SWSAC MEMBER AGENCIES: *SLOCFC&WCD, CSA 16 (SHANDON), CMC, COUNTY OPS CENTER, CUESTA COLLEGE, CITY OF MORRO BAY, CITY OF PISMO BEACH, OCEANO CSD, AVILA VALLEY MWC, AVILA BEACH CSD, SAN MIGUELITO MWC, SAN LUIS COASTAL USD*

Notice of Meeting

STATE WATER SUBCONTRACTORS ADVISORY COMMITTEE

SAN LUIS OBISPO COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT

Friday, July 2, 2021 – 10:00 to 11:00 AM

In accordance with the directives provided by Governor Newsom (Executive Order N-29-20), this meeting will be conducted as a phone-in and web-based meeting. Members of the public may participate via conference call and webinar.

Phone line: +1 (646) 749-3122
Access Code: 189-199-845
Webinar: https://global.gotomeeting.com/join/189199845
Public comments can be submitted to: wthomson@co.slo.ca.us
For more information: https://www.slocounty.ca.gov/Departments/Public-Works/Committees-Programs/State-Water-Project-and-Subcontractors-Advisory-Co.aspx

CONTACT: *All Americans with Disabilities Act (ADA) accommodations shall be promptly reviewed and resolved.* Persons who require accommodations for any audio, visual or other disability to review an agenda, or to participate in the meeting per the ADA, are encouraged to request such accommodation 48 hours in advance of the meeting from the State Water Subcontractors Advisory Committee (SWSAC) Secretary, Wes Thomson at (805) 781-5252.

Chair: Brad Hagemann (Avila Beach CSD)
Vice Chair: Ben Fine (Pismo Beach)

AGENDA

I. Call to Order – Roll Call & Quorum Count

II. Public Comment *(For matters within the Committee's jurisdiction. May be limited to three minutes each.)*

III. Review of Last Meeting's Minutes – Approve minutes from May 7, 2021.

IV. Discussion / Action – Notice to State Water Subcontractors – District Intent to Establish Process for Use of New Water Management Tools to Facilitate Exchange & Transfer Options. Discussion of potential impacts and an opportunity for making recommendations to the District.

V. Reports from the District – for Information Only
A. Water Operations Report
B. Water Management Tools Study

VI. Items for Next Regular Meeting Agenda

VII. Date of Next Meeting:
Special Meeting w/ CCWA (WMT Study Workshop) – July 8, 2021
SWSAC Regular Meeting -- September 3, 2021

VII. Adjournment

ATTACHMENTS

1. Agenda Item III – Draft Minutes – May 2021
2. Agenda Item IV – Notice to Subcontractors (emailed 6/23/21)
3. Agenda Item V.A – Staff Report
4. Agenda Item V.B – WMT Study, Draft Review Docs (emailed 5/13/21)

The purpose of the Committee *is, "to monitor all aspects of this agreement and related agreements and to advise the governing bodies of District and Contractor on the functioning of this agreement and related agreements, and to recommend to the governing bodies of District and Contractor any modifications to said agreements that may, from time to time, be appropriate."*
(Art. 31, Water Supply Agreement, 1992)

Via Web/Teleconference Only Friday, May 7th, 2021
10:00 AM

MINUTES (Draft)

Chairperson: Brad Hagemann
Vice Chairperson: Ben Fine
Secretary: Wes Thomson

The following action minutes are listed as they were acted upon by the State Water Subcontractors Advisory Committee (SWSAC) and as listed on the Regular Meeting agenda for **May 7th, 2021,** together with staff reports and related documents attached thereto and incorporated therein by reference.

I. Call to Order & Roll Call (Quorum Count)
Call to order at approx. 10:00 AM; a quorum was established.

II. Public Comment
None.

III. Review of Last Meeting's Minutes
March meeting Minutes approved by SWSAC.

IV. Reports from the District (see staff report)
A. SWSAC Representation
- Update from W. Thomson about vacancies in SWSAC.

B. Water Operations Report
- DWR allocations currently at 5% as a result of the dry conditions. Reduction was made from 10% to 5% in March 2021. District's projected storage at end-of-year in SLR is approx. 12,900 AF.

C. Delta Conveyance Project – Negotiations Update
- Update from W. Thomson. In March State Water Contractors and DWR finalized Agreement in Principle (AIP) for the Delta Conveyance Project. The AIP is a steppingstone for the future contract amendment.
- Update from C. Howard regarding the SLO county FCWCD Boards approval for DCP's planning phase funding for next two years. District will have opportunity to re-evaluate continued participation in 2022.

D. Water Management Tools Study
- W. Thomson recapped special meeting on 4/8/21, which included a "needs assessment" identifying needs of SLO County FCWCD and CCWA. Primary needs identified for both agencies was State Water project supply as a dry-year supply, and cost control.
- Next workshop will be 7/8/21 (1:00 PM). More information will be sent out.

V. Presentation – Water Management Considerations for Dry-Year Need for Emergency Storage (by W. Thomson)

A. Dry year need- What would it look like for your agency to have a reliable supply to meet your service area's dry year need (assuming a five-year consecutive dry period)?

Does your agency have a plan in place that:

- Documents its assessment of its dry year need and anticipated supply availability.
- Characterize its water service reliability under varying hydrological scenarios.
- Describes how it will meet its need during a multiple dry year period?

B. Emergency storage - What would it look like for your agency to have sufficient emergency storage to meet your service area's need should a major earthquake or other catastrophic event result in damage to the aqueduct that imports water to the Central Coast?

The goal of establishing emergency criteria involve is to arrive at planning target for a proposed emergency storage volume – one that:

- 1) factors in a combination of criteria.
- 2) supports a range of acceptable scenarios designed to prevent severe shortages during the outage.

C. Conclusions and Questions

- Recommendation made for agencies to calculate amount of water needed as well as identify locations of storage to plan for an emergency scenario.
- Concerns brought up about an event in the future where SWP cannot supply water.

VI. Future Agenda Items

- No specific agenda items requested.
- Next regular meeting is July 2, 2021, 10:00 AM.
- Next Special Joint-CCWA Meeting is July 8, 2021, 1:00 PM.

Meeting Adjourned at 11:00 AM.

SAN LUIS OBISPO COUNTY FLOOD CONTROL & WATER CONSERVATION DISTRICT
STATE WATER PROJECT

SENT VIA EMAIL

June 23, 2021

SUBJECT: Notice to State Water Subcontractors – District Intent to Establish Process for Use of New Water Management Tools to Facilitate Exchange & Transfer Options

Dear State Water Subcontractors:

This email is to inform you that the District (i.e., the San Luis Obispo County Flood Control and Water Conservation District) intends to establish a local process for considering future State Water Project (SWP) water exchange and transfer options that rely on the new water management tools (WMTs).

In November 2020, the District initiated a study to consider how it could use the WMTs to optimize SWP supply to meet County needs. That study is currently underway with CCWA (Central Coast Water Authority -- our local partner for SWP Coastal Branch operations). We've received positive input from the Subcontractors and will continue to bring your agency regular updates and opportunities to participate as this effort moves forward. Details on the study scope and draft documents can be found at the following link: https://www.slocounty.ca.gov/Departments/Public-Works/Current-Public-Works-Projects/State-Water-Project-Water-Management-Tools-Study.aspx

The WMTs are now available for the District because of the Board's recent decision to approve the Water Management Amendment with the California Department of Water Resources (DWR). The related Board Business item from the March 2nd agenda can be found at the following link: https://agenda.slocounty.ca.gov/iip/sanluisobispo/agendaitem/details/13044

Prior to use of the new WMTs – which provide greater water management flexibility regarding transfers and exchanges of SWP water within the SWP service area – the District intends to clarify how it will implement these options, consistent with condition on the Board's approval of the Water Management Amendment[1]. The process will define District priorities and specify local considerations (e.g., advancement of management objectives or targets), or steps that will be taken when reviewing any future opportunity. Chief among the District's considerations would be the impact on the Subcontractors and any SWP water supply set aside in storage for their use.

[1] Clause 8 from the Board's resolution approving the amendment requires staff to return to the Board for discussion and direction concerning the use of the WMT's as it relates to (1) the District's ability to regulate / limit recharge and recovery of State Water within SLO County by entities with whom the District may sell State Water, and (2) to secure any other required determinations and approvals, for CEQA compliance, and as it concerns District SWP subcontracts or drought buffer agreements.

The WMTs do not change the District's annual Table A amount and will not change the water supply delivered by the SWP, as SWP water will continue to be delivered to the District consistent with current SWP water supply contract terms and all regulatory requirements. However, the WMT's look to provide an opportunity for the District to (1) optimize this water supply benefit for the Central Coast, (2) help address storage and dry-year supply needs, and (3) improve the long-term SWP water supply affordability.

There will be time for discussion on this topic at the **July 2nd State Water Subcontractors Advisory Committee (SWSAC) meeting, including potential impacts to Subcontractors (for example, decisions regarding storing versus selling and cost implications)** and an opportunity for making recommendations to the District.

The District is scheduled to consider this matter at the **August 10th Board of Supervisors meeting.**

Feel free to call me at (805) 788-2101 or Courtney Howard at (805) 781-1016 with any questions.

Regards,

Wes Thomson, Utilities Division Engineer, County Public Works
SLO County Flood Control & Water Conservation District

File: CF 970.01.01

SAN LUIS OBISPO COUNTY
FLOOD CONTROL AND WATER CONSERVATION DISTRICT

TO: District State Water Subcontractors

FROM: Wes Thomson, P.E.

DATE: July 2, 2021

SUBJECT: SWP Water Operations Report

Summary

SWP water delivery reports summarizing 2021 deliveries through May 2021 (see Attachment 1). The Project allocation for 2021 is **5 percent** which amounts to a total of **1,250 AF** of "Table A" water for the District, which by itself is not sufficient to meet the Subcontractor's requested deliveries for 2021. Therefore, the District will draw from its "carryover" supply of SWP water stored at San Luis Reservoir (SLR) to meet Subcontractor demand.

Under the current SWP allocation and delivery schedule, the District estimates that it will have approximately **12,900 AF** in combined storage (District + Subcontractors) at SLR at the end of the year (12/31/21).

Est'd Subcontractor SWP Storage End of Year (EOY) 2021

SWP Deliveries thru May 2021

TURNOUT	SUBCONTRACTOR	Stored Carryover Water on Jan 1, 2021	2021 Delivery Request	Projected EOY Carryover Balance
SHANDON	CSA 16	69	-	74
CHORRO VALLEY	CMC	115	396	-
	County Ops	95	420	-
	Cuesta	48	200	-
	City of Morro Bay	1,431	1,200	479
LOPEZ	City of Pismo Beach[1]	1,059	1,260	903
	Oceano CSD	990	640	445
	San Miguelito MWC	265	120	167
	Avila Beach CSD	111	70	51
	Avila Valley MWC	0	20	-
	San Luis Coastal USD	6	6	2
	TOTAL	**4,189**	**4,332**	**2,121**
	District +Subs	**14,816**	**--**	**12,900**

1. Pismo is using up District stored water at Lopez.

Attachments

1. 2021 Delivery Update – SWP Deliveries (May 2021)

2021 STATE WATER DELIVERIES (DRAFT)

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
SHANDON TO	CSA 16	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	**0**
CHORRO V. TO	CMC	28.9	25.4	29.4	27.8	32.2	0	0	0	0	0	0	0	**144**
	County Ops	30.6	26.9	31.2	29.5	34.2	0	0	0	0	0	0	0	**152**
	Cuesta	14.0	12.3	15.2	14.3	16.6	0	0	0	0	0	0	0	**72**
	City of Morro Bay	80.4	73.4	84.2	92.4	101.0	0	0	0	0	0	0	0	**431**
LOPEZ TO	City of Pismo Beach	0.0	0.0	0.0	140.1	140.0	0	0	0	0	0	0	0	**280**
	Oceano CSD	0.0	0.0	0.0	58.3	66.8	0	0	0	0	0	0	0	**125**
	San Miguelito MWC	4.5	6.6	12.8	14.1	16.3	0	0	0	0	0	0	0	**54**
	Avila Beach CSD	4.8	5.0	5.9	6.0	6.0	0	0	0	0	0	0	0	**28**
	Avila Valley MWC	1.0	1.0	1.0	2.0	2.0	0	0	0	0	0	0	0	**7.0**
	San Luis Coastal USD	0.1	0.2	0.4	0.4	0.5	0	0	0	0	0	0	0	**1.5**
	TOTAL	**164.4**	**150.8**	**180.1**	**384.9**	**415.5**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1296**

Note: 1. Deliveries based on CCWA monthly delivery reporting and subcontractor request.
2. All delivery values reported are in volumetric units of acre-feet (AF).

2021 STATE WATER REQUESTS

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
SHANDON TO	CSA 16	0	0	0	0	0	0	0	0	0	0	0	0	**0**
CHORRO V. TO	CMC	33	33	33	33	33	33	33	33	33	33	33	33	**396**
	County Ops	35	35	35	35	35	35	35	35	35	35	35	35	**420**
	Cuesta	16	16	17	17	17	17	17	17	17	17	16	16	**200**
	City of Morro Bay	100	100	100	100	100	100	100	100	100	100	100	100	**1200**
LOPEZ TO	City of Pismo Beach	0	0	0	0	140	175	180	160	185	175	150	95	**1260**
	Oceano CSD	0	0	0	70	75	75	75	75	70	75	65	60	**640**
	San Miguelito MWC	7	7	10	12	13	13	13	12	9	9	7	8	**120**
	Avila Beach CSD	5	5	6	6	6	6	6	7	6	6	6	5	**70**
	Avila Valley MWC	1.0	1.0	1.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.0	2.0	**20**
	San Luis Coastal USD	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	**6**
	TOTAL	**198**	**198**	**203**	**276**	**422**	**457**	**462**	**442**	**458**	**453**	**414**	**355**	**4332**

Note: DWR delivery allocation assumed* = 100%
**Assumes District can supply requested delivery under 100% allocation scenario.*

STATE WATER PROJECT
San Luis Obispo County Flood Control and Water Conservation District
P:\State Water\Water Ops_DELIVERY\Actuals\2021\Delivery Report Summary\210608-SLO-Deliveries thru May 2021_DRAFT

Prepared by WT, 6/8/2021

SAN LUIS OBISPO COUNTY
FLOOD CONTROL AND WATER CONSERVATION DISTRICT

TO: District State Water Subcontractors

FROM: Wes Thomson, P.E.

DATE: July 2, 2021

SUBJECT: WMT Study Draft Documents for Review/Comment (emailed 5/13/21)

Summary

Three Draft Review Documents were sent out for Subcontractors for review/comment, along with a Save the Date for the upcoming SWSAC/CCWA WMT Study Joint Meeting on July 8th (Thursday from 1:00 to 3:00 PM). Providing a copy of these to the SWSAC for reference.

Attachments

1. Save the Date Email – from Lucia Mercado
2. WMT Study Draft Docs for Review:
    a. Conveyance Capability
    b. Rule and Regulations
    c. Supply Capability

Wes Thomson

From: Lucia Mercado
Sent: Thursday, May 13, 2021 3:05 PM
To: PW.SWP-Subcontractors
Subject: SWSAC/CCWA WMT Study Joint Meeting Follow-Up and Save the Date
Attachments: Conveyance Capability 28Apr2021.pdf; Rules and Regulations 26Apr2021.pdf; Supply Capability 28Apr2021.pdf; WMS Comment Form Conveyance Capability.docx; WMS Comment Form Rules and Regulations.docx; WMS Comment Form Supply Capability.docx

Follow Up Flag: Follow up
Flag Status: Flagged

Good afternoon everyone,

As discussed at the April Water Management Strategies Stakeholder Meeting, attached you will find the following SWP Water Management Tools Study draft **Review Documents** for comment:

Attached Review Documents

- Conveyance Capability
- Rules and Regulations
- Supply Capability

Additionally, you will also find the following **Comment Forms** for each review document:

Attached Comment Forms

- WMS Comment Form Conveyance Capability
- WMS Comment Form Rules and Regulations
- WMS Comment Form Supply Capability

Please populate and submit all comments on the respective comment form and submit by email to Jessica Alwan at jalwan@hgcpm.com . We kindly request all comments be submitted no later than **June 1st, 2021**.

—

Also, keep an eye out for a calendar invite from me for the next online State Water Subcontractors Advisory Committee Joint Special Meeting with the Central Coast Water Authority on **Thursday, July 8th from 1:00 to 3:00 PM**. Meeting links and agenda will be posted as they become available on the CCWA website: https://www.ccwa.com/2021-07-08-operating-committee-meeting.

Additional information on the WMT Study and the attached materials can also be found on the County's WMT Study project page: https://www.slocounty.ca.gov/Departments/Public-Works/Current-Public-Works-Projects/State-Water-Project-Water-Management-Tools-Study.aspx.

Please reach out if you have any questions. We greatly appreciate your feedback and participation!

Thank you,

Lucía Mercado
Pronouns: She/Her/Hers
Water Resources Engineer
Public Works, County of San Luis Obispo
Tel: (805) 781-5536 | *An APWA Accredited Agency*
Website | Twitter | Map

Conveyance Capacity

I. Introduction

Water management activities by SWP subcontractors in San Luis Obispo and Santa Barbara Counties (Central Coast Contractors) will frequently require use of conveyance capacity in the California Aqueduct and the Coastal Branch Aqueduct (Figure 1). These facilities are operated by different agencies, with different patterns of availability and different rules. The California Aqueduct and Coastal Branch reaches upstream of Polonio Pass, are operated by DWR as part of the overall SWP. The downstream portion of the Coastal Branch (below Polonio Pass) is operated by CCWA. The two operators – DWR and CCWA – have different operating rules, which affect use of their facilities by subcontractors and other agencies.

Following the initial discussion of operations for both the California Aqueduct and Coastal Branch, descriptions of the facilities involved are presented along with information related to physical and operational capacities. This conveyance capability discussion touches on constraints upstream and downstream of San Luis Reservoir, analyses of CALSIM-2 and historical capacities for the California Aqueduct, and comparison of design capacity and historical deliveries for the Coastal Branch. Finally, a high-level summary of available capacity in various reaches is presented.

Overall, the summary identified major constraints in available capacity in summer months (generally June through September) in years of above average deliveries along the California Aqueduct east of Coalinga, due to historic subsidence. There are also lesser, but still often significant, limitations in capacity along most Coastal Branch reaches during the summer. Alternatively, there is plentiful available capacity in the October through May period in nearly all years in the conveyance facilities serving the Coastal Branch Contractors.

II. Conveyance Facility Operation and Access by Outside Entities

DWR constructed and operates the California Aqueduct and Coastal Branch reaches through Polonio Pass for the SWP and their primary purpose is to deliver SWP water to its contracting water agencies. Although SWP contractors are assigned a share of capacity (and associated costs) in the reaches of the facility providing their water supply, the SWP water supply projects do not give SWP contractors direct rights to use that capacity. The Department of Water Resources (DWR) operates the SWP as a whole and does not instantaneously constrain contractor water supplies to their allocated share of capacity. Contractors submit annual water delivery request schedules to DWR and DWR strives to meet contractor water supply needs to the extent possible by optimizing available capacity. DWR only limits contractor use of conveyance for SWP water to their assigned capacities under extreme circumstances. SWP contractors, including CCWA and SLOCFCWCD, have rights to move non-SWP water through available capacity under Article 55 of the water supply projects. Additionally, any entity has a right to use unused conveyance capacity with the payment of fair compensation under Water Code Section 1810.

The Coastal Branch downstream of Polonio Pass is operated by CCWA. CCWA's prime purpose in operating its portion of the Coastal Branch is also to deliver SWP water to its subcontractors on their

requested schedule. CCWA does not have any defined provisions for allowing use of its facilities by member agencies or outside entities. As with any public agency conveyance facilities, Water Code Section 1810 provides for the use of unused conveyance capacity for an outside entity.

III. State Water Project Operational Features of the California Aqueduct and a Portion of the Coastal Branch Aqueduct

As described above, DWR operates the SWP, including California Aqueduct and a portion of the Coastal Branch Aqueduct. The configuration of SWP California Aqueduct and Coastal Branch Aqueduct is shown in Figure 1.

Figure 1: Placeholder for Figure of California Aqueduct

SWP contractors, including Santa Barbara County Flood Control and Water Conservation District (SBCFCWCD, administered by Central Coast Water Authority) and San Luis Obispo County Flood Control and Water Conservation District (SLOCFCWCD), are provided water by the SWP and are responsible for payment of assigned costs for their portion of the SWP. Table 1 shows the allocation of Central Coast Contractors' capacity in the State Water Project for upstream reaches of the California Aqueduct and the Coastal Branch. These capacities are used by DWR primarily for cost allocation purposes, but under extreme circumstances they could also be constraining in the event of continuing shortage in conveyance capacity.

Table 1
California Aqueduct: Capacity Provided for SWP Contractors, by Reach*

	SBCFCWCD Share	**SLOCFCWCD Share**	**Design Total**	**Current Estimated Total**
Reach	Capacity (cfs)	Capacity (cfs)	Capacity (cfs)	Capacity (cfs)
1	72.03691	39.0471	10,300	10,300
2A	72.02638	39.04134	10,000	10,000
2B	71.61539	38.81848	10,000	10,000
3	71.48536	38.74804	13,100	13,100
4	71.34908	38.67414	13,100	13,100
5	71.17955	38.58213	11,800	11,800
6	70.9241	38.4437	8,350	6,900
7	70.84246	38.39943	8,100	6,900
8C	70.73959	38.34363	8,100	8,100
8D	70.73761	38.34264	8,100	8,100
31A	70.60034	38.26825	450	450
33A	70.06459	37.9774	71	71

*(Includes Consideration of Scheduled Outages and Operational Losses)

In addition to SWP project deliveries (including Table A amounts, Turnback Pool, Carryover Water and Article 21 Water), the California Aqueduct system is also commonly used for conveyance of other supplies on behalf of SWP contractors (and potentially outside agencies). While DWR attempts to meet all SWP contractor conveyance needs, in situations with extended periods of limited capacity, a SWP

contractor may be limited to their proportional share of remaining capacity after SWP project needs have been met.

