual Water Company	?	?	?	?	?	?	?	?	?	?	?	?	?
✘ Other Potential CCWA Water Users	?	?	?	?	?	?	?	?	?	?	?	?	?
<b>San Luis Obispo County Flood Control and Water Conservation District</b>													✔
<b>North SLO</b>													
■ County of SLO C.S.A. No. 16, I.D. #1 (Shandon)													✔
<b>Central SLO/Chorro Valley Turn Out</b>													
✔ California Men’s Colony (State)		✔	✔	✔	✔	✔							✔
✔ County of SLO (Op Center & Reg. Park)													✔
✔ City of Morro Bay													✔
■ SLO Co. Comm. Coll. District (Cuesta College)													✔
<b>South SLO/Lopez Turn Out</b>													
✔ Avila Beach Community Services District		✔	✔	✔	✔	✔							✔
✔ Avila Valley Mutual Water Company, Inc		✔	✔	✔	✔	✔							✔
■ Oceano Community Services District													✔
✔ City of Pismo Beach		✔	✔	✔	✔	✔							✔
✘ San Luis Coastal Unified School District	?	?	?	?	?	?	?	?	?	?	?	?	?
✔ San Miguelito Mutual Water Company		✔	✔	✔	✔	✔							✔
✘ Other Potential SLO Water Users	?	?	?	?	?	?	?	?	?	?	?	?	?

APPENDIX C: SURVEY RESULTS TABLE

Draft

Coastal Branch Needs Assessment Survey

Questions	10	9	8	7	6	5	4	3	2	1
Agency	City of Santa Barbara	Carpinteria Valley Water Distric	Cuesta College	Oceano Community Services District	Montecito Water District	San Luis Obispo County Public Works Department	City of Santa Maria	City of Solvang	City of Guadalupe	Goleta Water District
2020 Demand	10190	4000	200	720	4250	The County's consumption records show a water consumption of 77 acre feet for fiscal year 2019-2020.	13000	1355	1050	10950
2030 Demand	14376	4200	200	1107	4366 per MWDs 2015 UWMP	According to the data from the 2012 Shandon Community Plan, Shandon's population grew at an average annual rate of 1.9% from 2000 to 2010 and was expected to grow at a rate of 6.1% from 2010-2035. Based on CSA16's extremely low rate of new services between 2010 and 2022, the expected growth rate of 6.1% was not used to calculate the projected water demands. At a continued growth rate of 1.9% the expected water demands are about 93 acre-feet by 2030.	18000	1700	1300	14831, likely will be lower number that will be updated with 2020 UWMP
2040 Demand	14498	4300	200	1419	4,401 per MWD's 2015 UWMP and the 2020 Future Demand and Water Supply Options Report	At a growth rate of 1.9% the projected water demand is about 112 acre-feet.	19500	1980	1600	15,126, likely will be lower number that will be updated with 2020
2050 Demand	14934	4400	200	1764	Demand projections not available for 2050	According to the 2004 CSA 16 Water Master Plan, the buildout is at 549 services, which would be reached by 2045 with a projected water demand of 121 AFY.	21000	2250	1900	15,300, likely will be lower number that will be updated with 2020 UWMP
