



A Meeting of the

**BOARD OF DIRECTORS
OF THE
CENTRAL COAST WATER AUTHORITY**

will be held at 9:00 a.m., on Thursday, January 23, 2020
at 255 Industrial Way, Buellton, California

I. Call to Order and Roll Call

II. Public Comment – (Any member of the public may address the Board relating to any matter within the Board’s jurisdiction. Individual Speakers may be limited to five minutes; all speakers to a total of fifteen minutes.)

III. Election of Officers and Committee Appointments

IV. Consent Calendar

- * A.1. Approve Minutes of the October 24, 2019 Regular Meeting and
- A.2. November 18, 2019 Special Meeting
- * B. Approve Bills
- * C. Controller’s Report
- * D. Operations Report

V. Executive Director’s Report

- A. CCWA Water Supply Situation Report
- B. Lake Cachuma Bypass Pipeline Status
- * C. DWR Draft 2019 Delivery Capability Report
- * D. CCWA Calendar Year 2020 Strategies and Priorities
- * E. 2020 Supplemental Water Purchase Program
- F. State Water Contract Assignment Update
- G. Suspended Water Reacquisition Update
- H. Delta Conveyance Project Contract Amendment Update
- * I. Procurement of Engineering Services for Risk and Resiliency Assessment - \$50,000
- * J. Preparation of Request For Qualification – Water Management Strategy Development
- ◆ K. Finance Committee Report
 - 1. FY 2019/20 Second Quarter Investment Report
 - 2. FY Ended June 30, 2019 and 2018 Comprehensive Annual Financial Report
 - 3. Ernst & Young Audit Report and Findings on the DWR Statement of Charges
- * L. FY 2020/21 Year Budget Preparation Schedule
- * M. JPIA Low Loss Report
- N. State Water Project Contract Extension

VI. Reports from Board Members for Information Only

- * A. City of Buellton Appointment of Ed Andrisek as CCWA Board Member and Art Mercado as Board Alternate

VII. Items for Next Regular Meeting Agenda

VIII. Date of Next Regular Meeting: February 27, 2020

IX. Adjournment

- * Indicates attachment of document to original agenda packet.
- ◆ Indicates enclosure of document with original agenda packet.

Hard copies of the Comprehensive Annual Financial Report are included for the Board and Committee members, but are available to all interested parties upon request, or online at <http://www.ccwa.com/Archives/CAFRs/2019CAFR.pdf>.

Eric Friedman
Chairman

Ed Andrisek
Vice Chairman

Ray A. Stokes
Executive Director

Brownstein Hyatt
Farber Schreck
General Counsel

Member Agencies

City of Buellton

Carpinteria Valley
Water District

City of Guadalupe

City of Santa Barbara

City of Santa Maria

Goleta Water District

Montecito Water District

Santa Ynez River Water
Conservation District,
Improvement District #1

Associate Member

La Cumbre Mutual
Water Company

255 Industrial Way
Buellton, CA 93427
(805) 688-2292
Fax (805) 686-4700
www.ccwa.com

**MINUTES OF THE
CENTRAL COAST WATER AUTHORITY
BOARD OF DIRECTORS**

October 24, 2019

I. Call to Order and Roll Call

Chairman Friedman called the Central Coast Water Authority (CCWA) Board of Directors meeting held at 255 Industrial Way, Buellton, California, to order at 9:00 AM. Attachment No. 1 is a list of those in attendance.

CCWA member agencies with voting privileges were represented by:

<u>Representative</u>	<u>Agency/City</u>	<u>Voting %</u>
Farfalla Borah	Goleta Water District	17.20%
Harlan Burchardi	Santa Ynez River Water Conservation District, ID #1	7.64%
Eric Friedman	City of Santa Barbara	11.47%
Shirley Johnson	Carpinteria Valley Water District	7.64%
Shannon Sweeney	City of Guadalupe	1.15%
Etta Waterfield	City of Santa Maria	43.19%
Floyd Wicks	Montecito Water District	9.50%

II. Public Comment

There was no public comment related to items not on the agenda.

III. Consent Calendar

- A. Approve Minutes of the July 25, 2019 Regular Meeting
- B. Approve Bills
- C. Controller's Report
- D. Operations Report

Director Burchardi requested an amendment to the minutes of the July 25, 2019 Regular Board meeting.

A motion to approve the Consent Calendar, including the minutes as amended, was made by Director Waterfield, seconded by Director Wicks and carried, with all in favor, none opposed and Director Johnson abstaining.

IV. Executive Director's Report

- A. Water Supply Situation Report

Ray Stokes, CCWA Executive Director, provided information on the status of the precipitation indices throughout California, most of which are showing below historic average, minimal precipitation for the new water year. NOAA is projecting below normal precipitation and above average temperatures for the upcoming three months. However, reservoirs are above average for this time at their current

storage levels. Lake Oroville is at 2.149 million AF, San Luis Reservoir is currently at 1.232 million AF storage.

Table A water allocation continues at 75%, or 34,116 AF for CCWA project participants, with 6,535 AF carryover, 2,578 AF lost in carryover spill, and 6,220 AF water debt. As of the 10/24/2019 report date, 14,653 AF had been delivered to turnouts, and 24,542 was available for delivery.

B. 2019 DWR Scheduled Coastal Branch Shutdown

John Brady, CCWA Deputy Director, stated the Department of Water Resources (DWR) has finalized its schedule for the annual maintenance shutdown for the Coastal Branch of the State Water Project and all CCWA project participants have been notified. This shutdown will require approximately two and one half weeks and will allow both DWR and CCWA to complete required maintenance work. To accommodate this work, CCWA staff will shut down participant turnouts on Friday, November 1, 2019. To prepare the pipeline for the duration of the shutdown, the chlorine residual will be raised to the 3.5 mg/l range in water delivered during the week prior to the shutdown. This will ensure that water within the pipeline will remain potable throughout the outage.

Once the shutdown maintenance work is complete, CCWA will activate turnouts and resume water deliveries on Monday, November 18, 2019. CCWA has requested use of the penstock at Bradbury Dam to flush the pipeline, but USBR has not responded to the request. CCWA feels that flushing will not be necessary, as the shutdown is only two weeks and the chlorine residual should keep the water potable for 30 days.

During the outage CCWA will have the Treatment Plant Clearwell, Tank 2 and Tank 5 available as a limited source of emergency supply. There will be no emergency supply source downstream of Tank 7, which effects Buellton, Solvang and Santa Ynez ID#1.

C. Delta Conveyance Project Participation Decision by CCWA

Mr. Stokes reported this agenda item was a request for the Board to provide direction to CCWA staff related to participation in the Delta Conveyance Facility Project (DCP). Negotiations are ongoing between DWR and SWP contractors to amend the SWP contract for the DCP cost allocations and other operations aspects.

Mr. Stokes provided a general description of the proposed amendments for the DCP, including the Opt-In approach, that the DCP would be a SWP facility integrated with existing SWP, DCP water is established as a new type of SWP water, DCP water and rights to use available capacity allocated to participating SWP Contractors, and that "Non-Participants" may use available capacity (if any) and pay all associated costs of DCP

Five north of the Delta Public Water Agencies are excluded from the DCP, and Agreements In Principle (AIP) from contract negotiations include a description of the opt-in framework, schedule of public Water Agency participation, cost accounting general description, and a dispute resolution process. Mr. Stokes

stated that negotiations have not yet begun with DWR related to these matters, because the State Water Contractors have not yet reached any agreement on key principles.

Mr. Stokes reviewed the conceptual San Luis Operations related to spill priority, and how DCP water would affect Article 21 water deliveries. While negotiating as a non-participant in the DCP project, CCWA is advocating for the principle that non-participants should not be harmed by the project, so a record of its storage allocation should be taken at the point of filling due to DCF water, and non-DCP contractor's storage should not be affected until the point at which the reservoir would have filled without the addition of the DCF water.

At the end of the negotiations of the AIP – likely before January 1, 2020 – it is anticipated that DWR will request that each SWP Contractor wanting to participate in the DCP (1) approve the AIP, and (2) agree to fund their allocated share of an additional \$350 million in additional planning costs to keep the project moving forward over the next few years (CCWA's share would be approximately \$3.8 million). Although a specific deadline has not yet been set, expectation is that approval will be required within a relatively short amount of time after negotiations are completed (i.e., 2 months) in order to secure a Contractor's participation in the DCF and that absent approval of the AIP, the Contractor will be assumed to be out of the DCF.

DWR is unlikely to have a complete project description by the likely deadline to approve the AIP and Funding Agreement for the planning costs. However, DWR evaluated a 6,000 cfs single tunnel project in the first phase of the California Waterfix economic analysis, and so SWP Contractors have been generally looking to the results of that analysis to get an idea of the potential costs and benefits of a single tunnel project.

Mr. Wicks asked how action taken by the CCWA Board would be communicated to DWR. Mr. Stokes stated the decision of CCWA would be communicated to DWR and Santa Barbara County, and Mr. Fayram, Santa Barbara County Water stated that the Transfer of Financial Responsibility Agreement allows CCWA to notify the County of State Water Contract related action that it requests, however, in this case, no action is being requested. Mr. Amerikaner confirmed that pursuant to the Transfer of Financial Responsibility Agreement CCWA will notify the Santa Barbara County Board of Supervisors of its decision.

Upon a motion by Director Johnson, seconded by Director Burchardi and carried with Alternate Director Sweeney, and Directors Waterfield, Burchardi, Friedman, Wicks and Johnson in favor, Director Borah abstaining, and none opposed, the CCWA Board of Directors elected to opt out of the Delta Conveyance Project and directed staff to inform Santa Barbara County and DWR that CCWA does not intend to participate and to include a zero for CCWA's participation in the AIP.

Director Waterfield left the meeting and Alternate Director Springer assumed representation for the City of Santa Maria.

D. Contract Assignment Update

CCWA met with Santa Barbara County staff to discuss moving forward with assignment of the State Water Contract from Santa Barbara County to CCWA, and Ms. Hastings, General Counsel, provided some background on the past actions taken by the CCWA Board, including the draft assignment agreement created and approved by the Board in 2017, approval of the concept of assignment in 2018 by DWR, and presentation of the assignment transaction to the Santa Barbara County Board of Supervisors in February 2019.

The residual issue is the idea of permanent transfers of Table A entitlement outside of Santa Barbara County. The County has requested it have an option to purchase any Table A entitlement prior to it being permanently sold outside of Santa Barbara County, potentially for the use of Santa Barbara County communities who currently may not have a State Water entitlement, or alternatively be paid for the capital costs of the Table A water being sold during the period between Santa Barbara County execution of the State Water Contract and 1991 when CCWA assumed financial responsibility for the County's Table A entitlement.

The Board asked questions related to the effect of sale of Table A entitlement on voting rights and CCWA membership. It was pointed out that this is a theoretic issue, as the cost of CCWA's Table A is weighted by the fixed costs associated with the Coastal Branch and CCWA's Table A is much more expensive on a per acre foot basis than other State Water Contractors.

Mr. Fayram stated that this was one issue related to the assignment agreement, but there were potentially other issues to be resolved.

Mr. Stokes stated that based on the comment earlier by Mr. Fayram, additional material changes may be necessary to the assignment agreement, and he will try to schedule another meeting with Santa Barbara County staff before the proposed special meeting of the CCWA Board in November.

Motion was made by Alternate Director Springer to authorize CCWA staff to continue to negotiate with the County including the provisions that 1) Santa Barbara County will have right of refusal prior to permanent sale of a CCWA member agency's Table A entitlement and 2) Santa Barbara County would be reimbursed by the Table A entitlement seller for capital costs related to retention of the Table A entitlement for the period between Santa Barbara County execution of the State Water Contract and 1991 when CCWA assumed financial responsibility for the County's Table A entitlement. The motion was seconded by Director Wicks and carried with Alternate Director Sweeney, and Directors Waterfield, Burchardi, Friedman, Wicks and Borah in favor, Director Johnson abstaining, and none opposed.

E. Suspended Table A Reacquisition Update

Environmental Science Associates have been engaged as consultants to prepare the environmental documentation on the reacquisition of the suspended Table A. CCWA has communicated the decision to Santa Barbara County and DWR, and DWR has provided a letter indicating they have reviewed the proposal and which

aspects they would like to be involved in. Bond counsel has been approached to explore how the reacquisition could be financed following conclusion of the environmental documentation, estimated to be near the end of 2020.

Updates will be provided as the matter progresses.

F. DWR Enhanced Coastal Branch Planning and Monitoring Proposal

DWR responded to CCWA's letter request for a cost allocation specialist to oversee the Reach 33A cost allocations. Following meetings with staff, DWR has agreed to provide quarterly reports related to the Reach 33A costs, and will provide additional information prior to CCWA Budget preparation.

G. Update on Request for Qualifications for Water Management Consulting Firm

Mr. Brady stated that the Request for Qualifications (RFQ) are being developed, and CCWA has met with the County staff in San Luis Obispo County to review past actions related to water management. The scope of work is being developed, and will include discussion of what is done with excess water and how can it be retrieved at a later date, including consideration of using existing groundwater banks, establishing a groundwater storage facility and utilization of the water management tools of the State Water Contract. Decision science will also be included in the scope of work to provide a form for consideration of what he anticipates will be a wide range of alternatives.

Mr. Brady stated he expects to have an action request by the Board at its January 2020 meeting.

H. FY 2018/19 Year End Budget Status Report

Mr. Stokes introduced and expressed his gratitude to Ms. Laura Matthews, CCWA Controller, who will be retiring at the end of 2019 after 14 years of service to CCWA. Mr. Stokes then introduced Lisa Long, currently CCWA Deputy Controller who will be assuming the Controller duties after Ms. Matthews retires.

Ms. Long provided a report on the budget to actual analysis of the prior year expenses. In 2018/19 CCWA Fixed O&M expenses, including interest income and other credits were \$1,102,837 less than budgeted. Delivery requests for FY 2018/19 were 34,359 acre-feet and actual water deliveries for the fiscal year were 24,891 acre-feet, a difference of 9,468 acre-feet. Personnel expenses were lower than budgeted due to open positions and the associated pension and benefits expense. Professional services were lower than budgeted by about \$90,000 due a reduction in engineering services. Turnout expenses were over budget by about \$10,000 due to an unanticipated turnout repair. Unexpended funds will be returned to project participants through a credit on the next FY fixed invoice, or credited to project participants' DWR Reserve Funds.

Mr. Stokes reported that DWR has made a \$27 million error in the Statement of Charges, and CCWA has not yet been notified what its share of the additional payment will be.

I. Finance Committee

1. FY 2019/20 First Quarter Investment Report

Ms. Long reported that as of September 30, 2019 the investment portfolio totaled \$66.6 million and had an effective rate of return of 2.22% on an average daily balance for the month of September 2019 of about \$70.5 million. The investment were comprised do the State of California Local Agency investment Fund (LAIF), \$49 million), the Montecito Bank and Trust money market accounts (\$1.7 million), U.S. Treasury Notes held in a Charles Schwab Brokerage Account (\$6 million), and funds held by the CCWA revenue bond trustee for the October 1, 2019 bond principal and interest payment (\$9.9 million).

All investments during the quarter complied with the CCWA investment policy provisions, and current pro forma projections indicate that the Authority will have sufficient cash with which to operate for the next six months.

The Finance Committee recommended approval of the FY 2019/20 First Quarter Investment Report.

Upon a motion by Director Burchardi, seconded by Alternate Director Sweeney and carried with all in favor and none opposed, the Board approved the FY 2019/20 First Quarter Investment Report.

2. Resolution 19-01 Amending the CCWA Rules and Regulations Governing the Policy and Procedures for the Purchase of Services, Supplies and Equipment

Mr. Brady requested an amendment to Resolution 16-01, the current CCWA Resolution that authorizes the rules and regulations for the Central Coast Water Authority governing the policies and procedures for the purchase of services, supplies and equipment (“Rules and Regulations”). The requested amendment will allow the use of cooperative purchasing arrangements and programs with other public agencies.

The State of California Department of General Services has a program that which establishes multiple award agreements in accordance with Public Contract Code Sections 10290 et seq. and 12101.5 (effective January 1994). The California Multiple Award Schedules (CMAS) offers a wide variety of commodities, non-IT services and information technology products and services at prices which have been assessed to be fair, reasonable and competitive.

For the Board’s consideration, CCWA’s legal counsel drafted Resolution 19-01 to amend the Rules and Regulations to include the use of cooperative purchasing arrangements and programs, such as the California CMAS Program. In response to a questions from the Board, Mr. Brady stated that other purchasing groups are not precluded from consideration, and would be considered upon merit, and the items

available through CMAS are generally large ticket equipment purchases, not public works or construction items.

Upon a motion by Director Burchardi, seconded by Director Johnson and approved with Alternate Directors Sweeney and Springer and Directors Wicks, Friedman, Johnson, Burchardi and Borah in favor and none opposed the Board adopted Resolution 19-01, which amends the Rules and Regulations Governing the Policy and Procedures for the Purchase of Services, Supplies and Equipment to include the use of cooperative purchasing arrangements and programs.

J. Hyper-converged Technology (Nutanix Infrastructure) Project

Mr. Brady explained that CCWA's existing computer network, which is critical to the operations of CCWA's facilities, has a vulnerability of a single point of failure between the Virtual Server Host Machines and the single Storage Area Network device. Through using new yet proven technology, this single point of failure will be eliminated. The new Hyper-converged Equipment essentially combines all of the elements of the existing virtual server infrastructure into one device that also includes multiple redundancies. The cost of the Hyper-converged Technology is less than the cost of replacement of the existing equipment with in kind equipment.

CCWA's current managed network service provider, CompuVision, assists CCWA staff with the operating, monitoring and development of the CCWA network. They are also a CMAS vender that offers Hyper-converged Technology Equipment. CompuVision has submitted a bid to CCWA to provide Hyper-converged Technology, known as Nutranix Infrastructure, at the established CMAS pricing of \$89,153.94 (CMAS Contract 3-18-70-3347C).

Pursuant to Resolution 19-01, procurements of budgeted items above \$75,000 requires specific Board approval.

Director Johnson asked if the technology was proven and how long the anticipated life span is. Mr. Brady stated that the expected life of the equipment is about 5 years, and two consultants have recommended this technology.

Upon a motion by Director Springer, seconded by Director Borah and approved with all in favor and none opposed, the Board authorized the Executive Director to procure the Nutranix Infrastructure Equipment at the established 2019 California Multiple Award Schedules pricing for this equipment, pursuant to CCWA Resolution 19-01.

V. Reports from Board Members for Information Only

Mr. Amerikaner informed the Board that he will be phasing out as CCWA's General Counsel over the next year, and Ms. Hastings will be CCWA's primary contact for future meetings.

There were no reports from Board members.

VI. Items for Next Regular Meeting Agenda

Mr. Stokes stated that several procurements are necessary prior to January 2020, and potentially negotiations with the County of the Contract Assignment will require board direction, so a special meeting may be necessary in November.

VII. Date of Next Special Meeting: November 18, 2019 2:00 PM

A tentative Special Telephonic meeting of the CCWA Board was scheduled for November 18, 2019 at 2:00 pm.

VIII. Adjournment

The meeting was adjourned at 11:27 AM.

Respectfully submitted,

Elizabeth Watkins
Secretary to the Board

CENTRAL COAST WATER AUTHORITY

Meeting: CCWA Board of Directors

Date: October 24, 2019

NAME	ORGANIZATION	TELEPHONE
Farfalla Borah	GWD	805-964-7002
Harlan Burchard	SYRWCD IDI	688 6015
Shirley Johnson	CARP Valley WD	811 8011
Eric Friedman	City of SB	805-564-5318
Floyd Wicks	Montecito W.D.	805-455-1670
Etta Waterfield	City of S.m.	805-714-1379
Shannon Sweeney	Guadalupe	805-356-3910
TOM FAYRAM	COUNTY WA	805-568-3436
FRAU CREASE	COUNTY WATER AGY	805-568-2542
NICK DiCROCE	WEW	805-688-7813
Bob McDonald	CUWD	805 6405147
SHAD SPRINGER	CITY OF SANTA MARIA	(805)925-0951
Ryan Drake	GWD	(805) 879-4677
Cathy Taylor	CITY OF SANTA BARBARA	805-564-5571
LAURA MATTHEWS	CCWA	805-688-2292
Lisa Long	CCWA	" "
Stephanie Hastings	BHFS	805-963-7000
Kevin Walsh	SYRWCD	

Placing your name on this list is voluntary and is not required to attend this meeting.

**MINUTES OF THE
CENTRAL COAST WATER AUTHORITY
BOARD OF DIRECTORS**

November 18, 2019

I. Call to Order and Roll Call

Chairman Friedman called the Central Coast Water Authority (CCWA) Special Board of Directors meeting held at telephonically and at 255 Industrial Way, Buellton, California, to order at 2:00 PM. Attachment No. 1 is a list of those in attendance at 255 Industrial Way.

CCWA member agencies with voting privileges were represented by:

Board members present at CCWA offices were:

<u>Representative</u>	<u>Agency/City</u>	<u>Voting %</u>
Ed Andrisek	City of Buellton	2.21%
Harlan Burchardi	Santa Ynez River Water Conservation District, ID #1	7.64%
Etta Waterfield	City of Santa Maria	43.19%

Board members present telephonically were:

<u>Representative</u>	<u>Agency/City</u>	<u>Voting %</u>
Farfalla Borah	Goleta Water District	17.20%
Eric Friedman	City of Santa Barbara	11.47%
Shirley Johnson	Carpinteria Valley Water District	7.64%
Gina Rubalcaba	City of Guadalupe	1.15%
Floyd Wicks	Montecito Water District	9.50%

II. Public Comment

There was no public comment related to items not on the agenda.

III. Executive Director's Report

A. Contract Assignment Update

Mr. Ray Stokes, CCWA Executive Director, provided information on the status of the discussions regarding the contract assignment of the State Water Project contract with Santa Barbara County. He and Stephanie Hastings, CCWA General Counsel, met with County staff to discuss the contract assignment. Last month CCWA Board approved provision allowing first right of refusal for water sales outside of County to the County, following refusal by CCWA participants. County staff is continuing to work on the assignment issue, and anticipate presentation to the County Board of Supervisors will be a two-step process, with presentation of the assignment agreement at the February 4, 2020 meeting, and a vote coming later in the year.

Members of the public asked various questions related to the right of first refusal language within the assignment agreement.

Staff reported that there were three topics of concern that had been raised by County representatives: 1) Is CCWA going to pursue reacquisition of the Suspended Table A allocation, and CCWA has responded that it is pursuing the Suspended Table A by beginning the CEQA process; 2) Would CCWA's Board consider modification to the voting structure? CCWA has responded it will not be considering changing its voting structure, and 3) Would CCWA give the County first right of refusal for out of County transfers? CCWA has responded to satisfy County staff concerns. The additional question of CCWA participation in the Delta Conveyance Project (DCP) has been previously addressed by the CCWA Board's decision in September to not participate in the DCP.

B. Delta Conveyance Project Amendment Negotiations Update

Mr. Stokes reported that three days of negotiations with the State Water Contractors took place last week after DWR set a deadline for negotiations of last Friday. Currently the contract amendments do not protect carryover rights that CCWA currently has, so Mr. Stokes expects he will not be advising the CCWA Board to sign the contract amendment.

C. Procurement of Santa Ynez Pumping Plant Electrical Switchboard Replacement Project

Mr. John Brady, CCWA Deputy Director, provided an explanation of the need for the replacement of the switchgear used to protect the electrical systems within the Santa Ynez Pumping Plant, and stated that CCWA retained the services to HDR Engineering to conduct an electrical evaluation of the electrical switchgear at the SYPP.

CCWA staff prepared a Request for Bids (RFB) using the design prepared by HDR Engineering for the SYPP Switchboard Replacement Project, and Mr. Brady reviewed the process to advertise the bids.

Sealed bids were received from three responding bidders, Taft Electric, Santa Maria Electric and Smith Electric Company, totaling \$302,298.32 and \$319,633.00 and \$322,266.00 respectively. While re-bidding the project was effective in lowering the project pricing, a budget deficit of \$84,048.32 remains, as the current project budget is \$236,250.

This upgrade to the Santa Ynez Pumping Plant addresses a critical issue that was identified in the Plant's electrical evaluation by HDR Engineering. Consequently, staff recommends moving forward with the project. To address the budget deficit, staff has identified sources of funding that could be transferred to this project. The additional sources of funding are as follows:

- Riser Repair to Air Vacuum/Air Release Valves – Phase 1 (C-19RISERP). This project has a budget of \$131,250. Phase 1 was redefined to accommodate the design (\$52,000) and a pilot repair at one location (\$16,000). Through this approach, approximately \$60,000 of funding can be made available for transfer to the SYPP Switchboard Replacement Project.
- Electrical Upgrades at the WTP (C-19WTPUPG). This project has a budget of \$68,040. Due to completing some of the work under budget and the

postponement of purchasing one piece of equipment until next fiscal year, approximately \$20,000 of funding can be made available for transfer to the SYPP Switchboard Replacement Project.

- Tank 2 Electrical Vault Rewiring (C-19T2WIRE). This project has a budget of \$68,250. Through phasing this project into two phases, approximately \$10,000 of funding can be made available for transfer to the SYPP Switchboard Replacement Project.

Upon a motion by Director Borah, seconded by Director Burchardi and carried by roll call vote with Directors Rubalcaba, Waterfield, Andrisek, Burchardi, Borah, Friedman, Wicks and Johnson in favor and none opposed, the Board authorized the Executive Director to award the contract for the Santa Ynez Pumping Plant Switchboard Replacement Project to Taft Electric following the procedures outlined in the project contract documents in the amount of \$302,298.32, and to transfer funds from budgeted projects totaling \$90,000 to Project C-19SYPPPEU as described in the staff report.

IV. Reports from Board Members for Information Only

There were no reports from Board members.

V. Items for Next Regular Meeting Agenda

VI. Date of Next Regular Meeting: January 23, 2020

VII. Adjournment

The meeting was adjourned at 2:38 PM.

Respectfully submitted,

Elizabeth Watkins
Secretary to the Board

CENTRAL COAST WATER AUTHORITY

Meeting: CCWA Special Board of Directors

Date: November 18, 2019

NAME	ORGANIZATION	TELEPHONE
SHAD SPRINGER	CITY OF SANTA MARIA	805 925-0951
Harlan Burchardi	SYRWCO ID1	688 6015
Etta WATERFIELD	City of SM	714-1379
ED ANDRISIK	City of BUELTON	805-688-1498
Gina Watkins	Central Coast Water Auth	688-2292
Diana Long	CCWA	" "
NICK DiCROSE	WEW	688-7813
CHRIS DAHLSTRÖM	SYRWCO ID1	688-6015

Placing your name on this list is voluntary and is not required to attend this meeting.



CENTRAL COAST WATER AUTHORITY

Normal and Recurring Costs

Bills for Ratification - October, November, and December 2019

VENDOR	INVOICE AMOUNT	DESCRIPTION
GENERAL & ADMINISTRATIVE EXPENSES		
Adam, Lacey	372.10	Reimbursable expenses - SWC Travel Expenses
Bank of America Business Card	16.95	Board Meeting Expense
Bank of America Business Card	60.00	Workplace Seminar
Bank of America Business Card	121.91	CPR Training
Bank of America Business Card	152.68	Night Survey Lodging/Meal Expenses
Bank of America Business Card	227.30	JPIA Safety Training
Bank of America Business Card	321.32	MWQI Meeting Travel Expenses
Bank of America Business Card	414.60	Publications, subscriptions, postage
Bank of America Business Card	536.39	Staff meetings
Bank of America Business Card	574.98	ProWorx Training Expense
Bank of America Business Card	803.69	National Safety Council Training
Bank of America Business Card	1,068.11	State Water Contractors - Travel and meetings
Bank of America Business Card	396.16	California Special District Association Conference
Bank of America Business Card	485.45	WTP Shutdown Training
Brady, John	706.03	Reimbursable expenses - License and SWC Travel Expenses
California Special Districts Association	1,446.00	Membership Dues 2020
Cal-OSHA Reporter	427.00	OSHA Newsletter
Cardmember Service	75.00	Membership Fee
Cardmember Service	200.01	Employee Retirement Luncheon
Cardmember Service	7,725.62	State Water Contractors - Travel and meetings
Federal Express	786.77	Express shipping
Healy, Richard	139.66	Reimbursable expense - Training Travel expense
Total Funds	400.00	Postage - postage machine
Underground Service Alert	357.00	Annual Membership
United Parcel Service	391.71	Shipping expenses
US Bank	412.18	State Water Contractors - Travel and meetings
Valley Oaks Printing	55.17	Budget Cover Printing
Winema Industrial & Safety Supply	850.00	CPR & First Aid Training for Staff
	\$ 19,523.79	Total General & Administrative
MONITORING EXPENSES		
AmeriPride Services, Inc.	1,130.84	Lab supplies
Bank of America Business Card	16.14	Lab supplies and tests
BIOVIR Laboratories	359.29	Water Analysis Tests
Culligan Industries Water Systems	255.00	Carbon Tank Rentals, Tri-Bed Tank Rentals
Environmental Resource Association	623.97	QC Testing
Eurofins Eaton Analytical	1,070.00	Lab testing
Hach Company	3,190.35	Lab supplies
IDEXX Distribution Corp.	3,231.73	Lab supplies
Mettler-Toledo Inc.	1,153.54	Water Analysis Tests
Praxair Distribution, Inc.	123.91	Lab supplies
VWR International	14,985.53	Lab supplies
	\$ 26,140.30	Total Monitoring Expenses
OFFICE EXPENSES		
AND Design Agency	32.19	Employee ID Cards
Bank of America Business Card	2,471.43	Office and kitchen supplies
CCI Office Technologies	183.35	Postage Machine - ink
Grainger Inc.	58.83	Janitorial supplies



CENTRAL COAST WATER AUTHORITY

Normal and Recurring Costs

Bills for Ratification - October, November, and December 2019

VENDOR	INVOICE AMOUNT	DESCRIPTION
Office Depot	1,042.45	Office, janitorial & kitchen supplies
Solvang Bakery	77.85	Board and Committee meeting pastries
Staples Inc.	355.97	Office, janitorial & kitchen supplies
Ultrax Business Products	219.81	Office supplies
US Bank	201.47	Tax Forms
Valley Oaks Printing	544.14	Business cards/Envelopes
	\$ 5,187.49	Total Office Expenses
OTHER EXPENSES		
ACWA/JPIA	74,747.00	Insurance - Auto/General Liability 2019-20
Airgas USA, LLC	105.40	Equipment Rental
American Marborg	140.06	Tank 2/EDV Rental
Bank of America Business Card	206.13	Computer miscellaneous expenses
Bragg Crane Service	9,603.60	Equipment Rental
Brownstein Hyatt Farber	2,265.00	Legal Services: Irvine Ranch Water Dist. Water Storage Program
Brownstein Hyatt Farber	23,247.14	Legal Services: Reacquisition of Relinquished Entitlement
Cobra Solution, Inc.	445.00	Cobra Software annual maintenance
Comcast	589.48	Internet Service
CompuVision	2,194.20	Miscellaneous Software Updates
CompuVision	10,540.00	Managed Service Agreement
De Lage Landen Financial Services	1,554.85	Copier Lease - BAO
Dell Business Credit	311.70	Laptop Screen Repair
Downs Equipment Rentals, Inc	2,633.00	Equipment Rental
Environmental Science Association	5,683.20	Reacquisition of Relinquished Entitlement
Graybar	6,015.00	Unity ProWorx Annual Support
iManage, LLC	3,855.27	Desksite Annual Maintenance Renewal
Impulse Internet Services	4,216.44	T-1 System and Internet Service (Buellton and Shandon)
Mail Finance	91.36	Postage Machine Lease
Marborg Industries	745.39	Tank 5/Tank 7/Tank 2/ EDV Rental
Praxair Company	91.81	Gas tank
San Miguel Roll-Off	615.56	Roll-off Rental
Schneider Electric USA Inc	9,408.00	ClearSCADA Annual Service and Support
Stangle, John	131.98	DSL reimbursement
United Rentals North America, Inc.	7,754.78	Equipment Rental
Velosio	87.50	Microsoft Dynamics SL annual support services
Wilson Creek Communications	465.00	Internet Service
Xerox Financial Services	377.24	Copier Lease - WTP
	\$ 168,121.09	Total Other Expenses
OTHER MISCELLANEOUS EXPENSES		
Department of Water Resources	7,686,711.00	Variable OMP&R, Delta Water & Transport Charge (3 months)
	\$ 7,686,711.00	Total Other Miscellaneous Expenses



CENTRAL COAST WATER AUTHORITY

Normal and Recurring Costs

Bills for Ratification - October, November, and December 2019

VENDOR	INVOICE AMOUNT	DESCRIPTION
PERSONNEL EXPENSES		
ACWA/JPIA	18,274.19	Workman's Compensation Insurance
CalPERS Health	104,094.36	Health Insurance
CalPERS Retirement	130,161.30	Pension Contributions
CCWA Payroll Wages/Taxes	945,156.95	Gross Payroll Wages/Taxes
Dental/Vision Payments	13,297.02	Dental/Vision Benefits
MetLife SBC Insurance	3,086.30	Life Insurance
Other Misc Employee Benefits	32,014.71	Vehicle, Uniform and Cafeteria Plan Benefits
Standard Insurance Company	4,019.71	Disability Insurance
	<u>\$ 1,250,104.54</u>	Total Personnel Expenses
PROFESSIONAL SERVICES		
Air Pollution Control District	1,626.80	Equipment permit renewals
All-Cal Equipment Services	3,291.30	Annual testing of Crane and Lift Equipment
Bank of America Business Card	924.50	Team Building Workshop
Bartel Associates, LLC	1,638.00	GASB 75 Accounting Report
Brownstein Hyatt Farber	90.00	Legal Services-Public Records Act
Brownstein Hyatt Farber	142.50	Legal Services-Audit File
Brownstein Hyatt Farber	495.00	Legal Services-Relations State Water Contractors
Brownstein Hyatt Farber	810.00	Legal Services - Delta Conveyance
Brownstein Hyatt Farber	2,160.00	Legal Services-Bidding Requirements/Construction Contra
Brownstein Hyatt Farber	7,985.00	Legal Services-JPA Agreement
Brownstein Hyatt Farber	11,646.35	Legal Services-General Meetings
Brownstein Hyatt Farber	19,197.50	Legal Services-DWR/SBCFCWCD Contract
Cardno, Inc.	3,052.65	Environmental Consulting
County of Santa Barbara Water Agency	17,339.56	SWC Extension Administration
Ernst & Young LLP	14,385.00	Accounting Services
HDR Engineering Inc	14,215.34	Engineering Services
Mid-Coast Fire Protection Inc.	67.00	Safety, Annual fire extinguisher service
Samba Holdings, Inc.	138.60	DMV driver reports
San Luis Obispo County	4,208.00	WTP Business Plan Annual Fee
Sentry Alarm Systems	450.00	Security System - WTP
Stanley Convergent Security	1,157.37	Security Service BAO/SYPS
State Water Resources Control	22,816.00	Water System Fees
Stradling Yocca Carlson Rauth	434.00	Legal - Employee Matters
Underground Service Alert	97.65	New USA tickets
	<u>\$ 128,368.12</u>	Total Professional Services
CIP PROJECTS - MATERIALS & OVERHEAD		
Applied Industrial Technologies	22,564.68	Duplex Strainer Replacement
Bank of America Business Card	63.19	Bradbury Over the Top Bypass Pipeline
Bank of America Business Card	324.14	Ergonomic Furniture Replacement
Bank of America Business Card	2,320.99	New Phone Server
Brownstein Hyatt Farber Schreck	180.00	SYPP Electrical Upgrade (Switchboard)
Brownstein Hyatt Farber Schreck	225.00	Electrical Upgrades
Brownstein Hyatt Farber Schreck	315.00	Granular Activated Carbon Filters #4 and #6
California Electric Supply	40.84	CP Rectifier Upgrade
Cushman Contracting Corp	13,679.00	Riser Repairs to Air Vacuum/Release Valves - Phase 1
Farwest Corrosion Control	4,607.53	CP Rectifier Upgrade