Generally, limitations to conveyance availability are likely to occur in the summer months of high-delivery (wet) years. SWP facilities for SWP agricultural contractors were designed to meet water demands on an irrigation demand schedule, which has high peaks during summer months. Additional conveyance constrictions can occur in Aqueduct reaches where SWP contractors purchased additional Table A amounts or where outside factors (such as groundwater subsidence or facility outages) have limited operational capacity.

As an example, if the SWP is using 80 percent of the capacity in a reach for SWP purposes, Article 55 provides that the remaining 20 percent could be allocated among contractors proportional to each contractor's assigned capacity of that reach. Central Coast Contractors access to conveyance facilities for non-SWP purposes will normally be on an "as available" basis, subject to primary use by the SWP or by other project participants.

To address the potential for limited conveyance access on an "as available" basis, this discussion quantifies both the physical capacity of conveyance facilities and the primary facility use for purposes of delivering SWP water. The primary facilities described here are the California Aqueduct and the Coastal Branch Aqueduct. The overall approach used was to compare historical or projected Aqueduct use for representative Aqueduct reaches with physical capacities, and quantify the amounts of available, or unused, capacity. For purposes of this study, analysis is limited to available conveyance probabilities on a monthly basis, with totals indicated for annual potential conveyance. The approach to defining available conveyance capacity is different for each facility, as described below.

IV. SWP Conveyance Constraints Upstream of San Luis Reservoir

The California Aqueduct begins at Clifton Court Forebay in the Sacramento-San Joaquin Delta and terminates in Southern California. For Reaches 1 through 4 (from Clifton Court Forebay to San Luis Reservoir), DWR has designated the California Aqueduct as having two purposes – conveyance (labelled "transportation"), for delivering water to meet SWP contractor demands, and storage (labelled "conservation"), for delivering water to San Luis Reservoir for storage during wet periods for later use to meet SWP contractor demand.

While Aqueduct Reaches 1-4 were designed with capacities of up to 10,300 cubic feet per second to provide for both direct SWP deliveries and storage of water at San Luis Reservoir, in actual operations that apparent high capacity is not usable to the SWP for a variety of reasons:

- A U.S. Army Corps of Engineers permit for Banks Pumping Plant (Reach 1) limits its use to 6,680 cfs, with provision for somewhat higher capacities under limited circumstances for limited periods, for reasons relating to levee protection.
- Fisheries and water rights permits for Banks Pumping Plant and Sacramento-San Joaquin Delta operations generally restrict allowable exports at Banks Pumping Plant for extended periods from November through June.

- Upstream California Department of Fish and Wildlife flow regulations limit the ability to increase Oroville Reservoir releases at times when permitted Banks Pumping Plant capacity is available.

As a result of these various regulatory and physical constraints at Banks Pumping Plant, constraints from water supply availability and upstream flow management limitations, there is essentially a four-month period (July through October) when unused capacity in Reaches 1-4 is available. While the physical capacity in Banks Pumping Plant and the California Aqueduct is 10,300 cfs, the capacity that is actually allowable considering applicable regulations is usually 6,680 cfs or less. In most wetter-than-average runoff years, the SWP normally uses all available permitting pumping capacity at Banks Pumping Plant (and Aqueduct Reaches 1-4) for filling San Luis Reservoir with available high Delta outflows and for conveying Oroville Reservoir releases to SWP contractors. It is only in below-average runoff years that there is unused available capacity in Aqueduct Reaches 1-4. Even in those below-average runoff years, capacity can be limited and its availability is frequently difficult to predict.

As described in the earlier water supply discussion, DWR allocates Table A amounts to SWP contractors based on a combination of availability of water in the Delta (either from natural flows or from Oroville Reservoir releases), permitted pumping capacity at Banks Pumping Plant and water stored over the winter in San Luis Reservoir. The SWP's annual Table A allocation is the amount available for SWP contractors after adjusting for the most limiting of available unregulated Delta flows, Oroville and San Luis Reservoir storage and ability to convey water to SWP contractors on requested delivery patterns.

Considering the purpose of this discussion is to describe the potential for capacity use by Central Coast Contractors, unused capacity on the California Aqueduct upstream of San Luis Reservoir has not been quantified. While transfers of North of Delta water supplies are theoretically an option, their availability is uncertain as is the ability to deliver them through Aqueduct facilities south of the Sacramento-San Joaquin Delta. The underlying assumption for Central Coast water management is that water management measures would be limited to water that is already south of the Delta. The water available for Central Coast Contractor water management has been assumed to be limited to SWP Table A allocations (which are effectively made available to contractors by DWR at San Luis Reservoir) and other potential South of Delta water supply sources and management measures such as SWP Table A Transfers, exchanges with SWP or other water agencies and South of the Delta groundwater banking programs.

V. Analysis of SWP Conveyance Capacity Availability Downstream of San Luis Reservoir

To evaluate the impacts of California Aqueduct capacity constraints, a comparison of two analyses were conducted at Reach 7 (Check 21), Reach 31A (Badger Hill Pumping Plant), Reach 33A (Polonio Pass Pumping Plant). The first analysis reviews historical SWP deliveries compared to physical capacity. Where CALSIM-2 data is available, a second analysis relies on data extracted from CALSIM-2 model simulations of the California Aqueduct. The historical and CALSIM-2 projection analyses provide different types of information. While the historical analysis is a likely indication of actual operational practices for SWP and Central Coast Contractors, it does not account for factors that may change in the future. Factors such as Delta regulatory requirements, changes in upstream SWP facility operations and

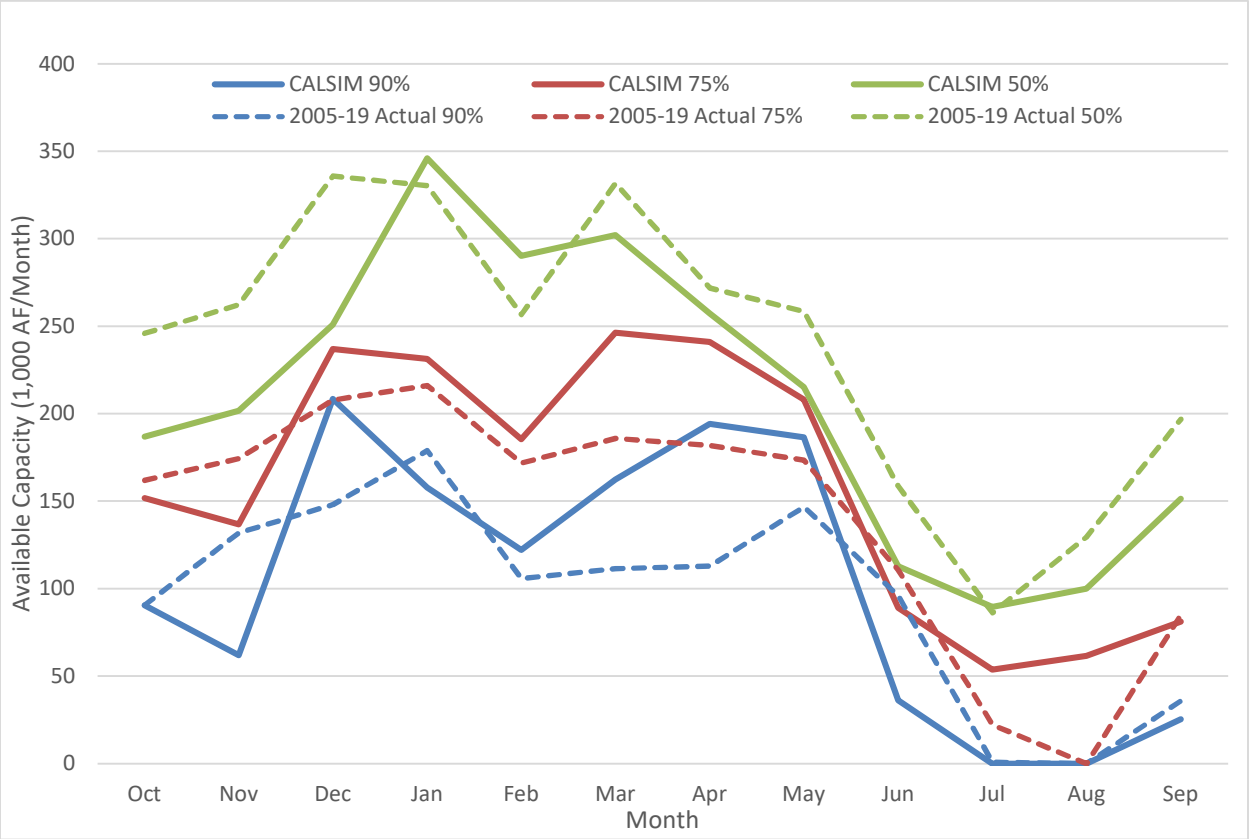
increased future use of contracted water supplies by downstream SWP contractors are not represented in historical operations but are included in CALSIM-2 simulations. While CALSIM-2 operations studies are generally not as accurate in indicating the nuances of SWP contractor actual operations, they have the advantage of considering known factors that can affect future availability of conveyance capacity. Next the two analysis are compared. Where historical and CALSIM-2 estimates of available capacity are similar, there can be strong confidence in the accuracy of their results. Where they differ, this summary offers an interpretation of which is more likely and provides a recommended outcome.

i. California Aqueduct Reach 7 (Check 21)

Conveyance capacity south of the San Luis Reservoir has been reduced from design amounts by subsidence. High groundwater pumping in the westside of the San Joaquin Valley along the California Aqueduct alignment has resulted in subsidence that has lowered local ground surface elevations. The decline in the ground surface has been uneven and has reduced gradients in many parts of the California Aqueduct, with corresponding reductions in conveyance capacity. A 2019 DWR analysis of ground surface declines to date and their impacts on the California Aqueduct, identified reductions in capacity that varied by reach of the Aqueduct. The analysis showed that California Aqueduct capacities remained at design levels through Pool 19 (generally, north of Huron). Aqueduct Pools 20 through 29 were identified as having some level of capacity reductions. The largest reduction in Aqueduct capacity was identified in Pool 20 of Reach 7, which lost 1,450 cfs of its design capacity of 8,350 cfs, leaving a reduced operational capacity of 6,900 cfs.

This historical analysis of SWP deliveries from 2005 to 2019 compared actual Aqueduct flows with the reduced 6,900 cfs capacity available in Aqueduct Reach 7, near Kettleman City.

Figure 2: California Aqueduct Reach 7 (Check 21) Capacity Availability



The analyses for Reach 7 (Check 21) capacity show similar results based on both CALSIM-2 projections and actual historical operations. In both analyses, severe limitations on capacity are projected in wetter years (90-percentile usage) for the months of July and August, and lesser limitations are projected in the months of June and September. There is significant available capacity for the remainder of the months, October through May. For the 75-percentile usage, actual historical operations show significant constraints during the months of June through September, which are consistent with CALSIM-2 projections. For the 50-percentile and lesser use conditions, both historical and CALSIM-2 analysis indicates minimal capacity constraints year-round.

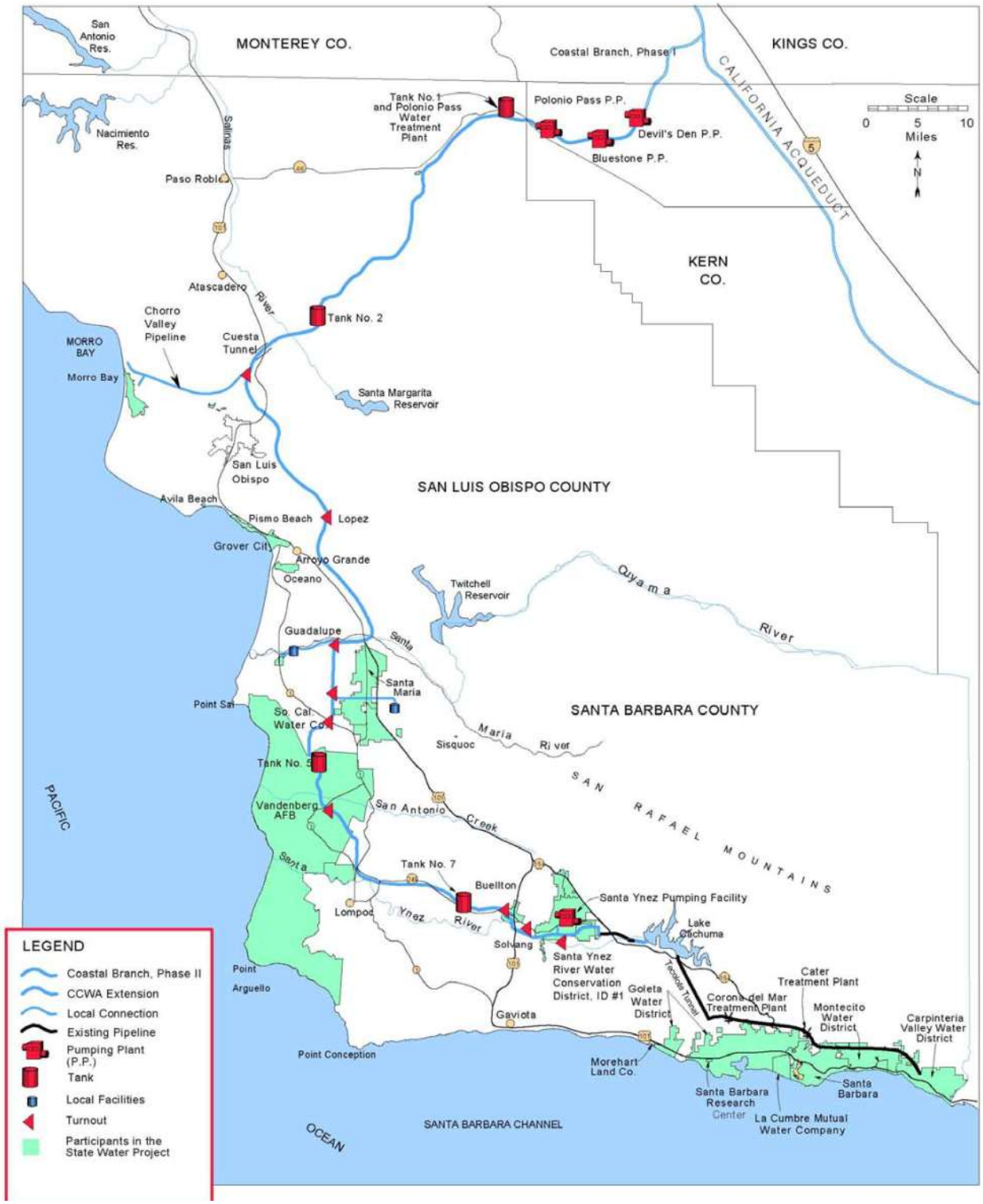
Overall, the actual historical operations are consistent with CALSIM-2 projections, with both showing significant constraints in available capacity during the June through September period for high use (90-percentile and 75-percentile) periods. There is significant available capacity in all year types October through May.

ii. Coastal Branch Aqueduct (Reach 31A)

The Coastal Branch breaks off from the California Aqueduct at Avenal Gap, just south of Kettleman City. Aqueduct Reach 31A (shown as Coastal Branch Phase 1 and including Las Perillas and Badger Hill Pumping Plants, provides deliveries for CCWA, SLCFCWCD, Santa Clarita Valley Water District (for the former Devils Den Water District), Kern County Water Agency (for their member agency Berrenda Mesa

178 Water District), and a potential future SWP water contractor. Figure 2 shows the alignment and major
179 features of the Coastal Branch Aqueduct.

180 *Figure 3: Diagram of Coastal Branch Aqueduct*

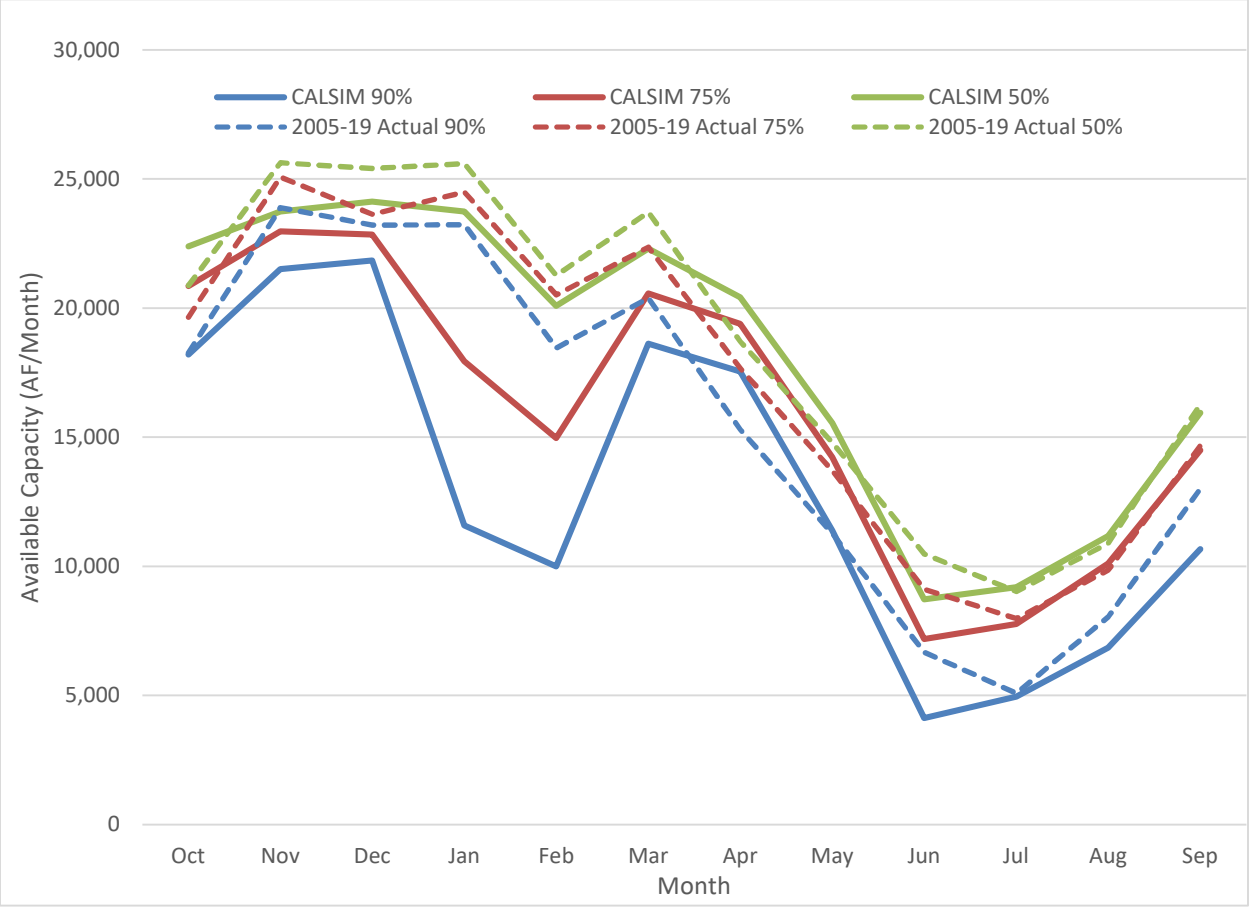


181

As with the California Aqueduct, 2005-2019 historical water flows for Badger Hill Pumping Plant were reviewed along with CALSIM-2 projections of a 1922-2003 long term period. As there are minimal SWP delivery turnouts until the end of Reach 31A, the Badger Hill Pumping Plant analysis is considered representative of Reach 31A. The design capacity for Badger Hill Pumping Plant is 454 cfs, which is equivalent to a monthly capacity of 27,000 to 29,000 acre-feet.

As with Reach 7 (Check 21) capacity analyses, Badger Hill Pumping Plant available capacity was consistent for both actual historical flows and CALSIM-2 projected flows. In both analyses, available capacity at Badger Hill Pumping Plant is limited during the months of June through September for the 90-percentile use level particularly, and, to a lesser extent, for the 75-precentile use level. Capacity is likely to be available for the remainder of the months, October through May, at the 90-percentile use level. Additionally, considerable capacity is available in essentially all months for the 50-percentile use level and drier conditions.

Figure 4: Coastal Aqueduct Badger Hill Pumping Plant Capacity Availability



iii. Coastal Branch Aqueduct (Reach 33A)

The Coastal Branch has reduced capacity in Reach 33A with CCWA and SLOCFCWCD being the only participant SWP contractors. There are three pumping plants in Reach 33A: Devils Den, Bluestone and

Polonio Pass. These three plants each have design capacities of 134 cfs (roughly 8,000 to 8,200 acre-feet per month), which were intentionally designed with higher capacities than needed for CCWA and SLOCFCWCD. The purpose of the higher capacity is to allow for more energy efficient off-peak pumping operation. The higher capacity would enable the SWP to pump water to Polonio Pass Water Treatment Plant during evenings and low power cost periods as a means to reduce overall SWP power costs.

