A Meeting of the





BOARD OF DIRECTORS
OF THE
CENTRAL COAST WATER AUTHORITY

will be held at 9:00 a.m., on Thursday, September 24, 2020 via URL: https://meetings.ringcentral.com/j/1497682062 or via telephone by dialing 1(623) 404-9000 and entering code 149 768 2062#

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

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

- 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. Consent Calendar
 - * A. Approve Minutes of the July 31, 2020 Regular Meeting
 - * B. Approve Bills
 - * C. Controller's Report
 - * D. Operations Report
- IV. Executive Director's Report
 - * A. Final State Water Project Delivery Capability Report 2019
 - * B. Request for Approval to Retain the Services of Provost & Prichard and the Hallmark Group for Phase I of the Water Management Strategies Study
 - * C. Discussion Regarding Water Management Amendment to the State Water Supply Contract, Draft Resolution Approving the Same for Consideration by the Board On October 22, 2020, and DWR's Final Environmental Impact Report For The Water Management Amendment and DWR's CEQA Findings of Fact and Statement of Overriding Considerations
 - * D. Request for Approval of Carryover of Project Funds from FY 19/20 to FY 20/21
 - * E. Request for Approval for the Use of Appropriated Contingency in the Amount of \$43,401 for Bradbury Bypass Pipeline Budget Exceedance
 - * F. Request for Approval of Award of Riser and Manway Repair Project C-20RISERP in the Amount of \$87,220
 - * G. Request for Approval of Water Treatment Plant Process Logic Controller Upgrade Project (C-18PLCDOC and C-20PLCUPG) - Procurement of Engineering Services in the Amount of \$213,111
 - * H. Budget Transfers for Various Projects
- V. Reports from Board Members for Information Only
- VI. Items for Next Regular Meeting Agenda
- VII. Date of Next Regular Meeting: October 22, 2020
- VIII. Adjournment
 - * Indicates attachment of document to original agenda packet.

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MINUTES OF THE

CENTRAL COAST WATER AUTHORITY BOARD OF DIRECTORS

July 31, 2020

The Board meeting was conducted pursuant to California Government Code Section 54953 and Governor Newsom's Executive Order, N-29-20, temporarily suspending portions of the Brown Act to implement social distancing in response to the COVID-19 pandemic. Members of the Board participated in this meeting by video call or telephone. Public Comment on agenda items also occurred telephonically.

Ms. Lisa Long, CCWA Controller, confirmed that all Board members could hear each other, had received a copy of the meeting agenda, and could hear the proceedings.

I. Call to Order and Roll Call

Chairman Friedman called the Central Coast Water Authority (CCWA) Board of Directors meeting to order at 9:00 AM.

CCWA member agencies with voting privileges were represented by:

Representative	Agency/City	Voting %
Ed Andrisek	City of Buellton	2.21%
Farfalla Borah	Goleta Water District	17.20%
Jeff Clay	Santa Ynez River Water Conservation Dis	strict, ID #1 7.64%
Eric Friedman	City of Santa Barbara	11.47%
Shirley Johnson	Carpinteria Valley Water District	7.64%
Gina Rubalcaba	City of Guadalupe	1.15%
Shad Springer	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 June 25, 2020 Regular Meeting
- B. Approve Bills
- C. Controller's Report
- D. Operations Report

A motion to approve the Consent Calendar was made by Director Borah, seconded by Alternate Director Springer and carried following a roll call vote, with Directors Borah, Clay, Friedman, Johnson, Rubalcaba, Springer in favor, Director Wicks abstaining and none opposed.

IV. Executive Director's Report

A. CCWA Warren Act Contract for the Conveyance and Storage of State Water Into/In Lake Cachuma for the South Coast CCWA Project Participants

Ray Stokes, CCWA Executive Director, explained that a clause within the existing Warren Act Contract with the United State Bureau of Reclamation (USBR) stated the 25 year term of the contract began on the date that water was first delivered into Lake Cachuma, which was not until June 1997. Therefore, the contract did not expire in July 2020 as had been assumed, but will continue until June 2022. This additional time will allow staff to continue to renegotiate a permanent contract with the USBR and the environmental analysis, with USBR has agreed to.

B. Assignment of the State Water Contract from Santa Barbara County to CCWA

A letter was sent in March 2020 to the Santa Barbara County Board of Supervisors requesting their consideration of the assignment of the State Water Contract from Santa Barbara County to CCWA. Santa Barbara County has subsequently contacted Department of Water Resources (DWR) staff with a question related to the sale of State water outside of the County and the County has said they will not consider the matter until a response from DWR is received to their questions.