CENTRAL COAST WATER AUTHORITY

Normal and Recurring Costs

Bills for Ratification - October, November, and December 2019

VENDOR	INVOICE AMOUNT	DESCRIPTION
Grainger Inc.	334.34	Clarifier Valve and Actuator Replacement
Harrison Hardware	67.85	Bradbury Over the Top Bypass Pipeline
HDR Engineering Inc	12,361.00	Bradbury Over the Top Bypass Pipeline
HDR Engineering Inc	48,293.08	Riser Repairs to Air Vacuum/Release Valves - Phase 1
Home Depot	85.79	Electrical Upgrades
ICONIX Waterworks Inc.	187.16	Bradbury Over the Top Bypass Pipeline
ISCO Industries Inc.	9,002.56	Bradbury Over the Top Bypass Pipeline
Lee Central Coast Newspapers	155.92	SYPP Electrical Upgrade (Switchboard)
Lowe's	46.52	Electrical Upgrades
Marborg Industries	64.89	Bradbury Over the Top Bypass Pipeline
McMaster-Carr Supply Company	200.36	New Phone Server
Nielsen Building Materials Inc.	521.04	Bradbury Over the Top Bypass Pipeline
Procast Products Inc	8,314.61	Intermediate Flash Mix Lining
Relax the Back	875.98	Ergonomic Furniture Replacement
Ringcentral Inc.	17,023.77	New Phone Server
The JTI Companies, Inc.	4,091.29	Bradbury Over the Top Bypass Pipeline
United Rentals North America, Inc.	950.38	Bradbury Over the Top Bypass Pipeline
Xylem Dewatering Solutions	17,348.33	Bradbury Over the Top Bypass Pipeline
	\$ 164,245.24	Total CIP Project - Materials and Overhead

REPAIRS & MAINTENANCE

Airgas USA, LLC	527.17	Equipment repairs and maintenance
American Industrial Supply	91.35	Parts, repair and maintenance
AmeriPride Services, Inc.	1,713.02	Building maintenance supplies
Analytical Technology Inc.	887.19	Equipment repairs and maintenance
Applied Industrial Technologies	222.03	Equipment repairs and maintenance
Automationdirect.com Inc	486.37	Parts, repair and maintenance
Bank of America Business Card	385.46	Vehicles repairs and maintenance
Bank of America Business Card	3,267.25	Equipment repairs and maintenance
Big Brand Tire & Service	1,948.16	Vehicle maintenance
Brenner Fielder & Associates	2,117.77	Parts, repair and maintenance
Brezden Pest Control, Inc	225.00	Pump repair
Burt Industrial Supply Inc	1,203.35	Parts, repair and maintenance
Cal Coast Irrigation, Inc.	464.69	Parts, repair and maintenance
California Electric Supply	2,438.08	Electrical parts
City of Buellton	193.78	Landscape maintenance - water
Consolidated Electrical Distributors	258.74	Parts, repair and maintenance
Coverall North America, Inc	2,937.00	Janitorial service - BAO/SYPS
D&H Water Systems Inc.	4,104.45	Equipment repairs and maintenance
Deep Blue Integration	985.84	Building maintenance
Farwest Corrosion Control	7,267.24	Parts, repair and maintenance
Ferguson Enterprise, Inc.	1,447.90	Parts, repair and maintenance
Galco Industrial Electric, Inc.	398.69	Parts, repair and maintenance
GFG Instrumentation Inc.	1,991.38	Equipment repairs and maintenance
Grainger Inc.	1,478.78	Parts, repair and maintenance
Graybar	1,279.32	Parts, repair and maintenance
Hach Company	2,176.50	Parts, repair and maintenance
Harrington Industrial Plastics	1,351.21	Parts, repair and maintenance
Harrison Hardware	22.69	Parts, repair and maintenance
Home Depot	217.78	Parts, repair and maintenance



CENTRAL COAST WATER AUTHORITY

Normal and Recurring Costs

Bills for Ratification - October, November, and December 2019

VENDOR	INVOICE AMOUNT	DESCRIPTION
Hydratech Engineered Products	1,578.01	Parts, repair and maintenance
ICONIX Waterworks, Inc	2,815.17	Equipment repairs and maintenance
Independent Electric Supply	99.65	Equipment repairs and maintenance
Jan's Gardening Service	1,625.00	Landscape maintenance - BAO/SYPS
Lowe's	109.72	Parts, repair and maintenance
McMaster-Carr Supply Company	532.31	Maintenance supplies
MCR Technologies, Inc.	7,936.78	Equipment repairs and maintenance
Mullahey Ford, Inc.	248.12	Equipment repairs and maintenance
Office Depot	144.37	Janitorial supplies
Paso Robles Chevrolet	1,557.42	Vehicles repairs and maintenance
Procure Janitorial Supply	163.44	Janitorial supplies - WTP
Progressive Greenery	865.89	Landscape maintenance - WTP
PRW Steel Supply, Inc.	109.03	Equipment repairs and maintenance
Rio Vista Chevrolet	263.86	Vehicle maintenance
Santa Ynez Valley Hardware	12.57	Maintenance supplies
Southwest Valve, LLC	975.98	Equipment repairs and maintenance
Staples	228.42	Janitorial Supplies
Steve's Wheel & Tire	329.17	Equipment repairs and maintenance
Surface Pumps, Inc.	4,085.60	Equipment repairs and maintenance
Todd Pipe & Supply	35.92	Maintenance supplies
Transcat	1,445.52	Equipment repairs and maintenance
Ultrax Business Products	670.81	Copier maintenance
United Parcel Services	1,101.36	Parts shipping
United Staffing Associates	3,687.33	Janitorial Service - WTP
USA Blue Book	1,836.23	Equipment repairs and maintenance
Western Exterminator Co	633.00	Pest control spraying - BAO and SYPS
Zoom Imaging Solutions, Inc	65.16	Copier Maintenance
	\$ 75,244.03	Total Repairs & Maintenance

SUPPLIES & EQUIPMENT

Airgas USA, LLC	626.81	Safety supplies
AmeriPride Services, Inc.	4,172.95	Uniform expenses
Bank of America Business Card	432.02	Minor tools
Bank of America Business Card	689.02	Safety supplies
Bank of America Business Card	1,677.18	Equipment & maintenance supplies
Bazzell, David	175.00	Reimbursable expenses - Uniform reimbursement
Burt Industrial Supply, Inc	224.53	Minor Tools, Maintenance supplies and hardware
Cal Coast Irrigation, Inc.	814.98	Maintenance supplies and hardware
California Electrical Supply	270.70	Electrical parts
Carquest Auto Parts	86.78	Equipment & maintenance supplies
Chemtrade Chemicals US, LLC	51,714.23	Chemicals - WTP
Eagle Energy	308.00	Equipment service
Ferguson Enterprise, Inc.	216.19	Maintenance supplies and hardware
Grainger Inc.	2,344.68	Minor tools, equipment & maintenance supplies, safety supplies
Harrington Industrial Plastics	1,388.42	Maintenance supplies and hardware
Harrison Hardware	257.66	Maintenance supplies and hardware
Hill Brothers Chemical Company	9,893.63	Chemicals - WTP
Home Depot	2,249.06	Minor tools, equipment & maintenance supplies
Integrated Industrial Supply Inc	1,533.77	Safety supplies

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CENTRAL COAST WATER AUTHORITY

Normal and Recurring Costs

Bills for Ratification - October, November, and December 2019

VENDOR	INVOICE AMOUNT	DESCRIPTION
JB Dewar	1,740.78	Fuel - equipment
JCI Jones Chemical	60,072.45	Chemicals - WTP
Kieding, Eric	452.01	Maintenance supplies and hardware
Lowe's	312.96	Maintenance supplies and hardware
McMaster-Carr Supply Company	384.29	Minor tools, equipment & maintenance supplies, safety supplies
Nielsen Building Materials Inc	27.49	Small tools, materials and safety supplies
Praxair Distribution Inc.	244.95	Equipment maintenance
Santa Barbara Natives Inc	157.75	Landscape materials
Santa Ynez Valley Hardware	9.34	Maintenance supplies and hardware
Sterling Water Technologies, LLC	15,432.00	Chemicals - WTP
United Rentals North America Inc	657.82	Equipment rentals
Univar USA, Inc.	4,580.86	Chemicals - WTP
WEX Bank - Wright Express	19,621.49	Fuel - Autos
	\$ 182,769.80	Total Supplies & Equipment
UTILITIES		
Bank of America Business Card	245.14	Cell Phone accessories
City of Buellton	365.72	Water - BAO
Delta Liquid Energy	1,592.24	Propane gas
First Choice Technology	59.55	Phone - Long distance carrier, 800#
Frontier	582.32	Telephone charges
Health Sanitation Services	498.24	Waste Disposal - SYPS
Marborg Industries	569.60	Waste Disposal - BAO
Pacific Gas & Electric	52,174.38	Utilities - BAO/SYPS/WTP
Safety Kleen Systems Inc.	516.33	Waste Oil removal
San Miguel Garbage Company	809.06	Waste Disposal - WTP
Santa Ynez River Water Conservation	336.15	Water - SYPS
Stokes, Ray	193.92	Reimbursable Expenses - Cell Phone charges
Surfnet Communications, Inc.	150.00	Wireless Internet - Chorro
The Gas Company	116.32	Natural Gas - BAO
Verizon Wireless	246.07	New cell phones (7 employees)
Verizon Wireless	2,011.25	Cell phone charges
	\$ 60,466.29	Total Utilities
Subtotal - Bills for Ratification	\$9,766,881.69	



CENTRAL COAST WATER AUTHORITY

Bills for Approval

VENDOR	INVOICE AMOUNT	DESCRIPTION
State of California DWR	\$ 13,396,838.00	Capital Cost and Minimum OMP&R Charges -Jan'20
Subtotal - Bills for Approval	\$ 13,396,838.00	
Total Ratification and Approval Bills	\$ <u>23,163,719.69</u>	

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Statements of Net Position

ASSETS

	<u>December 31, 2019</u>	<u>November 30, 2019</u>
Current Assets		
Cash and investments	\$ 9,065,695	\$ 9,559,245
Accounts Receivable (Note 1)	15,574	15,500
Accrued interest receivable	543,149	436,789
Other assets	1,637,154	1,662,829
Total Current Assets	<u>11,261,572</u>	<u>11,674,363</u>
Restricted Assets		
<u>Investment Accounts</u>		
Operations and Maintenance Reserve Fund (Note 2)	2,124,768	2,124,077
DWR Reserve Fund (Note 3)	1,566,073	1,565,724
Rate Coverage Reserve Fund (Note 4)	9,404,656	9,401,612
Debt Service Payments (Note 5)	605,968	604,885
Department of Water Resources (Note 6a)	27,780,643	29,508,287
Credits Payable (Note 7)	796,802	796,613
Escrow Deposits (Note 8)	520,859	520,693
Total Restricted Assets	<u>42,799,580</u>	<u>44,521,704</u>
Property, Plant and Equipment		
Construction in progress (Note 9)	1,133,914	1,067,006
Fixed assets (net of accumulated depreciation)	90,961,503	91,155,504
Total Property, Plant and Equipment	<u>92,095,417</u>	<u>92,222,510</u>
Other Assets		
Unamortized bond issuance costs (Note 10)	382,485	409,432
Long term receivable (Note 11)	2,480,119	2,480,119
Total Other Assets	<u>2,862,604</u>	<u>2,889,551</u>
Total Assets	<u>\$ 149,019,174</u>	<u>\$ 151,308,128</u>

Central Coast Water Authority

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Statements of Net Position

LIABILITIES AND FUND EQUITY

	<u>December 31, 2019</u>	<u>November 30, 2019</u>
<u>Current Liabilities</u>		
Accounts Payable	\$ 23,627	\$ 163,623
DWR and Warren Act Charge Deposits (Note 6a)	27,780,645	29,508,289
CCWA Variable Charge Deposits (Note 6b)	14,327	14,327
Accrued interest payable	246,376	164,251
Other liabilities	924,525	928,722
Rate Coverage Reserve Fund	1,566,073	1,565,724
DWR Reserve Fund	9,282,145	9,282,145
Unearned Revenue	66,952	66,952
Credits Payable to Project Participants	1,180,700	1,172,547
Total Current Liabilities	<u>41,085,371</u>	<u>42,866,581</u>
<u>Non-Current Liabilities</u>		
Bonds payable (Note 12)	19,710,000	19,710,000
Bond Original Issue Premium, net	1,025,361	1,097,600
OPEB Liability	818,000	818,000
Escrow Deposits	520,859	520,693
Net Pension Liability	3,494,467	3,494,467
Total Non-Current Liabilities	<u>25,568,687</u>	<u>25,640,760</u>
<u>Commitments and Uncertainties</u>		
<u>Net Assets</u>		
Contributed capital, net (Note 13)	22,562,433	22,562,433
Retained earnings	59,802,683	60,238,353
Total Net Assets	<u>82,365,116</u>	<u>82,800,786</u>
Total Liabilities and Net Assets	<u>\$ 149,019,174</u>	<u>\$ 151,308,128</u>



Statements of Revenues, Expenses and Changes in Net Position

	<u>December 31, 2019</u>	<u>November 30, 2019</u>
<u>Operating Revenues</u>		
Operating reimbursements		
from project participants	\$ 21,830,689	\$ 21,576,757
Other revenues	14,781	14,780
Total Operating Revenues	21,845,470	21,591,537
<u>Operating Expenses</u>		
Personnel expenses	2,594,584	2,221,205
Office expenses	8,311	5,979
General and administrative	108,271	92,639
Professional services	156,653	90,562
Supplies and equipment	461,041	415,513
Monitoring expenses	44,278	38,611
Repairs and maintenance	123,544	107,151
Utilities	128,373	111,556
Depreciation and amortization	816,544	681,067
Other expenses	578,276	539,662
Total Operating Expenses	5,019,875	4,303,945
Operating Income	16,825,595	17,287,592
<u>Non-Operating Revenues</u>		
Investment income	928,888	801,094
Total Non-Operating Revenues	928,888	801,094
<u>Non-Operating Expenses</u>		
Interest	607,250	525,125
Current year credits payable	319,437	300,096
Total Non-Operating Expenses	926,687	825,221
Net Income	16,827,796	17,263,466
<u>Retained Earnings</u>		
Retained earnings at beginning of period	42,974,887	42,974,887
Retained earnings at end of period	\$ 59,802,683	\$ 60,238,353

Central Coast Water Authority
Notes to Financial Statements
December 31, 2019

Note 1: Accounts Receivable

Accounts receivable consists of amounts payable by the State Water Project contractors and other miscellaneous receivables.

Note 2: O&M Reserve Fund

The O&M reserve fund represents cash reserves for emergency uses. The funding requirement is \$2,000,000 allocated on an entitlement basis for the Santa Barbara County project participants. Investment earnings on O&M reserve fund balances are credited against CCWA O&M assessments.

<u>Project Participant</u>	<u>Amount</u>
City of Guadalupe	\$ 28,256
City of Santa Maria	832,262
Golden State Water Company	25,687
Vandenberg AFB	393,273
City of Buellton	29,694
Santa Ynez ID #1 (Solvang)	77,061
Santa Ynez ID #1	26,009
Goleta Water District	234,091
Morehart Land Co.	10,275
La Cumbre Mutual Water Company	51,368
Raytheon Systems Company	2,569
City of Santa Barbara	154,123
Montecito Water District	156,060
Carpinteria Valley Water District	104,040
TOTAL:	<u>\$ 2,124,768</u>

Central Coast Water Authority
Notes to Financial Statements
December 31, 2019

Note 3: DWR Reserve Fund

The DWR Reserve Fund was established to provide a funding source for payments to the State of California Department of Water Resources (DWR) when there is a difference between estimates used to prepare the DWR portion of the annual CCWA budget and the actual amounts billed to the Authority by DWR. Contributions to the DWR Reserve Fund are voluntary. Funding of each participating Project Participant's share of the DWR Reserve Fund will come from a combination of (1) CCWA Operating Expense budget surpluses, if any (2) Interest earnings on funds held in all other accounts on behalf of the participating Project Participant and (3) excess amounts, if any, from any of the DWR Statement of Charges cost components until the funding Target Amount is reached. The Target Amount will be equal to the participating Project Participant's proportional share of a \$10 million allocation of DWR Transportation Minimum OMP&R charges. The following schedule shows the current fund balance of the participating Project Participant's.

Project Participant	Amount
City of Guadalupe	23,927
City of Santa Maria	932,194
Golden State Water Company	37,191
City of Buellton	\$ 45,076
Santa Ynez ID #1 (Solvang)	123,537
Santa Ynez ID #1	129,041
Morehart Land Co.	18,821
La Cumbre Mutual Water Company	68,557
Raytheon Systems Co.	4,902
City of Santa Barbara	182,827
TOTAL:	\$ 1,566,073

Note 4: Rate Coverage Reserve Fund Cash Deposits

The rate coverage reserve fund was established to provide CCWA project participants a mechanism to satisfy a portion of their obligation under Section 20(a) of the Water Supply Agreement to impose rates and charges sufficient to collect 125% of their contract payments. The following schedule shows the current balances plus accrued interest receivable in the rate coverage reserve fund.

Project Participant	Amount
City of Guadalupe	\$ 194,131
City of Santa Maria	5,083,232
City of Buellton	279,365
Santa Ynez ID #1 (Solvang)	621,897
Santa Ynez ID #1	468,496
La Cumbre Mutual Water Company	406,888
Montecito Water District	1,482,183
Carpinteria Valley Water District	853,009
Shandon	15,455
TOTAL:	\$ 9,404,656

Central Coast Water Authority
Notes to Financial Statements
December 31, 2019

Note 5: Debt Service Payments

The following table shows the financing participant cash balances available to pay CCWA Series 2016-A revenue bond principal and interest payments.

Participant	Amount
Avila Beach	\$ 707
California Men's Colony	6,186
County of SLO	6,589
Cuesta College	3,093
Morro Bay	39,909
Oceano	5,170
Pismo Beach	8,545
Shandon	700
Guadalupe	8,819
Buellton	15,691
Santa Ynez (Solvang)	46,710
Santa Ynez	17,542
Goleta	147,224
Morehart Land	6,869
La Cumbre	32,469
Raytheon	1,475
Santa Barbara	90,504
Montecito	106,769
Carpinteria	60,997
TOTAL:	\$ 605,968

Central Coast Water Authority
Notes to Financial Statements
December 31, 2019

Note 6a: Cash and Investments Payment to DWR and Warren Act and Trust Fund Charges

Cash deposits for payments to DWR and Warren Act and Trust Fund payments.

Project Participant	Amount
City of Guadalupe	\$ 348,801
City of Santa Maria	9,687,637
Golden State Water Company	302,083
Vandenberg AFB	4,747,185
City of Buellton	353,619
Santa Ynez ID #1 (Solvang)	931,474
Santa Ynez ID #1	473,572
Goleta Water District	3,444,815
Morehart Land Co.	114,176
La Cumbre Mutual Water Company	695,241
Raytheon Systems Co.	32,111
City of Santa Barbara	2,734,701
Montecito Water District	2,548,970
Carpinteria Valley Water District	1,366,259
TOTAL:	<u>\$ 27,780,643</u>

Note 6b: Cash Payments for CCWA Variable Charges

Cash deposits for payments to CCWA for Variable Assessments.

Project Participant	Amount
City of Guadalupe	\$ -
City of Santa Maria	-
Golden State Water Company	-
Vandenberg AFB	-
City of Buellton	-
Santa Ynez ID #1 (Solvang)	-
Santa Ynez ID #1	9,546
Goleta Water District	-
Morehart Land Co.	284
La Cumbre Mutual Water Company	-
Raytheon Systems Co.	4,497
City of Santa Barbara	-
Montecito Water District	-
Carpinteria Valley Water District	-
Shandon	-
Lopez Turnout	-
Chorro Turnout	-
TOTAL:	<u>\$ 14,327</u>

Central Coast Water Authority
Notes to Financial Statements
December 31, 2019

Note 7: Credits Payable

Credits payable to, or (due from) CCWA project participants for investment earnings and O&M assessment credits.

Project Participant	Amount
City of Guadalupe	\$ 0
City of Santa Maria	(112)
Golden State Water Company	(4)
Vandenberg AFB	407,883
City of Buellton	(8)
Santa Ynez ID #1 (Solvang)	(20)
Santa Ynez ID #1	(20,428)
Goleta Water District	158,708
Morehart Land Co.	(1)
La Cumbre Mutual Water Company	(5)
Raytheon Systems Co.	(0)
City of Santa Barbara	(6)
Montecito Water District	107,540
Carpinteria Valley Water District	70,398
Shandon	(1,775)
Lopez Turnout	39,828
Chorro Turnout	34,805
TOTAL:	<u>\$ 796,802</u>

Note 8: Escrow Deposits

Cash deposits from certain project participants as required under the Water Supply Agreements.

Project Participant	Amount
Morehart Land Company	\$ 411,210
Raytheon Systems Company	109,649
TOTAL:	<u>\$ 520,859</u>

Note 9: Construction in Progress

Amounts in construction in progress represent expenditures incurred during FY 2018/19 and amounts retained in construction in progress at June 30, 2018. The following schedule shows the CIP expenditures for CCWA projects.

Financial Reach	Amount
Labor	\$ 134,637
Materials	719,959
Overhead	279,318
Project CIP Total:	<u>\$ 1,133,914</u>

Central Coast Water Authority
Notes to Financial Statements
December 31, 2019

Note 10: Unamortized Bond Issuance Costs

Unamortized bond issuance costs for the 2016 revenue bonds include bond insurance and the 1992, 1996 and 2006 revenue bond deferred costs.

Note 11: Long-Term Receivable

The long-term receivable represents CCWA revenue bond expenditures for project participant local facilities which are owned by the individual project participants. The costs associated with the construction of these local facilities are financed with proceeds from the CCWA revenue bonds. Project participant revenue bond principal payments are proportionally divided between the long-term receivable and the CCWA owned facilities over the term of the bond issue.

Financing Participant	Long-Term Receivable
Avila Beach	\$ 5,671
California Men's Colony	126,663
County of SLO	135,079
Cuesta College	63,337
Morro Bay	968,922
Oceano	38,633
Pismo Beach	63,785
Shandon	4,613
Guadalupe	164,733
Buellton	26,813
Santa Ynez (Solvang)	71,523
Santa Ynez	31,694
Goleta	407,199
Morehart Land	1,875
La Cumbre	9,373
Raytheon	2,475
Santa Barbara	88,896
Montecito	141,420
Carpinteria	127,414
TOTAL:	\$ 2,480,119

Note 12: Bonds Payable

Bonds payable represents outstanding Series 2016-A revenue bonds outstanding. The next Series 2016-A principal payment is due on October 1, 2020 in the amount of \$9,615,000.

Central Coast Water Authority
Notes to Financial Statements
December 31, 2019

Note 13: Contributed Capital

Certain project participants elected to pay their share of CCWA project construction costs in cash. The amounts listed below show the capital contributions by project participant less the cost of local facilities and refunds to the project participants.

Project Participant	Amount
Avila Valley Water Company	\$ 15,979
City of Guadalupe	81,119
San Luis Schools	5,608
San Miguelito Water Company	233,605
Golden State Water Company	866,277
City of Santa Maria	13,498,802
Vandenberg AFB	7,861,043
TOTAL:	<u>\$ 22,562,433</u>



Budget and Actual All Reaches

	December 31, 2019		
	Budget	Actual	Percent Expended ⁽¹⁾
Operating Revenues			
Fixed operating assessments ⁽²⁾	\$ 10,029,748	10,029,748	100.00%
Variable operating assessments	3,259,787	2,643,277	81.09%
Other revenues	-	-	N/A
Non-annual recurring revenues	-	-	N/A
Total Operating Revenues	13,289,535	12,673,025	95.36%
Operating Expenses ⁽²⁾			
Personnel expenses	5,201,852	2,594,584	49.88%
Office expenses	20,500	8,311	40.54%
General and administrative	309,710	108,271	34.96%
Professional services	432,843	156,653	36.19%
Supplies and equipment	2,297,803	461,041	20.06%
Monitoring expenses	105,604	44,278	41.93%
Repairs and maintenance	285,620	123,544	43.25%
Utilities	1,331,312	128,373	9.64%
Depreciation and amortization	-	-	N/A
Other expenses	1,547,670	578,276	37.36%
Total Operating Expenses	11,532,913	4,203,332	36.45%
Operating Income	1,756,622	8,469,694	
Non-Operating Revenues			
Interest income	-	-	
Total Non-Operating Revenues	-	-	
Non-Operating Expenses			
Total Non-Operating Expenses	-	-	
Net Income (Loss)	\$ 1,756,622	8,469,694	

(1) Percent of year expended: 50%

(2) Includes revenues and expenses for Turnouts and adjusted for carryover revenues from FY 2018/19 to FY 2019/20



Budget and Actual Administration

	December 31, 2019		
	Budget	Actual	Percent Expended ⁽¹⁾
Operating Revenues			
Fixed operating assessments ⁽²⁾	\$ 1,868,217	\$ 1,868,217	100.00%
Variable operating assessments	-	-	N/A
Other revenues	-	-	N/A
Non-annual recurring revenues	-	-	N/A
Total Operating Revenues	1,868,217	1,868,217	100.00%
Operating Expenses ⁽²⁾			
Personnel expenses	991,469	543,831	54.85%
Office expenses	10,500	4,778	45.50%
General and administrative	202,460	73,873	36.49%
Professional services	254,171	87,006	34.23%
Supplies and equipment	-	-	N/A
Monitoring expenses	-	-	N/A
Repairs and maintenance	29,935	10,642	35.55%
Utilities	15,203	6,947	45.70%
Depreciation and amortization	-	-	N/A
Other expenses	252,898	320,002	126.53%
Total Operating Expenses	1,756,637	1,047,079	59.61%
Operating Income	111,580	821,138	
Non-Operating Revenues			
Investment Income	-	-	
Total Non-Operating Revenues	-	-	
Non-Operating Expenses			
Current Year credits payable	-	-	
Total Non-Operating Expenses	-	-	
Net Income (Loss)	\$ 111,580	821,138	

(1) Percent of year expended: 50%

(2) Includes revenues and expenses for Turnouts and adjusted

####

for carryover revenues from FY 2018/19 to FY 2019/20



Budget and Actual Water Treatment Plant

	December 31, 2019		
	Budget	Actual	Percent Expended ⁽¹⁾
<u>Operating Revenues</u>			
Fixed operating assessments ⁽²⁾	\$ 4,498,633	4,498,633	100.00%
Variable operating assessments	2,198,977	1,810,178	82.32%
Other revenues	-	-	N/A
Non-annual recurring revenues	-	-	N/A
Total Operating Revenues	6,697,610	6,308,812	94.19%
<u>Operating Expenses</u> ⁽²⁾			
Personnel expenses	2,477,227	1,193,318	48.17%
Office expenses	6,000	2,200	36.66%
General and administrative	73,000	23,934	32.79%
Professional services	75,239	44,180	58.72%
Supplies and equipment	2,194,892	417,065	19.00%
Monitoring expenses	105,604	44,278	41.93%
Repairs and maintenance	166,485	78,783	47.32%
Utilities	188,801	86,139	45.62%
Depreciation and amortization	-	-	N/A
Other expenses	525,576	94,110	17.91%
Total Operating Expenses	5,812,823	1,984,007	34.13%
Operating Income	884,787	4,324,805	
<u>Non-Operating Revenues</u>			
Interest income	-	-	
Total Non-Operating Revenues	-	-	
<u>Non-Operating Expenses</u>			
Interest	-	-	
Total Non-Operating Expenses	-	-	
Net Income (Loss)	\$ 884,787	4,324,805	

(1) Percent of year expended: 50%

(2) Includes revenues and expenses for Turnouts and adjusted

for carryover revenues from FY 2018/19 to FY 2019/20

Central Coast Water Authority
Polonio Pass Water Treatment Plant
Fixed and Variable Cost per Acre-Foot
December 31, 2019

WTP Fixed O&M Costs	July 2019	Aug. 2019	Sept. 2019	Oct. 2019	Nov. 2019	Dec. 2019	Total for Year
Fixed O&M Expenses	\$ 334,149	\$ 213,877	\$ 219,798	\$ 245,736	\$ 304,255	\$ 240,004	\$ 1,557,819
Annual Table A Amount ⁽¹⁾	43,908	43,908	43,908	43,908	43,908	43,908	43,908
Fixed WTP Cost per AF	\$ 7.61	\$ 4.87	\$ 5.01	\$ 5.60	\$ 6.93	\$ 5.47	\$ 35.48
WTP Variable O&M Costs							
Variable O&M Expenses	\$ 77,325	\$ 98,037	\$ 95,697	\$ 82,191	\$ 33,343	\$ 39,594	\$ 426,187
Actual Water Treated	2,486	2,463	2,250	2,255	635	1,178	11,267
Variable WTP Cost per AF	\$ 31.10	\$ 39.80	\$ 42.53	\$ 36.45	\$ 52.51	\$ 33.61	\$ 37.83
<p>(1) Includes Santa Barbara County and San Luis Obispo County Table A amounts and excludes Goleta 2,500 AF drought buffer and Santa Barbara County 3,908 AF drought buffer.</p>							



Budget and Actual Mission Hills II

	December 31, 2019		
	Budget	Actual	Percent Expended ⁽¹⁾
<u>Operating Revenues</u>			
Fixed operating assessments ⁽²⁾	\$ 366,691	366,691	100.00%
Variable operating assessments	-	-	N/A
Other revenues	-	-	N/A
Total Operating Revenues	366,691	366,691	100.00%
<u>Operating Expenses</u> ⁽²⁾			
Personnel expenses	222,268	112,712	50.71%
Office expenses	513	171	33.33%
General and administrative	4,392	1,342	30.54%
Professional services	13,265	4,867	36.69%
Supplies and equipment	13,198	5,535	41.94%
Monitoring expenses	-	-	N/A
Repairs and maintenance	11,439	2,632	23.00%
Utilities	8,528	1,516	17.77%
Depreciation and amortization	-	-	N/A
Other expenses	25,815	38,269	148.25%
Total Operating Expenses	299,417	167,042	55.79%
Operating Income	67,273	199,648	
<u>Non-Operating Revenues</u>			
Interest income	-	-	
Total Non-Operating Revenues	-	-	
<u>Non-Operating Expenses</u>			
Interest	-	-	
Total Non-Operating Expenses	-	-	
Net Income (Loss)	\$ 67,273	199,648	

(1) Percent of year expended: 50%

(2) Includes revenues and expenses for Turnouts and adjusted

####

for carryover revenues from FY 2018/19 to FY 2019/20



Budget and Actual Santa Ynez I

	December 31, 2019		
	Budget	Actual	Percent Expended ⁽¹⁾
<u>Operating Revenues</u>			
Fixed operating assessments ⁽²⁾	\$ 635,277	635,277	100.00%
Variable operating assessments	-	-	N/A
Other revenues	-	-	N/A
Total Operating Revenues	635,277	635,277	100.00%
<u>Operating Expenses</u> ⁽²⁾			
Personnel expenses	312,860	171,076	54.68%
Office expenses	722	241	33.34%
General and administrative	6,183	1,889	30.55%
Professional services	18,671	5,777	30.94%
Supplies and equipment	18,577	7,796	41.97%
Monitoring expenses	-	-	N/A
Repairs and maintenance	16,102	3,336	20.72%
Utilities	12,004	3,622	30.17%
Depreciation and amortization	-	-	N/A
Other expenses	76,026	9,672	12.72%
Total Operating Expenses	461,145	203,409	44.11%
Operating Income	174,132	431,869	
<u>Non-Operating Revenues</u>			
Interest income	-	-	
Total Non-Operating Revenues	-	-	
<u>Non-Operating Expenses</u>			
Interest	-	-	
Total Non-Operating Expenses	-	-	
Net Income (Loss)	\$ 174,132	431,869	

(1) Percent of year expended: 50%

(2) Includes revenues and expenses for Turnouts and adjusted

####

for carryover revenues from FY 2018/19 to FY 2019/20



Budget and Actual Santa Ynez II

	December 31, 2019		
	Budget	Actual	Percent Expended ⁽¹⁾
<u>Operating Revenues</u>			
Fixed operating assessments ⁽²⁾	\$ 1,186,914	1,186,914	100.00%
Variable operating assessments	1,060,810	833,099	78.53%
Other revenues	-		N/A
Total Operating Revenues	2,247,724	2,020,013	89.87%
<u>Operating Expenses</u> ⁽²⁾			
Personnel expenses	449,302	216,016	48.08%
Office expenses	1,037	346	33.34%
General and administrative	8,879	2,712	30.55%
Professional services	26,814	5,456	20.35%
Supplies and equipment	26,679	11,884	44.55%
Monitoring expenses	-	-	N/A
Repairs and maintenance	23,124	7,164	30.98%
Utilities	1,078,049	13,421	1.24%
Depreciation and amortization	-	-	N/A
Other expenses	279,840	51,938	18.56%
Total Operating Expenses	1,893,723	308,937	16.31%
Operating Income	354,001	1,711,076	
<u>Non-Operating Revenues</u>			
Interest income	-	-	
Total Non-Operating Revenues	-	-	
<u>Non-Operating Expenses</u>			
Interest	-	-	
Total Non-Operating Expenses	-	-	
Net Income (Loss)	\$ 354,001	1,711,076	

(1) Percent of year expended: 50%

(2) Includes revenues and expenses for Turnouts and adjusted

####

for carryover revenues from FY 2018/19 to FY 2019/20



Budget and Actual Reach 33B

	December 31, 2019		
	Budget	Actual	Percent Expended ⁽¹⁾
<u>Operating Revenues</u>			
Fixed operating assessments ⁽²⁾	\$ 747,465	747,465	100.00%
Variable operating assessments	-	-	N/A
Other revenues	-	-	N/A
Total Operating Revenues	747,465	747,465	100.00%
<u>Operating Expenses</u> ⁽²⁾			
Personnel expenses	346,171	158,734	45.85%
Office expenses	799	266	33.33%
General and administrative	6,841	2,090	30.55%
Professional services	20,659	4,914	23.78%
Supplies and equipment	20,555	8,755	42.59%
Monitoring expenses	-	-	N/A
Repairs and maintenance	17,816	8,132	45.64%
Utilities	13,282	4,778	35.97%
Depreciation and amortization	-	-	N/A
Other expenses	197,842	52,962	26.77%
Total Operating Expenses	623,966	240,631	38.56%
Operating Income	123,500	506,834	
<u>Non-Operating Revenues</u>			
Interest income	-	-	
Total Non-Operating Revenues	-	-	
<u>Non-Operating Expenses</u>			
Interest	-	-	
Total Non-Operating Expenses	-	-	
Net Income (Loss)	\$ 123,500	506,834	