Figure 5: Coastal Aqueduct Polonio Pass Pumping Plant Capacity Availability

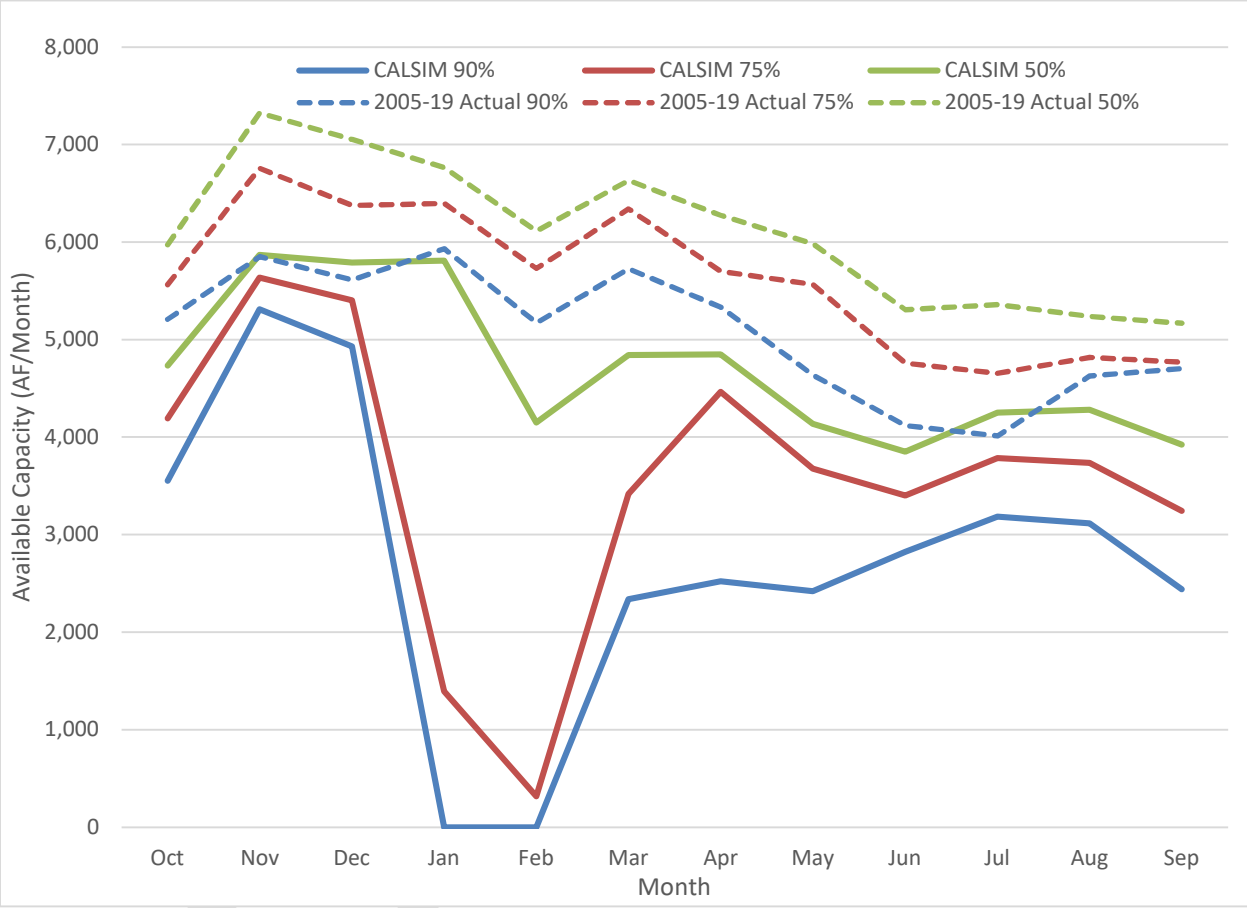


Figure 5 shows available capacity for Polonio Pass Pumping Plant using both actual historical operations data for 2005-2020 and CALSIM-2 projections. Unlike similar comparisons for Check 21 and Badger Hill Pumping Plant, the review of Polonio Pass Pumping Plant data shows significant differences between the CALSIM-2 projections and actual historical operations. The actual operations data shows essentially no periods of restricted capacity for any of the evaluated exceedances. There is essentially 50% available capacity (about 4,000 acre-feet per month) in even driest conditions. The CALSIM-2 projections included what are likely questionable assumptions about the delivery patterns for CCWA and SLOCFCWCD that have high delivery amounts in the months of January and February in some of the higher delivery years (90-percentile and 75-percentile.) These delivery patterns resulted in low-capacity availability in high delivery years, which do not match historical experience and appears to be an unrealistic modeling artifact. The poor representation of Polonio Pass flows by CALSIM-2 is likely due to modeler's focusing

on operational issues on the main California Aqueduct and minimal attention to operations on the Coastal Branch. For purposes of the current water management study, the CALSIM-2 data for Polonio Pass is being ignored and the capacity available in actual historical operations will be used instead. As noted, the actual historical data show essentially no limitations on available unused conveyance capacity based on likely potential use.

Based on the actual historical use data for Badger Hill and Polonio Pass Pumping Plants, there is limited available capacity in upstream reaches of the Coastal Branch in the summers (June through September) in most high delivery years (any years above 50-percentile). In dry years and in non-summer months, there is good availability of capacity.

Continuing downstream of the California Aqueduct to the Coastal Branch Aqueduct, the remainder of this discussion focuses on the Coastal Branch design capacities, making a conservative estimate of actual operational capacity that could be available on a consistent basis.

VI. Analysis of CCWA Conveyance Capacity Availability

At Polonio Pass, CCWA treats water at its Polonio Pass Water Treatment Plant (WTP). Downstream of the Polonio Pass WTP, CCWA operates remaining reaches of the Coastal Aqueduct. The capacity of Polonio Pass WTP is 43 million gallons per day (66.5 cubic feet per second), which can be a limiting factor for use of the Coastal Branch.

To evaluate the impacts of Coastal Branch capacity constraints, available Coastal Branch capacity on selected downstream reaches of the Coastal Branch was reviewed comparing historic delivery data for 1997-2020 provided by CCWA with the design capacities shown in Table 2. Note that no analysis of CALSIM-2 results was prepared, as CALSIM-2 does not include operation of the Coastal Branch downstream of Polonio Pass.

i. Coastal Branch Reach 33B

Design capacities for the Coastal Branch reaches are shown in Table 2. A 2011 hydraulic analysis conducted for CCWA identified modeled flow capacities for the Coastal Branch that were higher than design estimates. In Reach 33B, modeling indicated potential short term flow rates of up to 84.5 cfs. In Reaches 34, modeled flow capacity of up to 77 cfs was identified. While the hydraulic flow modeling indicates higher capacities than used for design, the higher capacities are considered a short-term peaking capability and it is uncertain that they could be maintained on a consistent basis. For the analysis here, the design rates are being used as representative of sustained flows that can be maintained under normal operations.

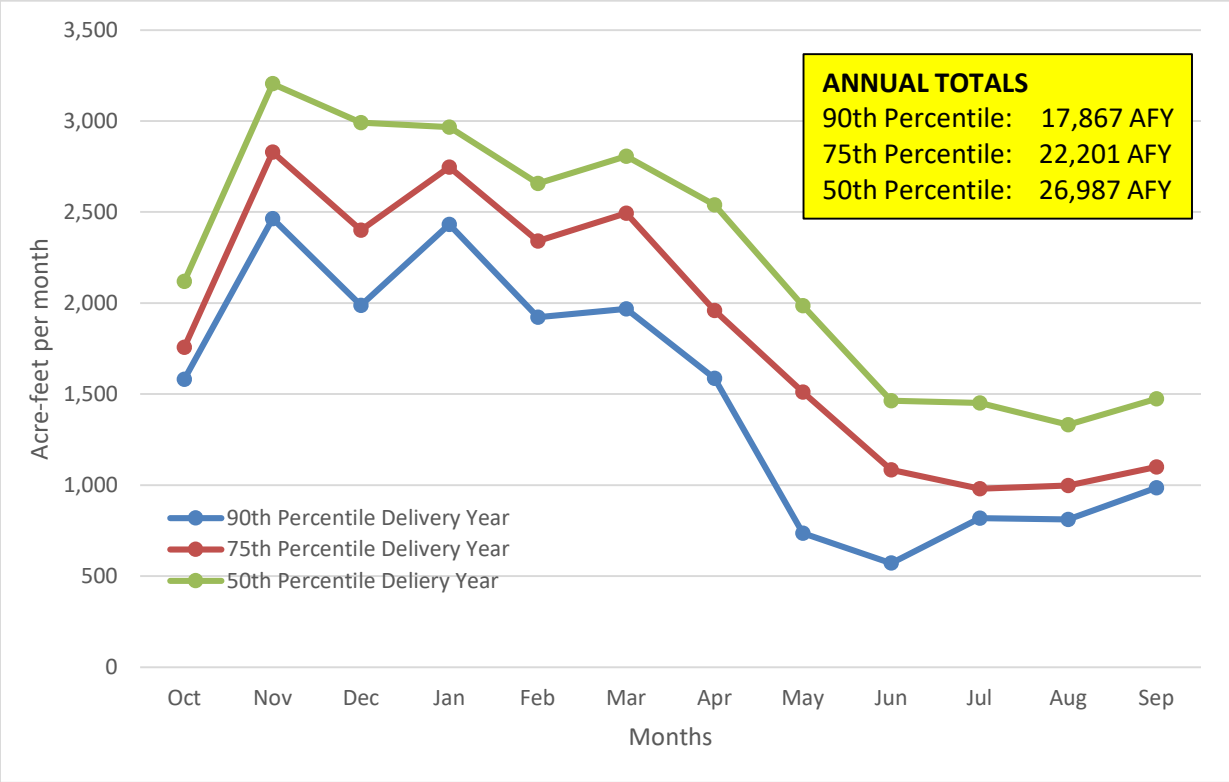
Table 2
Coastal Branch Design Capacity

Reach(s)	Upstream	Downstream	Design Capacity (cfs)
33B	Polonio Pass WTP	Chorro Valley TO	71
34	Chorro Valley TO	Lopez TO	68
35	Lopez TO	Guadalupe TO	64

37	Guadelupe TO	Southern Pacific RR	64
38	Southern Pacific RR	Tank 5	33
MH II	Tank 5	McLaughlin Rd	35/26
SY I	McLaughlin Rd	Santa Ynez PP	26
SY II	Santa Ynez PP	Cachuma Reservoir	22

During actual historical 1997-2020 CCWA delivery operations, the upstream reaches of the Coastal Branch (Reaches 1-4), with a design capacity of 71 cfs, had monthly availability as shown in Figure 6. This figure indicates the potential for limited availability capacity for the months of May through September. Available monthly capacity during this May through September period was limited to less than 1,000 AF for the 90th-percentile high delivery year. Available capacity is also near 1,000 AF for the months of Jun through September at the 75-th percentile. Conversely, available conveyance capacity of 1,500 AF or higher is regularly available for the months of October through April.

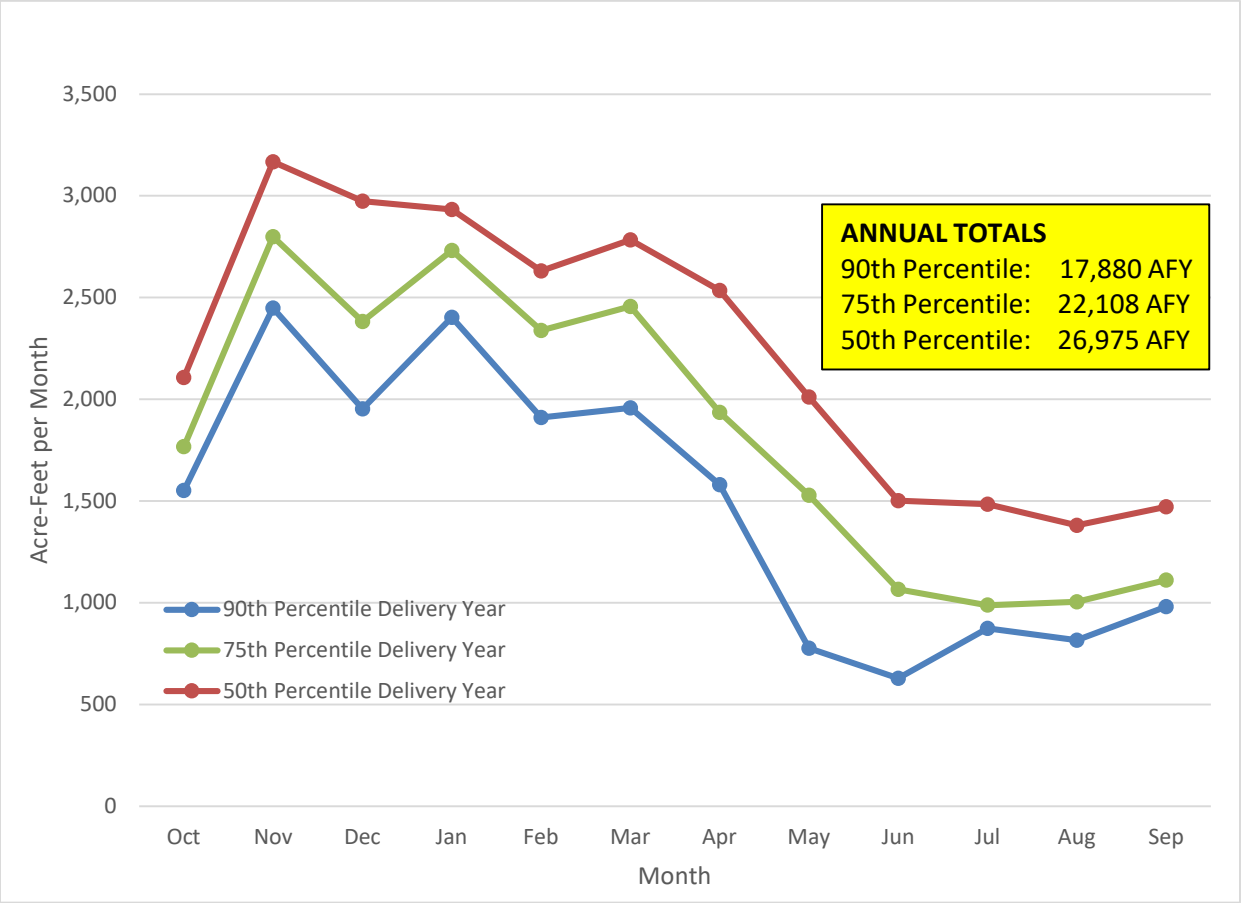
Figure 6: Coastal Branch 33B Historic (1998-2020) Capacity Availability



ii. Coastal Branch Reach 34

Available capacity for Reach 34 of the Coastal Branch was computed based on the design capacity of 68 cfs. These reaches cover the Coastal Branch Aqueduct roughly from Santa Margarita to the San Luis Obispo County line. This review identified the available capacities shown in Figure 7, which are generally similar to those shown for Reaches 1-4. Available capacity is regularly limited during the months of May through September and is relatively open for the months of October through April.

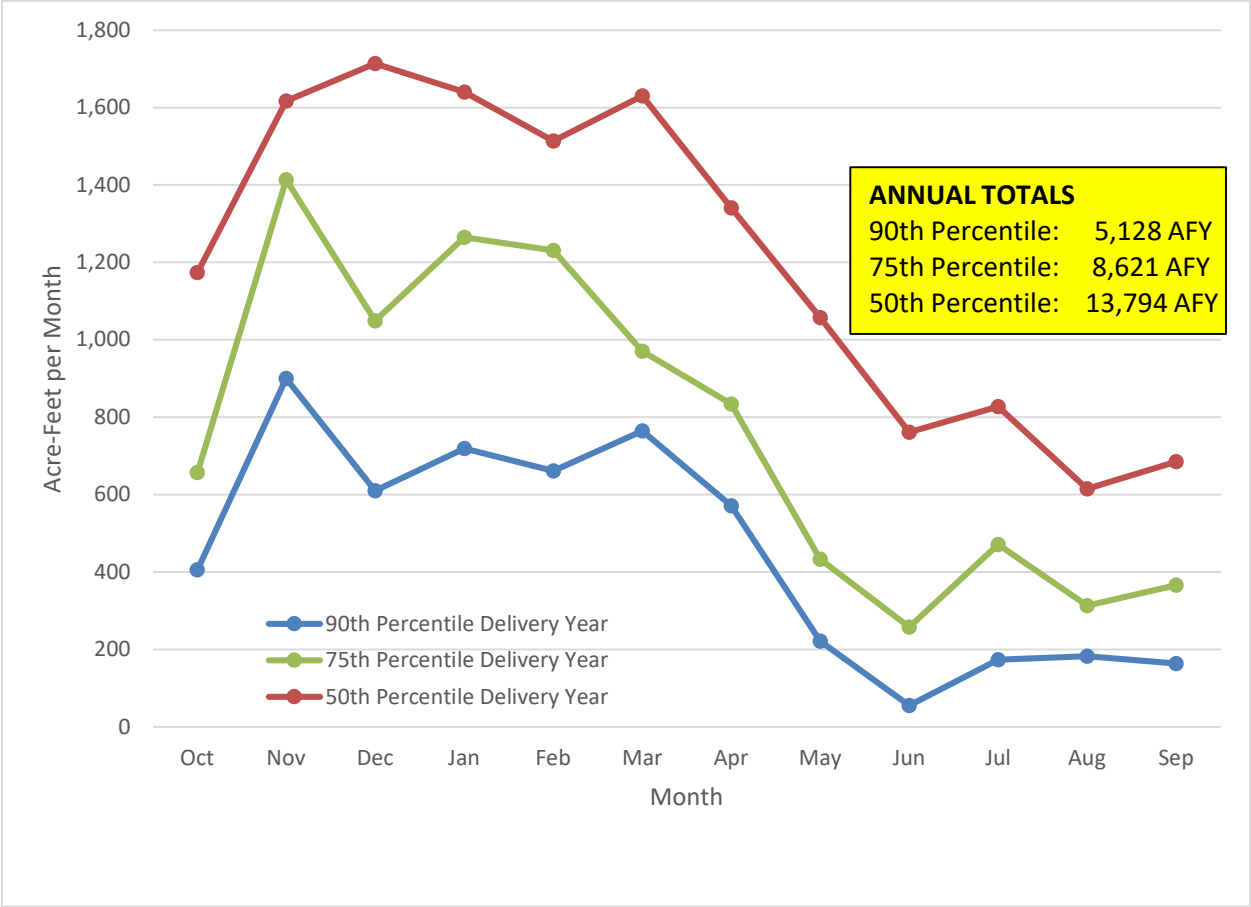
Figure 7: Reach 34 Historic (1998-2020) Capacity Availability



iii. Coastal Branch Reach 38

Reach 38 is located south of the City of Santa Maria. This reach has a design capacity of 33 cfs, which is significantly lower than upstream reaches and reflects the high turnout capacity at the City of Santa Maria. Figure 8 shows very limited available capacity in the peak delivery season for high delivery years (greater than 75th percentile), with available capacities less than 500 AF for the months of May through September. During the remainder of the year (October through April), monthly capacities of 1,500 AF and greater are available.

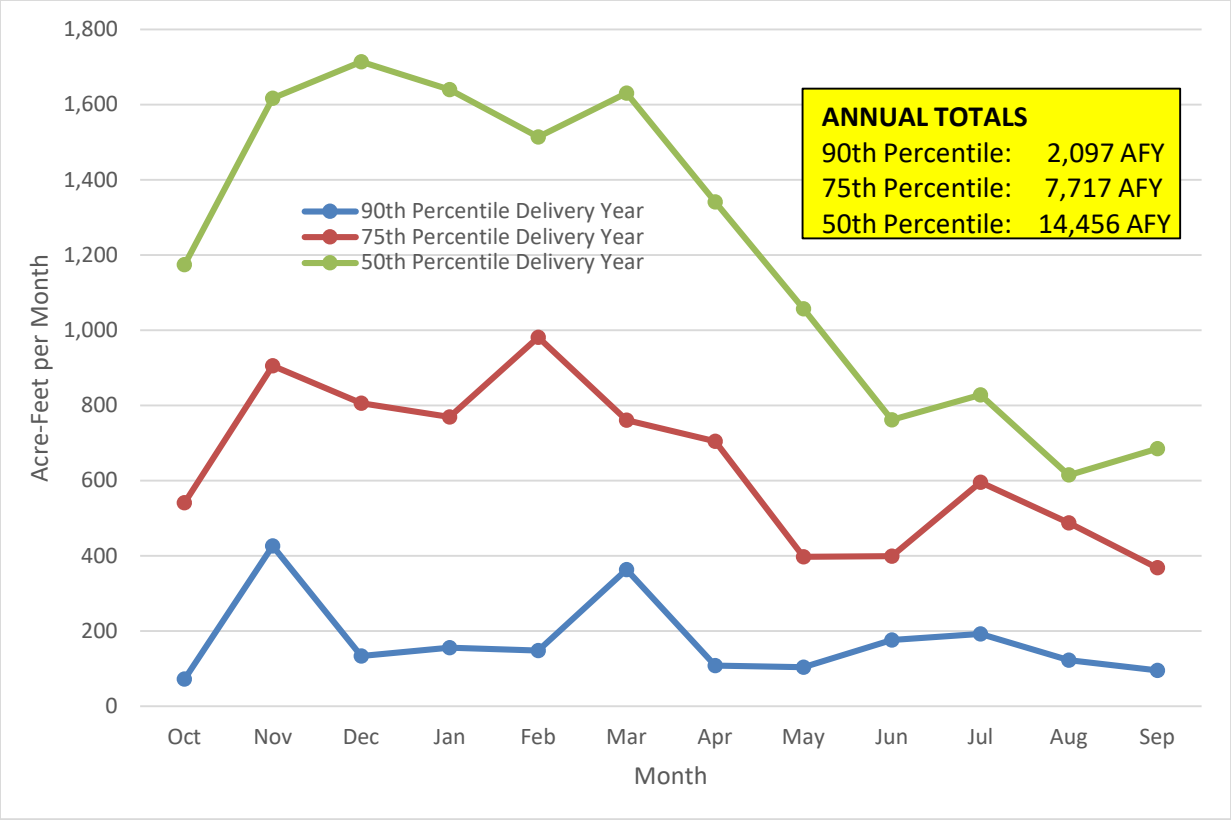
Figure 8: Reach 38 Historic (1998-2020) Capacity Availability



iv. Coastal Branch Reach SY II

The last reach of the Coastal Branch that is analyzed is Reach SY II, located downstream of the Santa Ynez Pump Station. This reach has a design capacity of 22 cfs, which (being the most downstream reach) is the lowest capacity on the Coastal Branch. Figure 9 shows very limited available capacity in the peak delivery season for high delivery years (greater than 90th percentile), with available capacities less than 200 AF for all but two months (November and March). In the 75th percentile delivery year and lower, there is consistent relatively high capacity available for the months of October through April.

Figure 9: Reach SY II Historic (1998-2020) Capacity Availability



VII. Conveyance Constraints Summary

The review of available capacity in the California Aqueduct between the San Luis Reservoir and the CCWA portion of the Coastal Branch indicates good availability of capacity in dry years and in non-summer months. At Reach 7 (Check 21) there is significant available capacity in all year types from October to May. At Reach 31A there is available capacity from October to May in high-use wet years and in all months in drier years (50th percentile and drier). At Reach 33A there are no limitations in available capacity even in the driest conditions. Historical actual data and CALSIM-2 modeling show similar capacity availability results at both Reach 7 and Reach 31A but differ for Reach 33A with historical actual data having more validity.