Supply: Groundwater Safe Yield	2,480 AFY (1,230 AFY Mission Tunnel + 1,250 AFY Groundwater)	3800		900	250	Information to be supplied by County Water Resources Division	Adjudicated Basin and Groundwater Stipulation: Twitchell Yield- 14,300 AF; State Water Return Flows (65%): 6,955 AF; Appropriative Rights: 5,100 AF	370	1600	2350
Supply: Local Surface Water	12,827 AFY (8,277 AFY Cachuma + 4,550 AFY Gibraltar)	Cachuma, 2813		303	1,300 Jameson Lake, 2,400 Cachuma Project	N/A	0	300	0	9322
Supply: State Water Project	3,300 AFY Table A amount (1,940 AFY 2200 allocation at 58.8% SWP reliability)		CA200	750	1200	Shandon's California State Water Project allocation is 100 AFY. Shandon began taking state water (SW) in September 2016. In FY 16-17 its SW usage was 12.93 acre-feet, in FY 17-18 the usage was 59.42 acre-feet, in FY 18-19 its usage was 60.81 acre-feet, and in FY 19-20 they only took 6.2 acre-feet. For financial reasons, Shandon stopped taking SW in September 2019 and is not requesting to take any SW for FY 20-21 until they reevaluate their financial situation post the 218 rate increase.	17,820 AF Table A, DWR current long-term AVG 60% or 10,700		315	4500
Supply: Other	Desalination: 3,125 AFY; Recycled water: 1,100 AFY	Planned IPR project 1000 AF			325 Dutton Tunnel					1000 AF reclaimed water
Facilities: Groundwater Basin	Storage Unit #1 and Foothill Basin: Total storage: 10,500 AFY; Total pumping capacity: 3,500 AFY; The City is hoping to pilot groundwater recharge, but does not currently have the permits to do so.	Carpinteria Groundwater Basin, 3800	San Luis Obispo	900	Montecito Groundwater Basin, Total usable capacity based on 1980 Safe Yield Evaluation of the Montecito Basin and Toro Canyon Area for the Montecito Water District prepared by Michael Hoover is 9,480AF	1290	Quantity not determined in adjudication/stipuation		1600	2350 AF annual safe yield plus 32000 AF stored water
Facilities: External Water Bank	0	Irvine Ranch Water District, 1000 AF for 5 years			Semitropic Groundwater Banking and Exchange Program, 1,500 AFY extraction, 4,500AF total storage	0	0		0	
Facilities: Existing Connection	3,300 AFY of SWP capacity; can be larger if other agencies aren't using capacity at any given time.	3.1		1053	To be provided by CCWA	0	CSM Turnout from Coastal Branch: 16,200 AFY	3.12 cfs	315	2268 CFS
Facilities: Other	We can store carryover Cachuma allocation in Cachuma; currently there is no limit on carryover storage volume.				Jameson Lake - total usage capacity approx. 4,300AF, Cachuma Project - current carryover of approx. 3,700AF	0				1000 AF reclaimed water
Shortages: Dry	0	1550		0	1500	0	0	420	0	1972
Shortages: Average	0	0		0	0	0	0	0	0	0
Shortages: Wet	0	0		0	0	0	0	0	0	0