(1) Percent of year expended: 50%

(2) Includes revenues and expenses for Turnouts and adjusted

####

for carryover revenues from FY 2018/19 to FY 2019/20



Budget and Actual Reach 34

	December 31, 2019		
	Budget	Actual	Percent Expended ⁽¹⁾
<u>Operating Revenues</u>			
Fixed operating assessments ⁽²⁾	\$ 249,039	249,039	100.00%
Variable operating assessments	-	-	N/A
Other revenues	-	-	N/A
Total Operating Revenues	249,039	249,039	100.00%
<u>Operating Expenses</u> ⁽²⁾			
Personnel expenses	167,480	79,899	47.71%
Office expenses	387	129	33.33%
General and administrative	3,310	1,011	30.54%
Professional services	9,995	2,089	20.90%
Supplies and equipment	9,945	4,159	41.82%
Monitoring expenses	-	-	N/A
Repairs and maintenance	8,620	3,415	39.62%
Utilities	6,426	3,284	51.11%
Depreciation and amortization	-	-	N/A
Other expenses	19,452	4,953	25.46%
Total Operating Expenses	225,613	98,938	43.85%
Operating Income	23,426	150,101	
<u>Non-Operating Revenues</u>			
Interest income	-	-	
Total Non-Operating Revenues	-	-	
<u>Non-Operating Expenses</u>			
Interest	-	-	
Total Non-Operating Expenses	-	-	
Net Income (Loss)	\$ 23,426	150,101	

(1) Percent of year expended: 50%

(2) Includes revenues and expenses for Turnouts and adjusted

for carryover revenues from FY 2018/19 to FY 2019/20



Budget and Actual Reach 35

	December 31, 2019		
	Budget	Actual	Percent Expended ⁽¹⁾
Operating Revenues			
Fixed operating assessments ⁽²⁾	\$ 162,220	162,220	100.00%
Variable operating assessments	-	-	N/A
Non-annual recurring revenues	-	-	N/A
Other revenues	-	-	N/A
Total Operating Revenues	162,220	162,220	100.00%
Operating Expenses ⁽²⁾			
Personnel expenses	110,285	48,696	44.16%
Office expenses	255	85	33.32%
General and administrative	2,179	666	30.54%
Professional services	6,582	1,108	16.83%
Supplies and equipment	6,548	2,738	41.81%
Monitoring expenses	-	-	N/A
Repairs and maintenance	5,676	756	13.31%
Utilities	4,231	988	23.35%
Depreciation and amortization	-	-	N/A
Other expenses	12,809	2,983	23.29%
Total Operating Expenses	148,565	58,018	39.05%
Operating Income	13,654	104,201	
Non-Operating Revenues			
Interest income	-	-	
Total Non-Operating Revenues	-	-	
Non-Operating Expenses			
Interest	-	-	
Total Non-Operating Expenses	-	-	
Net Income (Loss)	\$ 13,654	104,201	

(1) Percent of year expended: 50%

(2) Includes revenues and expenses for Turnouts and adjusted

#####

for carryover revenues from FY 2018/19 to FY 2019/20



Budget and Actual Reach 37

	December 31, 2019		
	Budget	Actual	Percent Expended ⁽¹⁾
<u>Operating Revenues</u>			
Fixed operating assessments ⁽²⁾	\$ 70,133	70,133	100.00%
Variable operating assessments	-	-	N/A
Non-annual recurring revenues	-	-	N/A
Other revenues	-	-	N/A
Total Operating Revenues	70,133	70,133	100.00%
<u>Operating Expenses</u> ⁽²⁾			
Personnel expenses	47,283	20,825	44.04%
Office expenses	109	37	33.61%
General and administrative	934	288	30.80%
Professional services	2,822	479	16.97%
Supplies and equipment	2,808	1,184	42.17%
Monitoring expenses	-	-	N/A
Repairs and maintenance	2,434	327	13.42%
Utilities	1,814	300	16.52%
Depreciation and amortization	-	-	N/A
Other expenses	5,492	1,290	23.49%
Total Operating Expenses	63,695	24,728	38.82%
Operating Income	6,438	45,404	
<u>Non-Operating Revenues</u>			
Interest income	-	-	
Total Non-Operating Revenues	-	-	
<u>Non-Operating Expenses</u>			
Interest	-	-	
Total Non-Operating Expenses	-	-	
Net Income (Loss)	\$ 6,438	45,404	

(1) Percent of year expended: 50%

(2) Includes revenues and expenses for Turnouts and adjusted

for carryover revenues from FY 2018/19 to FY 2019/20



Budget and Actual Reach 38

	December 31, 2019		
	Budget	Actual	Percent Expended ⁽¹⁾
<u>Operating Revenues</u>			
Fixed operating assessments ⁽²⁾	\$ 114,934	114,934	100.00%
Variable operating assessments	-	-	N/A
Non-annual recurring revenues	-	-	N/A
Other revenues	-	-	N/A
Total Operating Revenues	114,934	114,934	100.00%
<u>Operating Expenses</u> ⁽²⁾			
Personnel expenses	77,507	36,338	46.88%
Office expenses	179	60	33.32%
General and administrative	1,532	468	30.54%
Professional services	4,626	778	16.83%
Supplies and equipment	4,602	1,924	41.82%
Monitoring expenses	-	-	N/A
Repairs and maintenance	3,989	1,385	34.72%
Utilities	2,974	487	16.39%
Depreciation and amortization	-	-	N/A
Other expenses	9,002	2,096	23.29%
Total Operating Expenses	104,411	43,537	41.70%
Operating Income	10,524	71,397	
<u>Non-Operating Revenues</u>			
Interest income	-	-	
Total Non-Operating Revenues	-	-	
<u>Non-Operating Expenses</u>			
Interest	-	-	
Total Non-Operating Expenses	-	-	
Net Income (Loss)	\$ 10,524	71,397	

(1) Percent of year expended: 50%

(2) Includes revenues and expenses for Turnouts and adjusted

for carryover revenues from FY 2018/19 to FY 2019/20



CENTRAL COAST WATER AUTHORITY

MEMORANDUM

January 14, 2020

TO: CCWA Board of Directors

FROM: John Brady
Deputy Director, Operations and Engineering

SUBJECT: Operations Report, October, November and December 2019

The Polonio Pass Water Treatment Plant's production and chemical costs, as well as the Santa Ynez Pumping Plant production for October, November and December 2019 are presented below:

Month	Plant Production (AF)	Chemical Costs (\$/AF)	SYPP Pumping (AF)
October 2019	2,361.75	\$31.71	0
November 2019	660.08	\$34.30	0
December 2019	1,226.18	\$33.63	0

WATER TREATMENT PLANT (WTP)

- WTP staff attended DWR's Municipal Water Quality Investigation (MWQI) Program Annual Meeting. Several significant issues were discussed including the Delta Sanitary Survey, the North Valley Wastewater Recycle Project, DWR's use of Endothall in SWP conveyance structure and Bryte Chemical Laboratory's loss of accreditation from the State for a one year period. Also, Darin Dargatz, CCWA WTP Supervisor, was nominated and elected to serve as the MWQI Special Projects Committee Vice Chairman.
- WTP issued a Notice to Proceed to Carbon Activated (Contract Price: \$286,891) for the replacement of the granular activated carbon (GAC) filter media in Filters #4 and #6. CCWA staff visited the Carbon Activated Plant to collect samples of the GAC for analysis. Following acceptable analytical results, the GAC was approved for shipment to the WTP.
- Lagoon A and B were serviced through the removal of approximately 4,100 cubic yards of sediment. All sediment was disposed of at the WTP onsite monofill. In addition, staff solicited competitive bids for the repair of the Lagoon A Isolation Valve.
- During winter shutdown maintenance, a full interior inspection of the WTP was completed as well as cleaning/servicing certain sections of the plant interior. In addition, an investigation was conducted to evaluate chloride penetration of the concrete walls of the Chlorine Contact Basin. The results indicated that chloride has not significantly penetrated the concrete.
- A tabletop exercise was completed with WTP staff and representatives from the California Department of Forestry and Fire Protection. The exercise simulated a release of chlorine gas at the WTP.
- Three internal pipe joints were fitted with the Hydra-Tite seals with one installed at the intermediate flash mix and two installed at the Chlorine Contact Basin effluent piping.
- The WTP motor control center breakers were tested and serviced. In addition, the switchgear was serviced to address the action items identified in the prior year's switchgear maintenance and testing project.
- The Maintenance staff completed the following items: (1) replaced the two air scour and actuator assemblies on the WTP air scour pipeline as well as install an expansion joint in

the air scour pipeline, (2) replaced the clarifier valve and actuator, (3) installed sacrificial anodes within the clarifier launders, as recommended by CCWA corrosion engineering consultant, (4) refurbished the WTP operator sample sink through the installation of backflow prevention devices, (5) coordinated the WTP metal roof servicing and repair by a roofing contractor, and (6) completed the tuning of filter valve actuators.

DISTRIBUTION

- The new bypass pipeline alignment over the top of Bradbury Dam was constructed. All long lead items were procured, staff was briefed on the project through a preconstruction meeting and construction proceeded in the month of December. Although weather and equipment failures slowed progress, the project was completed as designed. The Bureau was notified upon start up as well.
- Design work for the repair of the corroding riser pipe of the Air Release/Vacuum Release (ARVR) Valve reached the 75% complete level. In addition, a pilot repair was completed to incorporate lessons learned into the final design. Approximately 23 ARVR risers will need some level of repair at a cost of approximately \$375,000.
- Encroachment monitoring and permit processing work was completed for the Sanja De Cota Winery and two locations for the Southern California Gas Company for utility crossings of the CCWA easement. In addition, input to the engineering firm working on the Alisal Ranch encroachment permit was conveyed, however, there has been no timely response.
- The Tank 7 Roof Column repair work was inspected after one year of service during the winter shutdown. The repair appeared to be in good sound condition.
- The Chorro Valley Turnout Sleeve Valve was repaired and serviced. Due to wear, the valve could no longer operated in automated mode. Consequently certain elements required replacement to return the valve to full automated function.
- In preparation for the winter shutdown, the major blow-off sites were prepared and made ready for operation. Due to lack of access to Lake Cachuma, the blow-off facilities were required for pipeline dewatering.
- Distribution staff conducted an internal inspection of the pipeline in Reach SY1. In addition, due to on-going nitrification in the pipeline downstream of Tank 5, a full AWWA specific disinfection was conducted for the impacted section of pipeline.
- Although the pipeline downstream of Tank 5 was disinfected, the nitrification continued which led to the shutdown of the pipeline downstream of Tank 7 in late December. Once the Bradbury Dam Bypass Pipeline was completed and lake deliveries proceeded, the nitrification was abated. Distribution staff is currently researching pipeline pigging operations as one measure to address the nitrification issue.

LABORATORY

- Laboratory staff continued water quality instrumentation calibration work throughout the plant. Staff also continued routine analysis of compliance and process samples to support operations.
- Laboratory staff supported the nitrification response measures through providing prompt analysis and reporting.
- Laboratory staff procured an ELISA Algal Toxin Analyzer. Staff initiated development of analytical procedures for the new analyzer. Staff provided training to water system operators during the winter shutdown.
- Training continued for the new Laboratory Technician. Topics cover include GAC analysis, nitrification and safety training.

INSTRUMENTATION/NETWORK

- Instrumentation Staff continued work on the cloud based phone system configuring the new switches and phones as well as porting existing CCWA phone numbers to RingCentral.

- Instrumentation staff reviewed the SYPP Switchboard replacement design and made suggestions to improve the affordability of the project without sacrificing function. Staff also more proactively advertised the project to contractors and equipment providers in an effort to get more competitive bids. This was successful in bringing in three very qualified bids.
- The Santa Ynez Pumping Plant Switchboard Replacement Project was awarded to Taft Electric as the lowest responsive bidder and as a responsible contractor. The contract price is \$302,298.32. A Notice to Proceed was issued in early January 2020.
- Instrumentation staff conducted the hydrostatic testing of the pipeline during winter shutdown. No leaks were detected. In addition, staff verified controls of the isolation valves along the Santa Ynez River during winter shutdown.
- Instrumentation staff assisted the Distribution Department in the installation of upgrades to the Cathodic Protection System Rectifier current output device and also equipped the rectifiers with a remote communication module.
- Instrumentation staff procured the following equipment (1) Nutanix Hyperconverge Technology, (2) Microsoft Exchange 2019, and (3) Microsoft Server 2019 – Data Center.
- Instrumentation staff conducted an evaluation of the scope of work related to the re-wiring of the Tank 2 facility. The required scope of work is currently under development.

GENERAL

- Staff continued with several water accounting tasks that included coordinating with exchange partners to return CCWA Participant water debt or make a deposit in a groundwater bank, updating the Water Delivery Status Report and associated sorting tables and reconciling CCWA delivery records with DWR delivery records.
- Staff prepared draft delivery 2020 schedules for all CCWA Participants for approval. Once approved, staff consolidated the schedules for submittal to DWR. Following DWR's announcement of the initial allocation for 2020, staff asked CCWA Participants for additional review and approval.
- Staff attended the annual fall conference of the DWR and State Water Contractors Water Operations Committee to learn about the 2020 positional analysis. This analysis presents statistical data to characterize the potential for spill at San Luis Reservoir, among other things. Staff also researched the advantages and disadvantages of classifying carry over water as 14b versus 12e. The conclusion is the 14b provided the best option for CCWA participants since 14b water is protected from spill and can be used throughout the year.
- The American Water Infrastructure Act of 2018 requires CCWA to complete a Risk and Resilience Assessment (RRA) by March 31, 2020. HDR Engineering was retained to assist CCWA staff complete the assessment. All critical information was stored securely on CCWA servers and HDR staff was allowed access after executing a Confidentiality Agreement, which was reviewed by CCWA legal counsel. CCWA and HDR staff are working concurrently through the RRA process.
- Staff participated in the scoping and provided input to the project description for the suspended Table A project environmental analysis. CCWA legal counsel and environmental consultant prepared the document.
- Preparation of the Request For Qualification for the Water Management Consultant was initiated. The purpose of this project is to identify water management strategies to optimize the yield of the State Water Project, primarily addressing the storage and retrieval of carryover water.
- One probationary employee was terminated for cause.
- Responded to a Freedom of Information request related to the Bidding of the WTP Clarifier Project in 2017. A review of CCWA records indicate all bidding processes were in order.
- Staff issued the winter shutdown notice to Participant, maintained an emergency supply of water in WTP Clearwells, Tank 2 and 5. Due to disinfection of the pipeline downstream of Tank 5, bringing Buellton, Solvang and Santa Ynez online was delayed by three days.

- Deputy Director attended his first USEPA National Drinking Water Advisory Council Meeting in Washington DC (travel expenses paid by EPA). The main issues of consultation included the Perchlorate MCL, the new Lead and Copper Rule and the Water Reuse Action Plan.
- CCWA staff met with staff of Santa Ynez ID#1 to review nitrification studies and to review recent actions to identify additional protective measures to prevent future nitrification events.

JLB

Attachments

**MONTHLY SUMMARY OF MINERAL AND PHYSICAL ANALYSIS
RAW WATER (RW) AND SETTLED WATER (SW)**

System Name:

Central Coast Water Authority

System Number:

4210030

Treatment Plant Name:

Polonio Pass Water Treatment Plant

October

2019

Date:	RW pH (SU)	RW Turbidity (NTU)	SW Turbidity (NTU)	RW Odor (TON)	RW Total Coliform (MPN)	RW E. Coli (MPN)	RW Cl- (mg/L)	RW Alkalinity (mg/L)		RW Hardness (mg/L)		RW E.C. (uS/cm)	RW TOC (mg/L)
								Total	Phenol	Total	Ca		
1	8.86	0.63	0.53	1.0			22	55	7	59	31		
2	8.98	0.58	0.53	1.5			21	56	8	60	33		2.6
3	9.02	0.62	0.51	1.0			20	58	12	62	32		
4	8.82	0.91	0.53	2.0			20	59	9	59	29		
5	8.55	0.97	0.49	1.0			20	58	2	62	31		
6	8.73	0.84	0.52	1.5			24	58	4	62	36		
7	8.67	0.75	0.56	1.5	102	<1	24	57	3	64	36	211	
8	8.74	0.69	0.51	1.5			22	56	5	65	32		
9	8.69	0.66	0.49	1.0			24	57	5	56	32		
10	8.84	0.75	0.47	1.0			22	54	6	57	32		
11	8.83	0.75	0.38	1.0			29	57	5	60	32		
12	8.85	0.67	0.37	1.0			42	59	6	67	37		
13	8.96	0.72	0.37	1.0			54	63	7	81	42		
14	8.97	0.84	0.35	1.0	214	<1	66	65	7	85	44	431	
15	8.93	1.78	0.40	2.0			65	69	9	87	43		
16	8.82	1.67	0.45	1.0			70	70	8	86	46		
17	8.59	1.54	0.37	1.0			70	69	4	79	44		
18	8.65	1.28	0.35	1.5			70	69	5	80	45		
19	8.61	1.25	0.35	2.0			73	70	4	85	44		
20	8.66	1.18	0.31	1.5			72	71	4	88	45		
21	8.68	0.92	0.31	1.0	112	<1	78	73	5	94	46	451	
22	8.69	1.58	0.35	1.0			79	69	4	96	46		
23	8.63	1.18	0.29	1.0			79	69	5	98	48		
24	8.47	0.97	0.28	1.0			79	73	3	104	49		
25	8.45	1.55	0.30	1.0			81	70	2	103	51		
26	8.27	1.93	0.33	1.0			82	70	0	101	51		
27	8.18	1.25	0.27	1.0			82	71	0	103	49		
28	8.33	1.03	0.27	1.5	308	2	80	70	2	100	50	457	
29	8.49	2.38	0.42	1.0			82	71	3	101	46		
30	8.63	2.48	0.44	1.0			83	70	4	98	47		
31	8.69	2.37	0.39	1.0			82	73	4	98	47		
Avg	8.69	1.18	0.40	1.2	184	2	55	65	5	81	41	388	2.6

**MONTHLY SUMMARY OF MINERAL AND PHYSICAL ANALYSIS
TREATED WATER (TW) & CLEARWELL (CW)**

System Name:

Central Coast Water Authority

System Number:

4210030

Treatment Plant Name:

Polonio Pass Water Treatment Plant

October

2019

Date:	TW pH (SU)	TW Turbidity (NTU)	Filter Rate (gpm/ft ²)	CW Odor (TON)	TW Total Collform	CW Cl- (mg/L)	CW Total Alk (mg/L)	CW Hardness (mg/L)		TW Chlorine (mg/L)		CCB3 Chlorine Free (mg/L)	TW NH3-N (mg/L)		(CCB3 Cl2 Free) / (TW NH3-N Total)	CW E.C. (uS/cm)	TW TOC (mg/L)
								Total	Ca	Total	Free		Total	Free			
1	8.44	0.07	4.26	0.0	ABSENT	24	52	59	32	3.08	0.00	2.93	0.58	0.00	5.1		
2	8.37	0.07	4.39	0.0	ABSENT	24	54	58	31	2.93	0.00	2.83	0.57	0.00	5.0		1.5
3	8.36	0.07	4.29	0.0	ABSENT	20	53	61	31	2.86	0.00	2.71	0.54	0.01	5.0		
4	8.32	0.07	4.26	0.0	ABSENT	24	52	61	29	2.92	0.00	2.78	0.55	0.00	5.1		
5	8.41	0.07	4.00	0.0	ABSENT	25	54	67	32	2.84	0.00	2.71	0.55	0.00	4.9		
6	8.34	0.07	4.08	0.0	ABSENT	25	54	59	34	2.88	0.00	2.76	0.53	0.00	5.2		
7	8.34	0.07	4.21	0.0	ABSENT	26	53	63	34	2.94	0.00	2.81	0.57	0.00	4.9	245	
8	8.41	0.07	4.17	0.0	ABSENT	26	53	63	34	2.92	0.00	2.79	0.57	0.00	4.9		
9	8.38	0.07	4.40	0.0	ABSENT	26	54	57	30	2.95	0.00	2.80	0.56	0.00	5.0		
10	8.42	0.07	4.33	0.0	ABSENT	23	50	56	31	2.95	0.00	2.88	0.56	0.00	5.1		
11	8.40	0.07	4.04	0.0	ABSENT	28	49	58	31	2.95	0.00	2.77	0.57	0.00	4.9		
12	8.39	0.07	4.02	0.0	ABSENT	37	52	63	34	2.95	0.00	2.81	0.59	0.00	4.8		
13	8.38	0.08	4.21	0.0	ABSENT	47	56	74	37	2.97	0.00	2.76	0.58	0.00	4.8		
14	8.35	0.07	4.21	0.0	ABSENT	61	58	82	40	3.00	0.00	2.86	0.57	0.00	5.0	414	
15	8.37	0.06	4.21	0.0	ABSENT	67	64	91	38	3.05	0.00	2.90	0.55	0.00	5.3		
16	8.33	0.06	4.05	0.0	ABSENT	72	63	88	47	3.02	0.00	2.88	0.56	0.00	5.1		
17	8.32	0.06	3.93	0.0	ABSENT	74	65	80	45	3.00	0.00	2.87	0.55	0.00	5.2		
18	8.40	0.06	4.23	0.0	ABSENT	74	65	80	47	3.05	0.00	2.93	0.57	0.00	5.1		
19	8.28	0.05	4.10	0.0	ABSENT	76	67	81	43	2.97	0.00	2.93	0.55	0.00	5.3		
20	8.30	0.05	4.06	0.0	ABSENT	75	68	85	44	2.89	0.00	2.87	0.56	0.00	5.1		
21	8.37	0.05	3.88	0.0	ABSENT	80	69	93	43	3.03	0.00	2.99	0.58	0.00	5.2	489	
22	8.34	0.05	3.88	0.0	ABSENT	80	65	95	46	3.04	0.00	2.96	0.59	0.00	5.0		
23	8.38	0.06	4.05	0.0	ABSENT	80	66	97	46	3.22	0.00	3.13	0.61	0.00	5.1		
24	8.42	0.06	4.18	0.0	ABSENT	83	66	102	49	3.33	0.00	3.22	0.62	0.00	5.2		
25	8.42	0.06	4.33	0.0	ABSENT	83	67	99	53	3.60	0.00	3.54	0.69	0.00	5.1		
26	8.45	0.05	4.10	0.0	ABSENT	83	70	104	49	3.60	0.00	3.46	0.68	0.00	5.1		
27	8.43	0.06	3.94	0.0	ABSENT	84	69	103	47	3.72	0.00	3.59	0.70	0.00	5.1		
28	8.40	0.05	4.08	0.0	ABSENT	84	68	100	50	3.73	0.00	3.62	0.71	0.00	5.1	511	
29	8.38	0.05	4.08	0.0	ABSENT	85	69	99	45	3.78	0.00	3.60	0.75	0.00	4.8		
30	8.51	0.05	3.98	0.0	ABSENT	86	65	100	46	3.88	0.00	3.65	0.76	0.00	4.8		
31	8.35	0.05	4.07	0.0	ABSENT	84	67	97	46	3.85	0.00	3.66	0.76	0.00	4.8		
Avg	8.38	0.06	4.13	0.00		57	61	80	40	3.16	0.00	3.03	0.60	0.00	5.0	415	1.50

**MONTHLY SUMMARY OF MINERAL AND PHYSICAL ANALYSIS
RAW WATER (RW) AND SETTLED WATER (SW)**

System Name: Central Coast Water Authority
Treatment Plant Name: Polonio Pass Water Treatment Plant

System Number: 4210030
November 2019

Date:	RW pH (SU)	RW Turbidity (NTU)	SW Turbidity (NTU)	RW Odor (TON)	RW Total Coliform (MPN)	RW E. Coli (MPN)	RW Cl- (mg/L)	RW Alkalinity (mg/L)		RW Hardness (mg/L)		RW E.C. (uS/cm)	RW TOC (mg/L)
								Total	Phenol	Total	Ca		
1	8.65	1.50	0.36	1.0			81	72	4	98	48		3.4
2	*	*	*	*	*	*	*	*	*	*	*	*	*
3	*	*	*	*	*	*	*	*	*	*	*	*	*
4	*	*	*	*	*	*	*	*	*	*	*	*	*
5	*	*	*	*	*	*	*	*	*	*	*	*	*
6	*	*	*	*	*	*	*	*	*	*	*	*	*
7	*	*	*	*	*	*	*	*	*	*	*	*	*
8	*	*	*	*	*	*	*	*	*	*	*	*	*
9	*	*	*	*	*	*	*	*	*	*	*	*	*
10	*	*	*	*	*	*	*	*	*	*	*	*	*
11	*	*	*	*	*	*	*	*	*	*	*	*	*
12	*	*	*	*	*	*	*	*	*	*	*	*	*
13	*	*	*	*	*	*	*	*	*	*	*	*	*
14	*	*	*	*	*	*	*	*	*	*	*	*	*
15	8.53	2.70	0.37	3.5			79	69	1	100	48		
16	8.55	1.13	0.30	3.5			84	71	2	101	51		
17	*	*	*	*	*	*	*	*	*	*	*	*	*
18	8.43	1.60	0.36	1.0			83	73	3	103	51		
19	8.33	1.53	0.37	2.5	145	1	85	75	0	98	46		
20	8.88	1.92	0.40	2.5			84	74	8	94	43		
21	8.91	1.12	0.35	1.5			81	71	7	98	41		
22	8.68	0.89	0.30	1.5			76	73	6	92	41		
23	8.51	0.64	0.24	2.0			71	71	0	94	42		
24	8.33	0.64	0.25	2.0			67	71	2	90	44		
25	8.42	0.56	0.26	2.0	78	1	68	71	1	92	44	410	
26	8.80	0.50	0.26	1.5			65	69	5	92	46		
27	8.95	0.49	0.26	1.0			63	67	6	90	45		
28	9.00	0.64	0.27	1.0			56	66	7	83	43		
29	8.92	0.61	0.28	1.5			49	64	7	82	44		
30	8.90	0.66	0.35	1.0			45	64	6	86	43		
Avg	8.67	1.07	0.31	1.8	112	1	71	70	4	93	45	410	3.4

* Shutdown

**MONTHLY SUMMARY OF MINERAL AND PHYSICAL ANALYSIS
TREATED WATER (TW) & CLEARWELL (CW)**

System Name:

Central Coast Water Authority

System Number:

4210030

Treatment Plant Name:

Polonio Pass Water Treatment Plant

November

2019

Date:	TW pH (SU)	TW Turbidity (NTU)	Filter Rate (gpm/ft ²)	CW Odor (TON)	TW Total Coliform	CW Cl- (mg/L)	CW Total Alk (mg/L)	CW Hardness (mg/L)		TW Chlorine (mg/L)		CCB3 Chlorine Free (mg/L)	TW NH3-N (mg/L)		(CCB3 Cl2 Free) / (TW NH3-N Total)	CW E.C. (uS/cm)	TW TOC (mg/L)
								Total	Ca	Total	Free		Total	Free			
1	8.30	0.05	4.18	0.0	ABSENT	85	64	100	48	3.63	0.00	3.45	0.70	0.00	4.9		2.1
2	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
3	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
4	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
5	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
6	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
7	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
8	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
9	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
10	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
11	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
12	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
13	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
14	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
15	8.00	0.08	2.59	0.0	ABSENT	86	62	102	46	3.20	0.06	3.62	0.55	0.00	*	*	*
16	8.53	0.06	2.91	0.0	ABSENT	86	66	101	48	3.47	0.01	3.51	0.68	0.00	5.2		
17	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
18	8.37	0.05	4.05	0.0	ABSENT	87	66	101	49	3.54	0.00	3.54	0.68	0.00	5.2		
19	8.33	0.05	4.05	0.0	ABSENT	88	70	98	44	3.40	0.00	3.23	0.65	0.00	5.0	533	
20	8.43	0.06	3.96	0.0	ABSENT	88	74	98	46	3.40	0.00	3.34	0.67	0.01	5.0		
21	8.48	0.06	3.82	0.0	ABSENT	85	66	96	40	3.43	0.00	3.33	0.65	0.00	5.1		
22	8.39	0.05	3.89	0.0	ABSENT	78	67	92	39	3.45	0.00	3.33	0.66	0.00	5.0		
23	8.46	0.04	3.40	0.0	ABSENT	76	67	94	44	3.40	0.00	3.33	0.66	0.00	5.0		
24	8.38	0.05	3.40	0.0	ABSENT	73	67	89	45	3.31	0.00	3.21	0.65	0.00	4.9		
25	8.41	0.05	3.42	0.0	ABSENT	74	65	93	43	3.33	0.00	3.30	0.65	0.00	5.1	473	
26	8.48	0.05	3.30	0.0	ABSENT	73	66	92	45	3.32	0.00	3.32	0.64	0.00	5.2		
27	8.43	0.04	3.72	0.0	ABSENT	69	61	95	48	3.28	0.00	3.14	0.63	0.00	5.0		
28	8.42	0.04	3.64	0.0	ABSENT	66	60	91	45	3.22	0.00	3.14	0.62	0.00	5.1		
29	8.38	0.05	3.64	0.0	ABSENT	59	58	85	44	3.25	0.00	3.15	0.62	0.00	5.1		
30	8.41	0.04	3.64	0.0	ABSENT	51	59	84	41	3.28	0.00	3.19	0.64	0.00	5.0		
Avg	8.39	0.05	3.60	0.00		76	65	94	45	3.37	0.00	3.32	0.65	0.00	5.1	503	2.10

* Shutdown

**MONTHLY SUMMARY OF MINERAL AND PHYSICAL ANALYSIS
RAW WATER (RW) AND SETTLED WATER (SW)**

System Name: Central Coast Water Authority

System Number: 4210030

Treatment Plant Name: Polonio Pass Water Treatment Plant

December

2019

Date:	RW pH (SU)	RW Turbidity (NTU)	SW Turbidity (NTU)	RW Odor (TON)	RW Total Coliform (MPN)	RW E. Coli (MPN)	RW Cl- (mg/L)	RW Alkalinity (mg/L)		RW Hardness (mg/L)		RW E.C. (uS/cm)	RW TOC (mg/L)
								Total	Phenol	Total	Ca		
1	8.85	0.65	0.33	1.0			52	64	6	83	42		
2	8.82	0.67	0.32	1.0	32	<1	55	66	4	90	44	411	
3	8.70	1.62	0.40	1.0			63	67	4	90	46		
4	8.62	1.45	0.41	2.5			65	69	2	92	45		3.1
5	8.52	0.96	0.37	3.0			65	69	2	88	43		
6	8.33	1.85	0.42	2.0			61	68	0	87	44		
7	8.26	1.42	0.41	2.0			62	69	0	87	44		
8	8.30	0.95	0.39	2.5			55	67	0	85	42		
9	8.30	1.01	0.38	2.0	50	2	51	64	0	85	44	325	
10	8.30	0.86	0.36	2.0			45	65	0	86	43		
11	8.26	0.73	0.32	1.5			43	65	0	83	45		
12	8.33	0.76	0.32	1.0			40	63	0	81	42		
13	8.45	0.64	0.30	1.0			38	62	1	78	40		
14	8.58	0.66	0.30	1.5			39	64	2	80	43		
15	8.63	0.63	0.31	1.0			35	64	3	81	40		
16	8.70	0.56	0.35	1.5	20	<1	36	62	3	83	42	284	
17	8.64	0.44	0.38	1.0			36	61	3	77	41		
18	8.70	0.44	0.32	1.0			38	60	5	75	41		
19	8.77	0.45	0.36	1.0			38	63	4	81	44		
20	8.80	0.45	0.40	1.0			39	64	4	77	43		
21	8.87	0.45	0.37	1.0			40	64	6	82	43		
22	9.00	0.44	0.38	1.0			39	63	7	80	44		
23	9.09	0.44	0.37	1.0	23	<1	38	63	9	80	43	276	
24	8.98	0.51	0.39	1.5			37	67	7	78	39		
25	8.83	0.58	0.41	1.0			38	66	5	79	40		
26	8.63	0.54	0.44	1.0			38	62	2	74	38		
27	8.53	0.61	0.41	1.5			38	61	1	72	39		
28	8.37	0.67	0.45	1.0			36	62	0	75	40		
29	8.29	0.61	0.37	1.0			39	60	0	76	37		
30	8.28	0.60	0.42	1.5	42	<1	40	62	0	80	40	304	
31	8.35	0.55	0.40	1.5			41	58	0	82	45		
Avg	8.58	0.75	0.37	1.4	33	2	44	64	3	82	42	320	3.1

**MONTHLY SUMMARY OF MINERAL AND PHYSICAL ANALYSIS
TREATED WATER (TW) & CLEARWELL (CW)**

System Name:

Central Coast Water Authority

System Number:

4210030

Treatment Plant Name:

Polonio Pass Water Treatment Plant

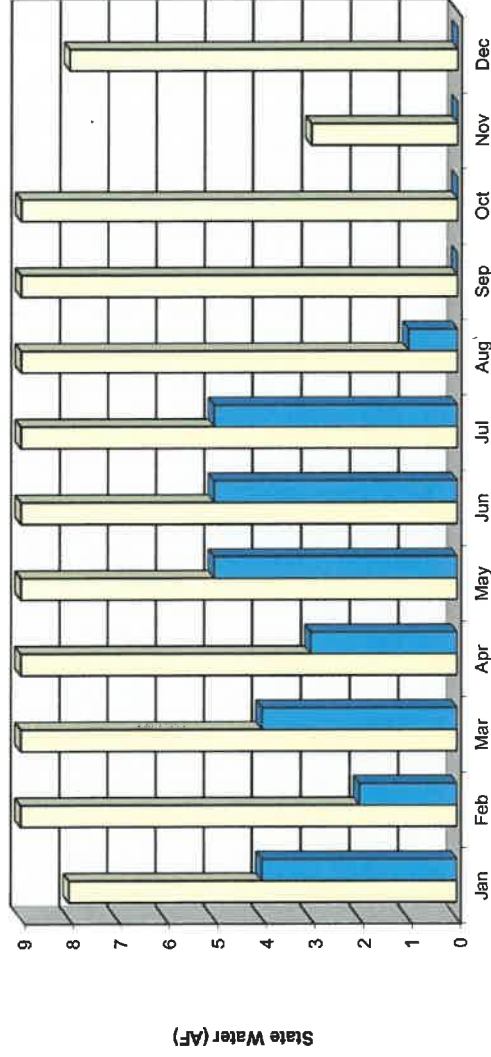
December

2019

Date:	TW pH (SU)	TW Turbidity (NTU)	Filter Rate (gpm/ft ²)	CW Odor (TON)	TW Total Coliform	CW Cl- (mg/L)	CW Total Alk (mg/L)	CW Hardness (mg/L)		TW Chlorine (mg/L)		CCB3 Chlorine Free (mg/L)	TW NH3-N (mg/L)		(CCB3 Cl2 Free) / (TW NH3-N Total)	CW E.C. (uS/cm)	TW TOC (mg/L)
								Total	Ca	Total	Free		Total	Free			
1	8.38	0.04	3.56	0.0	ABSENT	51	60	86	42	3.27	0.00	3.17	0.64	0.00	5.0		
2	8.43	0.04	3.28	0.0	ABSENT	55	59	88	41	3.25	0.00	3.17	0.64	0.00	5.0	397	
3	8.40	0.04	3.68	0.0	ABSENT	60	62	85	45	3.26	0.00	3.12	0.64	0.00	4.9		
4	8.32	0.05	4.21	0.0	ABSENT	66	65	83	43	3.19	0.00	2.98	0.63	0.00	4.7		1.9
5	8.33	0.05	4.21	0.0	ABSENT	66	62	92	44	3.27	0.00	3.05	0.64	0.00	4.8		
6	8.36	0.04	4.21	0.0	ABSENT	67	63	88	44	3.37	0.00	3.23	0.65	0.00	5.0		
7	8.32	0.04	4.45	0.0	ABSENT	66	65	88	43	3.41	0.00	3.44	0.67	0.00	5.1		
8	8.45	0.04	4.37	0.0	ABSENT	61	65	88	43	3.47	0.00	3.44	0.66	0.00	5.2		
9	8.42	0.04	4.29	0.0	ABSENT	58	63	86	42	3.49	0.00	3.35	0.67	0.00	5.0	407	
10	8.37	0.05	4.53	0.0	ABSENT	50	63	86	44	3.46	0.00	3.41	0.68	0.00	5.0		
11	8.47	0.05	4.38	0.0	ABSENT	48	62	90	44	3.33	0.00	3.39	0.67	0.00	5.1		
12	8.43	0.04	4.21	0.0	ABSENT	44	59	86	43	3.42	0.00	3.54	0.66	0.00	5.4		
13	8.37	0.04	4.35	0.0	ABSENT	43	61	81	38	3.38	0.00	3.38	0.67	0.00	5.0		
14	8.43	0.04	4.21	0.0	ABSENT	43	62	81	40	3.38	0.00	3.39	0.68	0.00	5.0		
15	8.36	0.04	4.07	0.0	ABSENT	42	60	80	39	3.34	0.00	3.42	0.66	0.00	5.2		
16	8.33	0.04	4.37	0.0	ABSENT	40	57	80	41	3.44	0.00	3.47	0.69	0.00	5.0	339	
17	8.38	0.05	4.12	0.0	ABSENT	41	57	74	41	3.48	0.00	3.42	0.70	0.00	4.9		
18	8.42	0.04	3.88	0.0	ABSENT	40	58	75	38	3.38	0.00	3.32	0.68	0.00	4.9		
19	8.43	0.04	4.04	0.0	ABSENT	40	58	81	42	3.45	0.00	3.35	0.68	0.00	4.9		
20	8.43	0.05	4.29	0.0	ABSENT	41	58	81	40	3.45	0.00	3.38	0.69	0.00	4.9		
21	8.39	0.05	4.61	0.0	ABSENT	42	59	80	44	3.38	0.00	3.39	0.68	0.00	5.0		
22	8.48	0.05	4.10	0.0	ABSENT	43	59	84	43	3.43	0.00	3.34	0.70	0.00	4.8		
23	8.42	0.05	3.88	0.0	ABSENT	42	58	82	42	3.39	0.00	3.33	0.68	0.00	4.9	355	
24	8.39	0.04	3.99	0.0	ABSENT	42	62	79	40	3.41	0.00	3.36	0.66	0.00	5.1		
25	8.25	0.05	3.66	0.0	ABSENT	42	63	82	43	3.43	0.00	3.42	0.67	0.00	5.1		
26	8.31	0.04	3.83	0.0	ABSENT	40	57	74	39	3.46	0.00	3.38	0.71	0.00	4.8		
27	8.25	0.04	3.64	0.0	ABSENT	41	57	69	39	3.44	0.00	3.32	0.68	0.00	4.9		
28	8.16	0.04	3.64	0.0	ABSENT	39	58	74	40	3.39	0.00	3.34	0.68	0.00	4.9		
29	8.29	0.04	3.32	0.0	ABSENT	42	58	78	39	3.44	0.00	3.33	0.69	0.00	4.8		
30	8.36	0.05	3.72	0.0	ABSENT	41	55	78	41	3.39	0.00	3.29	0.71	0.00	4.6	334	
31	8.32	0.05	3.83	0.0	ABSENT	43	55	84	44	3.35	0.00	3.26	0.69	0.00	4.7		
Avg	8.37	0.04	4.03	0.00		47	60	82	42	3.39	0.00	3.33	0.67	0.00	5.0	366	1.90

Shandon T.O. - SWP Deliveries in Year 2019

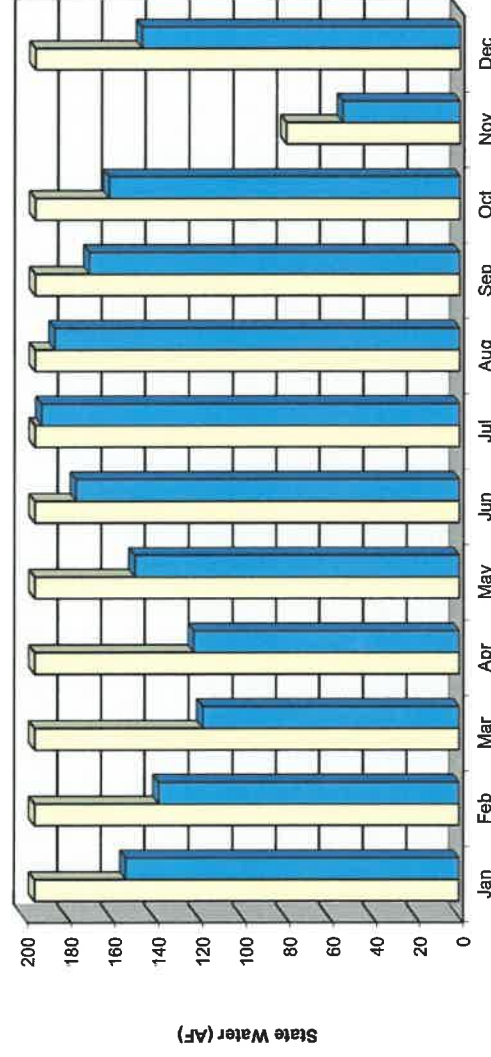
Month	Requested Delivery	Actual Delivery	Allocation Available
Jan	8	4	
Feb	9	2	
Mar	9	4	
Apr	9	3	
May	9	5	
Jun	9	5	
Jul	9	5	
Aug	9	1	
Sep	9	0	
Oct	9	0	
Nov	3	0	
Dec	8	0	
Total	100	29	



Requested Delivery
Actual Delivery

Chorro Valley T.O. - SWP Deliveries in Year 2019

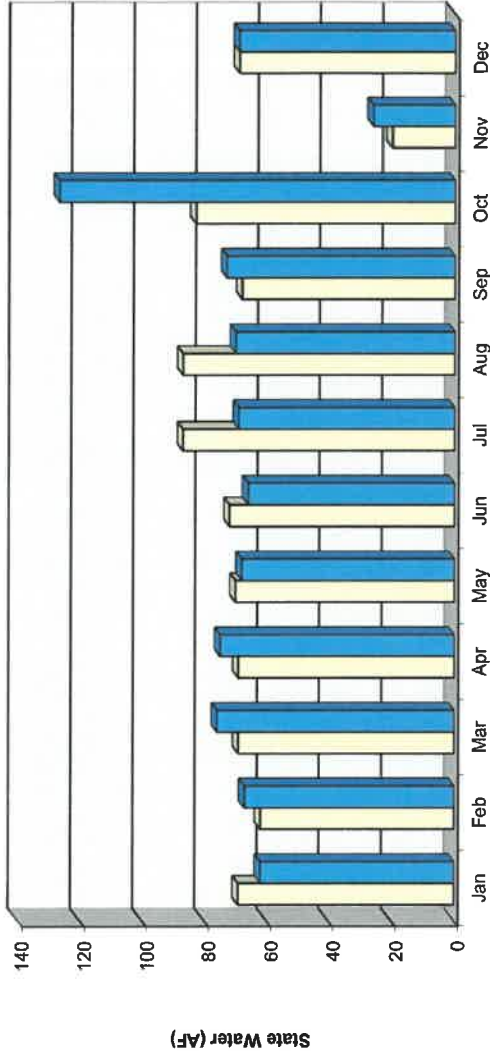
Month	Requested Delivery	Actual Delivery	Allocation Available
Jan	195	153	
Feb	195	138	
Mar	195	118	
Apr	195	122	
May	195	149	
Jun	195	176	
Jul	195	192	
Aug	195	186	
Sep	195	170	
Oct	195	161	
Nov	80	54	
Dec	195	146	
Total	2225	1765	



Requested Delivery
Actual Delivery

Lopez T.O. - SWP Deliveries in Year 2019

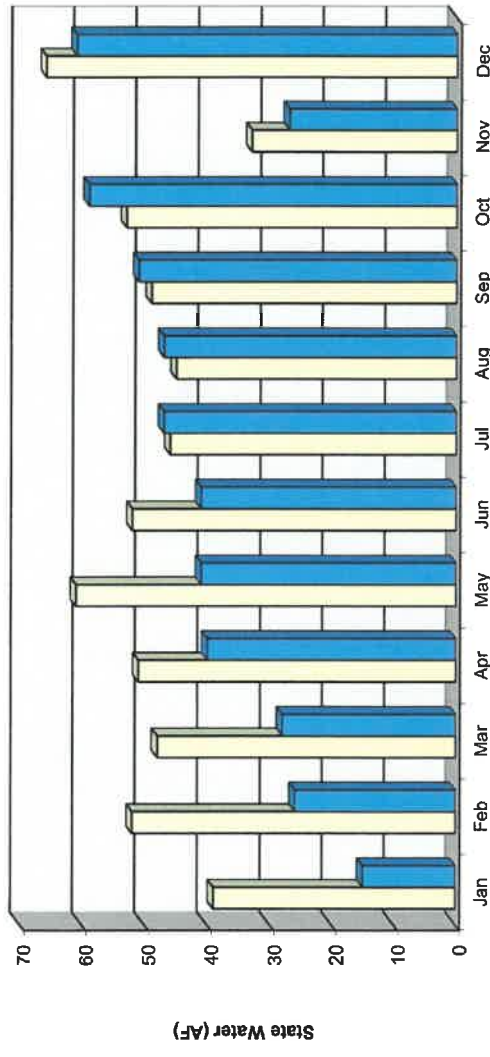
Month	Requested Delivery	Actual Delivery	Allocation Available
Jan	69	62	
Feb	62	67	
Mar	69	76	
Apr	69	75	
May	70	68	
Jun	72	66	
Jul	87	69	
Aug	87	70	
Sep	68	73	
Oct	83	127	
Nov	20	26	
Dec	69	69	
Total	825	848	



Requested Delivery
Actual Delivery

Guadalupe - SWP Deliveries in Year 2019

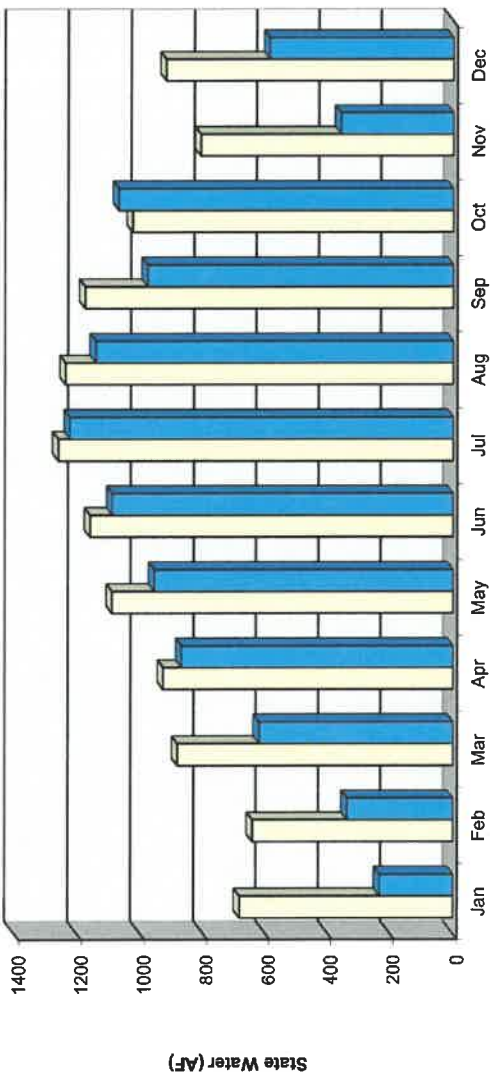
Month	Requested Delivery	Actual Delivery	Allocation Available
Jan	39	15	
Feb	52	26	
Mar	48	28	
Apr	51	40	
May	61	41	
Jun	52	41	
Jul	46	47	
Aug	45	47	
Sep	49	51	
Oct	53	59	
Nov	33	27	
Dec	66	61	
Total	595	483	



Requested Delivery
Actual Delivery

Santa Maria - SWP Deliveries in Year 2019

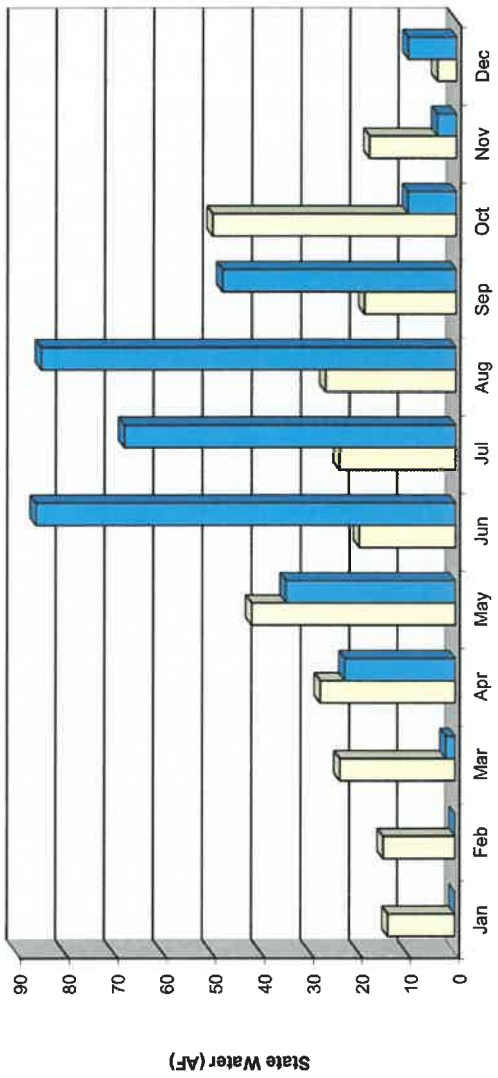
Requested Delivery
Actual Delivery



Month	Requested Delivery	Actual Delivery	Allocation Available
Jan	682	234	
Feb	642	339	
Mar	881	621	
Apr	928	868	
May	1091	957	
Jun	1161	1090	
Jul	1262	1225	
Aug	1239	1144	
Sep	1177	979	
Oct	1026	1070	
Nov	811	360	
Dec	920	589	
Total	11820	9476	

Golden State - SWP Deliveries in Year 2019

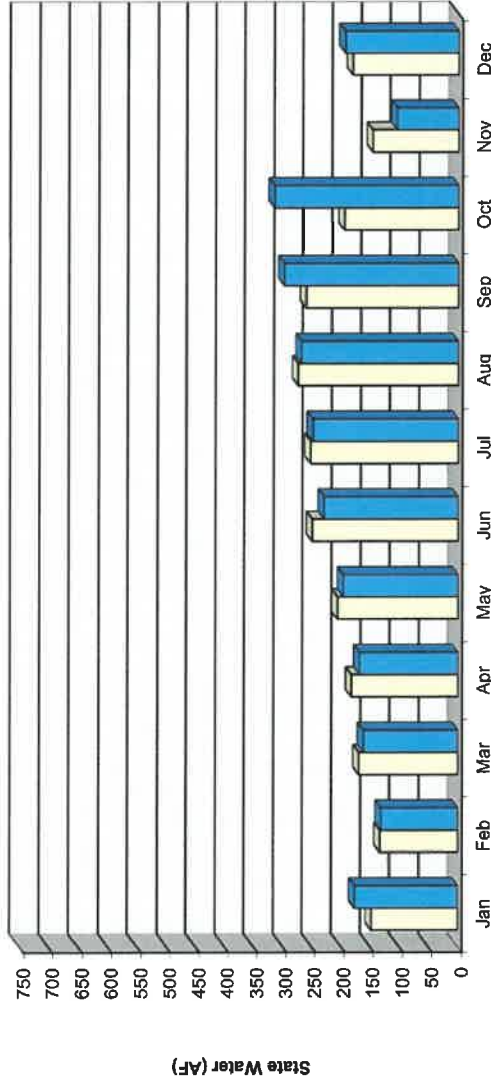
Requested Delivery
Actual Delivery



Month	Requested Delivery	Actual Delivery	Allocation Available
Jan	14	0	
Feb	15	0	
Mar	24	2	
Apr	28	23	
May	42	35	
Jun	20	86	
Jul	24	68	
Aug	27	85	
Sep	19	48	
Oct	50	10	
Nov	18	4	
Dec	4	10	
Total	285	371	

VAFB - SWP Deliveries in Year 2019

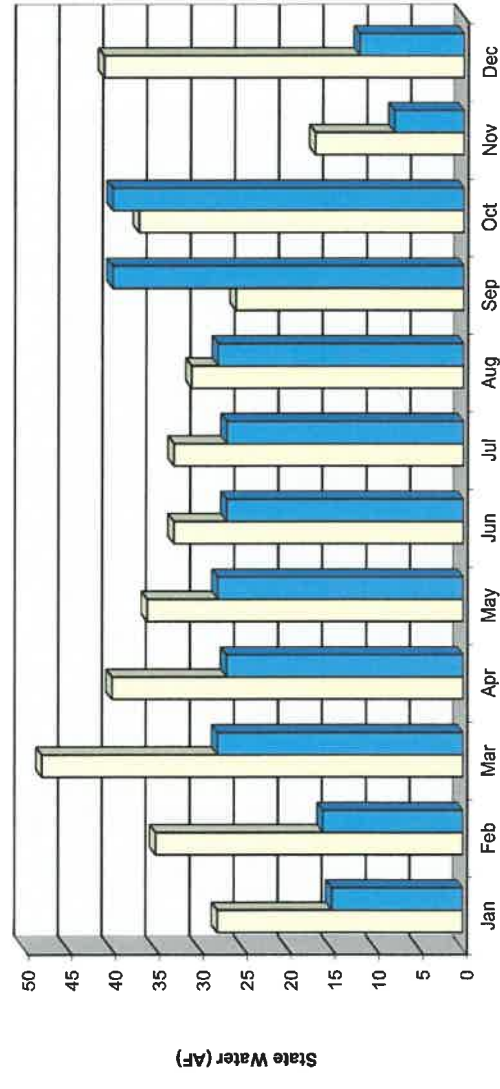
Month	Requested Delivery	Actual Delivery	Allocation Available
Jan	148	177	
Feb	133	131	
Mar	170	162	
Apr	183	169	
May	207	197	
Jun	250	230	
Jul	253	249	
Aug	275	269	
Sep	261	299	
Oct	196	316	
Nov	147	105	
Dec	182	195	
Total	2405	2499	



Requested Delivery
Actual Delivery

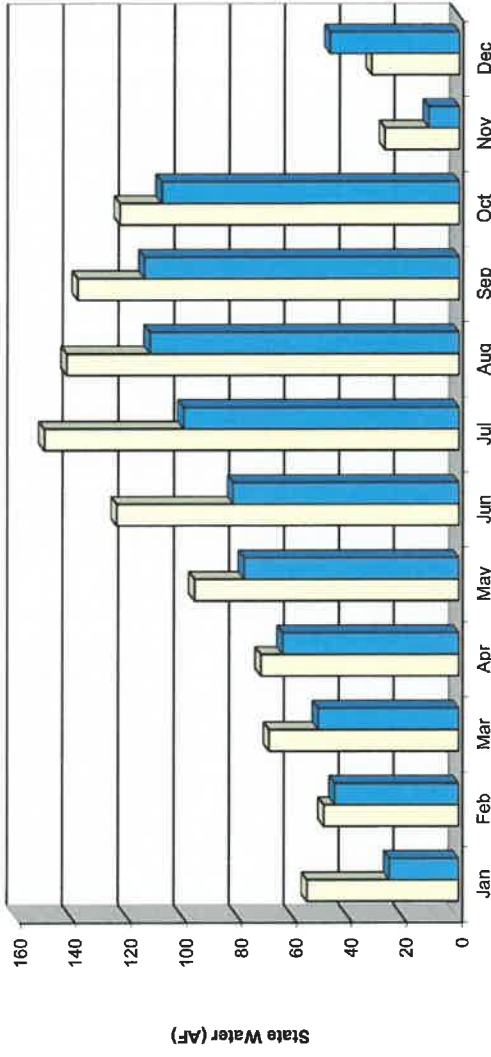
Buellton - SWP Deliveries in Year 2019

Month	Requested Delivery	Actual Delivery	Allocation Available
Jan	28	15	
Feb	35	16	
Mar	48	28	
Apr	40	27	
May	36	28	
Jun	33	27	
Jul	33	27	
Aug	31	28	
Sep	26	40	
Oct	37	40	
Nov	17	8	
Dec	41	12	
Total	405	296	



Requested Delivery
Actual Delivery

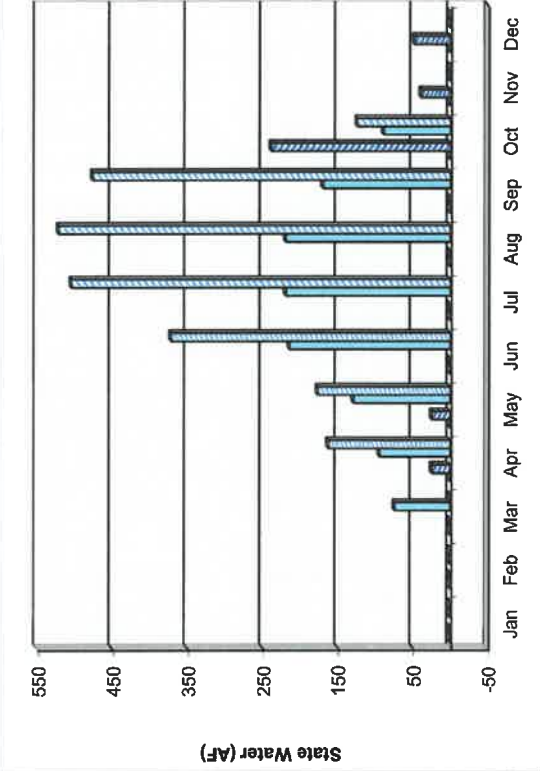
Santa Ynez - Solvang Only - SWP Deliveries in Year 2019



Requested Delivery
Actual Delivery

Month	Requested Delivery	Actual Delivery	Allocation Available
Jan	55	25	
Feb	49	45	
Mar	69	51	
Apr	72	64	
May	96	78	
Jun	124	82	
Jul	150	100	
Aug	142	112	
Sep	138	114	
Oct	123	108	
Nov	27	11	
Dec	32	47	
Total	1077	837	

Santa Ynez (Without Solvang) - SWP Deliveries in Year 2019

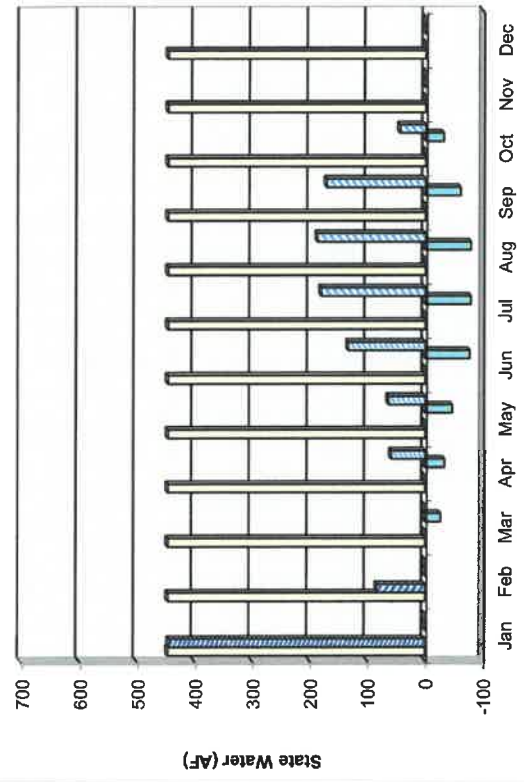


Month	Scheduled State Water Delivery	Actual State Water Delivery	Actual Exchange Water	Total Actual State & Exch. Water Delivery	Allocation Available
Jan	0	0	0	0	
Feb	0	0	0	0	
Mar	0	0	0	0	
Apr	0	25	163	188	
May	0	25	177	202	
Jun	0	0	372	372	
Jul	0	0	504	504	
Aug	0	0	521	521	
Sep	0	239	476	476	
Oct	0	40	125	364	
Nov	0	49	0	49	
Dec	0	378	0	378	
Total	0	378	2338	2716	

Scheduled State Water Delivery
Actual State Water Delivery
Scheduled Exchange Water
Actual Exchange Water Delivery

Goleta - SWP Deliveries in Year 2019

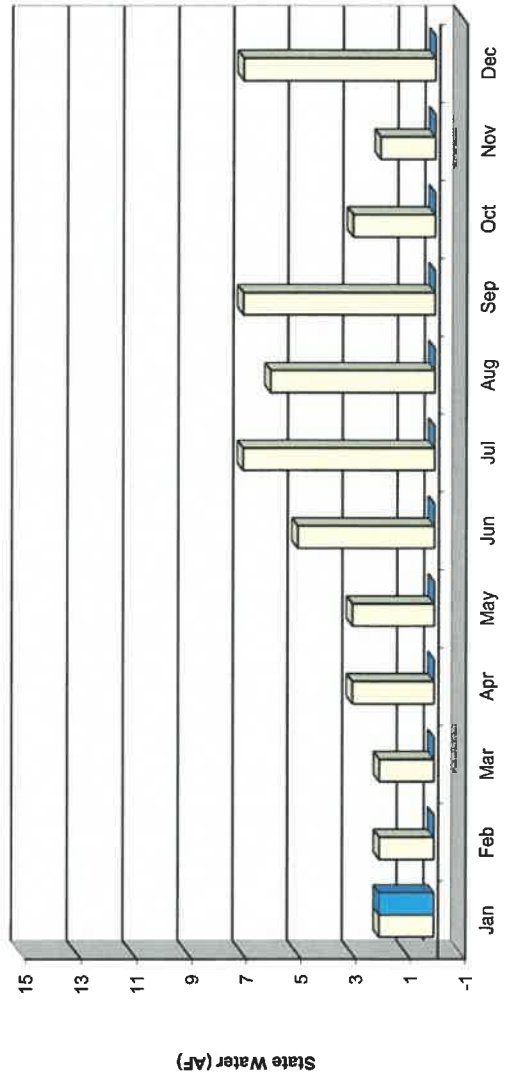
Month	Scheduled State Water Delivery	Scheduled Exchange Water	Total Sched'd State & Exch. Water Delivery	Actual State Water Delivery	Actual Exchange Water Delivery	Total Actual State & Exch. Water Delivery	Allocation Available
Jan	446	0	446	444	0	444	
Feb	446	0	446	84	0	84	
Mar	446	-27	419	0	0	0	
Apr	446	-34	412	0	59	59	
May	446	-47	399	0	64	64	
Jun	446	-77	369	0	134	134	
Jul	446	-79	367	0	181	181	
Aug	446	-79	367	0	188	188	
Sep	446	-61	385	0	172	172	
Oct	446	-32	414	0	45	45	
Nov	446	0	446	0	0	0	
Dec	446	0	446	0	0	0	
Total	5352	-436	4916	528	843	1371	



- Scheduled State Water Delivery
- Actual State Water Delivery
- Scheduled Exchange Water
- Actual Exchange Water Delivery

Morehart Land - SWP Deliveries in Year 2019

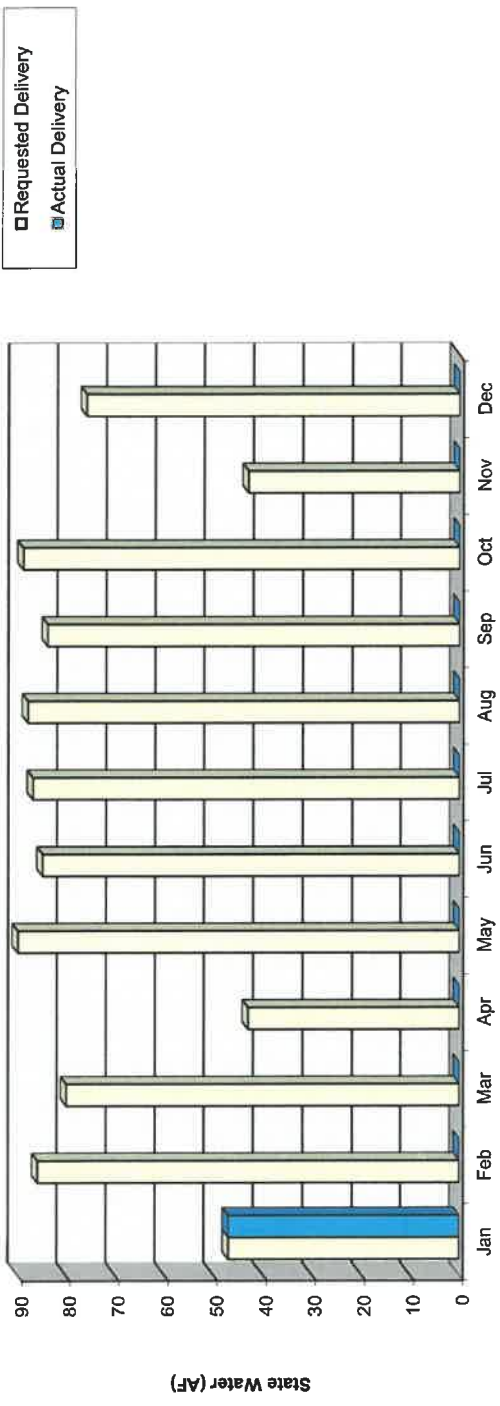
Month	Requested Delivery	Actual Delivery	Allocation Available
Jan	2	2	
Feb	2	0	
Mar	2	0	
Apr	3	0	
May	3	0	
Jun	5	0	
Jul	7	0	
Aug	6	0	
Sep	7	0	
Oct	3	0	
Nov	2	0	
Dec	7	0	
Total	49	2	



- Requested Delivery
- Actual Delivery

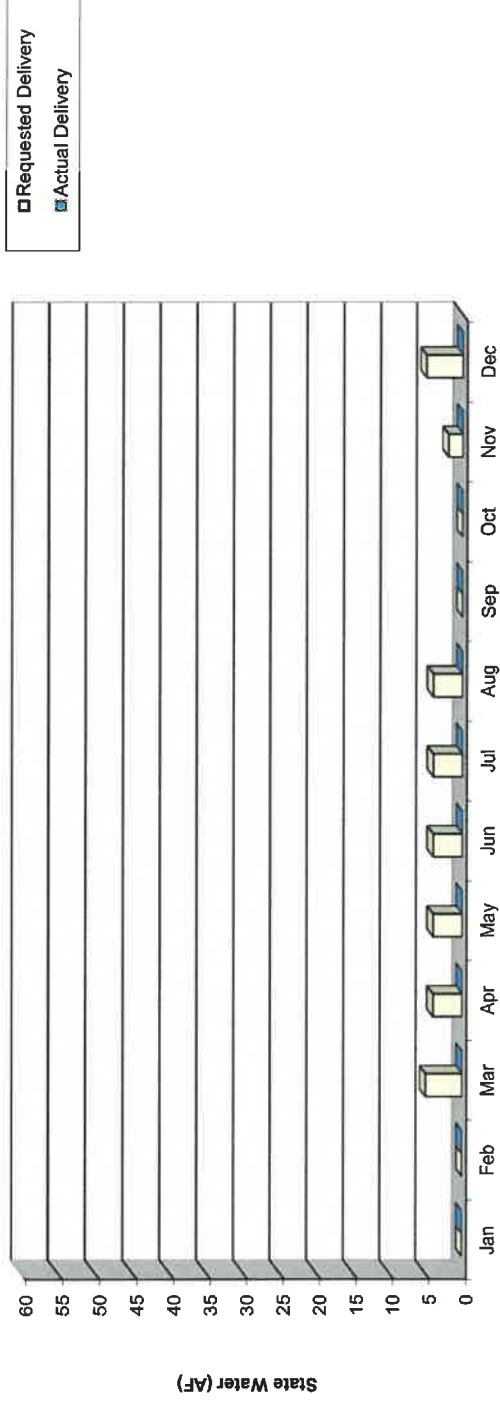
La Cumbre - SWP Deliveries in Year 2019

Month	Requested Delivery	Actual Delivery	Allocation Available
Jan	47	47	
Feb	86	0	
Mar	80	0	
Apr	43	0	
May	90	0	
Jun	85	0	
Jul	87	0	
Aug	88	0	
Sep	84	0	
Oct	89	0	
Nov	43	0	
Dec	76	0	
Total	898	47	



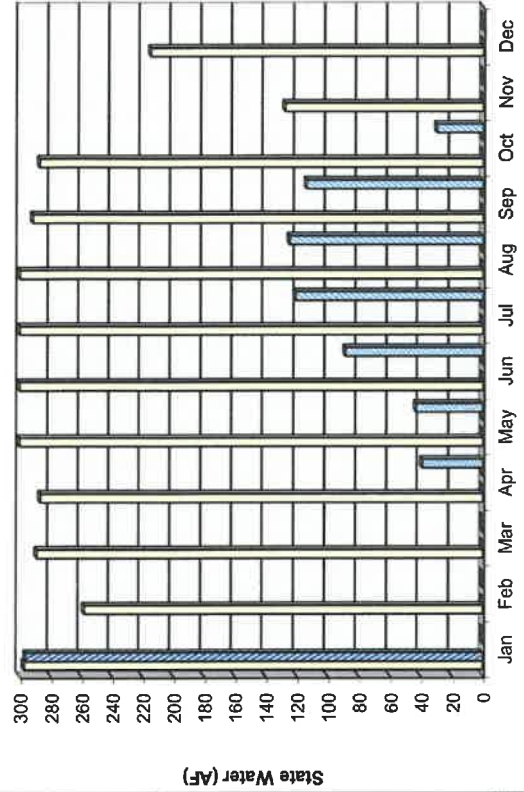
Raytheon (SBRC) - SWP Deliveries in Year 2019

Month	Requested Delivery	Actual Delivery	Allocation Available
Jan	0	0	
Feb	0	0	
Mar	5	0	
Apr	4	0	
May	4	0	
Jun	4	0	
Jul	4	0	
Aug	4	0	
Sep	0	0	
Oct	0	0	
Nov	2	0	
Dec	5	0	
Total	32	0	



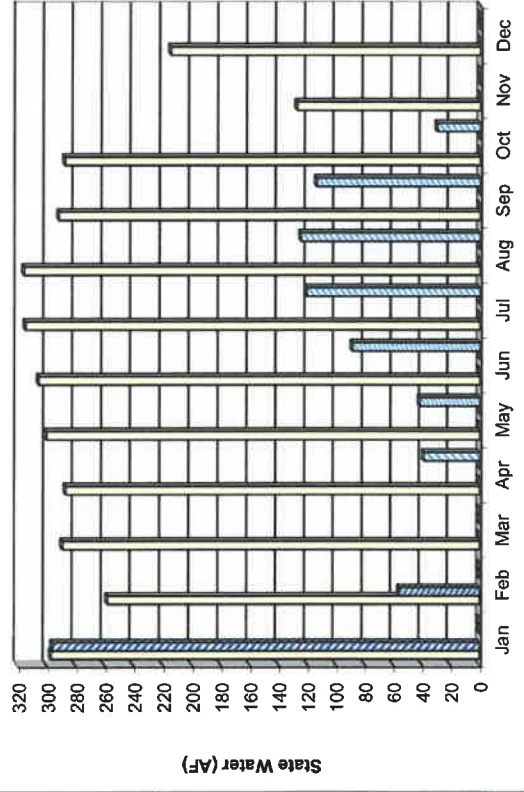
Santa Barbara - SWP Deliveries in Year 2019