The review of available capacity in the Coastal Branch indicates that there is limited available capacity from May through September in high-use years for all reaches. Consistently high capacity is available for use by Coastal Branch Contractors in all years in the months of October through April as well as in low delivery years (less than 50th percentile) in all months.

Central Coast Water Management Options
Overview of Rules and Regulations Affecting Potential Actions

Management of State Water Project water by SWP contractors, such as agencies within San Luis Obispo FCWCD and CCWA, is subject to a variety of formal and informal regulatory constraints. The purpose of this section is to summarize those constraints and provide references for specific language on applicable constraints and more detailed description. While the description here is generally applicable to water management actions involving use of SWP, it is recognized that additional constraints may occasionally apply to specific measures.

Although the focus of this discussion is on managing SWP water, optimizing water supplies for SWP contractors also frequently involves use of water supplies or facilities outside of the SWP. The discussion below addresses the following topics:

- State of California Water Rights
- State Water Project Contracts
- Environmental and Endangered Species Acts
- Groundwater Storage
- Use of Conveyance

I. State of California Water Rights

In general, the rights to use water in the State of California are managed by the State Water Resources Control Board (SWRCB). The State of California holds water in the state in trust. A water right provides an assigned user the right to use some portion of the available water. Water rights that can be demonstrated to have been established prior to 1914 are not subject to SWRCB regulation and allow the water right holder broad discretion on the use and management of the water supplies that they receive. Water rights that were established after 1914 are assigned by the SWRCB based on formal applications for use in specific areas. Within the San Luis Obispo and Santa Barbara Counties study area, water rights to local streams are subject to specific water rights permits by the SWRCB, either directly or as part of a larger project. A landowner that has property adjacent to a waterway may use water for beneficial uses on that property without additional approval from the SWRCB. Such riparian water rights do not apply to other lands, owned by the landowner, that are not contiguous with those lands adjacent to the waterway.

When the SWP was being contemplated, the State of California Department of Water Resources (DWR) obtained permits from the SWRCB to store and divert water for the SWP. While DWR has many contractual constraints on water use by its contractors (which are described below), its use of SWP water remains subject to SWRCB water rights jurisdiction. The practical effects of this continuing oversight are primarily related to the SWP Area of Use, which is defined in the SWP water rights. The SWP Area of Use includes the service area boundaries of all of the SWP Contractors, including San Luis Obispo and Santa Barbara Counties in their entirety as well as the neighboring counties of Kings, Kern and Ventura. The SWP Area of Use can affect a water transfer, exchange or banking program if a

transfer, exchange or banking program partner agency is not located within the defined SWP Area of Use.

Transfers from the Sacramento or San Joaquin valleys are examples where SWP Area of Use could affect a water management action. Any water management action that requires the movement of water through the Sacramento-San Joaquin Delta will necessitate close coordination and cooperation of DWR (which owns and operates the SWP), USBR (which owns and operates the CVP), State Water Contractors, (which performs many important management and facilitation functions for 27 of the 29 SWP contractors), and the San Luis-Delta Mendota Water Agency (which performs the same functions as the State Water Contractors for many CVP contractors). As such, all water transfers involving movement of water through SWP and CVP delta export pumping plants will require extensive preparation and coordination.

II. State Water Project Water Supply Contracts

Because this evaluation is focused on the SWP, there is also an emphasis on specific rules affecting use of SWP water supplies. As long as SWP water supplies are used within the SWP Area of Use, the primary regulations affecting their management are those that are described in the SWP Water Supply Contracts of San Luis Obispo and Santa Barbara Counties. The SWP Water Supply Contracts contain constraints that affect water management actions involving other SWP contractors. These constraints do not necessarily apply to individual subcontractor management within either San Luis Obispo or Santa Barbara Counties. Most subcontractor management actions would need approval by the primary SWP contract holder (either San Luis Obispo County or Santa Barbara County) and would be subject to any conditions that their SWP contractor would require.

DWR originally developed the SWP contracts in the 1960s to provide highly reliable supplies that would be available in all years, subject to defined minimal reductions during dry years. The original SWP water supply contract provided limited guidance on external water management actions, being either silent on the topic or providing very high level, general guidance. The need for such water management tools was not anticipated in the original 1960s era contracts because of the intended reliable water supply that would be provided. Due to delays in developing new SWP water supplies since the 1960s, SWP contractors needed additional flexibility to manage SWP water supplies they receive to meet their needs. Today, individual SWP contractors manage water supplies within their own service area without needing approvals from DWR. However, water management actions outside of a SWP contractor's own service area require approval from DWR. In response to the increased need for local water management of SWP supplies, amendments to the SWP contracts have been enacted over the years. These amendments have formalized typical DWR processes or agreements between DWR and SWP contractors collectively on proposed activities.

As discussed below, the manner in which a contract amendment controls a water management action varies considerably. In many cases, the contract amendment provides only a general indication that an action can be taken, leaving DWR with considerable discretion in how it implements a potential action. In other cases, contract amendments specify conditions that apply to an action and DWR has less leeway

in interpreting how an action can be approved. The SWP contractual or administrative policies apply to the following water management actions[1]:

- Transfers
- Exchanges
- Storage
- Conveyance

i. **Transfers –** Transfers are defined as the sale of SWP water either temporarily or permanently to another SWP contractor. The sale of SWP water to a user outside of the SWP contractors has not happened due to challenges and costs involved in completing these kinds of transfers[2] and transfer of SWP water to users outside of the SWP are not described here.

SWP water transfers are segregated into three categories that are subject to different constraints – permanent, multi-year and single year.

- Permanent – A permanent water transfer involves the assignment of part or all of one SWP contractor's SWP Table A amounts to another SWP contractor. Table A of each SWP contractor's contract specifies its share of the costs, water supplies and use of SWP facilities. Article 41 in the SWP Water Supply Contracts provides that an SWP contractor may assign their rights to another agency only with the approval of DWR. A SWP contractor may sell a portion of their Table A to another contractor permanently, with the buyer water agencies becoming responsible for future costs of their SWP supplies and receiving future water supply amounts. A permanent assignment, or water transfer, will require environmental documentation, such as CEQA. [3] (Reference: SWP Water Supply Contract Article 41)
- Multi-Year – Multi-year transfers would be an ongoing agreement for an agency to purchase SWP supplies from another SWP contractor over a series of years. DWR's authority for such transfers is contained in general language in Article 7 and Article 15. While some permanent transfers and single year transfers have been subject to specific SWP contract language since 1996[4], no specific guidelines have been developed for multi-year SWP transfers. Due, in part, to uncertainty about the approval process for multi-year transfers, these types of transfers were only implemented in extreme drought circumstances (e.g., 2008-09, 2013-14) among SWP contractors. (Reference: SWP Water Supply Contract Articles 7, 15 and 56(d))

[1] All actions require some level of CEQA disclosure.

[2] Such a transfer would have to address the need for a possible water rights change in place of use. It would also need to be approved by DWR under broad authorities (such as Article 15) and is not provided for in the SWP Water Supply Contracts.

[3] Article 53, added in 1996, required that agricultural SWP contractors offer the permanent transfer of at least 130,000 acre-feet to urban SWP contractors, with the agricultural contractors having a first right of refusal for transfers offered under this provision. The 130,000-acre-foot requirement was satisfied in 2010 and would not apply to any future transfers.

[4] A package of SWP water supply contract amendments, including Articles 52, 53, 54, 55 and 56, implemented in 1996 was successfully challenged for lack of adequate CEQA documentation. DWR ultimately agreed to revisions to the environmental documentation and recertified the environmental documentation for the revised amendments in 2010.

- Single Year – Since 1996, single year transfers have been prohibited by the SWP Water Supply Contract outside of the "Turnback Pool". Article 56 provided for a process for DWR to establish "Turnback Pool" for those contractors that do not have need for their water in a single year to transfer that water to other contractors. The pricing and allocation are explicitly identified in Article 56 and have limited flexibility in how they are applied; due to the low prices established in Article 56, there has been limited value for SWP contractors to transfer water supply through the Turnback Pool, and it has not been an effective water management tool in recent years.

  For SWP contractors that sign the 2020 Water Management Amendment, the Turnback Pool was eliminated as the sole way to allow single year transfers among SWP contractors and there is provision for single year sales of water on terms that are negotiated by SWP contractors.[5] Article 57, which is revised in the 2020 Water Management Amendment, provides that DWR will approve one-year transfers subject to general provisions that the financial integrity of the SWP is maintained, that the transfer is transparent, that other SWP contractors are not adversely impacted and that no significant adverse impacts are created in the participating contractors' service areas. (Reference: SWP Water Supply Contract Article 57)

III. **Exchanges** – An exchange is defined in this report as an ongoing agreement for one agency to provide water to another agency in exchange for the future return of some portion of the amount exchanged. An exchange will typically involve delivery of unneeded water in a wet year by an agency in exchange for return of some smaller portion of the exchanged water in a dry year. Monetary payments may also be involved in addition to the actual exchange to reflect different values of water in different year types as well as to address additional costs or avoided costs that occur.

The 2020 Water Management Amendment updates pre-existing SWP guidance on exchanges, which were defined as bona-fide exchanges in prior SWP contracts. The current SWP contract language provides for specified exchange ratios based on SWP allocation levels as follow:

- SWP allocation less than or equal to 15% - 5:1 specified exchange ratio
- SWP allocation greater than 15% and less than or equal to 25% – 4:1 specified exchange ratio
- SWP allocation greater than 25% and less than 50% – 3:1 specified exchange ratio
- SWP allocation greater than or equal to 50% – 2:1 specified exchange ratio

The current exchange provisions also include caps on exchange costs that are related to an agency's overall SWP contract charges to DWR. The SWP contract does not require payment of charges for

[5] Between 1996 when Article 56 was implemented and 2020 when the 2020 Amendment was added, single year transfers were limited to the Turnback Pool Program. The Turnback Pool Program was a limited means for a SWP contractor to sell unneeded Table A allocations at a defined price. The Turnback Pool Program provided that a SWP contractor could sell into two Pools at relatively low prices defined as half of the Delta Water Charge (for Pool A sales by February 15) or for a quarter of the Delta Water Charge (for Pool B sales by March 15). Because of increasing SWP contractor demands and the low prescribed price for Turnback Pool sales, it has had limited participation since the early 2000s.

exchange programs that use SWP facilities that a contractor already pays for, which is a condition of storage programs (as discussed below).

Over time, there has been a realization that exchanges almost always include an implied element of storage that can make them appear indistinguishable externally from a storage (or banking) program. (Reference: SWP Water Supply Contract Article 56(f))

ii. **Storage** – While SWP contractors have always been able to store water within their own service areas, either in surface reservoirs or groundwater, the original SWP contract did not provide for storage outside of a contractor's service area. With Article 56 (added in the SWP contract amendments of 1996), individual SWP contractors were allowed to store unused Table A amounts in either unused space of SWP facilities or in storage facilities within other SWP contractors' service area.

Storage of unused SWP Table A amounts in SWP facilities is subject to availability of that space and can be reclassified as SWP project water ("spilled") in the event that SWP supplies become available that require use of the storage. Under Article 56, SWP contractors can schedule water to be carried over on a long-term basis into subsequent years when their annual water supply requests are made. Contractors may also carry over some of their allocated Table A for delivery in January through March of the following year if there is sufficient storage space in SWP facilities.

Article 56 also specifies rules limiting the amount of scheduled carryover water by a SWP contractor. The scheduled carryover water is allocated by DWR and made available in San Luis Reservoir at the end of a calendar year. Any carryover water amounts can be retained in storage in San Luis Reservoir as long as the SWP does not need the storage, which can extend for multiple years. In the event that wet conditions occur and the SWP can fill San Luis Reservoir, a contractor is required to use their carryover water on relatively short notice or it will be converted to SWP water. There is no specific cost for storing water in SWP facilities, so this provision is very attractive to many SWP contractors.

Prior to 2007, when new Endangered Species Act (ESA)-related Delta pumping restrictions began, San Luis Reservoir would very frequently fill and SWP contractors were forced to manage their carryover or allow it to convert to the current year SWP water supply, effectively losing it for their use. Since 2007, the restrictions on SWP pumping in the Delta have greatly reduced the occurrence of filling San Luis Reservoir, thus allowing SWP contractors to increase reliance on that carryover storage.

While storage in SWP facilities is a convenient and low-cost option, SWP contractors have no control over when their water may be at risk of spilling. However, another important provision of Article 56 is the ability for SWP contractors to store some or all of their carryover in storage programs outside of the SWP. These external storage programs typically involve use of other SWP contractors' groundwater basins. The costs for this access and constraints on its use are subject to mutual agreement between a SWP contractor and

the water agency offering the banking arrangement. The Semitropic Water Bank, operated by Semitropic Water Storage District (a member agency of the Kern County Water Agency) was an early implementer of this kind of program. More recently, other agencies within Kern County and in other SWP service areas, have developed similar programs or are in the process of developing such programs.

The SWP Water Supply Contract Article 56 defines constraints on a SWP contractor's involvement in an external storage program, primarily addressing issues related to maintaining cost equity on the SWP for use of facilities. The most significant terms of an external storage program, however, are subject to mutual agreement with the SWP contractor and the storage agency, and are not regulated by DWR. (Reference: SWP Water Supply Contract Article 56)

iii. **Conveyance** – SWP contractors have contractual access to the use of SWP facilities (including the California Aqueduct) to deliver non-SWP water through SWP facilities. This access is subject to specified charges and the delivery priorities identified in Article 12(f). The priorities in Article 12(f) specify that various types of SWP water (e.g., Table A and Article 21 Water) have the highest priority. Non-project water, such as water transfers purchased by individual SWP contractors from non-SWP sources, have lower priorities and can only be delivered after all SWP water is delivered. Use of SWP facilities is subject to actual pumping costs determined by DWR and can also be subject to a calculated "use of facilities charge" for SWP features that a contractor does not pay for.

DWR's Division of Operations and Maintenance operates the California Aqueduct to maximize flexibility for overall SWP purposes[6]. These purposes include using conveyance and storage capability along the Aqueduct to minimize energy costs to all SWP contractors; however, avoiding loss of SWP water is a higher priority than energy costs. Non-SWP operations, such as transfers and exchanges, ride on top of the normal SWP operations. As a result, scheduling for water transfers and exchanges requires close coordination with DWR operators and can be challenging to schedule.

IV. Environmental Permits

Actions, such as water management activities, that could potentially affect the environment are subject to the regular kind of environmental permitting needed by any project. These requirements will almost always include the California Environmental Quality Act (CEQA), which may involve DWR as a responsible agency. Actions affecting federal facilities (such as Cachuma Reservoir) or involving federal permits (such as Clean Water Act permits) will typically require evaluation of environmental impacts under the National Environmental Protection Act (NEPA). A general overview of CEQA and NEPA requirements is provided below, and other potential State and Federal permitting requirements are summarized later in this discussion.

[6] There is additional discussion of DWR's management of conveyance in the Chapter on Conveyance Capability of this report.

CEQA review begins with review of the proposed water management activity and evaluation of whether it qualifies as a project under CEQA. Some routine operational activities will be considered categorically exempt. A categorical exempt activity may not require additional analysis and can proceed with release of a Notice of Exemption. Activities with the potential for significant impacts to the environment will require preparation of an Initial Study, which is followed by a decision on the level of significance of environmental impacts. Projects with a low level of environmental impacts can proceed after preparation and public release of a Negative Declaration, with provisions for specified public review. Projects with higher levels of environmental impacts require preparation of an Environmental Impacts Report (EIR) with more comprehensive documentation of potential impacts. The EIR will need public release providing an opportunity for public comment. Ultimately, after closure of public review periods for either a Negative Declaration or an EIR, an agency can approve the document with a Record of Decision and proceed with the action.

The NEPA process has many similarities to the CEQA process and NEPA documentation will frequently be prepared in coordination with CEQA as joint documents. Activities identified as projects under NEPA would be triggered by the need for federal approvals. Projects will initially be evaluated with an Environmental Assessment, identifying the potential for environmental impacts. Projects with a low potential for environmental impacts can be approved by preparation of a Finding of No Significant Impacts (FONSI). Based on the Environmental Assessment, projects with a higher potential for environmental impacts will require preparation of an Environmental Impacts Statement (EIS). After public release of the EIS, an opportunity for public review, and any modification based on comments, the project may ultimately be considered for implementation which is documented by a Notice of Determination.

In addition to the normal CEQA and NEPA evaluations, water management activities may be subject to permitting for the following processes. Note that this list is not comprehensive and there may be other permits or regulations requiring compliance for specific activities.

- Federal Endangered Species Act (FESA) – Activities that could involve impacts to federally listed endangered species may require permits from NOAA Fisheries or the U.S. Fish and Wildlife Service. Effects on streambeds in the Central Coast will sometimes involve habitat used by steelhead trout and may require FESA permits. Land based activities affecting critical habitat for specifies such as the San Joaquin Kit Fox may also require ESA permits.
- California Endangered Species Act (CESA) – CESA has separate permitting that is similar to the FESA. For the Central Coast area, CESA listed endangered species are likely to have similar identified ranges and permitting requirements. The CESA and FESA processes may be closely coordinated.
- Delta Plan – The Delta Stewardship Council adopted the Delta Plan in 2013, which identifies requirements meant to avoid adverse impacts to the Sacramento-San Joaquin Delta. Some water management activities to the SWP could have effects traced back to the Delta and need to conform to the Delta Plan. The Delta Stewardship Council will consider projects for consistency with the Delta Plan and make a determination on whether the project is consistent.

V. Groundwater Basins

Storage of SWP water in groundwater basins will typically involve compliance with local groundwater storage constraints including adjudications, ordinances, groundwater sustainability plans (GSPs) or less formal local agreements. Within the Central Coast area, the Santa Maria River Valley Basin has been adjudicated and use of the basin is subject to court supervised management. San Luis Obispo County implemented a permit requirement in 2014 for any groundwater exports from basins within the county. In addition to local regulatory agreements, there are usually local operation agreements that provide oversight on the operation and management of groundwater storage programs to ensure that no third-party impacts occur. With or without any such local agreements, in-basin users retain their ability to legally challenge programs, including groundwater banking program, that could adversely their groundwater use. Such legal challenges could lead to court ordered adjudications, which have frequently taken many years, or decades to complete.

With the passage of the Sustainable Groundwater Management Act (SGMA) in 2014, groundwater sustainability agencies (GSA) have been authorized with broad authorities to protect local beneficial uses that depend on groundwater. Under SGMA, beneficial uses of groundwater, including agricultural and municipal groundwater pumping, as well as environmental purposes such as groundwater dependent ecosystems, must be protected from significant and unreasonable impacts to sustainability indicators such as declining water levels, degraded water quality and land subsidence. SGMA provides GSAs with the authority to manage groundwater banking programs as part of their GSPs. Within the Central Coast area, the Paso Robles Basin completed a GSP in January 2020. The Paso Robles GSP does not identify any particular projects in their GSP related to banking and recommends that San Luis Obispo's existing groundwater export ordinance should be enforced and retained. Many other Central Coast groundwater basins are in the process of preparing their GSPs which are due in January 2022. Any groundwater banking in these other basins will ultimately require consideration of any related provisions in the future GSPs. While GSPs have the authority to implement groundwater banking programs, any water recharged in a GSA may be subject to legal challenge by a non-participant in the absence of an adjudication of the groundwater basin.

Banking of groundwater outside of the Central Coast area in areas like the San Joaquin Valley is often subject to local agreements. As the San Joaquin Valley includes predominantly high and medium priority groundwater basins, these basins generally have GSPs that have been implemented as of January 2020. These GSPs will often include provisions related to groundwater banking by outside parties that may formalize preexisting arrangements. Any constraints on banking arrangements outside of the Central Coast will be identified in the project descriptions for specific banking proposals included in the water management alternatives.

SWP Supply Capability

This Central Coast Water Management Strategies discussion uses CALSIM-2 studies in DWR's 2019 SWP Delivery Capability Report (2019 DCR)[1] to estimate present SWP supply capability conditions and quantify available SWP supplies for both counties. The 2019 SWP DCR indicates that SBCFCWCD has available SWP Table A and carryover supplies of about 59% of its Table A contract amounts. SLOCDCWCD has slightly lower SWP Table A and carryover supplies of about 58% of its Table A contract amounts. In addition to minor amounts of Article 21 water that are available on an interruptible basis, the supplies documented here are the quantities that the SWP is capable of providing for Coastal Branch Contractors. Subsequent analysis will be conducted to indicate the amounts of these available water supplies that could actually be utilized by Coastal Branch Contractors.

CALSIM-2 Description

The California Department of Water Resources, in managing the State Water Project (SWP), develops a biennial SWP Delivery Capability Report, which estimates the water supply available for SWP Contractors, including SBCFCWCD and SLOCFCWCD. The SWP water supply estimates are developed using their CALSIM-2 operations model[2]. In addition to evaluating SWP operations with hydrologic conditions in the Central Valley, CALSIM-2 incorporates the operations of the US Bureau of Reclamation (USBR) Central Valley Project (CVP) facilities and local water supply systems as these can affect the water supply available to the SWP. CALSIM-2 also represents water rights and regulatory constraints, which have changed over time and are subject to future revisions.

CALSIM-2 uses an historical period of 1922 through 2003, which contains hydrologic variations representing a range of water supply conditions, and is run incorporating current regulatory and water demand conditions. The current hydrologic conditions represent an estimate of the long-term water supply variation of the 1922 through 2003 period, with adjustments to bring water use practices to current levels. DWR also runs CALSIM-2 using projections of future climatic effects on water supply and corresponding regulatory and demand assumptions.