A member of the public expressed opposition to the assignment on behalf of the organization WeWatch.

C. Suspended Table A Reacquisition Update

The Board has previously approved preparation of environmental documentation related to reacquisition of the 12,214 AF of water that suspended by Santa Barbara County in the 1980s, and a consultant is working on the matter. There has been a delay in the Draft EIR for the reacquisition directly related to COVID. However, the consultant is continuing to work, and a Draft EIR is anticipated in the first quarter of 2021.

A member of the public expressed opposition to the participation of the City of Solvang in the reacquisition on behalf of the organization WeWatch.

D. Siemens Energy & Environmental Solution Proposal for Solar Power Installation at the Water Treatment Plant and 20 Year Power Purchase Agreement

Mr. John Brady, CCWA Deputy Director, reviewed a report included in the meeting materials which provided details on a potential project to construct an array of solar panels on the grounds of the Polonio Pass Water Treatment Plant (WTP). The proposal contemplates the installation of a 600 KW solar panel electrical generation system, which will generate enough energy to satisfy 100% of the annual energy needs of the WTP.

To date, the Board has authorized a budget of \$20,000 in establishing the project acceptance criteria. Staff has requested cost estimates and proposals from CCWA legal counsel and CCWA's engineering consultant, HDR Engineering, for the next phase of the project. Legal review of the Project Development

Agreement, Power Purchase Agreement and Lease Agreement is estimated to cost \$30,000 and \$15,000 is estimated for developing and reviewing the various studies and design work produced by Siemens.

Following discussion and public comment, the Board thanked Staff for their detailed analysis of the proposal and declined to take any action on further investigation of solar power at this time.

E. Additional Revision to Payment Schedule for FY 2020/21 DWR Fixed Costs

Ms. Long reported that for the 2021 DWR Statement of Charges, there is a net over-collection of DWR fixed costs when compared against estimates used in the FY 2020/21 CCWA Budget. CCWA Staff have analyzed the costs and provided recommendations detailed in a report in the meeting materials for the Board's consideration to provide options for agencies to change their fixed assessment, or apply the variance to the DWR Reserve Fund as appropriate.

Upon a motion by Director Springer, seconded by Director Rubalcaba and carried following a roll call vote with Directors Andrisek, Borah, Clay, Friedman, Johnson, Rubalcaba, Springer and Wicks in favor and none oppose the Board approved offering project participants a choice to either 1) Reduce their remaining Fixed Invoice due December 1, 2020 by the variance in the DWR Fixed charges shown in Table A; or 2) Apply the variance in the DWR Fixed charges shown in Table A to their DWR Reserve Fund Account; or 3) A combination of both.

G. Finance Committee

1. FY 2019/20 Fourth Quarter Investment Report

As of June 30, 2020 the investment portfolio totaled \$73 million and had an effective rate of return of 1.15% on an average daily balance for the month of June 2020 of about \$66.2 million. The investments were comprised of the State of California Local Agency Investment Fund (LAIF), (\$62.7 million), and Montecito Bank & Trust money market accounts (\$8.3 million), and U.S. Treasury Notes held in a Charles Schwab Brokerage Account (\$2 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.

Upon a motion by Director Borah, seconded by Director Springer and carried, following a roll call vote, with Directors Borah, Clay, Friedman, Johnson, Sweeney, Waterfield and Wicks in favor and none opposed, the Board approved the Fourth Quarter FY 2019/20 investment report.

Mr. Stokes reported that due to the previous discussion, the closed session was unnecessary.

V. Closed Session - Canceled

A. CONFERENCE WITH REAL PROPERTY NEGOTIATORS
Property: Cachuma Project, Negotiation of Warren Act Contract

Agency negotiator: Ray Stokes, Executive Director, CCWA
Negotiating parties: CCWA and United States Bureau of Reclamation

Under negotiation: Terms and conditions of Warren Act Contract for use of Cachuma

Project

VI. Reports from Board Members for Information Only

Director Rubalcaba asked if Federal Stimulus monies were being pursued for staff work from home expenditures during the COVID pandemic. CCWA staff stated they will look into applying for the funds, but as CCWA is a public agency funds might not be available.

Director Wicks noted that a ceremony will be held in the future to celebrate the desalination resources collaboration between Montecito Water District and the City of Santa Barbara.

There were no other reports from Board members.

VII. Items for Next Regular Meeting Agenda

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

Mr. Stokes explained that the August meeting will likely be canceled, but may be necessary if circumstances change.