Month	Scheduled State Water Delivery	Delivery	Scheduled Exchange Water	Water	Total Sched'd State & Exch. Water	Actual State Water Delivery	Actual Exchange Water Delivery	Total Actual State & Exch. Water Delivery	Allocation Available
Jan	297	297	0	0	297	296	0	296	
Feb	258	258	0	0	258	0	0	0	
Mar	289	289	-18	0	271	0	0	0	
Apr	287	287	-23	0	264	0	39	39	
May	300	300	-31	0	269	0	43	43	
Jun	306	306	-52	0	254	0	89	89	
Jul	315	315	-53	0	262	0	121	121	
Aug	316	316	-53	0	263	0	125	125	
Sep	292	292	-41	0	251	0	114	114	
Oct	288	288	-22	0	266	0	30	30	
Nov	128	128	0	0	128	0	0	0	
Dec	215	215	0	0	215	0	0	0	
Total	3290	3290	-292	0	2998	2996	561	857	



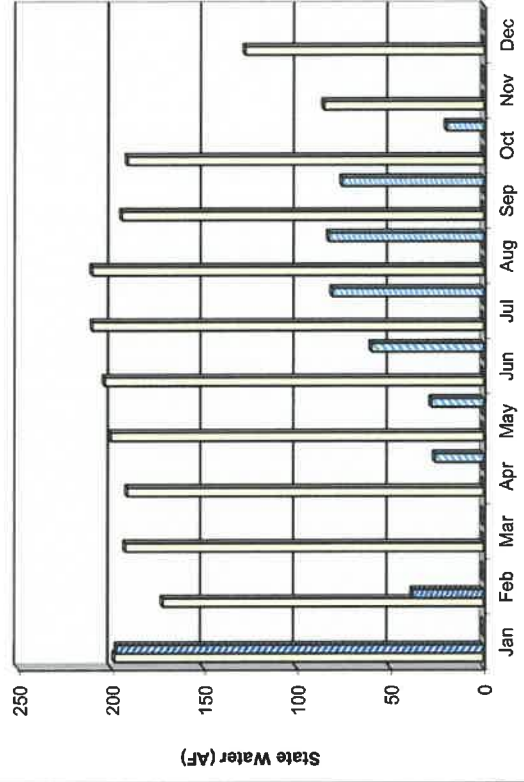
Montecito - SWP Deliveries in Year 2019

Month	Scheduled State Water Delivery	Delivery	Scheduled Exchange Water	Water	Total Sched'd State & Exch. Water	Actual State Water Delivery	Actual Exchange Water Delivery	Total Actual State & Exch. Water Delivery	Allocation Available
Jan	297	297	0	0	297	296	0	296	
Feb	258	258	0	0	258	56	0	56	
Mar	289	289	-18	0	271	0	0	0	
Apr	287	287	-23	0	264	0	39	39	
May	300	300	-31	0	269	0	42	42	
Jun	306	306	-52	0	254	0	89	89	
Jul	315	315	-53	0	262	0	121	121	
Aug	316	316	-53	0	263	0	125	125	
Sep	292	292	-41	0	251	0	114	114	
Oct	288	288	-22	0	266	0	30	30	
Nov	128	128	0	0	128	0	0	0	
Dec	215	215	0	0	215	0	0	0	
Total	3290	3290	-292	0	2998	352	560	912	



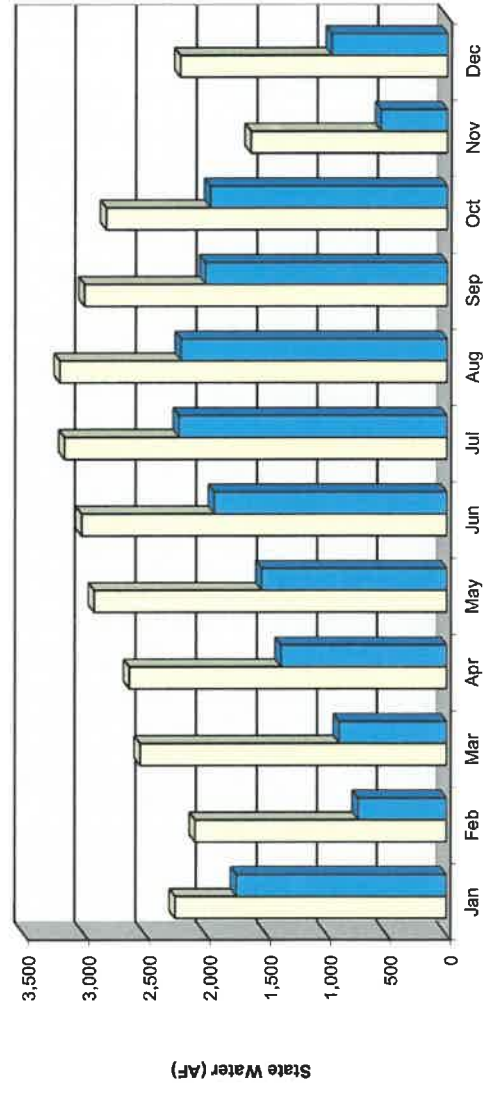
Carpinteria - SWP Deliveries in Year 2019

Month	Scheduled State Water Delivery	Scheduled Exchange Water	Total Sched'd Water State & Exch.	Actual State Water Delivery	Actual Exchange Water Delivery	Total Actual State & Exch. Water Delivery	Allocation Available
Jan	198	0	198	197	0	197	
Feb	172	0	172.14	38	0	38	
Mar	192	-12	180.41	0	0	0	
Apr	191	-15	176.2	0	26	26	
May	200	-21	179.63	0	28	28	
Jun	204	-34	169.15	0	60	60	
Jul	210	-35	174.96	0	81	81	
Aug	210	-35	175.1	0	83	83	
Sep	195	-27	167.4	0	76	76	
Oct	192	-14	177.17	0	20	20	
Nov	86	0	85.626	0	0	0	
Dec	128	0	127.82	0	0	0	
Total	2178	-194	1984	235	374	609	

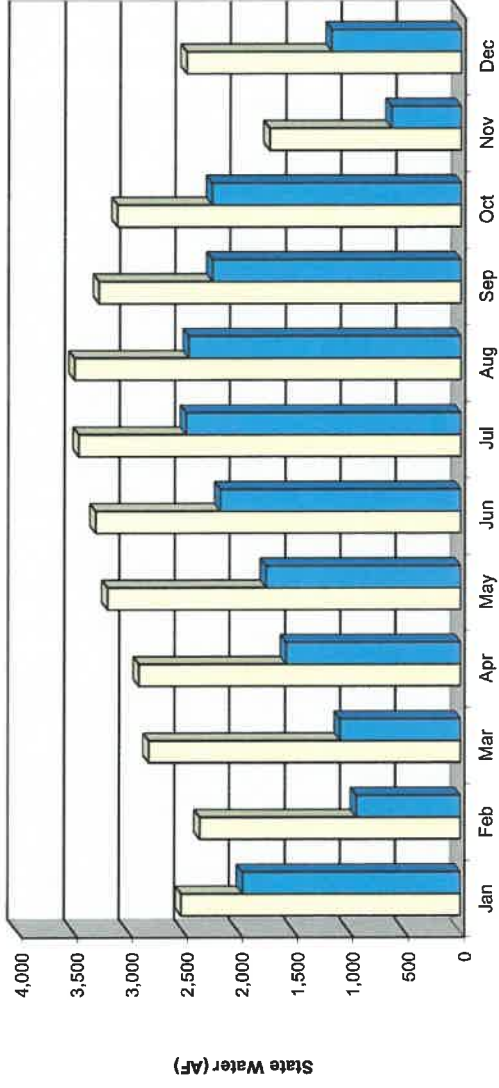


Total SB County - SWP Deliveries in Year 2019

Month	Requested Delivery	Actual Delivery
Jan	2,253	1,748
Feb	2,089	737
Mar	2,543	896
Apr	2,633	1,382
May	2,922	1,543
Jun	3,026	1,933
Jul	3,169	2,225
Aug	3,209	2,207
Sep	3,004	2,007
Oct	2,826	1,967
Nov	1,635	555
Dec	2,215	963
Total	31,525	18,163



Total SB and SLO County - SWP Deliveries in Year 2019



■ Requested Delivery
■ Actual Delivery

Month	Requested Delivery	Actual Delivery
Jan	2,525	1,967
Feb	2,355	942
Mar	2,816	1,090
Apr	2,906	1,579
May	3,196	1,760
Jun	3,302	2,175
Jul	3,460	2,486
Aug	3,500	2,463
Sep	3,276	2,250
Oct	3,113	2,255
Nov	1,738	635
Dec	2,487	1,178
Total	34,675	20,780



CENTRAL COAST WATER AUTHORITY
MEMORANDUM

January 13, 2020

TO: CCWA Board of Directors
FROM: Ray A. Stokes 
Executive Director
SUBJECT: DWR Draft 2019 Delivery Capability Report

DISCUSSION

Attached is the DRAFT of DWR's 2019 Delivery Capability Report which provides "information about the key factors affecting the operation of the State Water Project system in California, its long-term capability as a source of water for beneficial use, and an estimate of its current delivery capability."

Most notably, the report projects that the SWP long-term average annual delivery of Table A water is 59% for 2019, which compares to the 2017 report which showed a long-term average of 62%, as shown below.

Table 5-4. Estimated Average and Wet-Period Deliveries of SWP Table A Water, Excluding Butte County and Yuba City (Existing Conditions, in taf/year), and Percent of Maximum SWP Table A Amount, 4,133 taf/year														
	Long-term Average		Single Wet Year (1983)		Single Wet Year (2011)		Wet Periods							
							2-Year (1982-1983)		4-Year (1980-1983)		6-Year (1978-1983)		10-Year (1978-1987)	
2017 Report	2,571	62%	4,098	99%	--	--	3,967	96%	3,569	86%	3,433	83%	3,163	77%
2019 Report (2003)	2,453	59%	4,059	98%	--	--	3,856	93%	3,390	82%	3,314	80%	3,021	73%
2019 Report (2015)	2,430	59%	Same		4,009	97%	Same		Same		Same		Same	

As described in the summary to the report, the primary reason for the decrease to 59% from the previous 62% is attributed to an amendment to the Coordinated Operation Agreement (COA) between the SWP and the federal Central Valley Project (CVP). Generally, the amendments to the COA changed the water sharing agreement between the two projects with the SWP receiving less during dry periods, with more water going to the CVP and a change between the two projects from a 50/50 split to a 60/40 split (CVP/SWP) for restrictions associated with Old and Middle River flow restrictions and San Joaquin River Import/Export restrictions.

A full copy of the report is attached and is also found on the CCWA website.

RAS
Attachment

Draft State Water Project Delivery Capability Report 2019



State of California
Natural Resources Agency
Department of Water Resources

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State of California
Gavin Newsom, Governor

Natural Resources Agency
Wade Crowfoot, Secretary for Natural Resources

Department of Water Resources
Karla Nemeth, Director

Cindy Messer, Chief Deputy Director

Chief Counsel
Spencer Kenner

Public Affairs
**Erin Mellon,
Assistant Director**

Legislative Affairs
**Kasey Schimke,
Assistant Director**

Assistant
**Chief Deputy Director
Michelle Banonis**

California Water
Commission
**Joseph Yun,
Executive Officer**

Deputy Directors

Michael Day

Security and Emergency Management
Program

Katherine S. Kishaba

Business Operations

Gary Lippner

Flood Management and Dam Safety

Ted Craddock (acting)

State Water Project

Taryn Ravazzini

Statewide Groundwater Management

Kristopher A. Tjernell

Integrated Watershed Management

Bay-Delta Office
Tara Smith, Acting Chief

Modeling Support Branch
Tara Smith, Chief

**This report was prepared under the supervision of
Erik Reyes, Chief, Central Valley Modeling Section**

This report was prepared by

Nazrul Islam, Senior Engineer, WR, Central Valley Modeling Section

List of Acronyms

ANN (Artificial Neural Network)
BDCP (Bay Delta Conservation Plan)
BiOps (Biological Opinions)
CEQA (California Environmental Quality Act)
CESA (California Endangered Species Act)
CDFW (California Department of Fish and Wildlife)
COA (Coordinated Operation Agreement)
CVP (Central Valley Project)
CY (Calendar Year)
D-1641 (State Water Board's Water Right Decision 1641 (D-1641), issued in December 1999 and updated in March 2000)
DO (Dissolved oxygen)
DRMS (Delta Risk Management Strategy)
DSM2 (Delta Simulation Model 2)
E/I (Delta Exports to Inflow ratio)
EcoRestore (Governor Brown's Delta habitat restoration plan)
EIR (Environmental Impact Report)
EIS (Environmental Impact Statement)
ESA (Endangered Species Act)
FCWCD (Flood Control and Water Conservation District)
HCP (Habitat Conservation Plan)
ID (Irrigation District)
ITP (Incidental Take Permit)
KCWA (Kern County Water Agency)
M&I (Municipal and Industrial)
MWDSC (Metropolitan Water District of Southern California)
NCCP (Natural Community Conservation Plan)
NEPA (National Environmental Policy Act)
NMFS (National Marine Fisheries Service)
NOP (Notice of Preparation)
OAL (The State Office of Administrative Law)
ROD (Record of Decision)
RPA (Reasonable and Prudent Alternative)
SED (Substitute Environmental Document)
SWC (State Water Contractors)
SWP (State Water Project)
SWPAO (State Water Project Analysis Office)
SWRCB (State Water Resources Control Board)
USBR (United States Bureau of Reclamation)
USFWS (United States Fish and Wildlife Service)
UWMP (Urban Water Management Plan)
VA (Voluntary Agreements)
WaterFix (The water transfer component of the Bay Delta Conservation Plan)
WD (Water District)
WSD (Water Storage District)
WSI-DI (Water Supply Index vs. Demand Index Relationship)
WQCP (Water Quality Control Plan for the San Francisco Bay/Sacramento–San Joaquin Delta)
WY (Water Year)
X2 (The distance in kilometers from Golden Gate, where salinity concentration in the Delta is 2 parts per thousand)

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Summary

This report meets the requirements of Attachment B to the Monterey Plus Settlement Agreement of May 2003. This report is intended to provide information about the key factors affecting the operation of the State Water Project (SWP) system in California, its long-term capability as a source of water for beneficial use, and an estimate of its current delivery capability.

Water provided by the SWP is a major component of the water supplies available to many SWP Contractors. State Water Contractors (SWC) consists of 29 legal entities that include cities, counties, urban water agencies, and agricultural irrigation districts. SWC's local/regional water users have long term contracts with the California Department of Water Resources (DWR) for all, or a portion of their water supply needs. Thus, the capability of water from the SWP system is an important component in the water supply planning of its recipients, and ultimately affects the amount of water available for beneficial use in California.

The availability of these water supplies may be highly variable. A sequence of relatively wet water years¹ may be followed by a varying sequence of dry or critically dry years. Having good and reliable estimates on how much water each water user under contract with DWR will receive in a given year—whether it be a wet water year, a critical year, or somewhere in between—gives Contractors a better sense of the degree to which they may need to implement increased conservation measures, or plan for new facilities or back up sources of water to meet their needs.

The geography of California and the infrastructure of water transfer from the source areas, located in the Sierra Mountain Range, to areas of demand for water makes the Sacramento-San Joaquin Delta, a key feature of the SWP's ability to deliver water to its agricultural and urban Contractors in the North Bay, the South Bay, California Central Valley, and Southern California. All but five of the 29 SWP Contractors receive water deliveries by diversions from the Delta. These water diversions are pumped by either the Harvey O. Banks or Barker Slough pumping plants.

DWR, and the United States Bureau of Reclamation (USBR), the managing entities of the two statewide systems of water transfer in California, face numerous challenges in the operation of their diversion facilities in the Delta, and are regulated by several state and federal agencies to maintain, and enhance the Delta's long-term sustainability.

Maintaining suitable quality of water flowing in the channels of the Delta for the numerous in-basin beneficial uses, and the protection of endangered and threatened fish species, are important factors of concern for the operators of the Delta export diversion facilities. Ongoing regulatory restrictions, such as those aimed at protecting the estuary's resident and migratory fish species are major challenges to a reliable, and at the same time, sustainable water delivery capability of both, SWP and the CVP systems.

Complications induced by climate change also pose the threat of increased variability in floods and droughts, and the projected sea level rise, caused by the increase in

¹ Water years start on October 1 and end on September 30 of the next year. It is the time period where precipitation totals are measured.

average temperature, complicate efforts to manage salinity levels in the channels below tide level. This could result in more frequent water quality degradation in the Delta channels.

Among the other challenges are continued subsidence of Delta islands, many of which are already below sea level, maintained by relatively unstable levee system, and the related threat of a catastrophic levee failure as water pressure increases on fragile levees.

The analyses in this report, factor in all the current regulations governing SWP and CVP operations in the Delta and upstream, and assumptions about water uses upstream in the Sacramento River and San Joaquin River watersheds.

Analyses were conducted that considered the amounts of water that SWP Contractors use, and the amounts of water they choose to hold for use in a subsequent year.

While many of the same specific assumptions on SWP operations described in the *State Water Project Delivery Capability Report 2017* remain the same in this update for 2019, notable changes include baseline model (CalSim 3.0 from CalSim II), the amendment to the Coordinated Operation Agreement (COA), modeling representation of Old and Middle River (OMR) operational criteria, and CVP and SWP operational updates. Hence, the differences between the 2017 and 2019 report can be attributed primarily to inputs on operating assumptions.

SWP Delta exports have decreased since 2005, although the bulk of the change occurred in 2009 and 2019. The former reduction is due to the federal BiOps that went into effect, restricting operations of the CVP and SWP diversion pumps. The latter reduction is due to the amended COA with accompanying project operations changes which reduced SWP exports and increased CVP exports.

The most salient findings in this report are as follows:

- Under existing conditions, the average annual delivery of Table A water estimated for this 2019 Report with the 1922-2003 flow record is 2,453 taf/year, 118 taf less than the 2,571 taf/year estimated for the 2017 Report (Table 5-3).
- The likelihood of existing-condition SWP Article 21 deliveries (supplemental deliveries to Table A water) being greater than 20 taf/year has decreased by 16% relative to the likelihood presented in the 2017 Report. However, the likelihood of Article 21 deliveries between 20-100 taf/year has increased by 18% relative to that of the 2017 Report (Figure 5-7).

Section 1

Reasons to Assess SWP Water Delivery Capability

Two major factors underscore the importance of assessing the SWP's water delivery capability: the effects of population growth on California's balance of water supply and demand, and State legislation intended to help maintain a reliable water supply.

Population Growth, Land Use, and Water Supply

California's population has grown rapidly in recent years, with resulting changes in land use. This growth is expected to continue. From 1990 to 2005, California's population increased from about 30 million to about 36 million. Based on this trend, California's population has been projected to be more than 43 million by 2030. The *California Water Plan 2018* indicates that for year 2060 conditions, based on the California Department of Finance's projections of 2010 U.S. Census data, the population is projected to be nearly 51 million—a 70% increase compared to the 1990 population.

The amount of water available in California can vary greatly from year to year. Some areas may receive 2 inches of rain a year, while others are deluged with 100 inches or more. As land uses have changed, population centers have emerged in many locations without enough local water supplies. Thus, Californians have always been faced with the problem of how best to conserve, control, and move water from areas of abundant water to areas of water need and use.

Legislation on Ensuring a Reliable Water Supply

The laws described below impose specific requirements on both urban and agricultural water suppliers. These laws increase the importance of SWP water delivery capability estimates to local and regional water purveyors.

Urban Water Management Planning Act

The Urban Water Management Planning Act was enacted in 1983 (California Water Code, Sections 10610–10656). As amended, this law requires all public urban water purveyors to adopt urban water management plans (UWMPs) every 5 years and submit those plans to DWR. DWR reviews submitted plans to report to the legislature on the status of submitted plans and for the purposes of grant eligibility requirements.

UWMPs must include an estimate of water supply and demand for a 20-year planning horizon and three water-year types, normal, single dry year and multi dry years. SWP Contractors use SWP delivery capability to estimate their long-term water supply needs from other sources available to them.

DWR publishes a guidebook to assist water suppliers prepare their urban water management plans. Guidance documents are available at:

<https://water.ca.gov/Programs/Water-Use-And-Efficiency/Urban-Water-Use-Efficiency/Urban-Water-Management-Plans>

Water Conservation Act

The Water Conservation Act of 2009 (Senate Bill X7.7, Steinberg), enacted in November 2009, includes requirements for urban and agricultural suppliers. Water suppliers report on compliance with these requirements in either the urban or agricultural water management plans. DWR reviews plans for consistency with Water Conservation Act requirements.

This law sets goals for the State of California to reduce average statewide per capita urban water use by 10% by the end of 2015, and 20% by the end of 2020. Urban (M&I) water suppliers in their 2010 UWMPs, calculated baseline water-use and set targets for 2015 and 2020. Data submitted by participating local/regional suppliers on water use reduction target compliance, show a cumulative reduction in statewide M&I water production of more than 22% during the 22-month period of June 2015 through March 2017. DWR is required to report to the Legislature on progress toward meeting the State's goal of 20% reduction by 2020.

In addition, as part of the Water Conservation Act, agricultural water suppliers with 25,000 acres or more of irrigated land were required to prepare and adopt agricultural water management plans and submit the plans to DWR by the end of 2012 and then once every five years beginning in 2015. The Act also required suppliers to measure volumetrically water deliveries to farms and base the price of water sales at least in part on the volume of water delivered. Water suppliers were required to report on water measurement and water pricing in the water management plans.

In June 2015, DWR released a guidebook for developing agricultural water management plans:

<https://cawaterlibrary.net/wp-content/uploads/2017/06/Final-2015-AWMP-Guidebook-June-2015.pdf>

Water agencies filing agricultural water management plans are listed on a Web page maintained by DWR's Water Use and Efficiency Branch:

https://wuedata.water.ca.gov/uwmp_plans.asp

Section 2

Regulatory Restrictions on SWP Delta Exports

Multiple needs converge in the Delta: the need to protect a fragile ecosystem, to support Delta recreation and farming, and to provide water for agricultural and urban needs throughout much of California. Various regulatory requirements are placed on the SWP's Delta operations to protect special-status species such as delta smelt and spring- and winter-run Chinook salmon. As a result, as described below, restrictions on SWP operations imposed by State and federal fish and wildlife agencies contribute substantially to the challenge of accurately determining the SWP's water delivery capability in any given year.

Biological Opinions on Effects of Coordinated SWP and CVP Operations

Several fish species listed under the federal Endangered Species Act (ESA) as threatened or endangered are found in the Delta. These protected species' health and the viability of their populations are impacted by various factors, including SWP and CVP operations, nonnative species, predation, Delta salinity, water quality and contaminants, sediment supply, physical alterations to the Delta, land subsidence, pelagic organism decline, methylmercury and selenium, invasive aquatic vegetation, low dissolved oxygen (DO) levels and illegal harvest.

Because of the decline of these species, the U.S. Fish and Wildlife Service (USFWS) and National Marine Fisheries Service (NMFS) have issued several Biological Opinions (BiOps) since the 1990s on the effects of coordinated SWP/CVP operations on several listed species. (USFWS Biological Opinion for Delta smelt protection and NMFS Biological Opinion for salmonids, green sturgeon, and Southern Resident killer whales.)

These BiOps affect the SWP's water delivery capability for two reasons. Most notably, they include terms that restrict SWP exports in the Delta to specific amounts at certain times under certain conditions. The BiOps also include Delta outflow requirements during certain times of the year thus reducing the available supply for export or storage..

The first BiOp on the effects of SWP (and CVP) operations were issued in February 1993 (NMFS BiOp on effects of project operations on winter-run Chinook salmon) and March 1995 (USFWS BiOp on project effects on delta smelt and splittail). Among other things, the BiOps contained requirements for Delta inflow, Delta outflow, and export pumping restrictions in order to protect listed species. These requirements imposed substantial constraints on Delta water supply operations. Many were incorporated into the 1995 *Water Quality Control Plan for the San Francisco Bay/Sacramento–San Joaquin Delta*³ (1995 WQCP), as described in the “Water Quality Objectives” section, below.

³ The SWRCB is currently updating the WQCP.

The terms of the USFWS and NMFS BiOps have become increasingly restrictive over the years. In 2004 the USBR sought a new BiOp from USFWS regarding the operation of the Central Valley Project (CVP) and the State Water Project (SWP) (collectively, Projects). USFWS issued the opinion in 2005, finding that the proposed coordinated operations of the Projects were not likely to jeopardize the continued existence of the delta smelt or result in the destruction or adverse modification of its critical habitat. After judicial review, the 2005 BiOp was vacated and USFWS was ordered to prepare a new one. USFWS found that the proposed operations of the Project would result in jeopardy to the delta smelt and in December 2008 issued a Jeopardy BiOp which included a Reasonable and Prudent Alternative (RPA) with more protective export restrictions and other actions intended to protect the delta smelt.

Similarly, in 2004 NMFS issued a BiOp on the effects of the coordinated operation of the Projects on salmonids, green sturgeon, and Southern Resident killer whales and found that the proposed operations of the Projects were not likely to jeopardize the continued existence of the listed species or result in the destruction or adverse modification of their critical habitat. After judicial review, the 2004 BiOp was also vacated and NMFS was ordered to prepare a new one. In June 2009, NMFS issued a Jeopardy BiOp covering effects on winter-run and spring-run Chinook salmon, steelhead, green sturgeon, and killer whales. Like the 2008 smelt BiOp, the salmon BiOp included an RPA with more protective export restrictions and other actions intended to protect listed species.

The USFWS BiOp includes requirements on operations in all but 2 months of the year. The BiOp calls for “adaptively managed” (adjusted as necessary based on the results of monitoring) flow restrictions in the Delta intended to protect delta smelt at various life stages. USFWS determines the required target flow with the reductions accomplished primarily by reducing SWP and CVP exports. Because this flow restriction is determined based on fish location and decisions by USFWS staff, predicting the flow restriction and corresponding effects on export pumping with any great certainty poses a challenge. The USFWS BiOp also includes an additional salinity requirement in the Delta for September and October in wet and above-normal water years, calling for increased releases from SWP and CVP reservoirs to reduce salinity. Among other provisions included in the NMFS BiOp, limits on total Delta exports have been established for the months of April and May. These limits are mandated for all but extremely wet years.

The 2008 and 2009 BiOps were issued shortly before and shortly after the then Governor proclaimed a statewide water shortage state of emergency in February 2009, amid the threat of a third consecutive dry year. NMFS calculated that implementing its BiOp would reduce SWP and CVP Delta exports by a combined 5% to 7%, but DWR’s initial estimates showed an impact on exports closer to 10% in average years, combined with the effects of pumping restrictions imposed by the BiOps to protect delta smelt and other species. In 2008-2009 and periodically through the drought and for changed circumstances in 2017, CDFW issued consistency determinations under Section 2080.1 of the California Fish and Game Code. The consistency determinations stated that the USFWS and the NMFS BiOps would be consistent with the California Endangered Species Act (CESA). Thus, CDFW allowed incidental take of species listed under both the federal ESA and CESA to occur during SWP and CVP operations

without requiring DWR or the USBR to obtain a separate State-issued permit.⁴

Reinitiation of Consultation for Long-Term Operations (RoC LTO)

In August 2016, USBR and DWR requested reinitiating consultation with NMFS and USFWS on the Coordinated Long-term Operations of the CVP and SWP due to new information and science on declining listed fish species populations. In January 2019, a notice of preparation of an EIR for the Coordinated Long-Term Operations of the CVP and SWP was issued to responsible agencies and various interested parties. On October 21, 2019, the U.S. Fish and Wildlife Service and the National Marine Fisheries Service released their Biological Opinions. (https://www.fws.gov/sfbaydelta/cvp-swp/documents/10182019_ROC_BO_final.pdf). The new operations plan that has emerged includes responsive water project operations that both protect endangered fish and allow the flexibility to quickly adapt to changing conditions – like the variable weather in California – to ensure effective and efficient water supply management.

Delta Inflows

Delta inflows vary considerably from season to season, and from year to year. For example, in an above-normal year, nearly 85% of the total Delta inflow comes from the Sacramento River, more than 10% comes from the San Joaquin River, and the rest comes from the three eastside streams (the Mokelumne, Cosumnes, and Calaveras Rivers).

The type of water year is also an important factor affecting the volume of Delta inflows. When hydrology is analyzed, water years are designated by DWR as “wet” (W), “above normal” (AN), “below normal” (BN), “dry” (D), or “critical” (C). All other factors (such as upstream level of development) being equal, much less water will flow into the Delta during a dry or critical water year (that is, during a drought) than during a wet or above-normal water year. Fluctuations in inflows are a substantial overall concern for the Delta, and a specific concern for the SWP; such fluctuations affect Delta water quality and fish habitat, which in turn trigger regulatory requirements that constrain SWP Delta pumping.

Delta inflows will also vary by time of year as the amount of precipitation varies by season. About 80% of annual precipitation occurs between November and March, and very little rain typically falls from June through September. Upstream reservoirs regulate this variability by reducing flood flows during the rainy season and storing water to be released later in the year to meet regulatory requirements and water demands.

Water Quality Objectives

Because the Delta is an estuary, salinity is a particular concern. In the 1995 WQCP, the State Water Board set water quality objectives to protect beneficial uses of water in the Delta and Suisun Bay. The objectives must be met by the SWP and federal CVP as

⁴ However, CDFW stated in an October 2017 response letter to DWR that according to the evidence, the USFWS memorandum (2017 Memorandum), authorizing a change to the required location of X2 in September and October of Wet Years, would not be consistent with the California Endangered Species Act (CESA) requirements.

specified in the water right permits issued to DWR and the USBR. Those objectives—minimum Delta outflows, limits on SWP and CVP Delta exports, and maximum allowable salinity levels—are enforced through the provisions of the State Water Board's Water Right Decision 1641 (D-1641), issued in December 1999 and updated in March 2000, which implemented the 1995 WQCP.

DWR and the USBR must monitor the effects of diversions and SWP and CVP operations to ensure compliance with existing water quality standards.

Among the objectives established in the 1995 WQCP and D-1641 are the “X2” objectives. X2 is defined as the distance in kilometers from Golden Gate, where salinity concentration in the Delta is 2 parts per thousand. The location of X2 is used as a surrogate measure of Delta ecosystem health.

For the X2 objective to be achieved, the X2 position must remain downstream of Collinsville in the Delta for the entire 5-month period, and downstream of other specific locations in the Delta on a certain number of days each month from February through June. This means that Delta outflow, which among other factors controls the location of X2 must be at certain specified levels at certain times. This can limit the amount of water the SWP may pump at those times at its Harvey O. Banks Pumping Plant in the Delta.

Because of the relationship between seawater intrusion and interior Delta water quality, meeting the X2 objective can also improve water quality at Delta drinking water intakes; however, meeting the X2 objectives can require a relatively large volume of water for outflow during dry months that follow months with large storms.

The 1995 WQCP and D-1641 also established an export/inflow (E/I) ratio. The E/I ratio is designed to provide protection for the fish and wildlife beneficial uses in the Bay Delta estuary. The E/I ratio limits the fraction of Delta inflows that are exported. When other restrictions are not controlling, Delta exports are limited to 35% of total Delta inflow from February through June and 65% of inflow from July through January.

The State Water Board is updating the WQCP. Phase 1 of the WQCP update focuses on flows on the San Joaquin River and salinity objectives in the South Delta. Phase 2 focuses on new inflow requirements for the Sacramento River, its tributaries, and eastside tributaries to the Delta (the Mokelumne, Calaveras and Cosumnes rivers); new and modified Delta outflow requirements; new requirements for cold water habitat; new and modified interior Delta flow requirements; recommendations for complementary ecosystem protection actions that others should take; and adaptive management, monitoring, evaluation, special study, and reporting provisions. A primary focus of the WQCP update is on additional flows for the beneficial use of fish and wildlife. Based on the environmental documentation that has been produced up to this date by the State Water Board, it is likely that the implementation of these flow requirements will affect SWP contractor deliveries. The State Water Board issued its Substitute Environmental Document (SED), which is the equivalent of CEQA analysis, on Phase 1 in 2016 and issued its SED on Phase 2 in 2018. After these documents are finalized, the proposed changes will have to be adopted through an order of the State Water Board.

In December 2018, the SWRCB approved a plan for Phase 1 of the Water Quality Control Plan update to restore flows in the San Joaquin River and its tributaries. The plan made provisions to allow for voluntary agreements among stakeholders to apply “flow” and “non-flow” measures to meet water quality objectives and improve conditions for native fish and wildlife in the Delta.

Coordinated Operation Agreement (COA) 2018 Amendment

An amendment to COA between the Central Valley Project and State Water Project was made in 2018. Originally negotiated and signed in 1986, the COA established the shared responsibility for each project to meet water quality and regulatory standards. Since that time, the State Water Resources Control Board have imposed additional restrictions, including new Delta outflow requirements, which further restrict exports and affect CVP and SWP operations. In response to these changes, a joint review of the 1986 agreement was conducted by both projects. At the conclusion, DWR and Bureau of Reclamation agreed to amend the COA to better reflect the current regulatory environment and operations of the projects.

Incidental Take Permit (ITP)

The 2008 USFWS and 2009 NMFS Biological Opinions are consistent with CESA requirements. As such, further authorizations with respect to species listed under both ESA and CESA are no longer required. Under section 2081 of the California Fish and Game Code, DWR holds an ITP from the CDFW related to Longfin smelt. This ITP is scheduled to expire at the end of December 2019. Pursuant to section 2081, DWR intends to obtain a new ITP which covers species listed under CESA subject to incidental take through long-term operation of the SWP. These include Delta smelt, Longfin smelt, winter-run Chinook salmon and spring-run Chinook salmon. DWR has historically requested and received consistency determinations under section 2080.1 to allow for continued coordination between SWP and CVP operations.

Voluntary Agreements (VA)

The California Department of Water Resources and the Department of Fish and Wildlife (DFW) are working to establish the VA with participating water users following adoption by SWRCB of the Phase 1 updates. The VA involve the development of projects that provide flow augmentation, modified storage releases and non-flow actions such as floodplain inundation to enhance Delta conditions. Both departments are continuing the effort to develop and evaluate proposed voluntary agreements. On March 1, 2019, DWR and DFW submitted documents to the State Water Resources Control Board that reflect progress to flesh-out the previously submitted framework to improve conditions for fish through targeted river flows and a suite of habitat-enhancing projects including floodplain inundation and physical improvement of spawning and rearing areas. Further work and analysis are needed to determine whether the agreements can meet environmental objectives required by law and identified in the State Water Board's update to the Bay-Delta Water Quality Control Plan.

Section 3

Ongoing Environmental and Policy Planning Efforts

It is hard to overstate the Delta's importance to California's economy and natural heritage. The Delta supplies a large share of the water used in the state. California would not be the same without that water — hundreds of billions of dollars of economic activity depend upon it. Southern California, with half of the state's population, gets almost a quarter of its average water supply from the Delta; Kern County, which produces nearly \$3 billion annually in grapes, almonds, pistachios, milk, citrus, and carrots, depends on the Delta for about a fifth of its irrigation supply; the west side of the San Joaquin Valley also produces billions of dollars' worth of food and depends on the Delta for about three-quarters of its irrigation supply; and the San Francisco Bay Area, including the innovation hub of Silicon Valley, takes about half of its water supply from the Delta and its tributaries.

At the same time, the hundreds of miles of river channels that crisscross the Delta's farmed islands provide a migratory pathway for Chinook salmon, which support an important West Coast fishing industry. Other native fish species depend upon the complex mix of fresh and saltwater in the Delta estuary. Multiple stressors have impaired the ecological functions of the Delta, and concerns have been growing over the ability to balance the many needs of both people and the ecosystem.