For the 2019 SWP DCR, DWR prepared a CALSIM-2 study (Study 2020D09E) including current regulatory constraints on the SWP, including the Bay Delta Water Quality Control Plan, Biological Opinions of the National Marine Fisheries Service and the United States Fish and Wildlife Service, and the Coordination Operations Agreement between DWR and the USBR. CALSIM-2 results for SWP contractors are presented in the 2019 DCR for three types of water supply – Table A Amounts, Carryover Water (Article 56) and Article 21 Water. The reported amounts of Table A represent SWP allocations that can be delivered on a schedule for use in a specific year. In years with high Table A allocations, SWP contractors may request to carry over water in San Luis Reservoir for use in subsequent years. Once in San Luis Reservoir, the water can either be used in a drier following year or else it can be "spilled" if water supply conditions become wet and DWR needs to use the San Luis Reservoir storage space. The CALSIM-2

[1] https://water.ca.gov/Library/Modeling-and-Analysis/Central-Valley-models-and-tools/CalSim-2/DCR2019

[2] CALSIM-2 was used to perform the modeling simulations. https://water.ca.gov/Library/Modeling-and-Analysis/Central-Valley-models-and-tools/CalSim-2

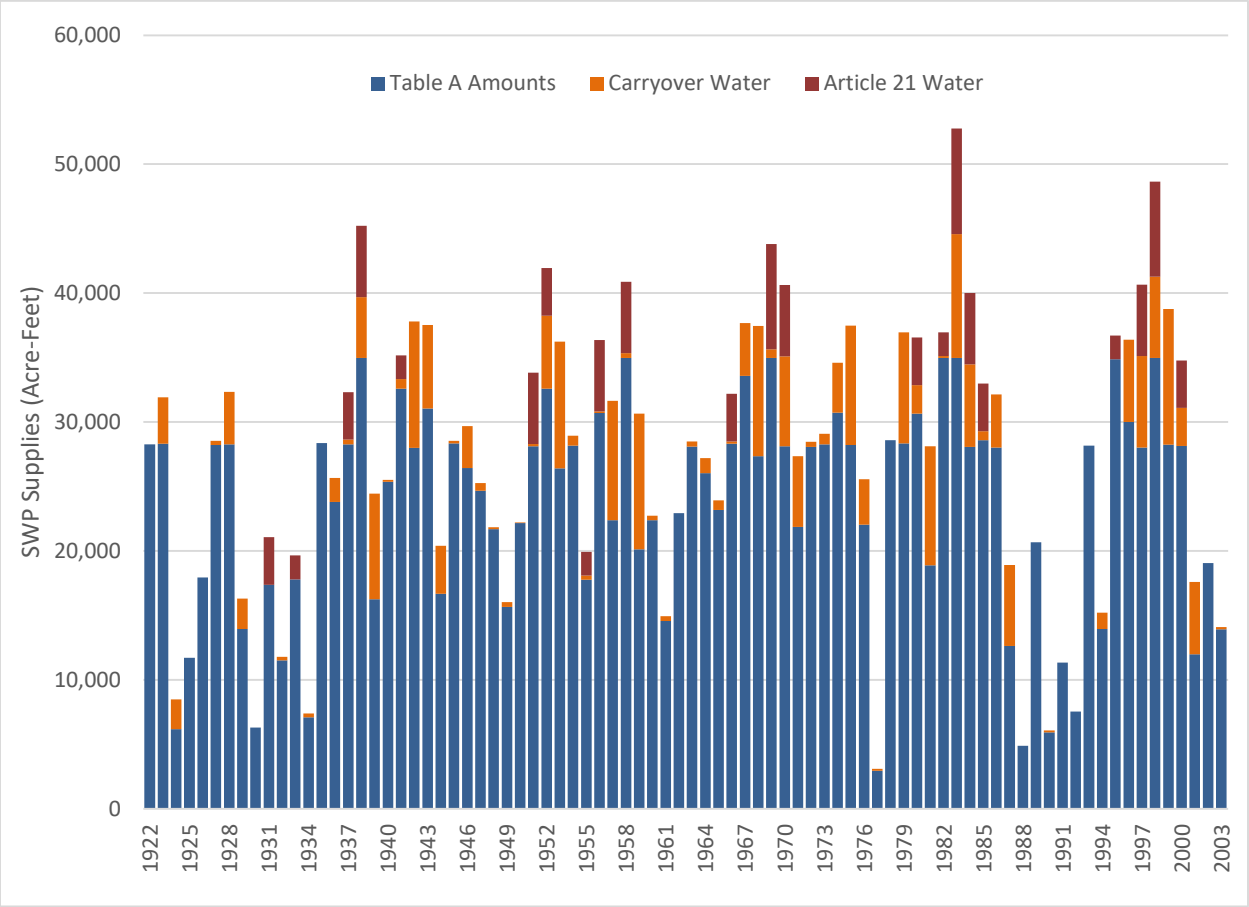
reported carryover amounts represent the quantities of Table A carryover supplies that were used in subsequent years. A third type of water, Article 21 Water, represents short term water supplies that are available relatively infrequently and can be taken on an instantaneous basis by SWP contractors.

2019 Delivery Capability Report Results

The projected Table A, Carryover and Article 21 water supply for SBCFCWCD and SLOCFCWCD from the 2019 DCR CALSIM studies is presented as monthly tables of water supply in the Appendix as Tables A1-A6. Summaries of the water supply are shown in Table 1. The water supplies summarized in Table 1 are also shown graphically in Figures 1 and 2.

Santa Barbara County Flood Control and Water Conservation District –Figure 1 shows the CALSIM-2 hydrologic sequence of SWP supplies for SBCFCWCD. The average SWP Table A and Carryover supplies that are available to SBCFCWCD are 26,000 acre-feet, with those supplies exceeding 22,000 acre-feet in about 70 percent of the years. The sequence of water supply availability shows three especially significant drought periods when deliveries are much lower than average – 1929-1934, 1976-1977, and 1987-1992. These dry periods have comparable SWP supply shortages to the recent 2012-2016 drought period, which is not included in the CALSIM-2 simulation. In addition to Table A and Carryover water that is delivered to SWP contractors on a requested delivery schedule, the 2019 DCR also shows about 1,200 acre-feet of Article 21 Water being available. This water is available in less than 30% of the years and only during the months of January through May.

Figure 1: Santa Barbara County FCWCD -- SWP Available Supply Present Level

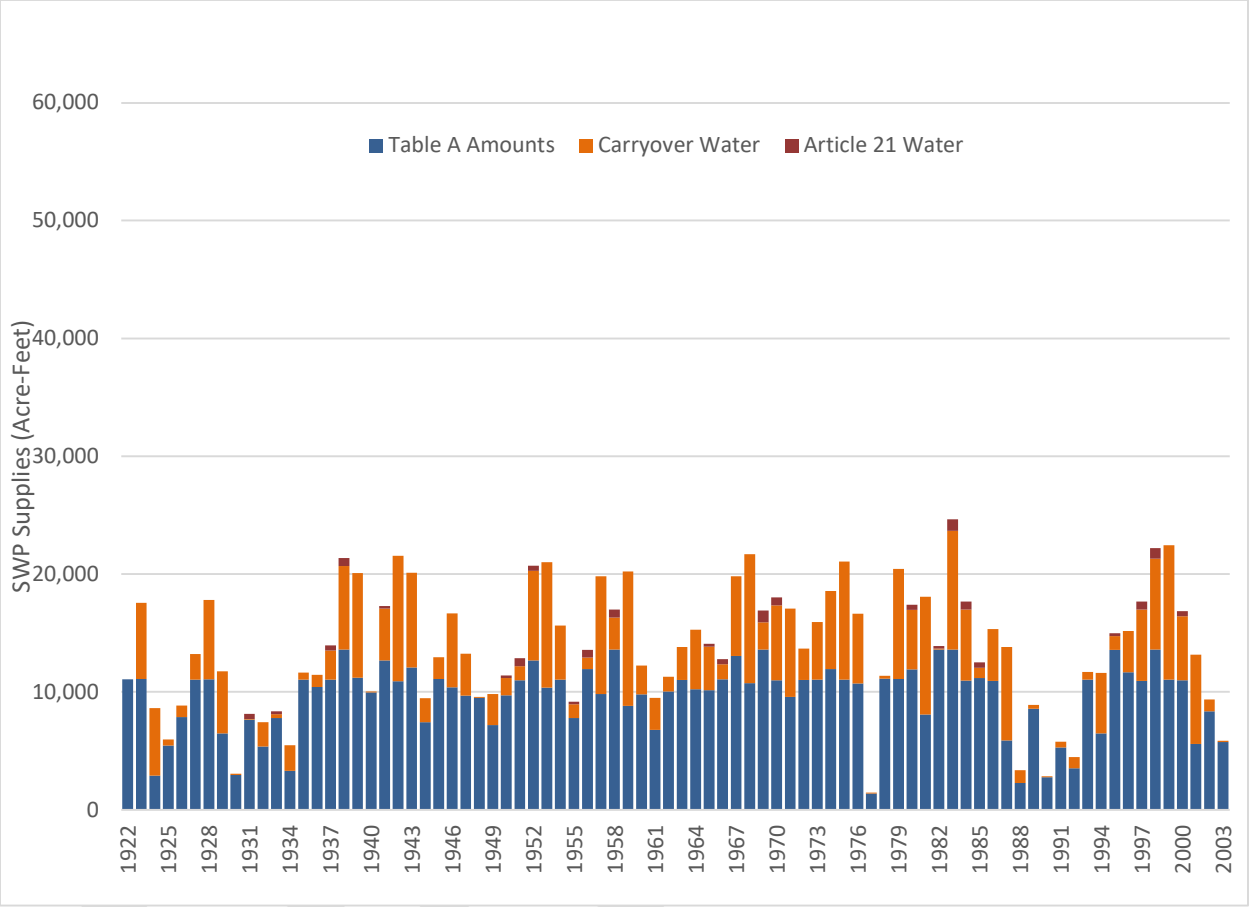


The water supplies shown in Figure 1 are the total SWP supplies that are available to SBCFCWCD and do not necessarily represent the amounts that could be used. In some wet years, there may not be water demands in the local service area, or local water supplies may be available making SWP Supplies unnecessary. As discussed elsewhere, in these types of wet years (either locally or in the SWP's Central Valley watershed source), other provisions may be needed for managing water supplies. Capacity on the SWP or in local conveyance facilities may also be a limiting factor, particularly in wetter years. For example, the approximate treatment capacity at Polonio Pass of 43 million gallons per day, is equivalent to about 48,000 acre-feet per year, which could be a limiting factor in very high allocation years such as 1983 or 1998.

San Luis Obispo County Flood Control and Water Conservation District –A similar graph of SWP available supply for SLOCFCWCD is shown in Figure 2. This figure is plotted on the same scale as that of SBCFCWCD and shows smaller quantities of SWP supplies, reflecting SLOCFCWCD's smaller amount of SWP Table A contracted supply. The 2019 DCR estimates that SLOCFCWCD would receive average Table A and carryover water deliveries of approximately 14,000 acre-feet, which is about 58% of the 25,000 acre-foot Table A contract amount. The percentage of Table A amounts estimated to be available to SLOCFCWCD is slightly lower than for SBCFCWCD due to different assumptions used by CALSIM-2 for

SLOFCWCD Table A demand levels and carryover requests. In addition to the Table A and Carryover Water, SLOCDCWCD also is projected to have about 100 acre-feet of Article 21 water available.

Figure 2: San Luis Obispo County FCWCD -- SWP Available Supply Present Level -



Coastal Branch Contractors Allocations –The supplies summarized in Table 1 and shown in Figures 1 and 2 represent a starting point in estimating locally available water supplies from the SWP. As discussed in later sections, factors such as local water supplies, service area demands and SWP capacity can affect the portion of SWP supplies retained in each county.

Both SBCFCWCD and SLOCFCWCD have local agencies within their service areas that have contracted for portions of the SWP supply. The Table A contracted amounts for these agencies are shown in Table 2.

Table 2

SBCFCWCD and SLOCFCWCD Table A Subcontracted Amounts

Santa Barbara County Flood Control and Water Conservation District			
	Table A Amount		
Project Participant	(Acre-Feet per Year)		
City of Buellton	578		
Carpinteria Valley Water District	2,000		
Goleta Water District	4,500		
City of Guadalupe	550		
La Cumbre Mutual Water Company	1,000		
Montecito Water District	3,000		
Morehart Land Company	200		
City of Santa Barbara	3,000		
Raytheon Systems Company	50		
City of Santa Maria	16,200		
Santa Ynez RWCD, Improvement District	2,000		
Golden State Water Company	500		
Vandenberg Air Force Base	5,500		
TOTAL [1]	39,078		
[1] The amounts do not include "drought buffer" amounts for CCWA (3,908 AF per year) or for Goleta Water District (2,500 AF per year)			
San Luis Obispo County Flood Control and Water Conservation District			
	Water Service Amount	Drought Buffer Amount	Total Water Amounts
SLOCFCWCD Subcontractor	(Acre-Feet per Year)	(Acre-Feet per Year)	(Acre-Feet per Year)
CSA 16 (Shandon)	100	0	100
City of Morro Bay	1,313	2,290	3,603
CMC	400	400	800
County Ops Center	425	425	850
Cuesta College	200	200	400
City of Pismo Beach	1,240	1,240	2,480
Oceano CSD	750	750	1,500
San Miguelito MWC	275	275	550
Avila Beach CSD	100	100	200
Avila Valley MWC	20	20	40
San Luis Coastal USD	7	7	14
Subcontractor Total [2]	4,830	5,707	10,537
[2] A remaining amount of 14,463 acre-feet of SLOFCWCD Table A amount is not under contract with a subcontractor			

The SWP water delivery availability amounts indicated in Table 1 can be applied proportionately to individual Coastal Branch Contractors based on the Table A amounts shown in Table 2. For example, Cuesta College, with an Table A amount of 400 acre-feet, would have access to 1.6% (400 AF/25,000 AF)

of the total SLOCFCWCD supply amounts shown in Table 1. The CALSIM-2 SWP water supply estimate summarized above, as distributed to Coastal Branch Contractors, constitute the SWP supply available. Later sections of this Water Management Strategy will evaluate approaches to maximize the use of these supplies to meet local water management needs cost effectively.

Table 1

State Water Project Central Coast Area Water Supply

	Santa Barbara County Flood Control and Water Conservation District								San Luis Obispo County Flood Control and Water Conservation District							
	Off-Peak (Oct-Mar)				On-Peak (Apr-Sep)				Off-Peak (Oct-Mar)				On-Peak (Apr-Sep)			
Year	Table A	Carryover	Article 21	Total	Table A	Carryover	Article 21	Total	Table A	Carryover	Article 21	Total	Table A	Carryover	Article 21	Total
1922	13,164	0	0	13,164	18,088	0	0	18,088	6,560	0	0	6,560	6,310	0	0	6,310
1923	11,234	3,607	0	14,841	17,343	0	0	17,343	5,164	6,466	0	11,630	6,032	0	0	6,032
1924	5,961	769	0	6,730	3,327	1,025	0	4,352	2,960	1,913	0	4,873	1,494	2,551	0	4,045
1925	3,053	513	0	3,565	8,015	0	0	8,015	1,475	1,451	0	2,926	3,486	350	0	3,837
1926	4,539	0	0	4,539	12,153	0	0	12,153	2,350	331	0	2,682	4,877	662	0	5,539
1927	8,216	309	0	8,525	18,407	0	0	18,407	3,919	2,179	0	6,098	6,452	0	0	6,452
1928	9,048	4,073	0	13,121	19,080	0	0	19,080	4,382	6,720	0	11,101	6,621	0	0	6,621
1929	6,984	886	0	7,870	7,651	1,476	0	9,127	3,447	1,977	0	5,424	3,436	3,295	0	6,730
1930	5,513	0	0	5,513	4,398	0	0	4,398	2,664	37	0	2,701	1,913	74	0	1,987
1931	3,560	0	3,688	7,248	11,581	0	0	11,581	1,771	60	448	2,279	4,684	0	0	4,684
1932	4,667	95	0	4,762	7,865	190	0	8,054	2,441	693	0	3,134	3,424	1,386	0	4,810
1933	4,178	0	1,844	6,022	12,349	0	0	12,349	2,184	325	224	2,734	4,962	0	0	4,962
1934	4,604	102	0	4,706	4,850	170	0	5,021	2,417	721	0	3,137	2,113	1,201	0	3,314
1935	2,550	34	0	2,584	20,745	0	0	20,745	1,331	842	0	2,173	7,338	0	0	7,338
1936	8,988	1,854	0	10,842	16,294	0	0	16,294	4,206	1,019	0	5,225	6,620	0	0	6,620
1937	7,339	349	3,688	11,376	20,020	0	0	20,020	3,781	2,461	448	6,690	7,059	0	0	7,059
1938	11,596	4,724	1,844	18,164	22,470	0	3,688	26,158	5,400	7,095	224	12,719	7,872	0	448	8,320
1939	10,629	3,510	0	14,139	12,726	4,680	0	17,406	4,952	3,803	0	8,755	4,425	5,071	0	9,496
1940	1,995	157	0	2,152	17,807	0	0	17,807	6,101	86	0	6,188	6,254	0	0	6,254
1941	11,001	740	0	11,741	20,526	0	1,844	22,370	5,137	4,394	0	9,531	7,169	0	224	7,393
1942	12,401	9,817	0	22,217	16,928	0	0	16,928	5,624	10,637	0	16,261	5,895	0	0	5,895
1943	10,619	6,469	0	17,088	19,527	0	0	19,527	4,825	8,031	0	12,856	6,846	0	0	6,846
1944	6,924	1,245	0	8,170	11,972	2,491	0	14,462	3,314	684	0	3,998	4,927	1,369	0	6,296
1945	6,102	210	0	6,312	20,019	0	0	20,019	3,080	1,860	0	4,940	7,049	0	0	7,049
1946	11,452	3,253	0	14,705	16,185	0	0	16,185	5,358	6,277	0	11,635	5,603	0	0	5,603
1947	7,192	257	0	7,449	14,339	343	0	14,682	3,526	1,527	0	5,053	5,013	2,036	0	7,050
1948	8,238	157	0	8,395	14,657	0	0	14,657	3,694	86	0	3,780	6,317	0	0	6,317
1949	8,060	124	0	8,184	10,776	249	0	11,025	3,672	878	0	4,549	4,608	1,755	0	6,363
1950	4,714	64	0	4,779	15,984	0	0	15,984	2,484	1,465	0	3,949	6,438	0	0	6,438
1951	11,010	172	5,532	16,713	16,995	0	0	16,995	5,223	1,210	896	7,329	5,943	0	0	5,943
1952	11,120	5,661	0	16,781	20,213	0	3,688	23,901	5,032	7,598	0	12,631	7,074	0	448	7,522
1953	12,573	9,817	0	22,389	15,580	0	0	15,580	5,691	10,637	0	16,328	5,398	0	0	5,398
1954	9,715	771	0	10,485	17,789	0	0	17,789	4,507	4,577	0	9,084	6,200	0	0	6,200
1955	8,281	312	1,844	10,437	11,248	0	0	11,248	4,022	1,158	224	5,404	4,529	0	0	4,529
1956	10,074	138	5,532	15,744	18,451	0	0	18,451	4,651	971	672	6,294	6,449	0	0	6,449
1957	8,682	9,243	0	17,925	14,816	0	0	14,816	4,051	10,015	0	14,067	5,983	0	0	5,983
1958	9,739	386	1,844	11,969	22,790	0	3,688	26,478	4,673	2,719	224	7,616	8,030	0	448	8,478
1959	11,626	10,530	0	22,156	11,880	0	0	11,880	5,375	11,410	0	16,785	4,820	0	0	4,820
1960	4,793	116	0	4,909	16,192	231	0	16,423	2,542	815	0	3,357	6,519	1,629	0	8,149
1961	6,035	128	0	6,163	10,184	257	0	10,441	3,197	906	0	4,103	4,443	1,811	0	6,255
1962	4,985	0	0	4,985	16,269	0	0	16,269	2,593	1,236	0	3,829	6,555	0	0	6,555
1963	10,915	395	0	11,310	17,096	0	0	17,096	5,256	2,785	0	8,041	5,906	0	0	5,906
1964	9,762	389	0	10,151	16,568	778	0	17,346	4,652	1,689	0	6,340	5,721	3,377	0	9,098
1965	10,230	760	0	10,990	13,597	0	0	13,597	4,843	3,708	0	8,551	5,464	0	0	5,464
1966	10,223	180	3,688	14,090	17,169	0	0	17,169	4,796	1,266	672	6,734	6,002	0	0	6,002
1967	10,113	4,090	0	14,203	21,790	0	0	21,790	4,624	6,744	0	11,368	7,680	0	0	7,680
1968	12,543	10,113	0	22,656	16,698	0	0	16,698	5,726	10,958	0	16,684	5,809	0	0	5,809
1969	11,085	679	5,532	17,297	21,998	0	2,638	24,636	5,107	2,316	672	8,095	7,715	0	318	8,033
1970	12,738	6,986	5,532	25,257	17,044	0	0	17,044	5,757	6,370	672	12,799	5,954	0	0	5,954
1971	10,571	5,465	0	16,037	12,513	0	0	12,513	4,856	7,486	0	12,343	5,083	0	0	5,083
1972	9,403	377	0	9,780	17,445	0	0	17,445	4,504	2,656	0	7,160	6,059	0	0	6,059
1973	10,308	819	0	11,128	17,782	0	0	17,782	4,768	4,866	0	9,633	6,230	0	0	6,230
1974	11,507	3,869	0	15,376	18,703	0	0	18,703	5,241	6,612	0	11,852	6,545	0	0	6,545
1975	11,176	9,255	0	20,431	17,613	0	0	17,613	5,115	10,028	0	15,143	6,124	0	0	6,124
1976	10,170	1,319	0	11,488	17,310	2,198	0	19,508	4,814	2,218	0	7,033	5,951	3,697	0	9,648
1977	293	52	0	346	1,961	105	0	2,066	2,760	29	0	2,789	854	58	0	911
1978	3,944	0	0	3,944	19,242	0	0	19,242	1,752	250	0	2,003	6,798	0	0	6,798
1979	7,734	8,612	0	16,346	20,422	0	0	20,422	3,680	9,332	0	13,012	7,199	0	0	7,199
1980	11,275	2,208	3,688	17,171	19,489	0	0	19,489	5,266	5,027	448	10,741	6,852	0	0	6,852
1981	7,987	3,078	0	11,064	12,050	4,104	0	16,153	3,796	3,335	0	7,131	5,277	4,447	0	9,724
1982	10,441	2,209	0	12,650	22,420	0	1,844	24,264	4,308	2,310	0	6,618	7,843	0	224	8,067
1983	13,631	9,620	5,532	28,783	21,599	0	2,638	24,237	6,116	10,075	672	16,863	7,589	0	318	7,907
1984	12,945	6,381	5,532	24,858	16,758	0	0	16,758	5,833	6,037	672	12,543	5,853	0	0	5,853
1985	9,841	699	3,688	14,227	18,294	0	0	18,294	4,563	882	448	5,893	6,366	0	0	6,366
1986	8,070	4,129	0	12,199	19,503	0	0	19,503	3,778	4,415	0	8,193	6,919	0	0	6,919
1987	7,142	2,092	0	9,234	8,574	3,487	0	12,061	3,506	2,642	0	6,148	3,731	4,404	0	8,135
1988	3,425	697	0	4,122	3,302	0	0	3,302	1,829	1,238	0	3,067	1,435	715	0	2,150
1989	2,096	0	0	2,096	19,753	0	0	19,753	1,088	138	0	1,226	6,959	184	0	7,143
1990	392	52	0	444	4,079	105	0	4,183	1,342	29	0	1,371	1,776	58	0	1,833
1991	2,217	0	0	2,217	7,806	0	0	7,806	1,160	168	0	1,327	3,397	335	0	3,733
1992	3,262	0	0	3,262	5,217	0	0	5,217	1,740	321	0	2,061	2,272	642	0	2,914
1993	5,763	0	0	5,763	18,580	0	0	18,580	2,681	641	0	3,322	6,506	0	0	6,506
1994	7,423	427	0	7,850	9,026	854	0	9,880	3,677	1,713	0	5,390	3,946	3,426	0	7,372
1995	7,399	0	0	7,399	23,198	0	1,844	25,042	3,514	1,183	0	4,697	8,175	0	224	8,399
1996	13,073	6,383	0	19,456	18,487	0	0	18,487	6,002	3,508	0	9,509	6,446	0	0	6,446
1997	12,159	7,094	5,532	24,786	16,556	0	0	16,556	5,428	6,071	672	12,171	5,782	0	0	5,782
1998	10,695	6,301	3,688	20,685	22,369	0	3,688	26,057	4,804	7,720	448	12,973	7,892	0	448	8,340
1999	12,730	10,530	0	23,260	17,268	0	0	17,268	5,821	11,410	0	17,231	6,002	0	0	6,002
2000	9,883	2,953	3,688	16,524	17,984	0	0	17,984	4,573	5,434	448	10,456	6,295	0	0	6,295
2001	6,528	1,871	0	8,399	8,158	3,741	0	11,900	3,187	2,524	0	5,711	3,549	5,048	0	8,597
2002	5,263	0	0	5,263	12,611	0	0	12,611	2,649	339	0	2,988	5,071	678	0	5,749
2003	8,410	183	0	8,593	9,575	0	0	9,575	4,149	100	0	4,250	3,772	0	0	3,772
Average	8,267	2,450	877	11,594	15,196	323	312	15,831	4,010	3,462	112	7,584	5,585	613	38	6,236