IX. Adjournment

The meeting was adjourned at 10:50 AM.

Respectfully submitted,	
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Elizabeth Watkins	
Secretary to the Board	

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CENTRAL COAST WATER AUTHORITY

Normal and Recurring Costs

Bills for Ratification - July and August 2020

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AMOUNT	DESCRIPTION
445.00	Dues and Memberships
275.00	ESRI Training
359.88	Lynda.com Training Renewal
659.00	CA Labor Law Digest
218.00	Membership 2020-21
1,842.49	Express shipping
425.00	NSC Membership Dues 2020-21
200.00	Postage - postage machine
5.00	Printing Expenses
140.43	Shipping expenses
24.50	Staff Meeting
358.37	Budget Covers and Tab Dividers
205.00	Reimbursable expenses - Certification renewal
\$ 5,157.67	Total General & Administrative
559.48	Lab supplies
185.00	Carbon Tank Rentals, Tri-Bed Tank Rentals
6,280.00	Lab testing
1,385.79	Lab supplies
2,201.66	Lab supplies
227.09	Lab supplies
5,106.27	Lab supplies
\$ 15,945.29	Total Monitoring Expenses
677 24	Office and kitchen supplies
	Postage Machine - ink
	Reimbursable expenses - Office Supplies
	Office, janitorial & kitchen supplies
	Accounts payable checks - Montecito Bank & Trust
	Office, janitorial & kitchen supplies
	Office supplies
	Office Supplies
\$ 3,191.08	Total Office Expenses
-	·
3 500 00	Insurance - Excess Crime Insurance 2020-21
-,	Insurance - Property Insurance 2020-21
•	Equipment Rental
	Biofilm Shipping
	Computer miscellaneous expenses
	Legal Services: SWPP - General Expense
	Internet Service
	Datto Cloud Backup
	Semi Annual Spam Filtering
	SonicWall Renewal
	Managed Service Agreement
	DSL reimbursement
	Copier Lease - BAO and WTP
	Mobile Precision Laptop
•	Website Redesign
7,000.00	TODORO MODOUGH
	445.00 275.00 359.88 659.00 218.00 1,842.49 425.00 200.00 5.00 140.43 24.50 358.37 205.00 \$ 5,157.67 559.48 185.00 6,280.00 1,385.79 2,201.66 227.09 5,106.27 \$ 15,945.29 677.24 64.29 83.97 598.01 600.47 786.77 307.09 73.24





VENDOR

CENTRAL COAST WATER AUTHORITY

Normal and Recurring Costs

Bills for Ratification - July and August 2020

AMOUNT DESCRIPTION

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VENDOR	AMOUNT	DESCRIPTION
Gonzalez, Cynthia	60.00	DSL reimbursement
Impulse Internet Services	4,224.14	T-1 System and Internet Service (Buellton and Shandon)
Marborg Industries	632.00	Tank 5/Tank 7/Tank 2/ EDV Rental
Microwest Software Systems, Inc.	4,595.00	CMMS Maintenance and Support
Praxair Company	73.12	Cylinder Rental
Quadient Leasing USA, Inc.	442.65	Postage Machine Lease
RingCentral Inc.	19,039.16	New Phone Server
Sage Software Inc	2,407.00	Fixed Asset Program Support Renewal
US Bank	345.00	GFOA Budget Award Fee
Valley Tool Rentals	675.10	Mower Rental
Velosio	1,575.00	Microsoft Dynamics SL support services
Watkins, Lisa	90.00	DSL reimbursement
Wilson Creek Communications	310.00	Internet Service
	\$ 135,077.10	Total Other Expenses
OTHER MISCELLANEOUS EXPENSES		
Bank of New York Mellon	2,450.00	Bond Trustee Expenses
Comb-Warren Act Trust Fund	10,406.00	Trust Fund Quarterly payment
Department of Water Resources	15,598,392.00	Variable OMP&R, Delta Water & Transport Charge
State Water Contractors	82,398.00	Member Dues FY 2020/21
	\$ 15,693,646.00	Total Other Miscellaneous Expenses
PERSONNEL EXPENSES		
ACWAJPIA	21,491.24	Workman's Compensation Insurance
CalPERS Health	64,474.80	Health Insurance
CalPERS Retirement	87,667.76	Pension Contributions
CCWA Payroll Wages/Taxes	468,069.07	Gross Payroll Wages/Taxes
Dental/Vision Payments	13,311.53	Dental/Vision Benefits
MetLife SBC Insurance	2,069.20	Life Insurance
Other Misc Employee Benefits	9,147.06	Vehicle, Uniform and Cafeteria Plan Benefits
Standard Insurance Company	2,651.56	Disability Insurance
. ,	\$ 668,882.22	Total Personnel Expenses
PROFESSIONAL SERVICES		
Air Pollution Control District	1,355.39	Equipment permit renewals
All-Cal Equipment Services	3,291.30	Annual testing of Crane and Lift Equipment
Brownstein Hyatt Farber	495.28	Legal Services-Relations State Water Contractors
Brownstein Hyatt Farber	2,578.00	Legal Services-DWR/SBCFCWCD Contract
Brownstein Hyatt Farber	4,417.50	Legal Services- SWC vs. DFW/DWR
Brownstein Hyatt Farber	7,558.58	Legal Services-General Meetings
Brownstein Hyatt Farber	9,880.00	Legal Services-Bidding Requirements/Construction Contra
Brownstein Hyatt Farber	21,850.00	Legal Services-Relations Warren Act
Cardno, Inc.	162.00	Environmental Consulting
Ernst & Young LLP	4,381.00	Accounting Services
Samba Holdings, Inc.	143.40	DMV driver reports
Stradling Yocca Carlson Rauth	2,804.50	Legal - Employee Matters
Underground Service Alert	138.80	New USA tickets
	\$ 59,055.75	Total Professional Services
CID DDO IFCTC MATERIAL C & OVERUSAR		
CIP PROJECTS - MATERIALS & OVERHEAD	7.405.05	Pomoto DI C Donol (DDD) Electrical I harrada
Allied Electronics and Automation	7,185.85	Remote PLC Panel (RPP) Electrical Upgrade
Consolidated Floatrical Dist	E07.04	
Consolidated Electrical Dist CS-AMSCO	537.24 38,114.24	Remote PLC Panel (RPP) Electrical Upgrade Filter Actuators - Phase 3