In order to respond to these concerns, considerable effort by government agencies and California water community as a whole has been spent during the past several decades to study ways that the problems in the Delta can be addressed, and the more recent attention to the effects of climate change has helped the watercommunity to realize the urgency of addressing these problems. The essential part of all these efforts has been to find a comprehensive solution that brings various, sometimes competing, interests together in a coordinated and concerted set of actions. The Delta Plan and the Bay Delta Conservation Plan (BDCP)/Delta Conveyance are two large-scale planning efforts that are in development. Once implemented, both efforts, could affect SWP water delivery capability in different ways, and at different scales.

Delta Plan

After years of concern about the Delta amid rising water demand and habitat degradation, the Delta Stewardship Council was created in legislation to achieve State-mandated coequal goals for the Delta. As specified in Section 85054 of the California Water Code:

“Coequal goals” means the two goals of providing more reliable water supply for California and protecting, restoring, and enhancing the Delta ecosystem. The coequal goals shall be achieved in a manner that protects and enhances the unique cultural, recreational, natural resource, and agricultural values of the Delta as an evolving place.

The Council is required to review the Delta Plan at least every five years. The first Delta Plan was adopted by the Council on May 16, 2013. The State Office of Administrative Law (OAL) approved the 14 regulations to implement the Delta Plan, which became effective with legally enforceable regulations on September 1, 2013.

To be responsive to changing circumstances and in accordance with commitments

made in the 2013 Plan, the Council amended the Delta Plan twice in 2016. The latest Delta Plan was released last April 2018 and amended January 2019. The Delta Plan contains a set of 14 regulatory policies as well as 95 recommendations, which are non-regulatory but identify actions essential to achieving the coequal goals.

The Delta Plan as adopted in 2013 called for completion of the Bay Delta Conservation Plan (BDCP). Pursuant to the Delta Reform Act of 2009, the BDCP, if it met all other requirements of law, was to be automatically incorporated into the Delta Plan. The Delta Plan also provided that if the BDCP were not approved by Jan. 1, 2016, the Council would consider amending the Delta Plan to promote options for new conveyance and storage projects and how they could be operated.

WaterFix was approved under the California Environmental Quality Act in 2017. However, the WaterFix component of the BDCP was ended in May 2, 2019 and replaced by a single tunnel project. The Council will direct staff to develop a proposed amendment to the Delta Plan regarding Delta conveyance, water storage, and the operation of both.

Bay Delta Conservation Plan (BDCP)/Delta Conveyance Project

In 2006, state and federal agencies started pursuing an ambitious and comprehensive conservation plan under Section 10 of the Endangered Species Act (ESA) and California's Natural Community Conservation Planning Act. The approach included new water conveyance facilities and sought to improve reliability of water delivery and contribute to the recovery of listed species under a single regulatory package. A draft Bay Delta Conservation Plan (BDCP) and draft EIR/EIS were released for a public comment period that began in December 2013 and closed in July 2014. While the draft EIR/EIS was out for public review several significant changes were announced by the Brown Administration and its federal partners.

Based on these project changes and in consideration of comments received on the draft EIR/EIS, state and federal agencies announced in April 2015 a change in their approach to seeking a permit for a project to improve, protect, and maintain ecosystem health, water quality, and water supplies so that the SWP and CVP are capable of reliably delivering water within a stable regulatory framework. Rather than pursue the project as a Habitat Conservation Plan (HCP), under Section 10 of the ESA, and a Natural Community Conservation Plan (NCCP), under the state's Natural Community Conservation Planning Act, the state and federal agencies chose to study additional alternatives to achieve the dual goals through implementation of new water conveyance facilities that would be built in compliance with Section 7 of the ESA and Section 2081(b) of the California ESA.

Based on this change in the permitting approach and other design modifications, DWR and the USBR released a joint Partially Recirculated Draft EIR/Supplemental Draft EIS on the Bay Delta Conservation Plan/California WaterFix for public review and comment from July 2015 through October 2015. The draft document included analysis of three new sub-alternatives as well as additional analysis and refinement of portions of the previous draft environmental document. The additional sub-alternatives do not include an HCP/NCCP, as was proposed as part of the alternatives analyzed in the

previously circulated documents. Instead, the alternative implementation strategy allows for other state and federal programs to address the long-term conservation efforts for species recovery in programs separate from the project.

The new sub-alternatives, including the previously preferred alternative known as California WaterFix (sub-alternative 4A), focused on the conveyance facility improvements necessary for the SWP and CVP to address more immediate water supply reliability needs in conjunction with ecosystem improvements to significantly reduce reverse flows and fish species impacts associated with the existing south Delta intakes.

In December of 2016, DWR and the USBR publicly released a Final EIR/EIS. The Final EIR/EIS describes the alternatives, discusses potential environmental impacts, and identifies mitigation measures that would help avoid or minimize impacts. It also provides responses to all substantive comments received on the 2013 Draft Environmental Impact Report/Environmental Impact Statement and 2015 Partially Recirculated Draft Environmental Impact Report /Supplemental Draft Environmental Impact Statement. In July 2017, DWR released a Notice of Determination and certified the Final EIR under the California Environmental Quality Act which was then approved.

Biological Assessment for CA WaterFix

Moving forward with the alternative implementation strategy (described above), in January 2016, DWR and the USBR released a draft Biological Assessment, which included a species-by-species analysis and proposed mitigation to offset and avoid potential project impacts. In August 2016, DWR and the USBR submitted a revised Biological Assessment to USFWS and NMFS to initiate formal consultation and under Section 7 of the ESA and begin the process of obtaining incidental take authorization for federally-listed species. Remaining consistent with the change in approach, in October 2016, DWR submitted a 2081 (b) application to CDFW to address incidental take of state-listed species for California ESA compliance. The incidental take analysis included in the 2081(b) application analyzes potential project impacts and provides mitigation necessary to ensure project impacts are fully mitigated. In January 2017, NMFS, USFWS, and CDFW submitted draft CA WaterFix Biological Opinion and 2081(b) mitigation analyses to the Delta Science Program's Aquatic Science Peer Review Panel. During this time, DWR and USBR assisted and coordinated with NMFS, USFW, CDFW working towards the completion of the CA WaterFix Biological Opinions and 2081(b) documents. In June 2017, NMFS and USFWS Service released their final Biological Opinions. In July 2017, CDFW issued the incidental take permit (20181(b) document).

Delta Conveyance Project

On May 2, 2019, Governor Gavin Newsom ended California WaterFix and announced a new approach to modernize Delta Conveyance through a single tunnel alternative. Governor Newsom also released Executive Order 10-19 which directed state agencies to inventory and assess the new planning for the single tunnel project. DWR then withdrew all project approvals and permit applications for California WaterFix, thus, effectively ending the twin tunnels project.

DWR is planning to release a notice of preparation (NOP) to start planning for the Delta Conveyance project. The NOP will document the intent to develop an EIR and signal the start of the scoping process. The scoping process establishes the public comment period and public meetings. The NOP will describe the proposed project objectives and the project itself.

DWR's tentative schedule for Delta Conveyance indicates that the NOP will be released soon, starting the CEQA process. A draft EIR will be available for review early 2021 and the final EIR will be released in 2022. DWR will be ensuring compliance with the federal and state ESA. Around mid-2021, DWR will work on water rights, Delta Plan consistency, and other environmental permits.

For more information, visit <https://water.ca.gov/Programs/State-Water-Project/Delta-Conveyance>.

EcoRestore

In addition to the new Section 7 permitting approach, and the previously preferred alternative, California WaterFix, Governor Brown announced the creation of the California EcoRestore program in April 2015, committing to restore more than 30,000 acres of Delta habitat by 2020, which will be implemented on an accelerated timeline independent of the proposed water conveyance facilities. This comprehensive suite of habitat restoration actions under the California EcoRestore program includes specific targets for floodplain, tidal and sub-tidal, managed wetlands, and fish passage improvements to benefit native fish species and a commitment to adaptive management. Current projects under construction include Dutch Slough, McCormack Williamson Tract, and Southport Levee Improvement.

For more information, visit <https://water.ca.gov/Programs/All-Programs/EcoRestore>.

Section 4

State Water Project Historical Deliveries (2009-2018)

Section 4 and Section 6 present the State Water Project Historical Deliveries from 2009-2018 (Calendar year). Section 4, this section, focuses on the annual minimum, maximum, and average total contractor combined deliveries during this 10-year (2009-2018) period. Section 6 of this report includes tables listing annual historical deliveries by various water classifications for each SWP Contractor for 2009–2018.

Contractor deliveries are presented as four different delivery types - Table A delivery, an Article 21 delivery, a carryover delivery, or a turnback delivery. These delivery types are briefly described below.

“Table A” Water is an exhibit to the SWP’s water supply contracts. The maximum Table A amount is the basis for apportioning water supply and costs to the SWP contractors.

Once the total amount of water to be delivered is determined for the year, all available water is allocated in proportion to each contractor’s annual maximum SWP Table A amount.

Article 21 Water (it is described in Article 21 of the water contracts) is water that SWP contractors may receive on a short-term basis in addition to their Table A water, if they request it. Article 21 water is used by many SWP contractors to help meet demands when allocations are less than 100%. The availability and delivery of Article 21 water cannot interfere with normal SWP operations.

Carryover Water is SWP water that is allocated to an SWP contractor and approved for delivery to that contractor in a given year, but not used by the end of the year. This water is exported from the Delta by the Banks Pumping Plant, but instead of being delivered to the contractor, it is stored in the SWP’s share of San Luis Reservoir, when space is available, for the contractor to use in the following year.

Turnback Pool Water SWP contractors may offer a portion of their Table A water that has been allocated in the current year and exceeds their needs to a “turnback pool,” where another contractor may purchase it. Contractors that sell their extra Table A water in a turnback pool receive payments from contractors that buy this water.

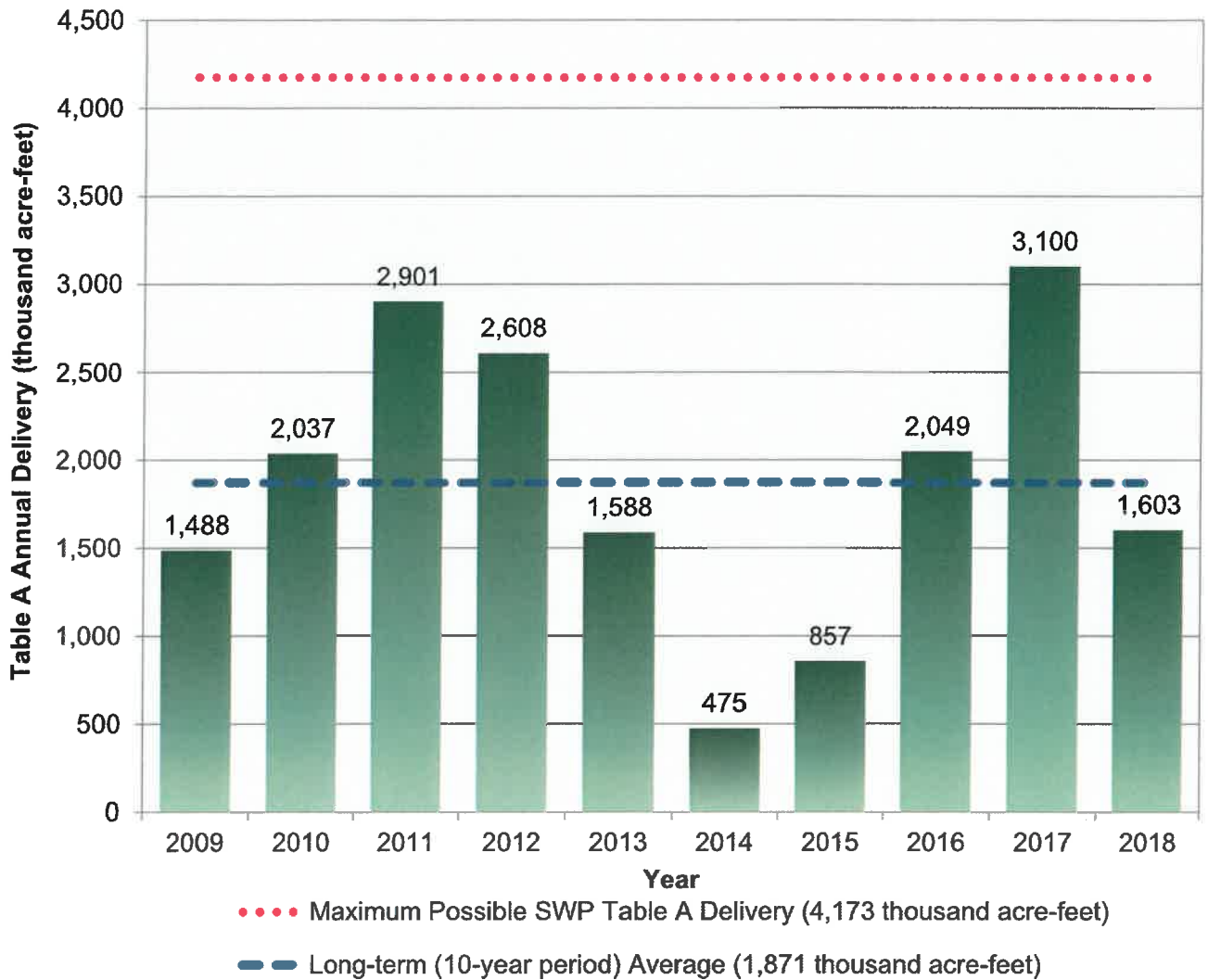
Table 4-1 lists the maximum annual SWP Table A water delivery amounts for SWP Contractors. Figure 4-1 shows that deliveries of SWP Table A water for 2009–2018 range from an annual minimum of 475 taf to a maximum of 3,100 taf, with an average of 1,871 taf. Historical deliveries of SWP Table A water over this 10-year period are less than the maximum of 4,173 taf/year.

Total historical SWP deliveries, including Table A, Article 21, turnback pool, and carryover water, range from 3,410 to 477 taf/ year, with an average of 1,963 taf/year for the period of 2009–2018 (Figure 4-2).

Table 4-1. Maximum Annual SWP Table A Water Delivery Amounts for SWP Contractors

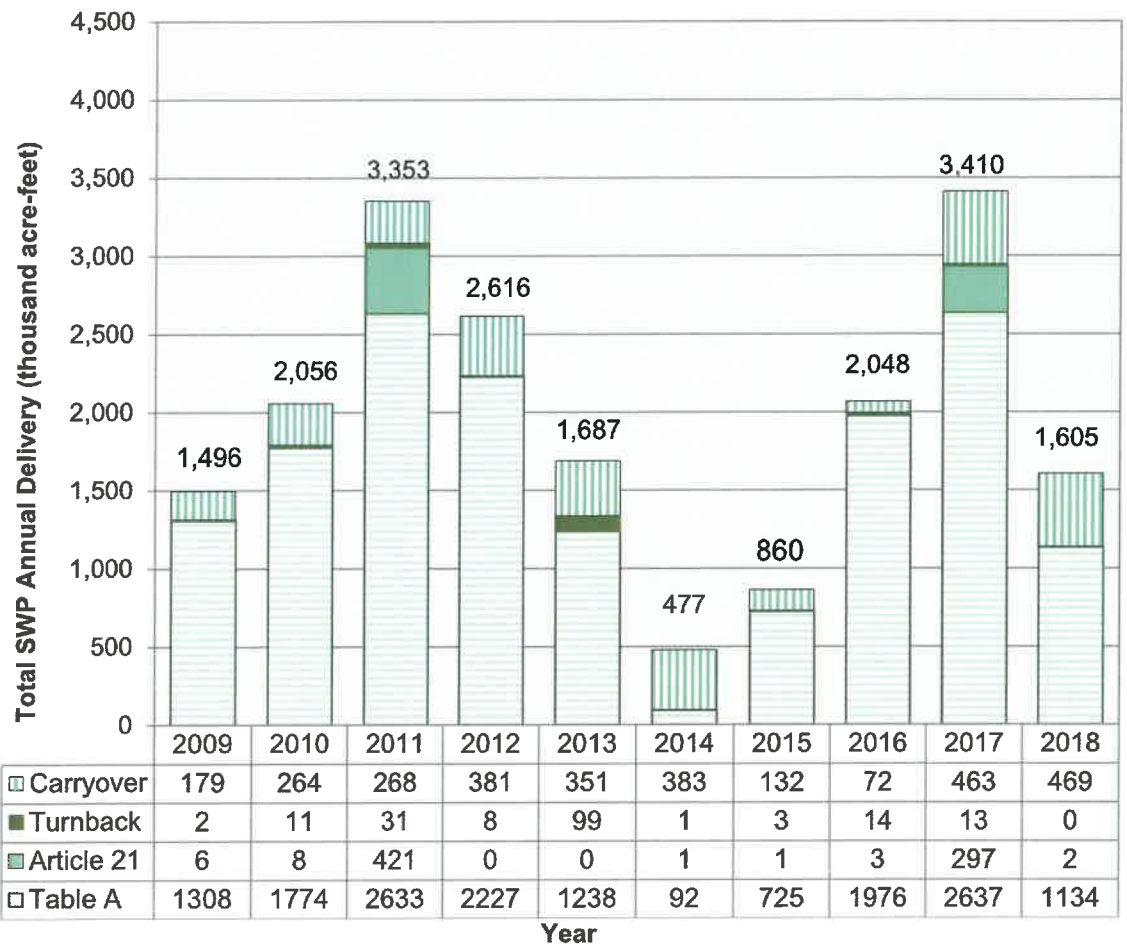
Contractor	Maximum Table A Delivery Amounts (acre-feet)
Feather River Area Contractors	
Butte County	27,500
Yuba City	9,600
Plumas County Flood Control and Water Conservation District	2,700
Subtotal	39,800
North Bay Area Contractors	
Napa County Flood Control and Water Conservation District	29,025
Solano County Water Agency	47,756
Subtotal	76,781
South Bay Area Contractors	
Alameda County Flood Control and Water Conservation District, Zone 7	80,619
Alameda County Water District	42,000
Santa Clara Valley Water District	100,000
Subtotal	222,619
San Joaquin Valley Area Contractors	
Dudley Ridge Water District	45,350
Empire West Side Irrigation District	3,000
Kern County Water Agency	982,730
Kings County	9,305
Oak Flat Water District	5,700
Tulare Lake Basin Water Storage District	87,471
Subtotal	1,133,556
Central Coastal Area Contractors	
San Luis Obispo County Flood Control and Water Conservation District	25,000
Santa Barbara County Flood Control and Water Conservation District	45,486
Subtotal	70,486
Southern California Area Contractors	
Antelope Valley–East Kern Water Agency	144,844
Castaic Lake Water Agency	95,200
Coachella Valley Water District	138,350
Crestline–Lake Arrowhead Water Agency	5,800
Desert Water Agency	55,750
Little Rock Creek Irrigation District	2,300
Metropolitan Water District of Southern California	1,911,500
Mojave Water Agency	85,800
Palmdale Water District	21,300
San Bernardino Valley Municipal Water District	102,600
San Gabriel Valley Municipal Water District	28,800
San Geronio Pass Water Agency	17,300
Ventura County Watershed Protection District	20,000
Subtotal	2,629,544
TOTAL TABLE A AMOUNTS	4,172,786

Source: California State Water Project Bulletin 132-17.



Note: The differences in historical deliveries from those reported in the DCR 2017 are due to the State Water Project Analysis Office (SWPAO) reclassification of the various components of water delivered to the SWP Contractors.

Figure 4-1. Historical Deliveries of SWP Table A Water, 2009–2018



Note: The differences in historical deliveries from the State Water Project Delivery Capability Report 2017 are due to reclassification of the various components of water delivered to SWP Contractors

Figure 4-2. Total Historical SWP Deliveries, 2009–2018 (by Delivery Type)

Section 5

Existing SWP Water Delivery Capability (2019)

This Section presents estimates of the SWP’s existing (2019) water delivery capability. The estimates are presented below, alongside the results obtained from the 2017 Report. Like this 2019 Report, the 2017 Report incorporated the requirements of BiOps issued by USFWS and NMFS in December 2008 and June 2009, respectively, on the effects of coordinated operations of the SWP and CVP. The 2019 Report also incorporates the 2018 Amendment to the COA between the CVP and SWP, which is a significant difference from the 2017 Report. The BiOps and the COA Amendment are discussed in detail in Section 2, “Regulatory Restrictions on SWP Delta Exports.”

The discussions of SWP water delivery capability in this Section presents the results of DWR’s updated modeling of the SWP’s water delivery capability. A tabular summary of the modeling results will be presented in the Technical Addendum of this report, which will be available online at <https://water.ca.gov/Library/Modeling-and-Analysis/Central-Valley-models-and-tools/>. The Technical Addendum will contain annual delivery probability curves (i.e., exceedance plots) to graphically show the estimated percentage of years in which a given annual delivery is equaled or exceeded.

Hydrologic Sequence

SWP delivery amounts are estimated in this 2019 Report for existing conditions using computer modeling⁵ that incorporates the historic range of hydrologic conditions (i.e., precipitation and runoff) that occurred from water years 1922 through 2015. The 2019 Report is the first to use the CalSim 3 model, which is an improved version of the previously used CalSim II model. The historic hydrologic conditions are adjusted to account for land-use changes (i.e., the current level of development) and upstream flow regulations as existed in 2019, and current sea levels reflecting sea level rise. By using this 94-year historical flow record, the delivery estimates modeled for existing conditions reflect a reasonable range of potential hydrologic conditions from wet years to critically dry years. The flow record has been lengthened from the 82-year flow record (1922-2003) used in the 2017 Report. Because of the change in the length of the flow record, tables showing long-term average results for the 2019 Report distinguish between averages for 1922-2003 and for 1922-2015. The former averages are displayed because they are more directly comparable to 2017 Report results, while the latter are the final delivery amounts for this 2019 Report.

Water Year Type Definition

The Sacramento Valley 40-30-30 index is used to define the water year type. The Sacramento Valley index, previously referred to as the “4 River Index” or “4 Basin Index,” is computed based on the monthly unimpaired runoff of four rivers: the Sacramento River above Bend Bridge near Red Bluff, Feather River inflow to Lake Oroville Reservoir, Yuba River at Smartville, and American River inflow to Folsom Lake.

⁵ CalSim 3 was used to perform the modeling simulations.

<https://water.ca.gov/Library/Modeling-and-Analysis/Central-Valley-models-and-tools/CalSim-3>

The Index is computed as $0.4 * \text{April-July runoff} + 0.3 * \text{October-March runoff} + 0.3 * \text{Prior Year Index}$. The Index is translated into Water Year types as shown in Table 5-1.

Table 5-1. Water year types used in the Sacramento River Index	
Sacramento Valley 40-30-30 Index	Water Year Type
≥ 9.2	Wet
7.8-9.2	Above Normal
6.5-7.8	Below Normal
5.4-6.5	Dry
≤ 5.4	Critical

Existing Demand for Delta Water

Demand levels for the SWP water users in this report are derived from historical data and information from the SWP Contractors themselves. The amount of water that the SWP contractors request each year is related to:

- The magnitude (maximum contracted amount),
- The extent of water conservation measures, in place,
- Local weather patterns, and
- Water costs.

The existing level of development (i.e., the level of water use in the source areas from which the water supply originates) is based on recent land uses and is assumed to be representative of existing conditions for the purposes of this 2019 Report.

SWP Table A Water Demands

The current combined maximum Table A amount is 4,173 taf/year. See Table 4-1 in Section 4, "State Water Project Historical Delivery Capability (2009-2018)". Of the combined maximum Table A amount, 4,133 taf/year is the SWP's maximum Table A water available for delivery from the Delta.

The estimated demands by SWP Contractors for deliveries of Table A water from the Delta under existing conditions is assumed to be the maximum SWP Table A delivery amount for the 2019 Report (Table 5-2), which is the same as in the 2017 Report.

Table 5-2. Comparison of Estimated Average, Maximum, and Minimum Demands for SWP Table A Water, Excluding Butte County and Yuba City (Existing Conditions, in taf/year)

	2017 Report	2019 Report
Average	4,133	4,133
Maximum	4,133	4,133
Minimum	4,133	4,133

SWP Article 21 Water Demands

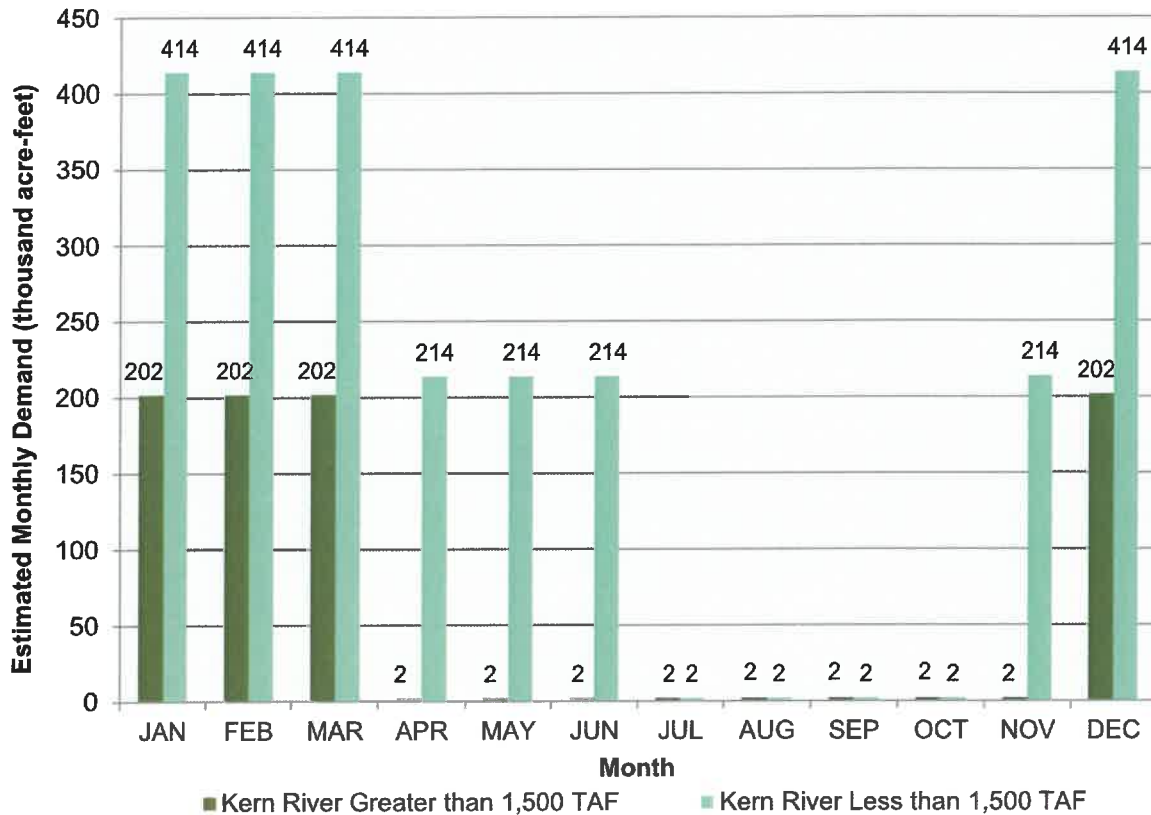
Under Article 21 of the SWP’s long-term water supply contracts, Contractors may receive additional water deliveries only under the following specific conditions:

- Such deliveries do not interfere with SWP Table A allocations and SWP operations;
- Excess water is available in the Delta;
- Capacity is not being used for SWP purposes or scheduled SWP deliveries; and
- Contractors can use the SWP Article 21 water directly or can store it in their own system (i.e., the water cannot be stored in the SWP system).

The demand for SWP Article 21 water by SWP Contractors is assumed to vary depending on the month and weather conditions (i.e., amounts of precipitation and runoff). SWP Article 21 water demands used in the 2019 Report vary depending on whether it is a Kern wet year. A Kern wet year is defined as a year when the annual Kern River flow is projected to be greater than 1,500 taf. There are nine Kern wet years in the simulation period of 1922 – 2015 (1941, 1952, 1969, 1978, 1980, 1983, 1986, 1995, and 1998). Kern River inflows are important because they are a major component of the local water supply for Kern County Water Agency (KCWA), which is the second largest SWP Contractor and possesses significant local groundwater recharge capability. During Kern wet years, KCWA uses more Kern River flows to recharge its groundwater storage and reduce its demand for Article 21 water.

As shown in Figure 5-1, existing demands for SWP Article 21 water estimated for this 2019 Report are assumed to be high during the spring and late fall in Kern non-wet years (214 taf/month) because most of the irrigation districts in the Kern service area cannot rely as heavily on the Kern River flows to recharge their groundwater basins. Demand for Article 21 water is also high during the winter months of December through March in all year types (202 taf in Kern wet years and 414 taf in Kern non-wet years). Demands are assumed to be very low (2 taf/month) from April through November of Kern wet years (because high Kern River flows provide groundwater recharge water) and from July through October of Kern non-wet years.

These demand patterns for SWP Article 21 water are identical to those used in the 2017 Report, for existing conditions.



Note: Values shown are the maximum amount that can be delivered monthly. However, the actual capability of SWP water Contractors to take this amount of SWP Article 21 water is not the sum of these maximum monthly values.

Figure 5-1. SWP Article 21 Demands during Kern Wet Years and Kern Non-Wet Years (Existing Conditions)

Estimates of SWP Table A Water Deliveries

Table 5-3 presents the annual average, maximum, and minimum estimates of SWP Table A deliveries from the Delta for existing conditions, as calculated for the 2017 and 2019 Reports. Average Table A deliveries decreased in the 2019 Report compared to 2017. This was mostly due to the 2018 COA Amendments which reduced SWP exports by about 100 taf. Other factors which affected deliveries are operational updates to the SWP and CVP, the transition from using CalSim II to CalSim 3, and other miscellaneous model logic improvements.

Table 5-3. Comparison of Estimated Average, Maximum, and Minimum Deliveries of SWP Table A Water, Excluding Butte County and Yuba City (Existing Conditions, in taf/year)			
	2017 Report (1922-2003)	2019 Report (1922-2003)	2019 Report (1922-2015)
Average	2,571	2,453	2,430
Maximum	4,098	4,059	4,059
Minimum	336	513	270

Figure 5-2 shows the average annual SWP exports and Table A deliveries from the 2005 through 2019 Reports. Exports and deliveries decreased from 2005 to 2009 due to Delta regulations which constrained exports, culminating in the 2008-2009 BiOps. Average annual exports and deliveries were then relatively stable through 2017, before decreasing again in this 2019 Report due changes include baseline model (CalSim 3.0 from CalSim II), the amendment to the Coordinated Operation Agreement (COA), modeling representation of Old and Middle River (OMR) operational criteria, and CVP and SWP operational updates.

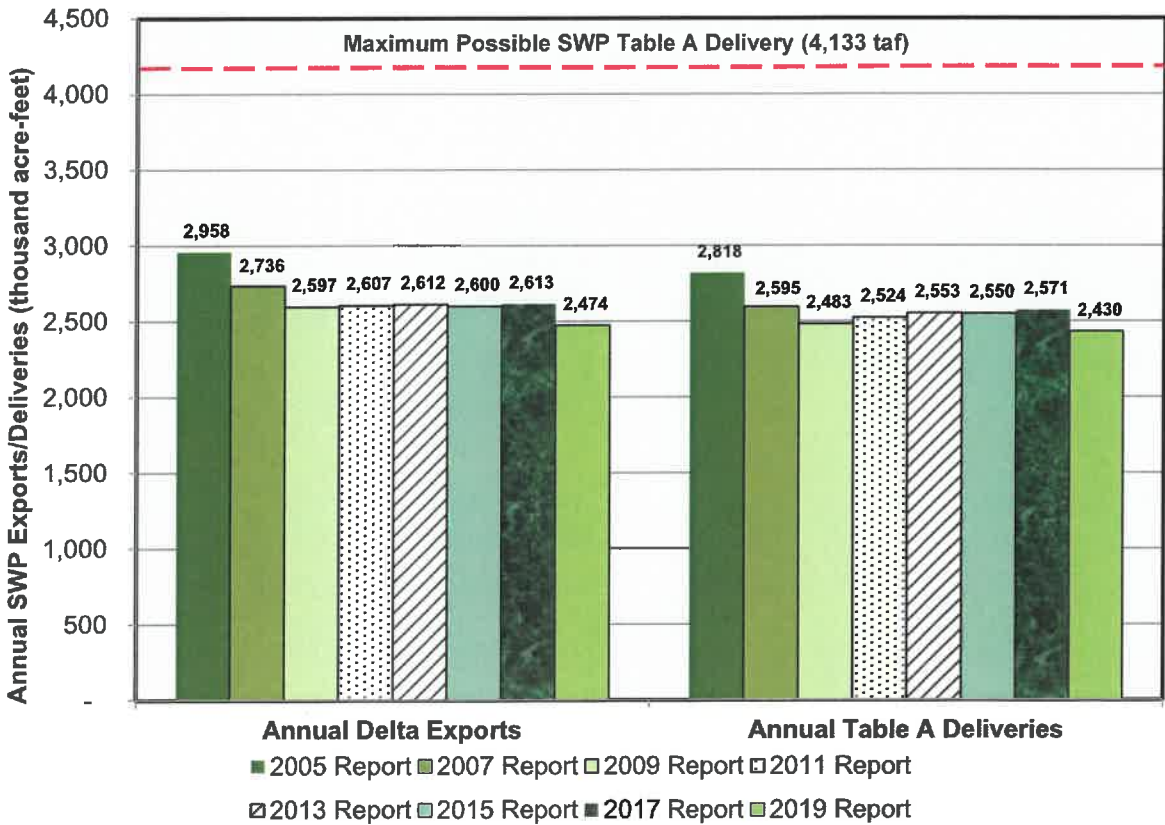


Figure 5-2. Estimated Average Annual Delta Exports and SWP Table A Water Deliveries (Excluding Butte County and Yuba City), for 2005 through 2019 Reports

Figure 5-3 presents the estimated likelihood of delivery of a given amount of SWP Table A water under the existing conditions scenario, as estimated for both the 2017 and 2019 Reports. This figure shows a 71% likelihood (77% with the 2017 Report) that more than 2,000 taf/year of Table A water will be delivered under the current estimates. This was accompanied by a shift in the distribution of the delivery ranges compared to the 2017 Report. Figure 5-3 shows substantial increases in deliveries in the 500-1,000 taf/year range, and substantial decreases in the 3,000-4,000 taf/year range.