Table A1 - Santa Barbara County FCWCD -- Table A Amounts (Acre-feet)

Study 2020D09E

WY	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Water Year	Cal Year
1922	4,010.0	2,040.0	2,510.0	1,088.3	1,294.4	2,220.8	2,311.8	3,256.7	3,253.6	3,004.4	3,051.4	3,210.5	31,252.0	28,275.2
1923	2,644.6	1,287.5	1,651.1	1,634.2	1,884.0	2,132.7	2,218.7	3,184.7	3,161.4	2,889.8	2,898.6	2,989.6	28,576.9	28,317.2
1924	2,493.3	1,238.0	1,592.2	0.0	22.2	615.7	527.1	648.5	670.1	708.8	772.7	0.0	9,288.6	6,188.6
1925	1,051.0	541.0	631.5	23.8	4.5	800.9	916.0	1,285.9	1,328.9	1,405.6	1,532.3	1,546.5	11,068.1	11,707.5
1926	1,353.2	696.6	813.2	18.7	404.2	1,252.9	1,172.0	2,084.9	2,142.7	2,268.9	2,302.6	2,182.2	16,692.2	17,947.9
1927	1,929.4	981.6	1,207.7	696.6	1,130.5	2,270.0	2,278.2	3,305.2	3,309.8	3,067.8	3,129.9	3,316.4	26,623.1	28,223.6
1928	2,720.0	1,314.8	1,684.4	1,078.0	1,199.2	1,051.3	2,449.0	3,483.2	3,463.7	3,174.7	3,195.2	3,313.7	28,127.3	28,270.5
1929	2,754.2	1,360.2	1,748.0	0.0	26.3	1,095.5	1,130.1	1,510.2	1,560.6	1,650.7	1,799.5	0.0	14,635.2	13,951.3
1930	0.0	0.0	5,178.4	0.0	0.0	334.8	477.6	710.2	733.9	776.3	846.2	854.1	9,911.6	6,314.3
1931	747.4	384.7	449.1	174.8	420.9	1,382.7	1,433.4	1,922.2	1,976.0	2,092.2	2,130.9	2,026.2	15,140.3	17,379.4
1932	0.0	0.0	3,820.2	0.0	94.0	753.0	932.6	1,255.6	1,297.6	1,372.5	1,496.2	1,510.1	12,531.8	11,507.1
1933	1,321.3	680.1	794.0	1.9	112.1	1,268.1	1,493.2	2,061.2	2,118.3	2,243.0	2,276.4	2,157.3	16,527.0	17,803.3
1934	0.0	0.0	4,071.8	17.5	18.0	496.9	607.9	768.4	794.1	840.0	915.6	924.2	9,454.4	7,093.4
1935	808.6	416.2	485.9	23.8	66.6	748.9	1,975.6	3,579.8	3,671.3	3,529.0	3,755.3	4,233.6	23,294.7	28,361.8
1936	3,343.2	1,514.1	1,920.5	0.0	113.9	2,096.2	2,167.7	2,682.0	2,756.4	2,918.7	2,962.1	2,807.2	25,282.0	23,802.4
1937	2,482.0	1,262.7	1,553.6	0.0	327.7	1,712.9	2,530.1	3,548.1	3,564.8	3,321.0	3,409.1	3,646.5	27,358.5	28,278.3
1938	2,973.4	1,423.6	1,821.1	1,349.6	1,856.4	2,172.0	2,775.6	3,756.3	3,852.3	3,702.9	3,940.4	4,442.3	34,066.1	34,960.0
1939	3,508.0	1,588.7	2,015.2	1,002.4	1,151.7	1,362.5	2,466.3	3,548.6	3,513.4	3,197.8	0.0	0.0	23,354.7	16,242.7
1940	0.0	0.0	0.0	0.0	0.0	1,995.0	1,932.9	3,417.1	3,368.5	3,044.5	3,010.8	3,033.4	19,802.2	25,355.5
1941	2,567.2	1,303.9	1,682.2	1,404.7	1,895.1	2,147.8	2,201.2	3,495.1	3,584.5	3,445.5	3,666.4	4,133.4	31,527.1	32,591.2
1942	3,264.1	1,478.3	1,875.1	1,813.1	1,860.4	2,109.9	2,192.9	2,904.0	2,945.6	2,784.8	2,908.3	3,192.0	29,328.5	27,988.8
1943	2,562.0	1,194.2	1,521.6	1,290.9	1,918.6	2,131.7	2,412.1	3,264.3	3,347.8	3,217.9	3,424.3	3,860.5	30,145.9	31,048.6
1944	3,048.5	1,380.6	1,751.3	0.0	2.1	741.7	1,640.4	1,937.3	1,993.9	2,110.7	2,183.4	2,106.1	18,896.1	16,668.9
1945	1,856.6	947.7	1,148.9	274.5	186.5	1,687.6	2,552.1	3,625.8	3,615.8	3,329.4	3,369.8	3,526.3	26,121.2	28,340.3
1946	2,914.6	1,426.7	1,831.0	1,764.5	1,537.3	1,977.4	1,966.9	3,060.6	3,017.1	2,726.9	2,696.7	2,716.9	27,636.6	26,438.3
1947	2,299.4	1,167.9	1,506.7	550.8	470.0	1,197.3	2,223.7	3,224.0	3,178.2	2,872.5	2,840.7	0.0	21,531.2	24,658.9
1948	0.0	3,537.6	4,564.1	5.7	0.0	130.6	449.0	2,912.8	0.0	3,794.5	3,850.9	3,649.5	22,894.6	21,681.1
1949	3,226.8	1,641.6	2,019.8	60.8	61.1	1,050.0	1,431.4	1,712.3	1,767.0	1,869.6	2,003.2	1,993.0	18,836.4	15,653.8
1950	1,747.9	897.4	1,060.2	20.2	132.0	856.7	2,226.7	2,612.0	2,684.4	2,842.5	2,884.7	2,733.9	20,698.5	22,153.0
1951	2,417.2	1,229.7	1,513.0	1,899.1	1,864.7	2,086.0	2,190.0	2,957.8	2,986.6	2,804.2	2,905.2	3,150.9	28,004.4	28,129.0
1952	2,547.5	1,202.3	1,534.8	1,816.2	1,962.9	2,056.0	2,094.1	3,455.8	3,544.2	3,406.7	3,625.2	4,087.0	31,332.7	32,591.2
1953	3,227.4	1,461.6	1,854.0	2,107.1	1,838.0	2,084.5	1,856.6	2,954.0	2,912.0	2,631.9	2,602.7	2,622.3	28,152.3	26,410.0
1954	2,219.3	1,127.2	1,454.2	1,014.4	1,703.0	2,196.6	2,185.9	3,330.0	3,291.6	2,988.1	2,971.6	3,022.1	27,504.0	28,175.0
1955	2,542.7	1,279.9	1,649.2	656.6	876.2	1,276.1	1,322.9	1,884.3	1,936.5	2,050.6	2,081.1	1,972.2	19,528.3	17,778.9
1956	1,743.8	887.1	1,091.5	1,835.0	2,203.8	2,312.7	2,153.8	3,108.3	3,187.8	3,064.2	3,260.7	3,676.0	28,524.5	30,687.2
1957	2,902.9	1,314.7	1,667.6	698.0	751.0	1,348.3	2,064.0	2,421.2	2,488.3	2,634.8	2,674.0	2,534.2	23,498.9	22,396.8
1958	2,240.6	1,139.9	1,402.5	948.8	1,621.6	2,385.7	2,815.2	3,809.9	3,907.3	3,755.8	3,996.6	4,505.7	32,529.6	34,960.0
1959	3,558.0	1,611.4	2,044.0	1,071.9	1,474.8	1,866.0	1,654.9	1,941.3	1,995.1	2,112.6	2,144.0	2,031.9	23,506.0	20,127.6
1960	1,796.5	914.0	1,124.5	0.0	0.0	958.2	2,255.6	2,646.0	2,719.3	2,879.5	2,922.3	2,769.4	20,985.3	22,377.4
1961	2,448.7	1,245.7	1,532.7	0.0	49.9	758.0	1,331.8	1,603.5	1,657.1	1,752.7	1,910.6	1,928.4	16,219.0	14,561.8
1962	0.0	1,647.1	1,922.8	14.0	0.0	1,401.3	2,266.4	2,658.6	2,732.3	2,893.2	2,936.2	2,782.6	21,254.3	22,936.4
1963	2,460.3	1,251.6	1,540.0	1,803.2	1,815.2	2,045.1	1,838.1	3,267.5	3,226.3	2,923.7	2,901.0	2,939.3	28,011.4	28,104.9
1964	2,478.8	1,252.2	1,614.4	1,105.4	1,716.5	1,594.9	2,141.9	3,105.4	3,061.3	2,766.8	2,736.1	2,756.7	26,330.4	26,031.7
1965	2,333.1	1,184.9	1,528.8	1,609.9	1,843.4	1,729.7	1,894.2	2,222.0	2,283.5	2,418.0	2,454.0	2,325.6	23,827.2	23,169.8
1966	2,056.3	1,046.1	1,287.1	1,870.0	1,870.6	2,092.8	2,178.1	3,071.8	3,076.2	2,851.3	2,909.1	3,082.6	27,391.9	28,318.2
1967	2,528.2	1,222.0	1,565.5	650.9	1,952.4	2,193.5	2,436.4	3,691.3	3,785.7	3,638.8	3,872.2	4,365.4	31,902.4	33,575.5
1968	3,447.3	1,561.2	1,980.4	1,516.1	1,896.0	2,142.2	2,158.6	3,129.6	3,085.2	2,788.4	2,757.5	2,778.2	29,240.7	27,338.0
1969	2,351.3	1,194.2	1,540.7	1,426.3	2,227.3	2,345.6	2,717.4	3,677.4	3,771.4	3,625.2	3,857.7	4,349.0	33,083.5	34,960.0
1970	3,434.4	1,555.4	1,972.9	1,817.7	1,868.3	2,089.7	2,193.7	2,976.0	3,002.0	2,814.2	2,910.2	3,147.7	29,782.2	28,116.1
1971	2,549.1	1,206.5	1,540.9	1,799.2	1,720.5	1,755.3	1,617.6	2,068.6	2,126.0	2,251.2	2,284.6	2,165.2	23,084.7	21,874.7
1972	1,914.4	973.9	1,198.3	1,522.9	1,639.6	2,154.3	2,255.2	3,269.8	3,223.3	2,913.3	2,881.0	2,902.6	26,848.6	28,076.0
1973	2,456.6	1,247.7	1,609.7	877.6	1,932.2	2,184.4	2,282.7	3,186.6	3,187.7	2,949.6	3,003.3	3,172.3	28,090.5	28,267.7
1974	2,606.9	1,264.1	1,620.2	1,819.5	2,068.5	2,128.0	2,068.5	3,172.7	3,253.8	3,127.6	3,328.2	3,752.2	30,210.3	30,726.2
1975	2,963.0	1,341.9	1,702.2	1,600.5	1,411.3	2,157.5	2,246.9	3,154.6	3,157.2	2,923.6	2,979.4	3,151.4	28,789.6	28,228.5
1976	2,587.5	1,253.0	1,605.6	1,486.7	1,359.5	1,877.4	2,237.8	3,244.5	3,198.4	2,890.8	2,858.7	2,880.2	27,480.0	22,034.0
1977	0.0	0.0	0.0	23.8	24.5	245.0	236.5	312.4	322.8	341.5	372.3	375.7	2,254.6	2,950.1
1978	328.8	169.2	197.6	0.0	1,044.9	2,203.5	2,343.7	3,222.9	3,305.3	3,177.1	3,380.9	3,811.5	23,185.5	28,592.1
1979	3,009.9	1,363.1	1,729.1	18.4	147.2	1,466.1	2,613.5	3,733.9	3,711.7	3,400.3	3,420.0	3,543.0	28,156.2	28,330.0
1980	2,946.7	1,456.8	1,872.4	759.2	1,914.5	2,324.9	2,407.4	3,258.0	3,341.3	3,211.7	3,417.7	3,853.0	30,763.8	30,656.4
1981	3,042.7	1,378.0	1,747.9	203.8	757.8	856.4	2,330.3	3,378.6	3,330.6	3,010.2	0.0	0.0	20,036.2	18,874.6
1982	0.0	5,007.0	0.0	1,516.5	1,797.3	2,120.2	2,743.3	3,753.0	3,848.9	3,699.7	3,937.0	4,438.4	32,861.3	34,960.0
1983	3,504.9	1,587.3	2,013.5	2,046.4	2,182.5	2,296.4	2,668.0	3,610.6	3,702.9	3,559.3	3,787.6	4,270.0	35,229.5	34,960.0
1984	3,372.0	1,527.1	1,937.1	2,211.0	1,839.7	2,058.5	2,161.1	2,909.9	2,940.4	2,763.8	2,867.0	3,115.4	29,703.0	28,079.9
1985	2,515.8	1,185.0	1,512.3	1,495.6	1,148.0	1,984.0	2,320.8	3,273.1	3,277.8	3,038.2	3,099.8	3,284.7	28,135.0	28,586.1
1986	2,693.9	1,302.1	1,668.1	0.0	0.0	2,406.1	2,441.3	3,373.6	3,418.2	3,226.4	3,363.1	3,680.8	27,573.6	28,016.1
1987	2,959.4	1,383.5	1,763.6	0.0	6.2	1,028.9	1,065.1	1,360.1	1,405.6	1,486.7	1,620.6	1,635.7	15,715.6	12,637.1
1988	0.0	1,397.1	1,631.0	5.7	25.9	365.4	361.9	532.5	550.3	582.1	634.5	640.4	6,726.7	4,884.2
1989	560.4	288.4	336.7	0.0	0.0	910.3	2,553.6	3,702.4	3,649.8	3,298.7	3,262.2	3,286.7	21,849.2	20,663.7
1990	0.0	0.0	0.0	10.3	30.7	351.0	469.6	653.7	675.6	714.6	779.0	786.2	4,470.7	5,926.1
1991	687.9	354.1	413.4	17.5	18.0	726.5	904.8	1,250.1	1,291.9	1,366.5	1,489.6	1,503.5	10,023.9	11,351.7
1992	1,315.5	677.2	790.5	14.5	15.0	449.0	616.1	833.5	861.3	911.0	993.1	1,002.3	8,479.0	7,551.4
1993	877.1	451.5	527.0	0.0	1,616.1	2,291.3	2,395.6	3,460.1	3,418.3	3,100.3	3,079.5	3,125.8	24,342.5	28,159.5
1994	2,633.1	1,327.9	1,711.5	371.0	393.6	985.6	1,180.3	1,421.1	1,468.6	1,553.4	1,693.3	1,709.1	16,448.7	13,940.1
1995	1,495.5	769.8	898.6	23.8	1,959.0	2,251.9	2,606.0	3,927.6	4,028.0	3,871.8	4,120.1	4,644.9	30,596.9	34,869.3
1996	3,668.0	1,661.2	2,107.1	1,748.3	1,826.9	2,061.9	2,185.4	3,109.3	3,188.8	3,065.1	3,261.7	3,677.1	31,560.7	30,011.3
1997	2,903.7	1,315.1	1,668.1	2,037.1	2,178.2	2,057.0	2,072.1	2,862.7	2,900.9	2,738.7	2,855.4	3,126.3	28,715.3	28,012.7
1998	2,513.0	1,174.4	1,496.9	993.5	2,126.4	2,391.2	2,763.2	3,739.4	3,835.0	3,686.3	3,922.7	4,422.3	33,064.4	34,960.0
1999	3,492.2	1,581.6	2,006.2	1,814.8	1,720.5	2,114.5	2,218.3	3,113.2	3,108.1	2,867.0	2,908.1	3,053.6	29,998.2	28,241.4
2000	2,518.5	1,228.6	1,576.1	760.5	1,591.9	2,206.9	2,316.0	3,132.7	3,162.4	2,968.1	3,073.5	3,331.1	27,866.4	28,134.7
2001	2,694.3	1,272.5	1,624.6	0.0	6.2	930.2	990.3	1,298.4	1,341.7	1,419.2	1,547.1	1,561.5	14,686.1	11,985.2
2002	1,366.3	703.3	821.0	610.1	879.0	883.5	1,756.7	2,060.8	2,117.9	2,242.6	2,276.0	2,156.9	17,874.1	19,054.5
2003	0.0	1,825.2	2,245.8	1,279.4	1,497.5	1,562.0	1,329.7	1,690.5	0.0	2,202.2	2,235.0	2,118.1	17,985.4	13,914.4
Avg.	**2,104.1**	**1,179.4**	**1,564.7**	**795.4**	**1,031.8**	**1,592.0**	**1,897.6**	**2,679.8**	**2,654.5**	**2,628.8**	**2,639.2**	**2,696.5**	**23,463.6**	**23,359.2**
Max	**4,010.0**	**5,007.0**	**5,178.4**	**2,211.0**	**2,227.3**	**2,406.1**	**2,815.2**	**3,927.6**	**4,028.0**	**3,871.8**	**4,120.1**	**4,644.9**	**35,229.5**	**34,960.0**
Min	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**130.6**	**236.5**	**312.4**	**0.0**	**341.5**	**0.0**	**0.0**	**2,254.6**	**2,950.1**

Table A2 - Santa Barbara County FCWCD -- Carryover (Article 56) Water (Acre-feet)