CENTRAL COAST WATER AUTHORITY

Normal and Recurring Costs

Bills for Ratification - July and August 2020

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VENDOR	AMOUNT	DESCRIPTION
HDR Engineering Inc	6,340.25	Air Vacuum Air Release (AVAR) Valve Riser Repair-Phase 2 of 3
Home Depot	136.16	Remote PLC Panel (RPP) Electrical Upgrade
KCCO Controls Co.	22,382.89	Fire Pump Controller
McMaster-Carr Supply Company	42.60	Filter Actuators - Phase 3
Quinn Rental Services	1,233.95	WTP Modular Office Building - Phase 2
Taft Electric Company	1,723.30	SYPP Equipment Upgrades
United Rentals North America, Inc.	1,129.92	WTP Modular Office Building - Phase 2
Winner Chevrolet	41,048.56	Distribution O&M Crew Truck - Replaces D073
	\$ 119,874.96	Total CIP Project - Materials and Overhead
REPAIRS & MAINTENANCE		
Alameda Electric Supply	57.17	Parts, repair and maintenance
AmeriPride Services, Inc.	1,015.75	Building maintenance supplies
Anthony's Tire Store	752.09	Vehicle maintenance
Automationdirect.com Inc	469.52	Parts, repair and maintenance
Bank of America Business Card	93.22	Equipment repairs and maintenance
Bank of America Business Card	174.90	Vehicles repairs and maintenance
Bank of America Business Card	179.03	Building maintenance supplies
Big Brand Tire & Service	471.60	Vehicle maintenance
Brezden Pest Control, Inc	155.00	Pest Control Spraying - WTP
Cal Coast Irrigation, Inc.	106.33	Parts, repair and maintenance
City of Buellton	196.76	Landscape maintenance - water
Compuvision	1,200.00	Equipment repairs and maintenance
Consolidated Electrical Distributors	2,894.86	Parts, repair and maintenance
Coverall North America, Inc	1,958.00	Janitorial service - BAO/SYPS
Farwest Corrosion Control	439.15	Parts, repair and maintenance
GFG Instrumentation Inc.	2,490.16	Equipment repairs and maintenance
Grainger Inc.	3,501.87	Parts, repair and maintenance
Harrington Industrial Plastics	2,953.07	Parts, repair and maintenance
Harrison Hardware	16.13	Parts, repair and maintenance
Home Depot	37.02	Parts, repair and maintenance
IFM Efector Inc.	448.30	Equipment Repair
Jan's Gardening Service	550.00	Landscape maintenance - BAO/SYPS
Jiffy Lube	280.22	Vehicle Maintenance
Knechts Plumbing and Heating	1,980.00	HVAC service and repairs
McMaster-Carr Supply Company	527.10	Maintenance supplies
Meadowlark Ranch Association	750.00	Road Maintenance Fee
Office Depot	27.55	Janitorial supplies
Praxair Distribution, Inc.	66.20	Repairs & maintenance supplies
Procare Janitorial Supply	178.05	Janitorial supplies - WTP
Progressive Greenery	660.00	Landscape maintenance - WTP
Rio Vista Chevrolet	815.98	Vehicle maintenance
Santa Ynez Valley Hardware	22.11	Maintenance supplies
Staples	25.10	Janitorial Supplies
Statewide Traffic Safety & Sign	3,045.77	Equipment repairs and maintenance
Ultrex Business Products	416.85	Copier maintenance
US Bank	465.55	Equipment repairs and maintenance
Western Exterminator Co	211.00	Pest control spraying - BAO and SYPS
Winema Industrial & Safety Supply	1,517.50	Parts, repair and maintenance
The state of the s	\$ 31,148.91	Total Repairs & Maintenance
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Subtotal - Bills for Ratification