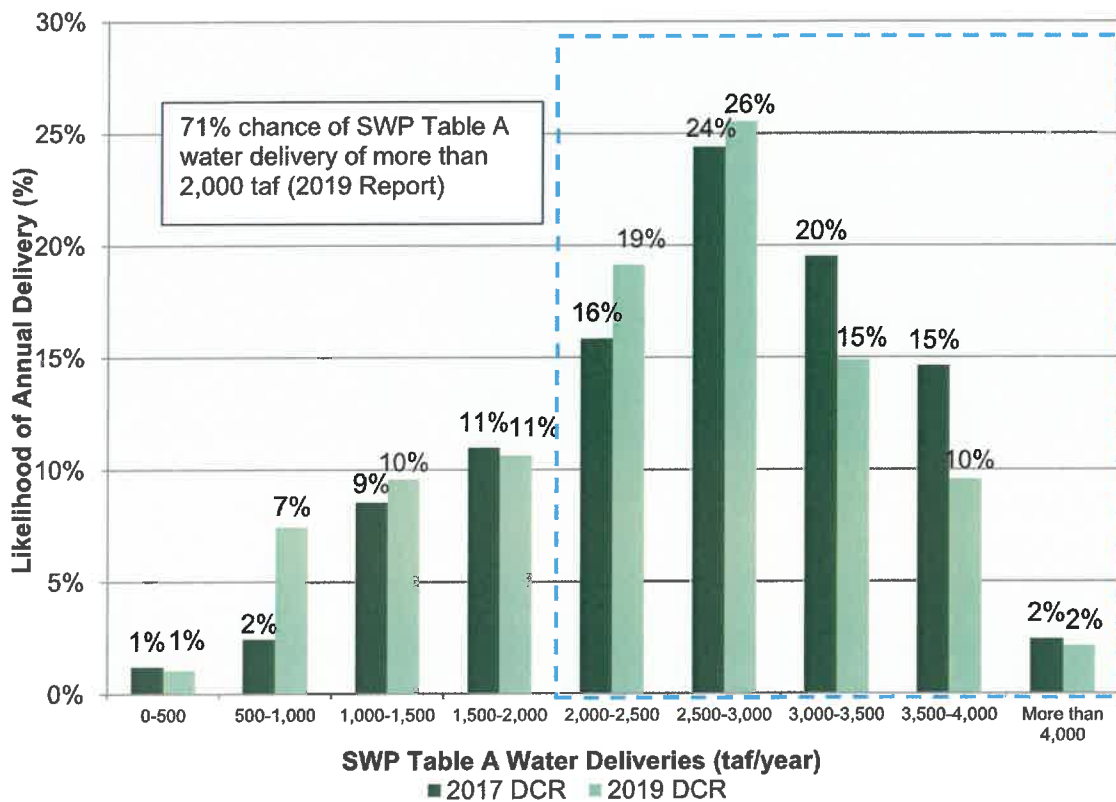


Figure 5-3. Estimated Likelihood of SWP Table A Water Deliveries, by Increments of 500 taf (Excluding Butte County and Yuba City)

Wet-Year Deliveries of SWP Table A Water

Table 5-4 and Figure 5-4 present estimates of SWP Table A water deliveries under existing conditions during possible wet conditions and compares them with corresponding delivery estimates calculated for the 2017 Report. Wet periods for the 2019 Report are analyzed using historical precipitation and runoff patterns from 1922–2015 as a reference, while accounting for existing 2019 conditions (e.g., land use, water infrastructure). For reference, the wettest single year on the 1922-2015 record was 1983. This year had the highest historical value of the Sacramento Valley Index (37.68) and the most annual deliveries in the 2019 Report.

Table 5-4 shows results for the 2019 Report for both the 82-year and 94-year flow records. The former is shown for direct comparison to the 2017 Report results for the long-term average, and the latter is the final delivery amount for this 2019 Report. The wet period averages do not change between these two flow record periods, but an additional wet year (2011) is added that is available only in the 94-year flow record.

The results of modeling existing conditions over historical wet years indicate that SWP Table A water deliveries during wet periods can be estimated to range between yearly averages of 4,059 to 3,021 taf. The most recent wet year (2011) has deliveries of just below 1983 (4,009 taf vs 4,059 taf). Table 5-4 and Figure 5-4 show that the 2019 deliveries of SWP Table A water decreased in all wet periods in comparison to the 2017 Report. The reasons for this decrease are the same as described for Table 5-3 and Figure 5-2.

Table 5-4. Estimated Average and Wet-Period Deliveries of SWP Table A Water, Excluding Butte County and Yuba City (Existing Conditions, in taf/year), and Percent of Maximum SWP Table A Amount, 4,133 taf/year														
	Long-term Average		Single Wet Year (1983)		Single Wet Year (2011)		Wet Periods							
							2-Year (1982-1983)		4-Year (1980-1983)		6-Year (1978-1983)		10-Year (1978-1987)	
2017 Report	2,571	62%	4,098	99%	--	--	3,967	96%	3,569	86%	3,433	83%	3,163	77%
2019 Report (2003)	2,453	59%	4,059	98%	--	--	3,856	93%	3,390	82%	3,314	80%	3,021	73%
2019 Report (2015)	2,430	59%	Same		4,009	97%	Same		Same		Same		Same	

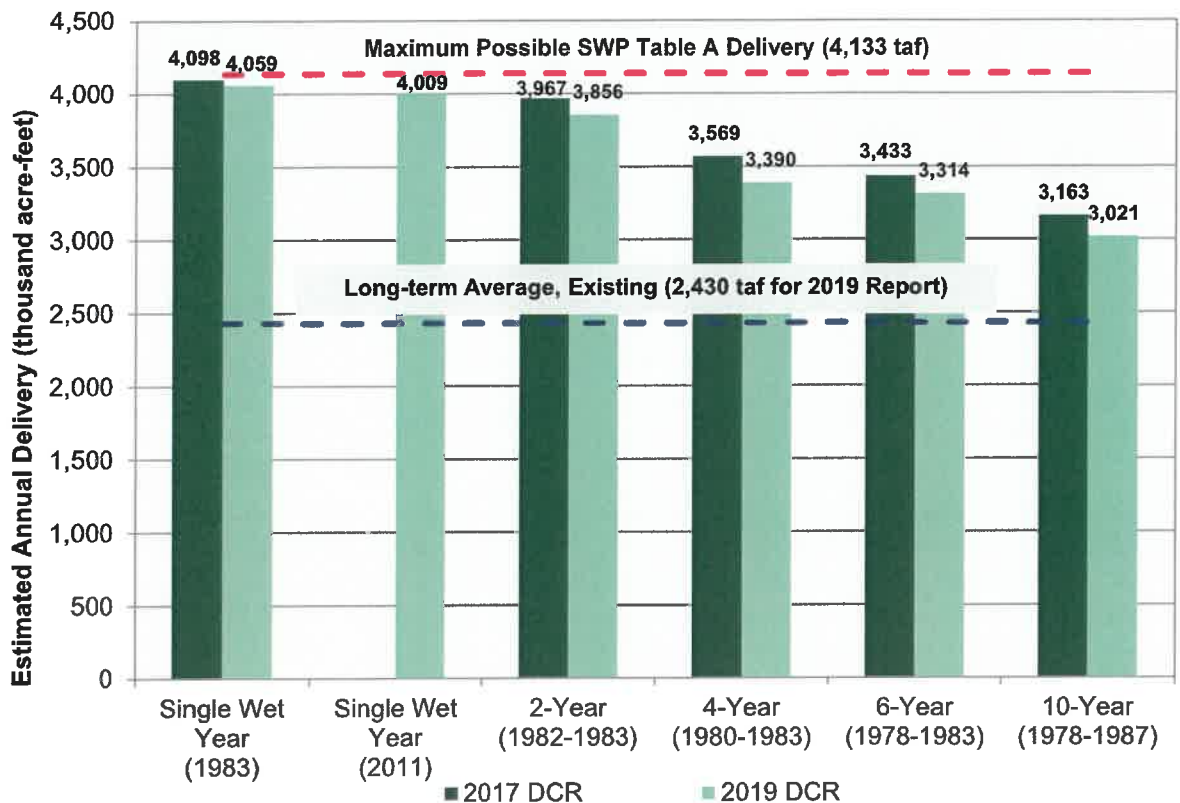


Figure 5-4. Estimated Wet-Period SWP Table A Water Deliveries (Excluding Butte County and Yuba City)

Dry-Year Deliveries of SWP Table A Water

Table 5-5 and Figure 5-5 display estimates of existing-conditions deliveries of SWP Table A water during possible drought conditions and compares them with the corresponding delivery estimates calculated for the 2017 Report. Droughts are analyzed using the historical drought-period precipitation and runoff patterns from 1922 through 2015 as a reference, although existing 2019 conditions (e.g., land use, water infrastructure) are also accounted for in the modeling. For reference, the worst multiyear drought on the 1922-2015 record was the 1929–1934 drought, although the brief drought of 1976–1977 was more intensely dry. The driest single year in terms of deliveries was 2014, though 1977 had a lower Sacramento Valley Index (3.11 vs 4.07). Deliveries were lower in 2014 due to the two preceding years being drier overall, which reduced carryover storage entering 2014.

As with the tables of wet year deliveries, long-term averages for the 2019 Report for both 82-year and 94-year flow records are shown Table 5-5. Two additional dry year periods were added that are only available in the 94-year flow record (2014 and 2014-2015).

The results of modeling existing conditions under historical drought scenarios indicate that SWP Table A water deliveries during dry years can be estimated to range between yearly averages of 270 and 1,214 taf. Table 5-5 shows that the 2019 Report deliveries of SWP Table A water decreased in many of the dry periods in comparison to the 2017

Report. The reasons for this decrease are the same as described for Table 5-3 and Figure 5-2. 1977 is the exception to this decreasing trend.

Table 5-5. Estimated Average and Dry-Period Deliveries of SWP Table A Water, Excluding Butte County and Yuba City (Existing Conditions, in taf/year) and Percent of Maximum SWP Table A Amount, 4,133 taf/year																	
	Long-term Average	Single Dry Year (1977)				Single Dry Year (2014)		Dry Periods									
		2-Year Drought (1976-1977)	2-Year Drought (2014-2015)	4-Year Drought (1931-1934)	6-Year Drought (1987-1992)	6-Year Drought (1929-1934)	2-Year Drought (1976-1977)	2-Year Drought (2014-2015)	4-Year Drought (1931-1934)	6-Year Drought (1987-1992)	6-Year Drought (1929-1934)	2-Year Drought (1976-1977)	2-Year Drought (2014-2015)	4-Year Drought (1931-1934)	6-Year Drought (1987-1992)	6-Year Drought (1929-1934)	
2017 Report	2,571	62%	336	8%	--	--	1,206	29%	--	--	1,397	34%	1,203	29%	1,408	34%	
2019 Report (2003)	2,453	59%	513	12%	--	--	1,047	25%	--	--	1,116	27%	1,093	26%	1,214	29%	
2019 Report (2015)	2,430	59%	Same		270	7%	Same		1,166	28%	Same		Same		Same		

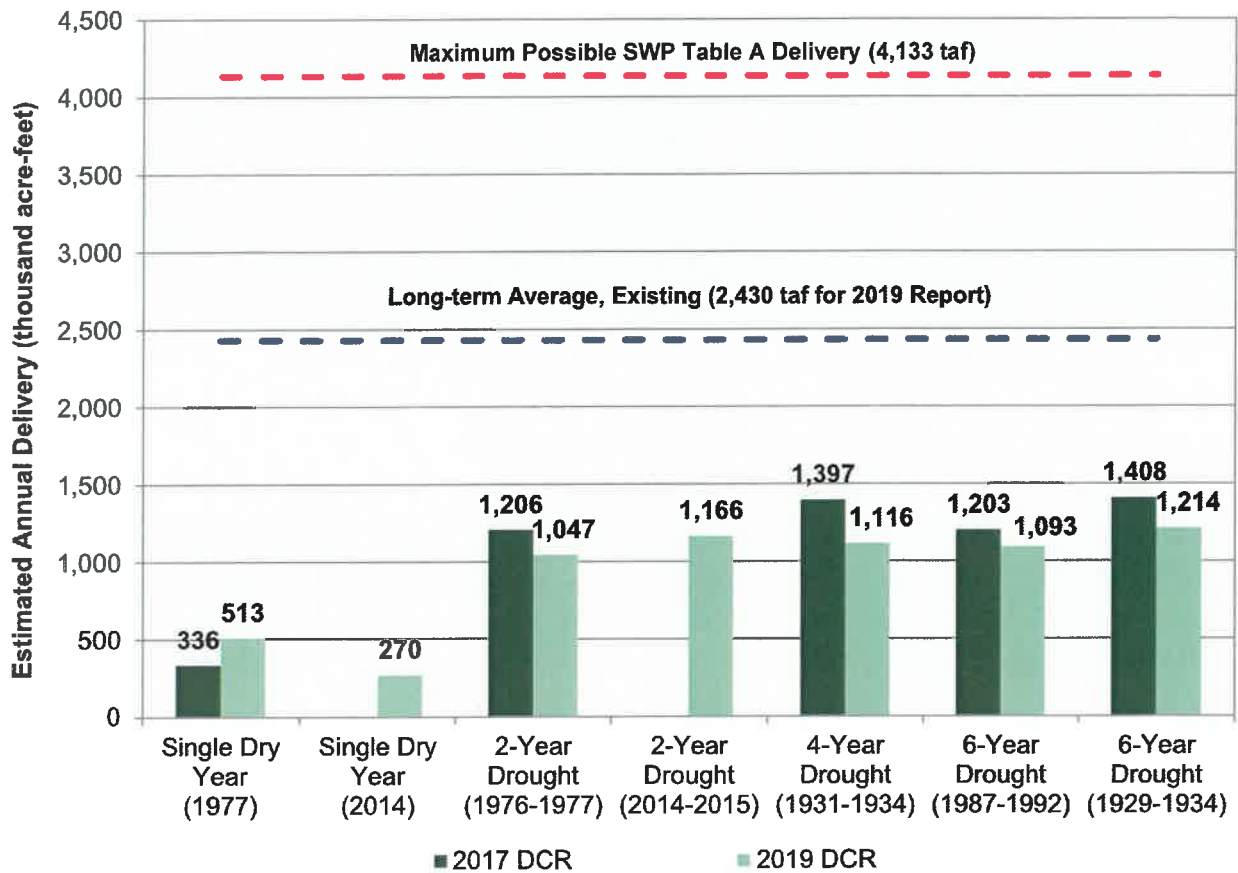


Figure 5-5. Estimated Dry-Period SWP Table A Water Deliveries (Excluding Butte County and Yuba City)

Estimates of SWP Article 21 Water Deliveries

SWP water delivery is a combination of deliveries of Table A water and Article 21 water. Some SWP Contractors store Article 21 water locally when extra water and capacity are available beyond that needed by normal SWP operations. Deliveries of SWP Article 21 water vary not only by year, but also by month. The estimated range of monthly deliveries of SWP Article 21 water is displayed in Figure 5-6. In May through October, essentially no Article 21 water is estimated to be delivered. In the late fall and winter (November through March), maximum monthly deliveries range from 97 to 242 taf/month.

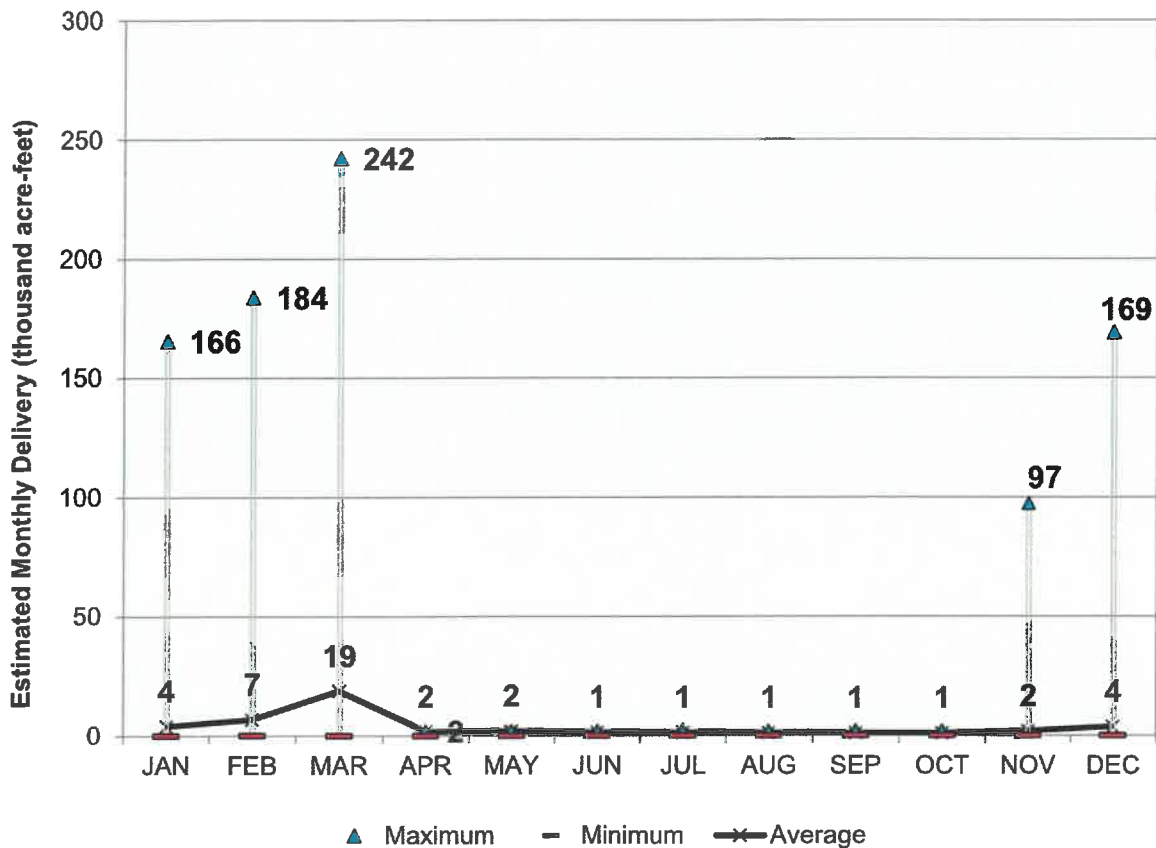


Figure 5-6. Estimated Range of Monthly Deliveries of SWP Article 21 Water (Existing Conditions)

The estimated likelihood that a given amount of SWP Article 21 water will be delivered is presented in Figure 5-7. The 68% chance of delivering 20 taf or less is less than the 84% chance in the 2017 Report. However, this does not indicate a large change in Article 21 operations, as there are a number of years where the delivery amount shifted from just below 20 taf to just above 20 taf. The chance of receiving Article 21 delivery between 20-100 taf increased by 18% as shown in Figure 5-7.

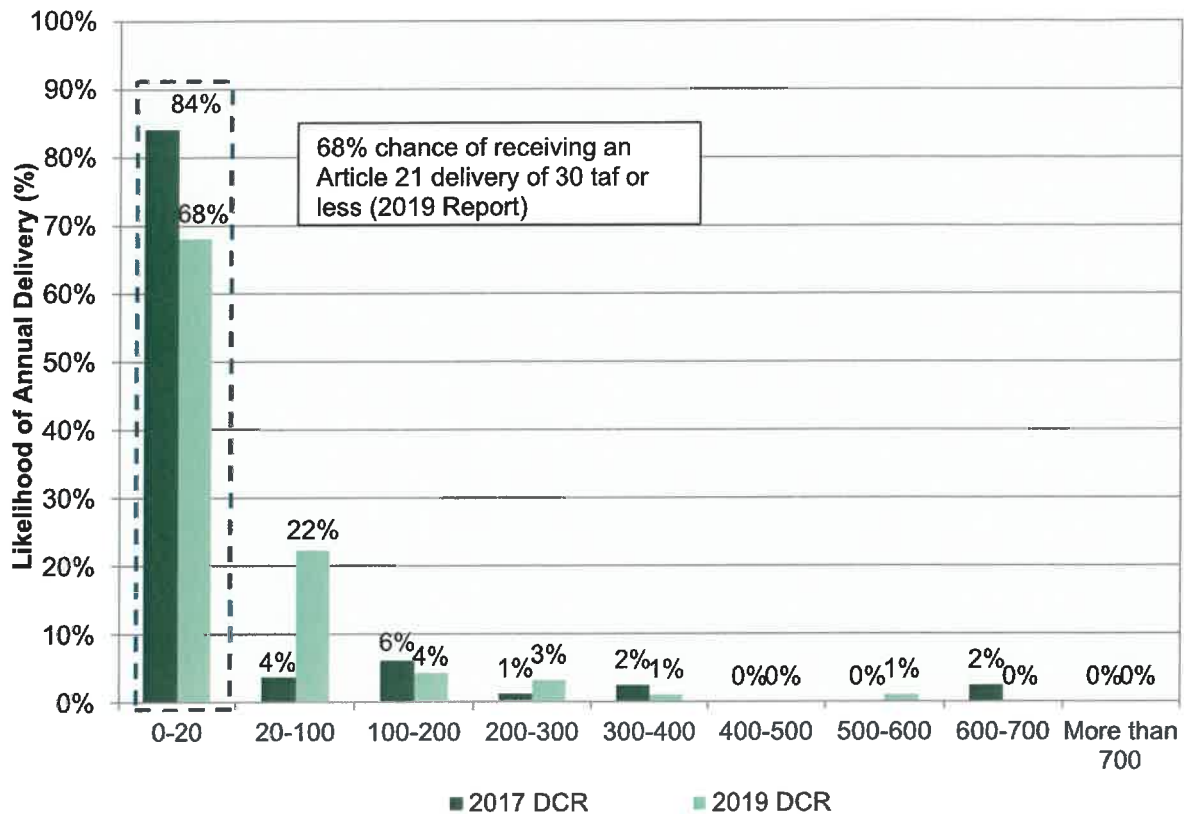


Figure 5-7. Estimated Likelihood of Annual Deliveries of SWP Article 21 Water (Existing Conditions)

Wet-Year Deliveries of SWP Article 21 Water

Table 5-6 shows the estimates of deliveries of SWP Article 21 water during wet periods under existing conditions. Estimated deliveries of SWP Article 21 water in wet years can be estimated to range between yearly averages of 102-321 taf.

Wet-period Article 21 deliveries in this 2019 Report are lower than in the 2017 Report for the long-term average and for two wet periods (1982-1983, 1978-1987), but higher for three other wet periods (1983, 1980-1983, 1978-1983).

	Long-term Average	Single Wet Year (1983)	Single Wet Year (2011)	Wet Periods			
				2-Year Wet (1982-1983)	4-Year Wet (1980-1983)	6-Year Wet (1978-1983)	10-Year Wet (1978-1987)
2017 Report	50	273	--	183	123	86	123
2019 Report (2003)	45	321	--	171	136	102	121
2019 Report (2015)	44	Same	96	Same	Same	Same	Same

Dry-Year Deliveries of SWP Article 21 Water

Table 5-7 shows the estimates of deliveries of SWP Article 21 water during dry periods under existing conditions. Although deliveries of SWP Article 21 water are smaller during dry years than during wet ones, opportunities exist to deliver SWP Article 21 water during multiyear drought periods. As modeled, deliveries in dry years are often small (less than 20 taf); however, in the 2019 Report all drought periods can support some level of Article 21 deliveries, which are all fairly similar, except for the 1977 single dry year and 1987-1992 six-year drought period.

	Long-term Average	Single Dry Year (1977)	Single Dry Year (2014)	Dry Periods				
				2-Year Drought (1976-1977)	2-Year Drought (2014-2015)	4-Year Drought (1931-1934)	6-Year Drought (1987-1992)	6-Year Drought (1929-1934)
2017 Report	50	8	--	14	--	16	13	15
2019 Report (2003)	45	16	--	17	--	16	18	17
2019 Report (2015)	44	Same	18	Same	14	Same	Same	Same

Section 6

Historical SWP Delivery Tables for 2009-2018

The State Water Project (SWP) contracts define several types of SWP water available for delivery to its Contractors under specific circumstances: Table A water, Article 21 water, turnback pool water, and carryover water. Many SWP Contractors frequently use Article 21, turnback pool, and carryover water to increase or decrease the amount of water available to them under SWP Table A.

Tables 6-1 through 6-10 list annual historical deliveries by SWP water type for each Contractor for 2009 through 2018. This data was obtained from SWPAO. Similar delivery tables are presented for years 2007– 2016 in the *State Water Project Delivery Capability Report 2017*. Any differences in values presented in this 2019 report and those in the 2017 report are due to reclassification of deliveries since the production of the 2017 report.

Table 6-1. Historical State Water Project Deliveries, Calendar Year 2009

Contractor Location	SWP Contractor	SWP Water Type Delivered (acre-feet)				Total SWP Deliveries (acre-feet)
		Table A	Article 21	Carryover	Turnback	
Feather River Area	Butte County	10,206	-	-	-	10,206
	Plumas County FCWCD	200	-	-	-	200
	Yuba City	2,114	-	-	-	2,114
	Subtotal	12,520	-	-	-	12,520
North Bay Area	Napa County FCWCD	2,723	1,588	4,475	13	8,799
	Solano County WA	7,118	4,444	3,123	-	14,685
	Subtotal	9,841	6,032	7,598	13	23,484
South Bay Area	Alameda County FCWCD, Zone 7	11,746	-	14,583	-	26,329
	Alameda County WD	5,911	-	10,494	8	16,413
	Santa Clara Valley WD	9,188	-	23,867	54	33,109
	Subtotal	26,845	-	48,944	62	75,851
San Joaquin Valley Area	Dudley Ridge WD	13,185	-	7,810	32	21,027
	Empire West Side ID	1,034	-	-	-	1,034
	Kern County WA	325,426	-	56,367	544	382,337
	Kings County	3,153	-	70	5	3,228
	Oak Flat WD	1,825	-	66	3	1,894
	Tulare Lake Basin WSD	35,160	-	1,271	52	36,483
	Subtotal	379,783	-	65,584	636	446,003
Central Coastal Area	San Luis Obispo County FCWCD	9,723	-	-	-	9,723
	Santa Barbara County FCWCD	4,961	-	4,523	25	9,509
	Subtotal	14,684	-	4,523	25	19,232
Southern California Area	Antelope Valley-East Kern WA	13,499	-	18,408	77	31,984
	Castaic Lake WA	14,858	-	9,529	52	24,439
	Coachella Valley WD	40,845	-	-	66	40,911
	Crestline-Lake Arrowhead WA	1,000	-	893	-	1,893
	Desert WA	16,865	-	-	27	16,892
	Littlerock Creek ID	920	-	-	-	920
	Metropolitan WD of Southern California	696,817	-	10,721	1,042	708,580
	Mojave WA	30,300	-	242	-	30,542
	Palmdale WD	2,470	-	3,229	-	5,699
	San Bernardino Valley MWD	26,085	-	9,348	-	35,433
	San Gabriel Valley MWD	11,516	-	-	-	11,516
	San Geronio Pass WA	5,312	-	480	-	5,792
	Ventura County WPD	3,890	-	-	-	3,890
Subtotal	864,377	-	52,850	1,264	918,491	
TOTAL SWP DELIVERIES		1,308,050	6,032	179,499	2,000	1,495,581

Table 6-2. Historical State Water Project Deliveries, Calendar Year 2010

Contractor Location	SWP Contractor	SWP Water Type Delivered (acre-feet)				Total SWP Deliveries (acre-feet)
		Table A	Article 21	Carryover	Turnback	
Feather River Area	Butte County	807	-	-	-	807
	Plumas County FCWCD	243	-	-	-	243
	Yuba City	2,331	-	-	-	2,331
	Subtotal	3,381	-	-	-	3,381
North Bay Area	Napa County FCWCD	7,275	2,207	2,845	90	12,417
	Solano County WA	13,793	5,298	3,661	-	22,752
	Subtotal	21,068	7,505	6,506	90	35,169
South Bay Area	Alameda County FCWCD, Zone 7	28,694	-	13,104	249	42,047
	Alameda County WD	11,668	-	10,889	14	22,571
	Santa Clara Valley WD	37,850	-	22,471	34	60,355
	Subtotal	78,212	-	46,464	297	124,973
San Joaquin Valley Area	Dudley Ridge WD	19,650	-	9,750	156	29,556
	Empire West Side ID	380	-	166	-	546
	Kern County WA	411,821	-	55,419	3,044	470,284
	Kings County	4,094	-	522	29	4,645
	Oak Flat WD	2,412	-	455	18	2,885
	Tulare Lake Basin WSD	39,835	-	3,199	275	43,309
	Subtotal	478,192	-	69,511	3,522	551,225
Central Coastal Area	San Luis Obispo County FCWCD	3,480	-	277	-	3,757
	Santa Barbara County FCWCD	8,640	-	8,995	140	17,775
	Subtotal	12,120	-	9,272	140	21,532
Southern California Area	Antelope Valley-East Kern WA	35,312	-	20,813	438	56,563
	Castaic Lake WA	37,054	-	14,501	295	51,850
	Coachella Valley WD	69,175	-	7,595	429	77,199
	Crestline-Lake Arrowhead WA	1,357	-	-	-	1,357
	Desert WA	27,875	-	3,135	173	31,183
	Littlerock Creek ID	1,150	-	-	-	1,150
	Metropolitan WD of Southern California	900,210	-	67,783	5,922	973,915
	Mojave WA	41,132	-	20	-	41,152
	Palmdale WD	5,585	-	5,325	59	10,969
	San Bernardino Valley MWD	38,133	-	11,273	-	49,406
	San Gabriel Valley MWD	14,400	-	-	-	14,400
	San Geronio Pass WA	5,226	-	1,608	6	6,840
	Ventura County WPD	4,075	-	-	-	4,075
Subtotal	1,180,684	-	132,053	7,322	1,320,059	
TOTAL SWP DELIVERIES		1,773,657	7,505	263,806	11,371	2,056,339

Table 6-3. Historical State Water Project Deliveries, Calendar Year 2011

Contractor Location	SWP Contractor	SWP Water Type Delivered (acre-feet)				Total SWP Deliveries (acre-feet)
		Table A	Article 21	Carryover	Turnback	
Feather River Area	Butte County	1,092	-	-	-	1,092
	Plumas County FCWCD	98	-	-	-	98
	Yuba City	2,297	-	-	-	2,297
	Subtotal	3,487	-	-	-	3,487
North Bay Area	Napa County FCWCD	9,426	-	1,388	-	10,814
	Solano County WA	9,620	14,739	-	-	24,359
	Subtotal	19,046	14,739	1,388	-	35,173
South Bay Area	Alameda County FCWCD, Zone 7	39,066	-	11,675	1,319	52,060
	Alameda County WD	24,813	1,959	9,332	506	36,610
	Santa Clara Valley WD	64,538	970	20,491	-	85,999
	Subtotal	128,417	2,929	41,498	1,825	174,669
San Joaquin Valley Area	Dudley Ridge WD	40,141	11,666	5,524	823	58,154
	Empire West Side ID	1,626	138	151	-	1,915
	Kern County WA	753,707	194,119	119,773	16,068	1,083,667
	Kings County	5,294	552	558	152	6,556
	Oak Flat WD	2,644	-	71	-	2,715
	Tulare Lake Basin WSD	39,056	6,909	4,626	1,454	52,045
	Subtotal	842,468	213,384	130,703	18,497	1,205,052
Central Coastal Area	San Luis Obispo County FCWCD	3,340	-	479	-	3,819
	Santa Barbara County FCWCD	29,132	-	13,770	-	42,902
	Subtotal	32,472	-	14,249	-	46,721
Southern California Area	Antelope Valley-East Kern WA	77,549	7,629	5,888	-	91,066
	Castaic Lake WA	34,067	400	9,332	-	43,799
	Coachella Valley WD	88,017	-	-	2,262	90,279
	Crestline-Lake Arrowhead WA	423	-	51	-	474
	Desert WA	36,139	-	-	240	36,379
	Littlerock Creek ID	-	-	-	-	-
	Metropolitan WD of Southern California	1,286,935	181,610	55,540	8,237	1,532,322
	Mojave WA	4,831	-	268	-	5,099
	Palmdale WD	12,294	-	567	-	12,861
	San Bernardino Valley MWD	30,916	-	7,210	-	38,126
	San Gabriel Valley MWD	23,040	-	-	-	23,040
	San Geronio Pass WA	8,884	-	1,619	-	10,503
	Ventura County WPD	4,000	-	-	-	4,000
Subtotal	1,607,095	189,639	80,475	10,739	1,887,948	
TOTAL SWP DELIVERIES		2,632,985	420,691	268,313	31,061	3,353,050

Table 6-4. Historical State Water Project Deliveries, Calendar Year 2012

Contractor Location	SWP Contractor	SWP Water Type Delivered (acre-feet)				Total SWP Deliveries (acre-feet)
		Table A	Article 21	Carryover	Turnback	
Feather River Area	Butte County	17,875	-	-	-	17,875
	Plumas County FCWCD	79	-	-	-	79
	Yuba City	2,695	-	-	-	2,695
	Subtotal	20,649	-	-	-	20,649
North Bay Area	Napa County FCWCD	5,065	-	4,278	64	9,407
	Solano County WA	11,673	-	9,641	-	21,314
	Subtotal	16,738	-	13,919	64	30,721
South Bay Area	Alameda County FCWCD, Zone 7	32,301	-	20,357	179	52,837
	Alameda County WD	11,951	-	8,787	93	20,831
	Santa Clara Valley WD	34,612	-	11,462	222	46,296
	Subtotal	78,864	-	40,606	494	119,964
San Joaquin Valley Area	Dudley Ridge WD	17,694	-	-	112	17,806
	Empire West Side ID	1,468	-	774	-	2,242
	Kern County WA	560,969	-	32,477	2,180	595,626
	Kings County	5,337	-	2,001	21	7,359
	Oak Flat WD	2,596	-	612	-	3,208
	Tulare Lake Basin WSD	53,630	-	32,081	197	85,908
	Subtotal	641,694	-	67,945	2,510	712,149
Central Coastal Area	San Luis Obispo County FCWCD	3,111	-	833	-	3,944
	Santa Barbara County FCWCD	20,874	-	43	-	20,917
	Subtotal	23,985	-	876	-	24,861
Southern California Area	Antelope Valley-East Kern WA	80,694	-	32,854	-	113,548
	Castaic Lake WA	42,707	-	11,350	-	54,057
	Coachella Valley WD	89,928	-	22,663	307	112,898
	Crestline-Lake Arrowhead WA	624	-	-	-	624
	Desert WA	36,238	-	8,461	124	44,823
	Littlerock Creek ID	-	-	-	-	-
	Metropolitan WD of Southern California	1,086,084	-	118,172	4,241	1,208,497
	Mojave WA	4,672	-	6,572	-	11,244
	Palmdale WD	9,959	-	4,736	-	14,695
	San Bernardino Valley MWD	65,102	-	47,870	-	112,972
	San Gabriel Valley MWD	18,720	-	-	-	18,720
	San Geronio Pass WA	5,968	-	4,956	-	10,924
	Ventura County WPD	4,353	-	-	-	4,353
Subtotal	1,445,049	-	257,634	4,672	1,707,355	
TOTAL SWP DELIVERIES		2,226,979	-	380,980	7,740	2,615,699

Table 6-5. Historical State Water Project Deliveries, Calendar Year 2013

Contractor Location	SWP Contractor	SWP Water Type Delivered (acre-feet)				Total SWP Deliveries (acre-feet)
		Table A	Article 21	Carryover	Turnback	
Feather River Area	Butte County	9,233	-	-	-	9,233
	Plumas County FCWCD	366	-	-	-	366
	Yuba City	3,360	-	1,490	-	4,850
	Subtotal	12,959	-	1,490	-	14,449
North Bay Area	Napa County FCWCD	2,963	-	9,075	-	12,038
	Solano County WA	5,355	-	17,805	-	23,160
	Subtotal	8,318	-	26,880	-	35,198
South Bay Area	Alameda County FCWCD, Zone 7	14,059	-	21,042	2,596	37,697
	Alameda County WD	4,241	-	15,349	50	19,640
	Santa Clara Valley WD	9,353	-	16,261	10,749	36,363
	Subtotal	27,653	-	52,652	13,395	93,700
San Joaquin Valley Area	Dudley Ridge WD	6,113	-	9,951	5,412	21,476
	Empire West Side ID	1,004	-	482	16	1,502
	Kern County WA	314,466	-	73,303	37,005	424,774
	Kings County	2,851	-	591	1,000	4,442
	Oak Flat WD	583	-	2,200	7	2,790
	Tulare Lake Basin WSD	27,803	-	4,169	8,400	40,372
	Subtotal	352,820	-	90,696	51,840	495,356
Central Coastal Area	San Luis Obispo County FCWCD	1,178	-	2,503	-	3,681
	Santa Barbara County FCWCD	3,252	-	12,233	-	15,485
	Subtotal	4,430	-	14,736	-	19,166
Southern California Area	Antelope Valley-East Kern WA	37,628	-	13,386	-	51,014
	Castaic Lake WA	33,320	-	28,434	-	61,754
	Coachella Valley WD	48,423	-	-	164	48,587
	Crestline-Lake Arrowhead WA	1,368	-	2,000	-	3,368
	Desert WA	19,513	-	-	66	19,579
	Littlerock Creek ID	-	-	-	-	-
	Metropolitan WD of Southern California	619,863	-	106,288	32,267	758,418
	Mojave WA	25,294	-	2,852	-	28,146
	Palmdale WD	4,559	-	3,122	-	7,681
	San Bernardino Valley MWD	26,159	-	4,426	-	30,585
	San Gabriel Valley MWD	10,080	-	-	-	10,080
	San Geronio Pass WA	2,339	-	3,729	1,000	7,068
	Ventura County WPD	2,890	-	-	-	2,890
Subtotal	831,436	-	164,237	33,497	1,029,170	
TOTAL SWP DELIVERIES		1,237,616	-	350,691	98,732	1,687,039