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Links	The City is currently updating its long term water supply plan. Draft technical memorandums can be found here: <a href="https://www.santabarbaraca.gov/gov/depts/pw/resources/system/docs/watervision/water_planning_publications.asp">https://www.santabarbaraca.gov/gov/depts/pw/resources/system/docs/watervision/water_planning_publications.asp</a> 2015 UWMP: <a href="https://www.santabarbaraca.gov/civicax/filebank/blobload.aspx?BlobID=173183">https://www.santabarbaraca.gov/civicax/filebank/blobload.aspx?BlobID=173183</a>	<a href="http://cvwd.net/capp/wp-content/uploads/CVWD_CAPP-Draft-EIR-and-Appendices_11-July-2019.pdf">http://cvwd.net/capp/wp-content/uploads/CVWD_CAPP-Draft-EIR-and-Appendices_11-July-2019.pdf</a> <a href="https://cvwd.net/doc/1382/">https://cvwd.net/doc/1382/</a>		<a href="https://oceanocsd.org/wp-content/uploads/bsk-pdf-manager/2020/05/NCMA-2019-Annual-Report_Final.pdf">https://oceanocsd.org/wp-content/uploads/bsk-pdf-manager/2020/05/NCMA-2019-Annual-Report_Final.pdf</a>	2015 UWMP <a href="https://www.montecitowater.com/doc/2518/GSP%20for%20Montecito%20Groundwater%20Basin">https://www.montecitowater.com/doc/2518/GSP for Montecito Groundwater Basin</a> is currently being prepared. Nothing to provide at this time. 2020 Future Demand and Water Supply Options Study prepared by Dr. Steven Bachman. <a href="https://www.montecitowater.com/doc/6724/">https://www.montecitowater.com/doc/6724/</a>	2012 Shandon Community Plan <a href="https://www.slocounty.ca.gov/Departments/Planning-Building/Forms-Documents/Plans/Community-Plans/Shandon-Community-Plan.pdf">https://www.slocounty.ca.gov/Departments/Planning-Building/Forms-Documents/Plans/Community-Plans/Shandon-Community-Plan.pdf</a> CSA16 Consumption Data 2004 CSA 16 Water Master Plan	CSM UWMP: <a href="https://www.cityofsantamaria.org/home/showdocument?id=15109">https://www.cityofsantamaria.org/home/showdocument?id=15109</a> Twitchell Management Authority Annual Report: <a href="https://www.cityofsantamaria.org/home/showdocument?id=27220">https://www.cityofsantamaria.org/home/showdocument?id=27220</a>	I will send 2018 Water Supply Management Plan via separate email.		<a href="http://www.goletawater.com/assets/uploads/WSMP%202015%20Update_FINAL_May%202017.pdf">http://www.goletawater.com/assets/uploads/WSMP%202015%20Update_FINAL_May%202017.pdf</a> <a href="http://www.goletawater.com/assets/uploads/documents/GWD_2010UWMP_Final.pdf">http://www.goletawater.com/assets/uploads/documents/GWD_2010UWMP_Final.pdf</a> <a href="http://www.goletawater.com/assets/uploads/documents/groundwater-management/Goleta%20Groundwater%20Management%20Final%202016%20Update_11-8-2016_WEB.pdf">http://www.goletawater.com/assets/uploads/documents/groundwater-management/Goleta%20Groundwater%20Management%20Final%202016%20Update_11-8-2016_WEB.pdf</a>
Additional:	Currently, the City has adequate supplies to meet demands. If demands increase significantly or supplies are reduced, the City will face shortages in drought conditions. The City is currently updating its long term water supply plan. In relation to SWP water, the City currently uses it as a drought supply. The City would like to optimize its SWP supply by either storing or possibly selling or exchanging SWP supplies when not needed in wet/average years, and retaining access to it in dry years. The City is looking forward to recommendations from the CCWA study on these possibilities.	The capacity of the coastal branch is under utilized. Analysis should be done to determine if there are non SWP users in Santa Barbara County and Ventura County that could rent capacity. An intertie is proposed between Casitas Water and Carpinteria Valley Water that would connect Ventura county to the Coastal Branch. Additionally it may be possible to store SWP water in Lake casitas		MWD is interested in understanding what groundwater banking opportunities may exist within San Luis Obispo and Santa Barbara Counties to improve the reliability of SWP supplies. MWD is also interested in understanding what other water supply opportunities may exist within these Counties, i.e. desalination	Question 7: Groundwater Basin, usable capacity All of CSA 16 water supply is pumped from the Paso Robles Upper Salinas Groundwater Basin. Two wells supply a total pumping capacity of 800 gpm, which equals about 1,290 acre-feet per year. Question 8: CSA 16 has not had any shortages. Since their 2017 connection to the SWP, they now have supplemental State Water, and we do not foresee any shortages in the future.	A key consideration for State Water is the quality of the water as much as the quantity. The water quality of the imported water is critical in the City meeting discharge requirements at the WWTP. Should State Water quality degrade, the benefit to the City is diminished.  The Groundwater Stipulation indicates the City is to import 10,000 AF of its State Water per year, if available.	We are looking for somewhere we can bank between 100 AF and 400 AF annually up to a maximum of 1,000 AF banked.	State water is expensive and not reliable. A private venture company applied for a FERC license to evaluate a combination hydroelectric/desalination plant at Minuteman Beach, Vandenberg. It would be 6 miles away from State Waterline and produce 12 MGD. The City of Guadalupe is interested in knowing if this more reliable, local source makes sense. Perhaps sell some of our Table A to North San Luis Obispo County to help replenish their gw aquifer??		