Study 2020D09E

WY	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Water Year	Cal Year
1922	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1923	0.0	0.0	0.0	1,623.2	1,448.2	535.7	0.0	0.0	0.0	0.0	0.0	0.0	3,607.1	3,607.1
1924	0.0	0.0	0.0	256.3	256.3	256.3	256.3	256.3	256.3	256.3	0.0	0.0	1,794.1	2,306.7
1925	512.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	512.6	0.0
1926	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1927	0.0	0.0	0.0	139.1	124.1	45.9	0.0	0.0	0.0	0.0	0.0	0.0	309.0	309.0
1928	0.0	0.0	0.0	1,832.9	1,635.4	604.9	0.0	0.0	0.0	0.0	0.0	0.0	4,073.1	4,073.1
1929	0.0	0.0	0.0	295.3	295.3	295.3	295.3	295.3	295.3	295.3	295.3	0.0	2,362.1	2,362.1
1930	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1931	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1932	0.0	0.0	0.0	31.6	31.6	31.6	31.6	31.6	31.6	31.6	31.6	31.6	284.3	284.3
1933	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1934	0.0	0.0	0.0	34.1	34.1	34.1	34.1	34.1	34.1	34.1	34.1	0.0	272.5	306.5
1935	0.0	34.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	34.1	0.0
1936	0.0	0.0	0.0	834.2	744.3	275.3	0.0	0.0	0.0	0.0	0.0	0.0	1,853.8	1,853.8
1937	0.0	0.0	0.0	184.4	164.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	349.0	349.0
1938	0.0	0.0	0.0	2,125.9	1,896.8	701.5	0.0	0.0	0.0	0.0	0.0	0.0	4,724.2	4,724.2
1939	0.0	0.0	0.0	1,170.0	1,170.0	1,170.0	1,170.0	1,170.0	1,170.0	1,170.0	0.0	0.0	8,190.0	8,190.0
1940	0.0	0.0	0.0	70.8	63.1	23.3	0.0	0.0	0.0	0.0	0.0	0.0	157.2	157.2
1941	0.0	0.0	0.0	333.0	297.1	109.9	0.0	0.0	0.0	0.0	0.0	0.0	740.0	740.0
1942	0.0	0.0	0.0	4,417.4	3,941.3	1,457.8	0.0	0.0	0.0	0.0	0.0	0.0	9,816.5	9,816.5
1943	0.0	0.0	0.0	2,910.9	2,597.2	960.6	0.0	0.0	0.0	0.0	0.0	0.0	6,468.7	6,468.7
1944	0.0	0.0	0.0	415.1	415.1	415.1	415.1	415.1	415.1	415.1	415.1	415.1	3,735.8	3,735.8
1945	0.0	0.0	0.0	94.4	84.2	31.1	0.0	0.0	0.0	0.0	0.0	0.0	209.7	209.7
1946	0.0	0.0	0.0	1,464.0	1,306.2	483.1	0.0	0.0	0.0	0.0	0.0	0.0	3,253.3	3,253.3
1947	0.0	0.0	0.0	85.7	85.7	85.7	85.7	85.7	85.7	85.7	0.0	0.0	600.1	600.1
1948	0.0	0.0	0.0	70.8	63.1	23.3	0.0	0.0	0.0	0.0	0.0	0.0	157.2	157.2
1949	0.0	0.0	0.0	41.5	41.5	41.5	41.5	41.5	41.5	41.5	41.5	41.5	373.3	373.3
1950	0.0	0.0	0.0	29.0	25.9	9.6	0.0	0.0	0.0	0.0	0.0	0.0	64.4	64.4
1951	0.0	0.0	0.0	171.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	171.6	171.6
1952	0.0	0.0	0.0	2,547.5	2,272.9	840.7	0.0	0.0	0.0	0.0	0.0	0.0	5,661.0	5,661.0
1953	0.0	0.0	0.0	4,417.4	3,941.3	1,457.8	0.0	0.0	0.0	0.0	0.0	0.0	9,816.5	9,816.5
1954	0.0	0.0	0.0	346.9	309.5	114.5	0.0	0.0	0.0	0.0	0.0	0.0	770.8	770.8
1955	0.0	0.0	0.0	155.9	155.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	311.8	311.8
1956	0.0	0.0	0.0	137.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	137.8	137.8
1957	0.0	0.0	0.0	4,159.4	3,711.1	1,372.6	0.0	0.0	0.0	0.0	0.0	0.0	9,243.0	9,243.0
1958	0.0	0.0	0.0	173.5	154.8	57.3	0.0	0.0	0.0	0.0	0.0	0.0	385.6	385.6
1959	0.0	0.0	0.0	4,738.5	4,227.8	1,563.7	0.0	0.0	0.0	0.0	0.0	0.0	10,530.0	10,530.0
1960	0.0	0.0	0.0	38.5	38.5	38.5	38.5	38.5	38.5	38.5	38.5	38.5	346.6	346.6
1961	0.0	0.0	0.0	42.8	42.8	42.8	42.8	42.8	42.8	42.8	42.8	42.8	385.3	385.3
1962	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1963	0.0	0.0	0.0	177.7	158.6	58.6	0.0	0.0	0.0	0.0	0.0	0.0	394.9	394.9
1964	0.0	0.0	0.0	129.7	129.7	129.7	129.7	129.7	129.7	129.7	129.7	129.7	1,167.0	1,167.0
1965	0.0	0.0	0.0	341.9	305.0	112.8	0.0	0.0	0.0	0.0	0.0	0.0	759.7	759.7
1966	0.0	0.0	0.0	179.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	179.5	179.5
1967	0.0	0.0	0.0	1,840.7	1,642.3	607.4	0.0	0.0	0.0	0.0	0.0	0.0	4,090.3	4,090.3
1968	0.0	0.0	0.0	4,550.8	4,060.4	1,501.8	0.0	0.0	0.0	0.0	0.0	0.0	10,113.0	10,113.0
1969	0.0	0.0	0.0	359.0	320.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	679.4	679.4
1970	0.0	0.0	0.0	4,738.5	2,248.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6,986.5	6,986.5
1971	0.0	0.0	0.0	2,459.5	2,194.4	811.6	0.0	0.0	0.0	0.0	0.0	0.0	5,465.5	5,465.5
1972	0.0	0.0	0.0	169.5	151.2	55.9	0.0	0.0	0.0	0.0	0.0	0.0	376.6	376.6
1973	0.0	0.0	0.0	368.7	329.0	121.7	0.0	0.0	0.0	0.0	0.0	0.0	819.4	819.4
1974	0.0	0.0	0.0	1,741.0	1,553.4	574.5	0.0	0.0	0.0	0.0	0.0	0.0	3,868.9	3,868.9
1975	0.0	0.0	0.0	4,164.6	3,715.8	1,374.3	0.0	0.0	0.0	0.0	0.0	0.0	9,254.8	9,254.8
1976	0.0	0.0	0.0	439.5	439.5	439.5	439.5	439.5	439.5	439.5	439.5	0.0	3,516.3	3,516.3
1977	0.0	0.0	0.0	17.5	17.5	17.5	17.5	17.5	17.5	17.5	17.5	17.5	157.2	157.2
1978	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1979	0.0	0.0	0.0	3,875.4	3,457.7	1,278.9	0.0	0.0	0.0	0.0	0.0	0.0	8,612.0	8,612.0
1980	0.0	0.0	0.0	1,167.0	1,041.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2,208.3	2,208.3
1981	0.0	0.0	0.0	1,026.0	1,026.0	1,026.0	1,026.0	1,026.0	1,026.0	1,026.0	0.0	0.0	7,181.8	9,233.7
1982	0.0	2,051.9	0.0	70.8	63.1	23.3	0.0	0.0	0.0	0.0	0.0	0.0	2,209.2	157.2
1983	0.0	0.0	0.0	4,738.5	4,227.8	653.9	0.0	0.0	0.0	0.0	0.0	0.0	9,620.2	9,620.2
1984	0.0	0.0	0.0	4,738.5	1,642.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6,380.8	6,380.8
1985	0.0	0.0	0.0	642.6	55.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	698.5	698.5
1986	0.0	0.0	0.0	1,858.1	1,657.8	613.2	0.0	0.0	0.0	0.0	0.0	0.0	4,129.0	4,129.0
1987	0.0	0.0	0.0	697.5	697.5	697.5	697.5	697.5	697.5	697.5	697.5	0.0	5,579.7	6,277.1
1988	0.0	0.0	697.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	697.5	0.0
1989	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1990	0.0	0.0	0.0	17.5	17.5	17.5	17.5	17.5	17.5	17.5	17.5	17.5	157.2	157.2
1991	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1992	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1993	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1994	0.0	0.0	0.0	142.4	142.4	142.4	142.4	142.4	142.4	142.4	142.4	142.4	1,281.3	1,281.3
1995	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1996	0.0	0.0	0.0	2,872.1	2,562.6	947.8	0.0	0.0	0.0	0.0	0.0	0.0	6,382.5	6,382.5
1997	0.0	0.0	0.0	4,067.8	3,026.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7,094.5	7,094.5
1998	0.0	0.0	0.0	2,835.6	2,529.9	935.7	0.0	0.0	0.0	0.0	0.0	0.0	6,301.2	6,301.2
1999	0.0	0.0	0.0	4,738.5	4,227.8	1,563.7	0.0	0.0	0.0	0.0	0.0	0.0	10,530.0	10,530.0
2000	0.0	0.0	0.0	1,560.7	1,392.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2,953.1	2,953.1
2001	0.0	0.0	0.0	623.6	623.6	623.6	623.6	623.6	623.6	623.6	623.6	623.6	5,612.0	5,612.0
2002	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2003	0.0	0.0	0.0	82.3	73.4	27.1	0.0	0.0	0.0	0.0	0.0	0.0	182.8	182.8
Avg.	**6.3**	**25.4**	**8.5**	**1,132.0**	**942.8**	**334.6**	**67.1**	**67.1**	**67.1**	**67.1**	**36.2**	**18.3**	**2,772.5**	**2,772.5**
Max	**512.6**	**2,051.9**	**697.5**	**4,738.5**	**4,227.8**	**1,563.7**	**1,170.0**	**1,170.0**	**1,170.0**	**1,170.0**	**697.5**	**623.6**	**10,530.0**	**10,530.0**
Min	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**

Table A3 Santa Barbara County FCWCD -- Article 21 WaterAcre-feet)

Study 2020D09E

WY	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Water Year	Cal Year
1922	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1923	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1924	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1925	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1926	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1927	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1928	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1929	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1930	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1931	0.0	0.0	0.0	1,844.0	1,844.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3,688.0	3,688.0
1932	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1933	0.0	0.0	0.0	0.0	0.0	1,844.0	0.0	0.0	0.0	0.0	0.0	0.0	1,844.0	1,844.0
1934	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1935	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1936	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1937	0.0	0.0	0.0	0.0	1,844.0	1,844.0	0.0	0.0	0.0	0.0	0.0	0.0	3,688.0	3,688.0
1938	0.0	0.0	0.0	0.0	0.0	1,844.0	1,844.0	1,844.0	0.0	0.0	0.0	0.0	5,532.0	5,532.0
1939	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1940	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1941	0.0	0.0	0.0	0.0	0.0	0.0	1,844.0	0.0	0.0	0.0	0.0	0.0	1,844.0	1,844.0
1942	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1943	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1944	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1945	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1946	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1947	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1948	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1949	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1950	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1951	0.0	0.0	0.0	1,844.0	1,844.0	1,844.0	0.0	0.0	0.0	0.0	0.0	0.0	5,532.0	5,532.0
1952	0.0	0.0	0.0	0.0	0.0	0.0	1,844.0	1,844.0	0.0	0.0	0.0	0.0	3,688.0	3,688.0
1953	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1954	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1955	0.0	0.0	0.0	0.0	0.0	1,844.0	0.0	0.0	0.0	0.0	0.0	0.0	1,844.0	1,844.0
1956	0.0	0.0	0.0	1,844.0	1,844.0	1,844.0	0.0	0.0	0.0	0.0	0.0	0.0	5,532.0	5,532.0
1957	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1958	0.0	0.0	0.0	0.0	0.0	1,844.0	1,844.0	1,844.0	0.0	0.0	0.0	0.0	5,532.0	5,532.0
1959	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1960	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1961	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1962	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1963	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1964	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1965	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1966	0.0	0.0	0.0	1,844.0	1,844.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3,688.0	3,688.0
1967	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1968	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1969	0.0	0.0	0.0	1,844.0	1,844.0	1,844.0	1,844.0	794.0	0.0	0.0	0.0	0.0	8,170.0	8,170.0
1970	0.0	0.0	0.0	1,844.0	1,844.0	1,844.0	0.0	0.0	0.0	0.0	0.0	0.0	5,532.0	5,532.0
1971	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1972	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1973	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1974	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1975	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1976	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1977	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1978	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1979	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1980	0.0	0.0	0.0	0.0	1,844.0	1,844.0	0.0	0.0	0.0	0.0	0.0	0.0	3,688.0	3,688.0
1981	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1982	0.0	0.0	0.0	0.0	0.0	0.0	1,844.0	0.0	0.0	0.0	0.0	0.0	1,844.0	1,844.0
1983	0.0	0.0	0.0	1,844.0	1,844.0	1,844.0	1,844.0	794.0	0.0	0.0	0.0	0.0	8,170.0	8,170.0
1984	0.0	0.0	0.0	1,844.0	1,844.0	1,844.0	0.0	0.0	0.0	0.0	0.0	0.0	5,532.0	5,532.0
1985	0.0	0.0	0.0	1,844.0	1,844.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3,688.0	3,688.0
1986	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1987	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1988	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1989	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1990	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1991	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1992	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1993	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1994	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1995	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1,844.0	0.0	0.0	0.0	0.0	1,844.0	1,844.0
1996	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1997	0.0	0.0	0.0	1,844.0	1,844.0	1,844.0	0.0	0.0	0.0	0.0	0.0	0.0	5,532.0	5,532.0
1998	0.0	0.0	0.0	0.0	1,844.0	1,844.0	1,844.0	1,844.0	0.0	0.0	0.0	0.0	7,376.0	7,376.0
1999	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2000	0.0	0.0	0.0	0.0	1,844.0	1,844.0	0.0	0.0	0.0	0.0	0.0	0.0	3,688.0	3,688.0
2001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2002	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2003	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Avg.	**0.0**	**0.0**	**0.0**	**224.9**	**314.8**	**337.3**	**179.9**	**131.8**	**0.0**	**0.0**	**0.0**	**0.0**	**1,188.7**	**1,188.7**
Max	**0.0**	**0.0**	**0.0**	**1,844.0**	**1,844.0**	**1,844.0**	**1,844.0**	**1,844.0**	**0.0**	**0.0**	**0.0**	**0.0**	**8,170.0**	**8,170.0**
Min	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**

Table A5 - San Luis Obispo FCWCD -- Table A Amounts (Acre-feet)

Study 2020D09E

WY	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Water Year	Cal Year
1922	1,750.0	1,440.0	1,380.0	495.7	583.3	911.2	982.1	1,029.2	1,056.4	1,096.9	1,103.1	1,042.7	12,870.6	11,056.0
1923	1,037.8	875.8	841.9	735.4	798.9	874.3	930.6	986.7	1,013.0	1,051.3	1,054.4	996.5	11,196.5	11,089.6
1924	997.0	841.9	809.6	0.0	9.8	301.4	274.3	294.2	301.8	314.1	309.5	0.0	4,453.5	2,876.0
1925	406.1	340.8	324.0	10.2	2.0	392.0	477.4	585.5	600.8	625.2	616.0	581.6	4,961.6	5,440.7
1926	587.7	493.3	469.0	8.0	178.4	614.1	611.1	834.5	848.9	882.2	873.8	826.0	7,227.0	7,854.2
1927	835.6	687.6	654.1	297.6	506.3	938.1	962.3	1,060.1	1,087.9	1,129.8	1,137.3	1,075.1	10,371.7	11,029.6
1928	1,068.0	901.1	866.1	488.8	540.5	517.1	1,029.8	1,080.9	1,109.7	1,151.8	1,156.0	1,092.6	11,002.4	11,066.6
1929	1,091.6	921.6	886.2	0.0	11.6	536.2	588.6	686.7	704.6	733.2	722.5	0.0	6,882.7	6,483.4
1930	0.0	0.0	2,500.0	0.0	0.0	163.8	249.1	323.8	332.3	345.8	340.7	321.7	4,577.2	2,934.4
1931	325.0	272.8	259.4	74.7	186.1	653.3	708.0	777.7	791.4	822.6	814.5	769.9	6,455.6	7,629.0
1932	0.0	0.0	2,030.6	0.0	41.5	368.7	486.3	571.6	586.5	610.3	601.4	567.8	5,864.9	5,347.5
1933	573.8	481.6	457.8	0.8	49.5	620.8	734.6	827.1	841.3	874.4	866.0	818.7	7,146.4	7,791.0
1934	0.0	0.0	2,157.8	7.5	8.0	243.2	317.0	349.4	358.5	373.1	367.6	347.1	4,529.3	3,296.4
1935	350.7	294.4	279.9	10.2	29.4	366.7	898.9	1,238.2	1,269.1	1,320.7	1,341.4	1,269.1	8,668.9	11,025.1
1936	1,238.2	1,042.1	1,000.9	0.0	50.2	874.6	995.7	1,100.5	1,119.3	1,163.4	1,152.2	1,089.2	10,826.4	10,416.2
1937	1,101.8	906.7	862.6	0.0	144.6	765.8	1,095.6	1,150.7	1,180.7	1,226.6	1,236.2	1,168.8	10,840.1	11,042.5
1938	1,158.1	976.7	938.7	634.5	808.4	883.4	1,216.0	1,280.0	1,312.0	1,365.3	1,386.6	1,312.0	13,271.6	13,590.0
1939	1,280.0	1,077.3	1,034.6	434.6	516.5	608.5	1,043.1	1,093.7	1,123.0	1,165.1	0.0	0.0	9,376.5	11,193.9
1940	0.0	0.0	5,209.4	0.0	0.0	892.1	881.5	1,040.4	1,068.6	1,108.2	1,108.2	1,047.0	12,355.4	9,947.2
1941	1,053.8	890.6	856.6	660.4	800.7	875.0	960.9	1,193.9	1,223.7	1,273.5	1,293.4	1,223.7	12,306.4	12,669.2
1942	1,193.9	1,004.9	965.1	802.5	793.6	864.4	919.6	958.5	983.0	1,022.0	1,033.9	977.8	11,519.2	10,905.9
1943	961.7	810.3	778.5	606.9	794.6	872.8	1,057.4	1,113.1	1,140.9	1,187.3	1,205.8	1,140.9	11,670.4	12,069.5
1944	1,113.1	936.9	899.7	0.0	0.9	363.0	773.9	811.3	827.2	860.1	850.6	803.8	8,240.5	7,416.2
1945	812.9	672.7	639.8	117.3	83.0	754.8	1,096.2	1,150.3	1,180.8	1,225.8	1,231.8	1,164.4	10,129.7	11,086.2
1946	1,160.5	979.6	941.7	794.0	672.5	809.8	821.2	925.9	951.1	986.3	986.3	931.8	10,960.8	10,371.9
1947	937.9	792.7	762.4	235.3	208.8	588.7	935.9	980.8	1,007.4	1,044.7	1,044.7	0.0	8,539.2	9,673.9
1948	1,364.8	1,153.4	1,109.4	2.4	0.0	63.9	234.7	1,190.0	1,210.4	1,258.0	1,245.9	1,177.9	10,010.9	9,487.9
1949	1,191.5	980.4	932.7	26.0	27.1	514.2	721.8	757.1	775.3	806.6	795.7	751.5	8,280.0	7,173.2
1950	759.6	634.7	603.5	8.6	58.3	419.6	1,013.0	1,061.5	1,079.7	1,122.2	1,111.4	1,050.7	8,922.8	9,694.4
1951	1,062.8	874.6	832.0	821.0	776.6	855.6	932.0	966.1	991.1	1,030.0	1,040.2	983.6	11,165.6	10,971.6
1952	970.7	818.3	786.3	803.2	813.8	839.7	916.2	1,184.2	1,213.8	1,263.2	1,282.9	1,213.8	12,106.4	12,669.2
1953	1,184.2	996.7	957.3	910.9	785.8	855.8	775.9	895.1	919.4	953.5	953.5	900.8	11,089.0	10,360.8
1954	906.7	766.3	737.1	443.0	750.3	903.6	919.0	1,022.1	1,049.7	1,088.9	1,090.2	1,030.1	10,707.0	11,045.6
1955	1,034.3	873.9	840.5	280.5	388.3	604.6	655.2	758.0	771.0	801.3	793.6	750.3	8,551.4	7,780.2
1956	758.9	624.5	594.1	813.4	914.3	945.3	941.3	1,059.2	1,085.7	1,129.8	1,147.5	1,085.7	11,099.7	11,929.1
1957	1,059.2	891.5	856.2	298.2	333.1	613.0	941.4	986.5	1,003.4	1,042.8	1,032.8	976.4	10,034.4	9,801.1
1958	987.7	812.7	773.2	405.3	715.2	979.0	1,240.5	1,305.7	1,338.4	1,392.8	1,414.6	1,338.4	12,703.4	13,590.0
1959	1,305.7	1,099.0	1,055.5	484.4	665.2	765.2	758.4	794.7	808.3	840.1	832.0	786.6	10,195.0	8,808.1
1960	795.7	654.7	622.9	0.0	0.0	468.9	1,025.7	1,074.9	1,093.3	1,136.3	1,125.4	1,063.9	9,061.6	9,792.6
1961	1,076.2	885.6	842.5	0.0	22.0	371.0	695.1	729.3	748.3	778.7	767.3	724.5	7,640.6	6,767.1
1962	0.0	989.8	940.9	6.0	0.0	656.6	1,031.3	1,080.7	1,099.3	1,142.5	1,131.5	1,069.7	9,148.4	10,037.3
1963	1,082.1	890.4	847.1	806.0	793.7	837.2	764.9	995.4	1,022.3	1,060.3	1,061.0	1,002.5	11,162.8	11,021.2
1964	1,007.6	851.4	818.9	509.2	753.9	710.6	892.3	935.1	960.5	996.1	996.1	941.1	10,372.7	10,212.4
1965	947.2	800.5	770.0	756.9	799.4	769.3	859.6	900.8	916.2	952.3	943.1	891.6	10,306.9	10,139.4
1966	901.9	742.1	706.1	808.4	779.2	858.5	932.4	978.9	1,004.6	1,043.3	1,050.2	992.8	10,798.5	11,066.5
1967	986.2	832.1	799.8	278.0	822.2	905.2	1,074.5	1,270.3	1,302.1	1,355.0	1,376.2	1,302.1	12,303.6	13,051.8
1968	1,270.3	1,069.2	1,026.8	682.2	797.4	879.8	906.1	949.5	975.2	1,011.4	1,011.4	955.5	11,534.9	10,724.9
1969	961.7	812.8	781.8	670.6	922.9	957.6	1,191.7	1,254.4	1,285.8	1,338.1	1,359.0	1,285.8	12,822.1	13,590.0
1970	1,254.4	1,055.8	1,014.0	798.9	777.3	856.3	932.6	968.3	993.4	1,032.3	1,042.1	985.4	11,711.0	10,969.1
1971	973.3	820.5	788.5	803.4	753.9	716.6	743.3	849.2	863.7	897.7	889.1	840.5	9,939.6	9,572.6
1972	850.2	699.6	665.6	685.3	718.9	884.2	945.1	990.4	1,017.3	1,055.0	1,055.0	996.7	10,563.3	11,014.4
1973	1,003.2	847.9	815.5	374.9	826.2	900.2	970.2	1,015.8	1,042.5	1,082.7	1,089.3	1,029.8	10,998.1	11,049.6
1974	1,023.8	863.9	830.4	793.4	858.8	870.2	899.4	1,085.6	1,112.8	1,158.0	1,176.1	1,112.8	11,785.3	11,944.2
1975	1,085.6	913.8	877.6	720.2	636.1	881.3	953.1	998.5	1,024.8	1,064.2	1,071.0	1,012.5	11,238.8	11,033.1
1976	1,006.2	849.0	816.1	699.0	610.5	833.6	928.2	972.7	999.0	1,036.1	1,036.1	978.9	10,765.2	10,712.7
1977	985.2	0.0	1,633.6	10.2	10.9	120.0	123.3	142.1	145.8	151.7	149.5	141.2	3,613.5	1,371.0
1978	142.7	119.7	113.8	0.0	461.0	915.2	1,027.3	1,109.7	1,137.4	1,183.7	1,202.2	1,137.4	8,550.1	11,114.6
1979	1,109.7	934.0	897.0	7.9	65.0	666.5	1,120.3	1,175.2	1,206.5	1,252.2	1,256.7	1,187.7	10,878.7	11,090.8
1980	1,186.9	1,002.2	963.6	324.3	834.7	953.9	1,058.4	1,114.1	1,142.0	1,188.4	1,206.9	1,142.0	12,117.5	11,917.1
1981	1,114.1	937.7	900.6	87.1	334.9	421.4	985.1	1,032.4	1,060.4	1,099.6	1,099.6	0.0	9,072.8	8,066.8
1982	0.0	1,946.4	0.0	713.0	786.3	862.7	1,200.0	1,277.5	1,309.4	1,362.6	1,383.9	1,309.4	12,151.1	13,590.0
1983	1,277.5	1,075.2	1,032.6	884.7	906.2	939.6	1,172.3	1,234.0	1,264.9	1,316.3	1,336.9	1,264.9	13,705.1	13,590.0
1984	1,234.0	1,038.6	997.5	955.9	764.2	843.2	918.5	951.2	975.7	1,014.1	1,024.4	968.7	11,686.0	10,950.7
1985	955.5	805.4	773.9	703.2	512.9	811.9	988.9	1,038.3	1,065.5	1,106.6	1,113.9	1,053.1	10,929.1	11,171.2
1986	1,046.0	882.5	848.3	0.0	0.0	1,000.6	1,071.8	1,126.7	1,155.6	1,201.4	1,214.8	1,148.9	10,696.6	10,919.1
1987	1,130.9	953.0	915.6	0.0	2.8	503.5	554.8	617.9	634.0	659.8	650.1	613.9	7,236.2	5,872.7
1988	0.0	838.6	797.2	2.4	11.4	178.9	188.5	242.5	248.9	259.0	255.2	240.9	3,263.6	2,269.8
1989	243.5	204.3	194.3	0.0	0.0	445.5	1,085.4	1,137.5	1,168.3	1,211.6	1,211.6	1,144.7	8,046.6	8,556.7
1990	1,152.1	0.0	0.0	4.4	13.6	171.9	245.0	297.8	305.6	318.0	313.4	295.9	3,117.6	2,754.0
1991	299.0	250.9	238.6	7.5	8.0	355.6	471.8	569.3	584.1	607.8	598.9	565.5	4,556.8	5,275.3
1992	571.4	479.6	455.9	6.2	6.6	219.8	321.3	379.5	389.4	405.2	399.3	377.0	4,011.5	3,509.3
1993	381.0	319.8	304.0	0.0	730.2	946.1	1,014.1	1,063.0	1,091.7	1,132.4	1,133.4	1,070.9	9,186.6	11,041.2
1994	1,075.9	909.1	874.3	158.5	174.6	484.4	617.3	647.7	664.6	691.6	681.4	643.4	7,622.8	6,478.2
1995	650.2	545.7	518.8	10.2	857.8	931.3	1,149.0	1,351.1	1,384.9	1,441.2	1,463.7	1,384.9	11,688.9	13,554.8
1996	1,351.1	1,137.2	1,092.2	786.7	796.3	838.2	952.6	1,056.4	1,082.8	1,126.8	1,144.4	1,082.8	12,447.5	11,666.3
1997	1,056.4	889.1	853.9	880.7	904.5	843.5	895.6	941.6	965.7	1,004.0	1,015.2	960.2	11,210.3	10,917.5
1998	945.0	796.3	765.1	428.5	886.5	983.0	1,219.0	1,283.2	1,315.3	1,368.7	1,390.1	1,315.3	12,696.0	13,590.0
1999	1,283.2	1,080.0	1,037.2	801.8	754.5	864.0	933.0	979.3	1,005.1	1,043.6	1,049.2	991.7	11,822.7	11,044.5
2000	987.6	833.5	801.3	324.9	719.9	906.1	986.3	1,023.5	1,050.0	1,091.2	1,101.9	1,042.0	10,868.0	10,974.4
2001	1,028.5	867.0	833.2	0.0	2.8	455.2	515.9	590.2	605.6	630.2	621.0	586.3	6,735.9	5,569.7
2002	592.5	497.3	472.7	260.6	389.4	436.2	797.8	836.1	850.4	883.8	875.4	827.5	7,719.8	8,338.5
2003	0.0	1,117.8	1,063.4	601.5	673.4	693.0	600.3	682.7	0.0	850.4	842.3	796.2	7,921.0	5,739.8
Avg.	**873.7**	**770.8**	**880.8**	**354.4**	**445.5**	**684.9**	**842.1**	**931.4**	**945.6**	**993.1**	**981.6**	**891.4**	**9,595.3**	**9,539.6**
Max	**1,750.0**	**1,946.4**	**5,209.4**	**955.9**	**922.9**	**1,000.6**	**1,240.5**	**1,351.1**	**1,384.9**	**1,441.2**	**1,463.7**	**1,384.9**	**13,705.1**	**13,590.0**
Min	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**63.9**	**123.3**	**142.1**	**0.0**	**151.7**	**0.0**	**0.0**	**3,117.6**	**1,371.0**