Table 6-6. Historical State Water Project Deliveries, Calendar Year 2014

Contractor Location	SWP Contractor	SWP Water Type Delivered (acre-feet)				Total SWP Deliveries (acre-feet)
		Table A	Article 21	Carryover	Turnback	
Feather River Area	Butte County	2,596	-	-	-	2,596
	Plumas County FCWCD	251	-	-	-	251
	Yuba City	96	-	4,085	-	4,181
	Subtotal	2,943	-	4,085	-	7,028
North Bay Area	Napa County FCWCD	41	1,444	9,731	-	11,216
	Solano County WA	450	-	9,493	-	9,943
	Subtotal	491	1,444	19,224	-	21,159
South Bay Area	Alameda County FCWCD, Zone 7	1,367	-	17,646	-	19,013
	Alameda County WD	-	-	10,326	-	10,326
	Santa Clara Valley WD	-	-	12,339	79	12,418
	Subtotal	1,367	-	40,311	79	41,757
San Joaquin Valley Area	Dudley Ridge WD	1,783	-	15,783	40	17,606
	Empire West Side ID	104	-	46	303	453
	Kern County WA	1,393	-	25,217	520	27,130
	Kings County	112	-	360	-	472
	Oak Flat WD	-	-	983	-	983
	Tulare Lake Basin WSD	3,942	-	3,181	-	7,123
	Subtotal	7,334	-	45,570	863	53,767
Central Coastal Area	San Luis Obispo County FCWCD	379	-	2,693	-	3,072
	Santa Barbara County FCWCD	289	-	10,533	-	10,822
	Subtotal	668	-	13,226	-	13,894
Southern California Area	Antelope Valley-East Kern WA	2,152	-	12,345	111	14,608
	Castaic Lake WA	451	-	7,743	-	8,194
	Coachella Valley WD	6,918	-	-	-	6,918
	Crestline-Lake Arrowhead WA	83	-	645	-	728
	Desert WA	2,788	-	-	-	2,788
	Littlerock Creek ID	106	-	-	-	106
	Metropolitan WD of Southern California	59,900	-	223,358	-	283,258
	Mojave WA	3,347	-	2,228	-	5,575
	Palmdale WD	1,005	-	3,670	-	4,675
	San Bernardino Valley MWD	-	-	6,320	-	6,320
	San Gabriel Valley MWD	1,434	-	-	-	1,434
	San Geronio Pass WA	603	-	4,572	-	5,175
	Ventura County WPD	93	-	-	-	93
Subtotal	78,880	-	260,881	111	339,872	
TOTAL SWP DELIVERIES		91,683	1,444	383,297	1,053	477,477

Table 6-7. Historical State Water Project Deliveries, Calendar Year 2015

Contractor Location	SWP Contractor	SWP Water Type Delivered (acre-feet)				Total SWP Deliveries (acre-feet)
		Table A	Article 21	Carryover	Turnback	
Feather River Area	Butte County	3,315	-	-	-	3,315
	Plumas County FCWCD	285	-	-	-	285
	Yuba City	2,400	-	604	-	3,004
	Subtotal	6,000	-	604	-	6,604
North Bay Area	Napa County FCWCD	5,365	690	3,896	35	9,986
	Solano County WA	2,020	-	15,718	-	17,738
	Subtotal	7,385	690	19,614	35	27,724
South Bay Area	Alameda County FCWCD, Zone 7	4,686	-	3,295	97	8,078
	Alameda County WD	-	-	2,233	51	2,284
	Santa Clara Valley WD	-	-	2,858	120	2,978
	Subtotal	4,686	-	8,386	268	13,340
San Joaquin Valley Area	Dudley Ridge WD	7,414	-	1,570	55	9,039
	Empire West Side ID	578	-	46	-	624
	Kern County WA	173,581	-	43,265	707	217,553
	Kings County	698	-	333	11	1,042
	Oak Flat WD	696	-	348	-	1,044
	Tulare Lake Basin WSD	16,359	-	571	105	17,035
	Subtotal	199,326	-	46,133	878	246,337
Central Coastal Area	San Luis Obispo County FCWCD	3,411	-	-	-	3,411
	Santa Barbara County FCWCD	4,973	-	1,089	55	6,117
	Subtotal	8,384	-	1,089	55	9,528
Southern California Area	Antelope Valley-East Kern WA	21,810	-	5,154	174	27,138
	Castaic Lake WA	11,068	-	4,121	-	15,189
	Coachella Valley WD	27,670	-	-	-	27,670
	Crestline-Lake Arrowhead WA	154	-	247	-	401
	Desert WA	11,150	-	-	67	11,217
	Littlerock Creek ID	460	-	-	-	460
	Metropolitan WD of Southern California	379,706	-	35,675	1,374	416,755
	Mojave WA	16,538	-	1,871	-	18,409
	Palmdale WD	2,420	-	-	26	2,446
	San Bernardino Valley MWD	17,737	-	9,012	123	26,872
	San Gabriel Valley MWD	5,759	-	-	-	5,759
	San Geronio Pass WA	3,343	-	135	-	3,478
	Ventura County WPD	1,000	-	-	-	1,000
Subtotal	498,815	-	56,215	1,764	556,794	
TOTAL SWP DELIVERIES		724,596	690	132,041	3,000	860,327

Table 6–8. Historical State Water Project Deliveries, Calendar Year 2016

Contractor Location	SWP Contractor	SWP Water Type Delivered (acre–feet)				Total SWP Deliveries (acre–feet)
		Table A	Article 21	Carryover	Turnback	
Feather River Area	Butte County	15,634	-	-	-	15,634
	Plumas County FCWCD	387	-	-	-	387
	Yuba City	1,229	-	-	-	1,229
	Subtotal	17,250	-	-	-	17,250
North Bay Area	Napa County FCWCD	13,138	3,319	-	295	16,752
	Solano County WA	12,595	-	4,130	-	16,725
	Subtotal	25,733	3,319	4,130	295	33,477
South Bay Area	Alameda County FCWCD, Zone 7	41,987	-	8,450	819	51,256
	Alameda County WD	14,280	-	8,400	-	22,680
	Santa Clara Valley WD	40,214	-	32,863	-	73,077
	Subtotal	96,481	-	49,713	819	147,013
San Joaquin Valley Area	Dudley Ridge WD	17,372	-	1,656	461	19,489
	Empire West Side ID	1,800	-	22	-	1,822
	Kern County WA	458,825	-	-	3,533	462,358
	Kings County	2,466	-	1,095	95	3,656
	Oak Flat WD	832	-	1,023	-	1,855
	Tulare Lake Basin WSD	41,126	-	1,135	126	42,387
	Subtotal	522,421	-	4,931	4,215	531,567
Central Coastal Area	San Luis Obispo County FCWCD	4,199	-	-	-	4,199
	Santa Barbara County FCWCD	12,003	-	917	-	12,920
	Subtotal	16,202	-	917	-	17,119
Southern California Area	Antelope Valley–East Kern WA	56,148	-	6,054	1,471	63,673
	Castaic Lake WA	31,147	-	2,241	-	33,388
	Coachella Valley WD	52,922	-	-	-	52,922
	Crestline–Lake Arrowhead WA	1,873	-	-	-	1,873
	Desert WA	21,327	-	-	566	21,893
	Littlerock Creek ID	1,380	-	-	-	1,380
	Metropolitan WD of Southern California	1,006,900	-	-	6,871	1,013,771
	Mojave WA	32,045	-	1,170	-	33,215
	Palmdale WD	7,805	-	-	-	7,805
	San Bernardino Valley MWD	57,859	-	2,348	-	60,207
	San Gabriel Valley MWD	17,280	-	-	-	17,280
	San Geronio Pass WA	8,683	-	933	-	9,616
	Ventura County WPD	3,000	-	-	-	3,000
Subtotal	1,298,369	-	12,746	8,908	1,320,023	
TOTAL SWP DELIVERIES		1,976,456	3,319	72,437	14,237	2,066,449

Table 6–9. Historical State Water Project Deliveries, Calendar Year 2017

Contractor Location	SWP Contractor	SWP Water Type Delivered (acre–feet)				Total SWP Deliveries (acre–feet)
		Table A	Article 21	Carryover	Turnback	
Feather River Area	Butte County	21,636	-	-	-	21,636
	Plumas County FCWCD	363	-	-	-	363
	Yuba City	1,746	-	-	-	1,746
	Subtotal	23,745	-	-	-	23,745
North Bay Area	Napa County FCWCD	974	6,429	822	-	8,225
	Solano County WA	15,190	-	-	-	15,190
	Subtotal	16,164	6,429	822	-	23,415
South Bay Area	Alameda County FCWCD, Zone 7	52,787	-	2,959	712	56,458
	Alameda County WD	27,260	-	1,776	-	29,036
	Santa Clara Valley WD	28,779	-	25,972	582	55,333
	Subtotal	108,826	-	30,707	1,294	140,827
San Joaquin Valley Area	Dudley Ridge WD	27,917	15,722	9,838	400	53,877
	Empire West Side ID	1,698	-	-	-	1,698
	Kern County WA	760,939	114,112	165,613	8,670	1,049,334
	Kings County	5,149	1,414	-	82	6,645
	Oak Flat WD	2,858	-	35	-	2,893
	Tulare Lake Basin WSD	49,119	-	7,336	1,465	57,920
Subtotal	847,680	131,248	182,822	10,617	1,172,367	
Central Coastal Area	San Luis Obispo County FCWCD	2,263	-	582	-	2,845
	Santa Barbara County FCWCD	25,243	4,720	18,150	401	48,514
	Subtotal	27,506	4,720	18,732	401	51,359
Southern California Area	Antelope Valley–East Kern WA	83,343	17,400	15,581	-	116,324
	Castaic Lake WA	38,132	-	33,442	-	71,574
	Coachella Valley WD	47,617	-	30,088	806	78,511
	Crestline–Lake Arrowhead WA	2,897	-	-	-	2,897
	Desert WA	19,188	-	12,123	325	31,636
	Littlerock Creek ID	-	-	-	-	-
	Metropolitan WD of Southern California	1,283,294	123,950	130,511	-	1,537,755
	Mojave WA	29,995	-	820	-	30,815
	Palmdale WD	7,751	-	1,587	-	9,338
	San Bernardino Valley MWD	69,605	-	4,141	-	73,746
	San Gabriel Valley MWD	17,505	3,057	7	-	20,569
	San Geronio Pass WA	9,546	-	1,700	-	11,246
	Ventura County WPD	4,250	10,000	-	-	14,250
Subtotal	1,613,123	154,407	230,000	1,131	1,998,661	
TOTAL SWP DELIVERIES		2,637,044	2,637,044	296,804	463,083	3,410,374

Table 6-10. Historical State Water Project Deliveries, Calendar Year 2018

Contractor Location	SWP Contractor	SWP Water Type Delivered (acre-feet)				Total SWP Deliveries (acre-feet)
		Table A	Article 21	Carryover	Turnback	
Feather River Area	Butte County	9,225	-	-	-	9,225
	Plumas County FCWCD	508	-	-	-	508
	Yuba City	-	-	1,715	-	1,715
	Subtotal	9,733	-	1,715	-	11,448
North Bay Area	Napa County FCWCD	10,159	2,180	5,243	-	17,582
	Solano County WA	12,757	-	11,627	-	24,384
	Subtotal	22,916	2,180	16,870	-	41,966
South Bay Area	Alameda County FCWCD, Zone 7	21,170	-	15,739	-	36,909
	Alameda County WD	4,721	-	8,440	-	13,161
	Santa Clara Valley WD	26,297	-	56,221	-	82,518
	Subtotal	52,188	-	80,400	-	132,588
San Joaquin Valley Area	Dudley Ridge WD	13,621	-	7,415	-	21,036
	Empire West Side ID	739	-	852	-	1,591
	Kern County WA	243,956	-	74,382	-	318,338
	Kings County	1,284	-	2,363	-	3,647
	Oak Flat WD	302	-	1,987	-	2,289
	Tulare Lake Basin WSD	10,318	-	23,555	-	33,873
	Subtotal	270,220	-	110,554	-	380,774
Central Coastal Area	San Luis Obispo County FCWCD	2,427	-	-	-	2,427
	Santa Barbara County FCWCD	11,415	-	11,300	-	22,715
	Subtotal	13,842	-	11,300	-	25,142
Southern California Area	Antelope Valley-East Kern WA	40,415	-	26,121	-	66,536
	Castaic Lake WA	12,473	-	24,424	-	36,897
	Coachella Valley WD	48,423	-	69,175	-	117,598
	Crestline-Lake Arrowhead WA	199	-	735	-	934
	Desert WA	19,513	-	27,875	-	47,388
	Littlerock Creek ID	805	-	-	-	805
	Metropolitan WD of Southern California	578,824	-	61,561	-	640,385
	Mojave WA	14,213	-	5,471	-	19,684
	Palmdale WD	7,137	-	4,828	-	11,965
	San Bernardino Valley MWD	23,830	-	17,605	-	41,435
	San Gabriel Valley MWD	10,080	-	6,975	-	17,055
	San Geronio Pass WA	2,158	-	3,390	-	5,548
	Ventura County WPD	7,000	-	-	-	7,000
Subtotal	765,070	-	248,160	-	1,013,230	
TOTAL SWP DELIVERIES		1,133,969	2,180	468,999	-	1,605,148



CENTRAL COAST WATER AUTHORITY

MEMORANDUM

January 13, 2020

TO: CCWA Board of Directors

FROM: Ray A. Stokes
Executive Director 

SUBJECT: CCWA Calendar Year 2020 Strategies and Priorities

DISCUSSION

CCWA staff has begun the process of preparing the FY 2020/21 FY Budget, which will be considered in draft form at the March 26, 2020 CCWA Board meeting and the final version adopted at the April 23, 2020 Board meeting.

As part of the budgeting process, it is important to ensure the CCWA Budget is aligned with the priorities of the CCWA Board of Directors. To that end, I would like to have a discussion at the board meeting to discuss high-level policy issues and priorities. Any additional priorities or changes in the priorities from the CCWA Board can then not only be addressed in the FY 2020/21 Budget, but also ensure CCWA staff resources and efforts are appropriately aligned with the priorities of the Board.

I will present from staff's perspective a list of issues and priorities for the Board's consideration and solicit input from the Board on not only those issues, but also any additional priorities and issues the Board may wish to pursue in the coming year.

RAS



CENTRAL COAST WATER AUTHORITY

MEMORANDUM

January 13, 2020

TO: CCWA Board of Directors

FROM: Ray A. Stokes
Executive Director 

SUBJECT: 2020 Supplemental Water Purchase Program

DISCUSSION

Beginning in calendar year 2014 and every year since, CCWA has established an annual Supplemental Water Purchase Program (SWPP) for the purpose of acquiring additional water supplies for the CCWA project participants needing additional water to meet their local water demands.

In 2019, the CCWA Board of Directors authorized the Executive Director to implement a SWPP each year in which a need has been identified by the CCWA project participants.

In the past two years, CCWA has entered into an exchange agreement with the Mojave Water Agency (MWA) in varying amounts to meet additional water needs of CCWA project participants. Generally, the terms of the exchange agreement are a 4:1 exchange (CCWA returns 1 AF for every 4 AF MWA provides to CCWA), plus \$320/AF for all water delivered to CCWA and payment of the MWA DWR variable costs when the water is returned to MWA sometime over the next ten years.

As a preemptive measure, CCWA and MWA executed a non-binding Letter of Intent (LOI) for calendar year 2020 in the event CCWA project participants need additional supplies for calendar year 2020, which is attached to this report. The terms of the exchange for 2020 are exactly the same as the prior two exchange agreements.

I have forwarded this information to all CCWA project participants and requested that if any project participant needs additional water supplies for 2020, to notify me so that we may begin the contracting process with DWR for the CCWA/MWA 2020 exchange.

Additionally, CCWA legal counsel is in the process of reviewing all the contracting documents for the SWPP to potentially clean up any areas that might need additional clarification and we will distribute those contracts when the review is completed.

RAS

Attachment



December 9, 2019

Mr. Tom McCarthy
General Manager
Mojave Water Agency
13846 Conference Center Drive
Apple Valley Ca. 92307

Eric Friedman
Chairman

Ed Andrisek
Vice Chairman

Ray A. Stokes
Executive Director

Brownstein Hyatt
Farber Schreck
General Counsel

Member Agencies

City of Buellton

Carpinteria Valley
Water District

City of Guadalupe

City of Santa Barbara

City of Santa Maria

Goleta Water District

Montecito Water District

Santa Ynez River Water
Conservation District,
Improvement District #1

Associate Member

La Cumbre Mutual
Water Company

**RE: STATE WATER PROJECT WATER EXCHANGE
LETTER OF INTENT**

Dear Mr. McCarthy:

The purpose of this letter of intent (LOI) is to set forth the general terms and conditions to be included in an agreement providing for the exchange of State Water Project (SWP) "Table A" water between Mojave Water Agency (MWA) and the Central Coast Water Authority (CCWA) that is consistent with the applicable Water Supply Contracts applicable. It is anticipated the DWR will prepare an agreement for review and approval by MWA and CCWA, as more fully described herein ("Agreement"). It is intended that the Agreement will set forth in greater detail the terms and conditions of the transaction contemplated by this LOI and such other terms and conditions as are mutually agreed upon by MWA and CCWA, and will also provide for DWR's approval and agreement to convey the SWP water to be exchanged. Neither CCWA nor MWA is bound in any way to proceed with the exchange contemplated herein until final and completed documents are executed by all parties, all required approvals are obtained, and compliance with the California Environmental Quality Act (CEQA) is undertaken.

1. **Parties.** The parties to this LOI are MWA and CCWA. The parties to the Agreement will be DWR, MWA and the Santa Barbara County Flood Control and Water Conservation District (SBCFCWCD), on behalf of CCWA. SBCFCWCD holds the Water Supply Contract with DWR for Santa Barbara County; but CCWA is the responsible party. All references to CCWA herein are to SBCFCWCD, on behalf of CCWA.
2. **Description.** Due to prolonged drought conditions and low SWP allocations, CCWA currently needs supplemental water to meet its 2020 water supply needs. MWA has a SWP allocation for eighty-five thousand eight hundred (85,800) acre-feet of SWP Table A water. CCWA proposes to acquire in 2020, through an exchange, six thousand (6,000) acre-feet of MWA's Table A SWP supply (the "Exchange Water"). MWA has projected that the Exchange Water can be made available to CCWA during their period of critical need in 2020 due to water management programs implemented by MWA.

255 Industrial Way
Buellton, CA 93427-9565
(805) 688-2292
FAX: (805) 686-4700



3. Purpose of Exchange. CCWA needs additional water supply to meet critical demands in 2020. CCWA has a SWP Table A allocation of 45,486 acre-feet. Due to severe drought and inadequate SWP allocated supply, certain CCWA member agencies are experiencing a shortfall in water supplies to meet their estimated demand in 2020.

4. Conditions Precedent: Required Approvals. The proposed exchange is internal to the SWP and permitted by the SBCFCWCD and MWA Water Supply Contracts, as well as DWR's current licenses and permits. The exchange also requires the approval of DWR. Further, MWA and CCWA must approve the terms and conditions of the Agreement and all parties to the Agreement must approve and execute the Agreement. Further, all parties are required to comply with CEQA.

5. Type of Exchange and Term. The exchange shall be a 4:1 exchange whereby MWA agrees to deliver the Exchange Water to CCWA, on or before December 31, 2018, at the times and when requested by CCWA, and CCWA agrees to return one thousand four hundred and nine (1,409) acre-feet (one (1) acre-foot for every four (4) acre-feet of Exchange Water) to MWA in varying amounts, on or before December 31, 2030 ("Return Water").

6. Compensation for Water Delivered to CCWA. CCWA shall pay \$1,920,000 (\$320 per acre-foot of Exchange Water delivered to CCWA in 2020) to MWA upon SBCFCWCD's execution of the Agreement.

The cost compensation is within the cost recovery formula as allowed under the SWP Contract, as follows:

<u>MWA Fixed Costs from 2019 Statement of Charges:</u>	
Water Systems Revenue Bond Surcharge	\$2,071,831
Capital cost component:	
Delta Water Charge	1,930,806
Transportation	2,697,622
Minimum Cost Component:	
Delta Water Charge	3,962,368
Transportation Charge	4,976,854
Total for Invoice No. 18-015-T	\$15,603,481
Water available @ 25% allocation	22,450
Equivalent unit cost per acre foot	\$695
 Unit cost charged under this agreement	 \$320

7. Delivery of Water. The Exchange Water will be delivered to CCWA as part of the SWP Contract between SBCFCWD (on behalf of CCWA) and DWR. The timing and quantities of water to be delivered shall be described in the

Agreement. The Agreement shall provide that the delivery of Exchange Water to CCWA shall occur at its turnouts on the Coastal Branch by December 31, 2020. CCWA shall make all necessary arrangements with DWR for the delivery of the Exchange Water to CCWA and Return Water to MWA. CCWA will not be obligated to take delivery of, or pay for any water not delivered to CCWA by December 31, 2020.

8. Return Water. The Return Water will be delivered to MWA as part of the SWP Contract between MWA and DWR. The timing and quantities of water to be returned shall be described in the Agreement. The Agreement shall provide that delivery of the Return Water shall occur at MWA's turnout in reach 22B or 24, at MWA's discretion. MWA shall make reasonable best efforts to accept the Return Water when delivered. MWA reserves the right to reject delivery of the Return Water should delivery constraints exist within MWA's recharge basin(s) (ie: Mojave River is flowing). In the event MWA is not able to accept delivery of the Return Water prior to 2030, MWA and CCWA, with DWR's approval, may mutually agree to extend the term.
9. SWP Variable Costs. CCWA shall assume all financial obligations for SWP variable OMP&R costs incurred for the delivery of Exchange Water to CCWA. CCWA shall also assume all financial obligations for SWP variable OMP&R costs incurred for the delivery of Return Water to MWA's turnout at reach 22B or 24, not to exceed \$250 per acre-foot of Return Water. MWA shall assume any additional SWP variable OMP&R costs.
10. Transaction Documents and Costs. Each party shall undertake its own compliance with CEQA, as applicable. Each party shall be responsible for its legal and consulting costs prior to and for the term of the Agreement. To the extent that a third-party initiates a claim against any party, CCWA and MWA shall cooperate with each other to defend the action and further agree to share equally in any such costs.
11. Preparation of Agreement. Following MWA acceptance of this LOI, CCWA will request DWR to prepare and deliver to MWA, CCWA and SBCFCWD. The Agreement will incorporate the terms and conditions of this LOI, and such other terms and conditions relating to the exchange as may be mutually agreed upon by MWA and CCWA.
12. Definitive Agreement. This LOI is non-binding. CCWA and MWA mutually acknowledge that the proposed terms and conditions in this LOI represent the current intention of the parties but do not bind either party in any manner; this LOI does not commit any party to entering into the Agreement or any other course of action, and does not limit any party's discretion under CEQA.

13. Good Faith and Reasonable Best Efforts. The Parties will exercise good faith and reasonable efforts to satisfy all conditions precedent, including compliance with CEQA. In the event that the Agreement is not executed within ninety (90) days of the execution of this LOI, then the LOI will terminate without any further action of any party, and the parties will be deemed to have discharged their respective obligations to each other under this LOI, unless both CCWA and MWA mutually agree otherwise.

14. Authority. Each of the undersigned individuals represents and warrants to the other that such individual has the legal power, right and actual authority to execute this LOI.

If the foregoing meets with your approval, please indicate your acceptance by executing the copy of this LOI that has been enclosed and delivering it to:

Central Coast Water Authority
255 Industrial Way
Buellton, CA 93427
Attn: Ray Stokes, Executive Director

CENTRAL COAST WATER AUTHORITY

By: Ray A Stokes
Ray Stokes, Executive Director

Date: 12/09/2019

AGREED AND ACCEPTED:

Mojave Water Agency

By: _____
Tom McCarthy, General Manager

Date: _____

of the execution of this LOI, then the LOI will terminate without any further action of any party, and the parties will be deemed to have discharged their respective obligations to each other under this LOI, unless both CCWA and MWA mutually agree otherwise.

14. Authority. Each of the undersigned individuals represents and warrants to the other that such individual has the legal power, right and actual authority to execute this LOI.

If the foregoing meets with your approval, please indicate your acceptance by executing the copy of this LOI that has been enclosed and delivering it to:

Central Coast Water Authority
255 Industrial Way
Buellton, CA 93427
Attn: Ray Stokes, Executive Director

CENTRAL COAST WATER AUTHORITY

By: _____
Ray Stokes, Executive Director

Date: _____

AGREED AND ACCEPTED:

Mojave Water Agency

By: Tom D. McCarthy
Tom McCarthy, General Manager

Date: 12/10/19



CENTRAL COAST WATER AUTHORITY

MEMORANDUM

January 15, 2020

TO: CCWA Board of Directors

FROM: John Brady, Deputy Director 

SUBJECT: Procurement of Engineering Services for Risk and Resiliency Assessment - \$50,000

DISCUSSION

The American Water Infrastructure Act of 2018 requires community water systems serving more than 3,300 people to develop or update Risk and Resiliency Assessments (RRA) and Emergency Response Plans (ERP). The law specifies the components that the RRAs and ERPs must address, and establishes deadlines by which water systems must certify to EPA that the RRA and ERP have been completed. Since CCWA provides water to over 100,000 people, the deadline for completing the RRA is March 31, 2020 and the deadline for completing the ERP is September 30, 2020.

FINANCIAL

The CCWA budget for FY 2019/2020 was developed prior to the release of the Federal Register in which the requirements of the American Water Infrastructure Act of 2018 were described. Consequently, there is no budget for this project in the current fiscal year. In consideration of the deadline and the potential penalties for missing the deadline, CCWA staff moved forward with work to prepare the RRA and also retained the services of CCWA's engineering consultant, HDR Engineering, to provide support. An initial Purchase Order was issued for \$25,000, under the Executive Director's purchasing authority for unbudgeted projects.

Staff and HDR have completed some work on the RRA and believe that the RRA can be completed prior to the deadline of March 31, 2020. However, to complete the project, additional funding of \$25,000 is needed to fund HDR Engineering's support. This will bring the total engineering cost to \$50,000.

In order to fund this work, a budget must be established. Staff has identified sources of funding that could be transferred to this project. The additional sources of funding are as follows:

- Seismic Joint Pipe Spools and Parts (C-17SMCJNT). This project has a budget of \$68,040 and was initiated as a result of staff's prior resiliency assessment and is intended to purchase spare parts for the Seismic Joint in northern San Luis Obispo County. The Seismic Joint is the point where the CCWA pipeline crosses the San Andreas Fault.

Through transferring funds from this project, the project will need to be completed in two phases. The second phase of the project will be presented to the Board for consideration in the FY 2020/2021 Budget, which the Board will consider in April 2020.

RECOMMENDATION

That the Board:

- Authorize the Executive Director to issue a Purchase Order for engineering services to HDR Engineering to assist staff in completing the required Risk and Resiliency Assessment of the CCWA operation in the amount of \$50,000.
- Authorize the Executive Director to transfer funds from Project C-17SMCJNT (Seismic Joint Pipe Spools and Parts) to E-19RISKRS (Risk and resiliency Assessment) in the amount of \$50,000.


JLB



CENTRAL COAST WATER AUTHORITY

MEMORANDUM

January 15, 2020

TO: CCWA Board of Directors 

FROM: John Brady, Deputy Director

SUBJECT: Preparation of Request For Qualification – Water Management Strategy Development.

BACKGROUND

The Central Coast Water Authority and the San Luis Obispo County Flood Control and Water Conservation District (Agencies) wish to evaluate the available options for optimizing the yield from the State Water Project (SWP) for San Luis Obispo and Santa Barbara Counties. Consequently, a Request For Qualification (RFQ) is being prepared and will be used to identify a highly qualified consulting firm that can assist the Agencies with the development of sound water management strategies.

Due to the lack of sufficient storage capacity within the Agencies' service area, there is an on-going risk of losing carryover water during a spill event at the San Luis Reservoir. Carryover water is the undelivered portion of a given year's SWP Table A allocation at year's end, typically classified as Article 56c water and is stored in San Luis Reservoir as a matter of normal operations. However, carryover water is among the first water classifications to be lost during a spill event, following a protocol outlines in the State Water Supply Contract.

Through this project, the Agencies aim to consider the proposed water management tools that are included in the pending amendments of the State Water Supply Contract. These new water management tools may facilitate innovative management practices and measures that could reduce the potential of losing carryover water in a spill event as well as to make water available during times of drought.

STATUS

CCWA staff prepared a draft RFQ and the Agencies are in the process of reviewing and finalizing it. CCWA staff will provide an update of the project at the CCWA Board of Directors Meeting on Thursday January 23, 2020.

JLB

CCWA Budget Planning Schedule FY 2020/21 Budget

January							February							March							April						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
1	2	3	4				1	2	3	4	5	6	7	1	2	3	4	5	6	7	1	2	3	4	5	6	7
8	9	10	11				8	9	10	11	12	13	14	8	9	10	11	12	13	14	5	6	7	8	9	10	11
12	13	14	15	16	17	18	15	16	17	18	19	20	21	15	16	17	18	19	20	21	12	13	14	15	16	17	18
19	20	21	22	23	24	25	16	17	18	19	20	21	22	22	23	24	25	26	27	28	19	20	21	22	23	24	25
26	27	28	29	30	31		23	24	25	26	27	28	29	29	30	31					26	27	28	29	30		

May							June							July													
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S							
3	4	5	6	7	8	9	1	2	3	4	5	6	1	2	3	4	5	6	5	6	7	8	9	10	11		
10	11	12	13	14	15	16	7	8	9	10	11	12	13	7	8	9	10	11	12	13	12	13	14	15	16	17	18
17	18	19	20	21	22	23	14	15	16	17	18	19	20	14	15	16	17	18	19	20	19	20	21	22	23	24	25
24	25	26	27	28	29	30	21	22	23	24	25	26	27	21	22	23	24	25	26	27	26	27	28	29	30	31	

- Receive DWR Statement of Charges (for following calendar year)
- Prepare Draft Budget
- Submit Preliminary Budget to Operating Committee
- Submit Preliminary Budget to Finance Committee
- Submit Preliminary Budget to Board of Directors
- Board Approval of Final Budget
- Beginning of 2020/21 Budget Expenditure Cycle

- July 1, 2019
- November 1, 2019- February 28, 2020
- March 12, 2020
- March 12, 2020
- March 26, 2020
- April 23, 2020
- July 1, 2020





YOUR BEST PROTECTION

ACWA JPIA

P. O. Box 619082
Roseville, CA 95661-9082

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800.231.5742

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800.535.7899

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www.acwajpia.com

President
E.G. "Jerry" Gladbach

Vice President
Tom Cuquet

Chief Executive Officer
Walter "Andy" Sells

Executive Committee
Fred Bockmiller
Tom Cuquet
David Drake
E.G. "Jerry" Gladbach
Brent Hastey
Steven LaMar
Melody A. McDonald
J. Bruce Rupp
Kathleen Tiegs

November 20, 2019

Central Coast Water Authority (C039)
255 Industrial Way
Buellton, CA 93427-9591

Ray:

Each year at Fall Conference, the JPIA recognizes members that have a Loss Ratio of 20% or less in either of the Liability, Property, or Workers' Compensation programs (loss ratio = total losses / total premiums).

The members with this distinction receive the "**President's Special Recognition Award**" certificate for each Program that they qualify in.

The JPIA is extremely pleased to present Central Coast Water Authority (C039) with this special recognition and commends the District on the hard work in reducing claims.

Congratulations to you, your staff, Board, and District. Keep up the good work!

The JPIA wishes you the best in 2020.

Sincerely,

A handwritten signature in cursive script that reads "Jerry Gladbach".

E.G. "Jerry" Gladbach
President

Enclosure: President's Special Recognition Award(s)

0316 5300 ©

President's Special Recognition Award

The President of the
ACWA JPIA
hereby gives Special Recognition to

Central Coast Water Authority

for achieving a low ratio of "Paid Claims and Case Reserves" to "Deposit Premiums"
in the Liability Program for the period 10/01/2015 - 09/30/2018
announced at the Board of Directors' Meeting in San Diego.



E. G. "Jerry" Gladbach

E. G. "Jerry" Gladbach, President

December 02, 2019

President's Special Recognition Award

*The President of the
ACWA JPIA
hereby gives Special Recognition to*

Central Coast Water Authority

*for achieving a low ratio of "Paid Claims and Case Reserves" to "Deposit Premiums"
in the Property Program for the period 04/01/2015 - 03/31/2018
announced at the Board of Directors' Meeting in San Diego.*



December 02, 2019

E. G. "Jerry" Gladbach

E. G. "Jerry" Gladbach, President

President's Special Recognition Award

*The President of the
ACWA JPIA
hereby gives Special Recognition to*

Central Coast Water Authority

*for achieving a low ratio of "Paid Claims and Case Reserves" to "Deposit Premiums"
in the Workers' Compensation Program for the period 07/01/2015 - 06/30/2018
announced at the Board of Directors' Meeting in San Diego.*



December 02, 2019

E. G. "Jerry" Gladbach

E. G. "Jerry" Gladbach, President



2020 - APPOINTMENTS TO BOARDS, COMMISSIONS & COMMITTEES

Mayor – Holly Sierra
Vice Mayor – Art Mercado

Ed Andrisek eda@cityofbuellton.com 805-451-1231	Central Coast Water Authority (CCWA) Santa Barbara County Association of Governments (SBCAG) Alternate	Air Pollution Control District (APCD) Alternate	California Joint Powers Insurance Authority (CJPIA)	League of California Cities (LOCC) Alternate	Central Management Area Committee for the Sustainable Groundwater Management Act (SGMA)	Economic Development Task Force
Dave King davek@cityofbuellton.com 805-451-9494	Economic Development Task Force		Multi-Jurisdictional Solid Waste Task Group	Buellton Chamber of Commerce City Liaison Member		Art Mercado artm@cityofbuellton.com 805-688-0752
John Sanchez ajs@cityofbuellton.com 805-451-8618	Central Coast Water Authority (CCWA) SECOND Alternate	Library Advisory Alternate	Home for Good SBC	Central Management Area Committee for the Sustainable Groundwater Management Act (SGMA) Alternate	Association of California Water Agencies/Joint Powers Insurance Authority	Holly Sierra hollys@cityofbuellton.com 805-252-2618
Santa Barbara County Association of Governments (SBCAG)	Air Pollution Control District (APCD)	League of California Cities (LOCC)	Economic Development Task Force	Library Advisory		