Table A5 - San Luis Obispo FCWCD -- Carryover (Article 56) Water (Acre-feet)

Study 2020D09E

WY	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Water Yea	Cal Year
1922	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1923	0.0	0.0	0.0	2,909.5	2,595.9	960.1	0.0	0.0	0.0	0.0	0.0	0.0	6,465.6	6,465.6
1924	0.0	0.0	0.0	637.8	637.8	637.8	637.8	637.8	637.8	637.8	0.0	0.0	4,464.8	5,740.4
1925	1,275.7	0.0	0.0	58.3	58.3	58.3	58.3	58.3	58.3	58.3	58.3	58.3	1,800.8	525.1
1926	0.0	0.0	0.0	110.4	110.4	110.4	110.4	110.4	110.4	110.4	110.4	110.4	993.4	993.4
1927	0.0	0.0	0.0	980.7	875.0	323.6	0.0	0.0	0.0	0.0	0.0	0.0	2,179.3	2,179.3
1928	0.0	0.0	0.0	3,023.9	2,698.0	997.9	0.0	0.0	0.0	0.0	0.0	0.0	6,719.8	6,719.8
1929	0.0	0.0	0.0	658.9	658.9	658.9	658.9	658.9	658.9	658.9	658.9	0.0	5,271.5	5,271.5
1930	0.0	0.0	0.0	12.3	12.3	12.3	12.3	12.3	12.3	12.3	12.3	12.3	110.7	110.7
1931	0.0	0.0	0.0	59.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	59.5	59.5
1932	0.0	0.0	0.0	230.9	230.9	230.9	230.9	230.9	230.9	230.9	230.9	230.9	2,078.4	2,078.4
1933	0.0	0.0	0.0	108.5	108.5	108.5	0.0	0.0	0.0	0.0	0.0	0.0	325.5	325.5
1934	0.0	0.0	0.0	240.2	240.2	240.2	240.2	240.2	240.2	240.2	240.2	0.0	1,921.5	2,161.7
1935	0.0	240.2	0.0	270.9	241.7	89.4	0.0	0.0	0.0	0.0	0.0	0.0	842.1	601.9
1936	0.0	0.0	0.0	458.5	409.1	151.3	0.0	0.0	0.0	0.0	0.0	0.0	1,018.8	1,018.8
1937	0.0	0.0	0.0	1,300.6	1,160.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2,461.0	2,461.0
1938	0.0	0.0	0.0	3,192.6	2,848.5	1,053.6	0.0	0.0	0.0	0.0	0.0	0.0	7,094.7	7,094.7
1939	0.0	0.0	0.0	1,267.8	1,267.8	1,267.8	1,267.8	1,267.8	1,267.8	1,267.8	0.0	0.0	8,874.4	8,874.4
1940	0.0	0.0	0.0	38.9	34.7	12.8	0.0	0.0	0.0	0.0	0.0	0.0	86.4	86.4
1941	0.0	0.0	0.0	1,977.4	1,764.3	652.5	0.0	0.0	0.0	0.0	0.0	0.0	4,394.2	4,394.2
1942	0.0	0.0	0.0	4,786.6	4,270.7	1,579.6	0.0	0.0	0.0	0.0	0.0	0.0	10,636.9	10,636.9
1943	0.0	0.0	0.0	3,613.9	3,224.4	1,192.6	0.0	0.0	0.0	0.0	0.0	0.0	8,031.0	8,031.0
1944	0.0	0.0	0.0	228.1	228.1	228.1	228.1	228.1	228.1	228.1	228.1	228.1	2,053.1	2,053.1
1945	0.0	0.0	0.0	836.9	746.7	276.2	0.0	0.0	0.0	0.0	0.0	0.0	1,859.8	1,859.8
1946	0.0	0.0	0.0	2,824.5	2,520.1	932.1	0.0	0.0	0.0	0.0	0.0	0.0	6,276.7	6,276.7
1947	0.0	0.0	0.0	509.1	509.1	509.1	509.1	509.1	509.1	509.1	0.0	0.0	3,563.7	3,563.7
1948	0.0	0.0	0.0	38.9	34.7	12.8	0.0	0.0	0.0	0.0	0.0	0.0	86.4	86.4
1949	0.0	0.0	0.0	292.5	292.5	292.5	292.5	292.5	292.5	292.5	292.5	292.5	2,632.6	2,632.6
1950	0.0	0.0	0.0	659.3	588.2	217.6	0.0	0.0	0.0	0.0	0.0	0.0	1,465.1	1,465.1
1951	0.0	0.0	0.0	1,210.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1,210.4	1,210.4
1952	0.0	0.0	0.0	3,419.3	3,050.8	1,128.4	0.0	0.0	0.0	0.0	0.0	0.0	7,598.5	7,598.5
1953	0.0	0.0	0.0	4,786.6	4,270.7	1,579.6	0.0	0.0	0.0	0.0	0.0	0.0	10,636.9	10,636.9
1954	0.0	0.0	0.0	2,059.6	1,837.6	679.7	0.0	0.0	0.0	0.0	0.0	0.0	4,576.9	4,576.9
1955	0.0	0.0	0.0	578.8	578.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1,157.7	1,157.7
1956	0.0	0.0	0.0	971.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	971.4	971.4
1957	0.0	0.0	0.0	4,507.0	4,021.2	1,487.3	0.0	0.0	0.0	0.0	0.0	0.0	10,015.5	10,015.5
1958	0.0	0.0	0.0	1,223.8	1,091.9	403.8	0.0	0.0	0.0	0.0	0.0	0.0	2,719.5	2,719.5
1959	0.0	0.0	0.0	5,134.5	4,581.1	1,694.4	0.0	0.0	0.0	0.0	0.0	0.0	11,410.0	11,410.0
1960	0.0	0.0	0.0	271.5	271.5	271.5	271.5	271.5	271.5	271.5	271.5	271.5	2,443.9	2,443.9
1961	0.0	0.0	0.0	301.9	301.9	301.9	301.9	301.9	301.9	301.9	301.9	301.9	2,717.1	2,717.1
1962	0.0	0.0	0.0	556.0	496.1	183.5	0.0	0.0	0.0	0.0	0.0	0.0	1,235.6	1,235.6
1963	0.0	0.0	0.0	1,253.2	1,118.2	413.6	0.0	0.0	0.0	0.0	0.0	0.0	2,785.0	2,785.0
1964	0.0	0.0	0.0	562.9	562.9	562.9	562.9	562.9	562.9	562.9	562.9	562.9	5,065.8	5,065.8
1965	0.0	0.0	0.0	1,668.5	1,488.6	550.6	0.0	0.0	0.0	0.0	0.0	0.0	3,707.7	3,707.7
1966	0.0	0.0	0.0	1,266.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1,266.0	1,266.0
1967	0.0	0.0	0.0	3,034.9	2,707.8	1,001.5	0.0	0.0	0.0	0.0	0.0	0.0	6,744.3	6,744.3
1968	0.0	0.0	0.0	4,931.2	4,399.7	1,627.3	0.0	0.0	0.0	0.0	0.0	0.0	10,958.1	10,958.1
1969	0.0	0.0	0.0	2,132.0	183.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2,315.8	2,315.8
1970	0.0	0.0	0.0	5,134.5	1,235.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6,369.9	6,369.9
1971	0.0	0.0	0.0	3,368.9	3,005.8	1,111.7	0.0	0.0	0.0	0.0	0.0	0.0	7,486.4	7,486.4
1972	0.0	0.0	0.0	1,195.2	1,066.4	394.4	0.0	0.0	0.0	0.0	0.0	0.0	2,656.1	2,656.1
1973	0.0	0.0	0.0	2,189.5	1,953.6	722.6	0.0	0.0	0.0	0.0	0.0	0.0	4,865.7	4,865.7
1974	0.0	0.0	0.0	2,975.3	2,654.6	981.8	0.0	0.0	0.0	0.0	0.0	0.0	6,611.8	6,611.8
1975	0.0	0.0	0.0	4,512.7	4,026.3	1,489.2	0.0	0.0	0.0	0.0	0.0	0.0	10,028.2	10,028.2
1976	0.0	0.0	0.0	739.4	739.4	739.4	739.4	739.4	739.4	739.4	739.4	0.0	5,915.1	5,915.1
1977	0.0	0.0	0.0	9.6	9.6	9.6	9.6	9.6	9.6	9.6	9.6	9.6	86.4	86.4
1978	0.0	0.0	0.0	112.6	100.5	37.2	0.0	0.0	0.0	0.0	0.0	0.0	250.3	250.3
1979	0.0	0.0	0.0	4,199.3	3,746.7	1,385.8	0.0	0.0	0.0	0.0	0.0	0.0	9,331.7	9,331.7
1980	0.0	0.0	0.0	2,656.7	2,370.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5,027.1	5,027.1
1981	0.0	0.0	0.0	1,111.7	1,111.7	1,111.7	1,111.7	1,111.7	1,111.7	1,111.7	0.0	0.0	7,782.0	10,005.4
1982	0.0	2,223.4	0.0	38.9	34.7	12.8	0.0	0.0	0.0	0.0	0.0	0.0	2,309.8	86.4
1983	0.0	0.0	0.0	5,134.5	4,581.1	359.4	0.0	0.0	0.0	0.0	0.0	0.0	10,075.0	10,075.0
1984	0.0	0.0	0.0	5,134.5	902.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6,037.1	6,037.1
1985	0.0	0.0	0.0	851.1	30.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	881.8	881.8
1986	0.0	0.0	0.0	1,986.9	1,772.7	655.7	0.0	0.0	0.0	0.0	0.0	0.0	4,415.2	4,415.2
1987	0.0	0.0	0.0	880.8	880.8	880.8	880.8	880.8	880.8	880.8	880.8	0.0	7,046.6	7,927.4
1988	0.0	0.0	880.8	119.1	119.1	119.1	119.1	119.1	119.1	119.1	119.1	119.1	1,953.1	1,072.3
1989	0.0	0.0	0.0	46.0	46.0	46.0	46.0	46.0	46.0	46.0	0.0	0.0	322.3	322.3
1990	0.0	0.0	0.0	9.6	9.6	9.6	9.6	9.6	9.6	9.6	9.6	9.6	86.4	86.4
1991	0.0	0.0	0.0	55.9	55.9	55.9	55.9	55.9	55.9	55.9	55.9	55.9	502.9	502.9
1992	0.0	0.0	0.0	107.0	107.0	107.0	107.0	107.0	107.0	107.0	107.0	107.0	963.2	963.2
1993	0.0	0.0	0.0	288.3	257.3	95.2	0.0	0.0	0.0	0.0	0.0	0.0	640.8	640.8
1994	0.0	0.0	0.0	571.0	571.0	571.0	571.0	571.0	571.0	571.0	571.0	571.0	5,138.7	5,138.7
1995	0.0	0.0	0.0	532.3	474.9	175.7	0.0	0.0	0.0	0.0	0.0	0.0	1,182.9	1,182.9
1996	0.0	0.0	0.0	1,578.4	1,408.3	520.9	0.0	0.0	0.0	0.0	0.0	0.0	3,507.6	3,507.6
1997	0.0	0.0	0.0	4,407.7	1,663.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6,071.1	6,071.1
1998	0.0	0.0	0.0	3,573.2	3,188.1	958.9	0.0	0.0	0.0	0.0	0.0	0.0	7,720.3	7,720.3
1999	0.0	0.0	0.0	5,134.5	4,581.1	1,694.4	0.0	0.0	0.0	0.0	0.0	0.0	11,410.0	11,410.0
2000	0.0	0.0	0.0	2,871.9	2,562.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5,434.4	5,434.4
2001	0.0	0.0	0.0	841.3	841.3	841.3	841.3	841.3	841.3	841.3	841.3	841.3	7,571.8	7,571.8
2002	0.0	0.0	0.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	1,017.0	1,017.0
2003	0.0	0.0	0.0	45.2	40.3	14.9	0.0	0.0	0.0	0.0	0.0	0.0	100.5	100.5
Avg.	**15.6**	**30.0**	**10.7**	**1,630.8**	**1,287.7**	**486.7**	**121.8**	**121.8**	**121.8**	**121.8**	**78.2**	**47.5**	**4,074.4**	**4,074.4**
Max	**1,275.7**	**2,223.4**	**880.8**	**5,134.5**	**4,581.1**	**1,694.4**	**1,267.8**	**1,267.8**	**1,267.8**	**1,267.8**	**880.8**	**841.3**	**11,410.0**	**11,410.0**
Min	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**

Table A6 - San Luis Obispo FCWCD -- Article 21 Water (Acre-feet)

Study 2020D09E

WY	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Water Year	Cal Year
1922	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1923	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1924	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1925	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1926	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1927	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1928	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1929	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1930	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1931	0.0	0.0	0.0	224.0	224.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	448.0	448.0
1932	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1933	0.0	0.0	0.0	0.0	0.0	224.0	0.0	0.0	0.0	0.0	0.0	0.0	224.0	224.0
1934	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1935	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1936	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1937	0.0	0.0	0.0	0.0	224.0	224.0	0.0	0.0	0.0	0.0	0.0	0.0	448.0	448.0
1938	0.0	0.0	0.0	0.0	0.0	224.0	224.0	224.0	0.0	0.0	0.0	0.0	672.0	672.0
1939	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1940	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1941	0.0	0.0	0.0	0.0	0.0	0.0	224.0	0.0	0.0	0.0	0.0	0.0	224.0	224.0
1942	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1943	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1944	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1945	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1946	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1947	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1948	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1949	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1950	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	224.0
1951	0.0	0.0	224.0	224.0	224.0	224.0	0.0	0.0	0.0	0.0	0.0	0.0	896.0	672.0
1952	0.0	0.0	0.0	0.0	0.0	0.0	224.0	224.0	0.0	0.0	0.0	0.0	448.0	448.0
1953	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1954	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1955	0.0	0.0	0.0	0.0	224.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	224.0	224.0
1956	0.0	0.0	0.0	224.0	224.0	224.0	0.0	0.0	0.0	0.0	0.0	0.0	672.0	672.0
1957	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1958	0.0	0.0	0.0	0.0	0.0	224.0	224.0	224.0	0.0	0.0	0.0	0.0	672.0	672.0
1959	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1960	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1961	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1962	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1963	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1964	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1965	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	224.0
1966	0.0	0.0	224.0	224.0	224.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	672.0	448.0
1967	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1968	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1969	0.0	0.0	0.0	224.0	224.0	224.0	224.0	94.0	0.0	0.0	0.0	0.0	990.0	990.0
1970	0.0	0.0	0.0	224.0	224.0	224.0	0.0	0.0	0.0	0.0	0.0	0.0	672.0	672.0
1971	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1972	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1973	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1974	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1975	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1976	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1977	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1978	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1979	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1980	0.0	0.0	0.0	0.0	224.0	224.0	0.0	0.0	0.0	0.0	0.0	0.0	448.0	448.0
1981	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1982	0.0	0.0	0.0	0.0	0.0	0.0	224.0	0.0	0.0	0.0	0.0	0.0	224.0	224.0
1983	0.0	0.0	0.0	224.0	224.0	224.0	224.0	94.0	0.0	0.0	0.0	0.0	990.0	990.0
1984	0.0	0.0	0.0	224.0	224.0	224.0	0.0	0.0	0.0	0.0	0.0	0.0	672.0	672.0
1985	0.0	0.0	0.0	224.0	224.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	448.0	448.0
1986	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1987	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1988	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1989	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1990	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1991	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1992	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1993	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1994	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1995	0.0	0.0	0.0	0.0	0.0	0.0	0.0	224.0	0.0	0.0	0.0	0.0	224.0	224.0
1996	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1997	0.0	0.0	0.0	224.0	224.0	224.0	0.0	0.0	0.0	0.0	0.0	0.0	672.0	672.0
1998	0.0	0.0	0.0	0.0	224.0	224.0	224.0	224.0	0.0	0.0	0.0	0.0	896.0	896.0
1999	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2000	0.0	0.0	0.0	0.0	224.0	224.0	0.0	0.0	0.0	0.0	0.0	0.0	448.0	448.0
2001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2002	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2003	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Avg.	**0.0**	**0.0**	**5.5**	**27.3**	**41.0**	**38.2**	**21.9**	**16.0**	**0.0**	**0.0**	**0.0**	**0.0**	**149.8**	**149.8**
Max	**0.0**	**0.0**	**224.0**	**224.0**	**224.0**	**224.0**	**224.0**	**224.0**	**0.0**	**0.0**	**0.0**	**0.0**	**990.0**	**990.0**
Min	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**