CENTRAL COAST WATER AUTHORITY

Normal and Recurring Costs

Bills for Ratification - July and August 2020

INVOICE

VENDOR	AMOUNT	DESCRIPTION
SUPPLIES & EQUIPMENT		
Airgas USA, LLC	109.48	Safety supplies
AmeriPride Services, Inc.	1,872.43	Uniform expenses
Bank of America Business Card	60.27	Fuel - Autos
Bank of America Business Card	74.76	Equipment & maintenance supplies
Bank of America Business Card	306.36	Chemical - Clearitas
Bank of America Business Card	353.02	Minor tools
Burt Industrial Supply, Inc	320.53	Minor Tools, Maintenance supplies and hardware
Cal Coast Irrigation, Inc.	16.72	Maintenance supplies and hardware
Carr's Boots & Western Wear	173.99	Uniform expenses
Chemtrade Chemicals US, LLC	69,991.11	Chemicals - WTP
Delta Liquid Energy	35.34	Maintenance supplies and hardware
Department of Industrial Relations	1,235.00	CalOSHA Inspection Penalty
Donau Carbon US LLC	18,135.60	Chemicals - WTP
Eagle Energy	294.57	Equipment service
Grainger Inc.	457.42	Minor tools, equipment & maintenance supplies, safety supplies
Gulbrandsen Technologies Inc	297.35	Chemicals - Clearitas
Harrison Hardware	300.18	Maintenance supplies and hardware
Hill Brothers Chemical Company	4,558.86	Chemicals - WTP
Home Depot	151.61	Minor tools, equipment & maintenance supplies
JB Dewar	1,438.42	Fuel - equipment
JCI Jones Chemical	32,082.63	Chemicals - WTP
Santa Ynez Valley Hardware	53.41	Small tools, materials and safety supplies
Santa Ynez Valley Hardware	88.24	Maintenance supplies and hardware
Staples Credit Plan	165.33	Maintenance Supplies
Univar Solutions USA, Inc.	25,183.49	Chemicals - WTP
US Bank	256.98	Maintenance supplies
WEX Bank - Wright Express	8,662.03	Fuel - Autos
WEX Bank Wight Explose	\$ 166,675.13	Total Supplies & Equipment
UTILITIES		
City of Buellton	383.60	Water - BAO
Compuvision	3,750.00	Phone Extension Repairs
Delta Liquid Energy	28.78	Propane gas
First Choice Technology	28.28	Phone - Long distance carrier, 800#
Frontier	583.15	Telephone charges
	303.13	
	520.08	
Health Sanitation Services	520.98 303.03	Waste Disposal - SYPS
Health Sanitation Services Marborg Industries	303.03	Waste Disposal - SYPS Waste Disposal - BAO
Health Sanitation Services Marborg Industries Pacific Gas & Electric	303.03 112,003.25	Waste Disposal - SYPS Waste Disposal - BAO Utilities - BAO/SYPS/WTP
Health Sanitation Services Marborg Industries Pacific Gas & Electric San Miguel Garbage Company	303.03 112,003.25 450.04	Waste Disposal - SYPS Waste Disposal - BAO Utilities - BAO/SYPS/WTP Waste Disposal - WTP
Health Sanitation Services Marborg Industries Pacific Gas & Electric San Miguel Garbage Company Santa Ynez River Water Conservation	303.03 112,003.25 450.04 176.96	Waste Disposal - SYPS Waste Disposal - BAO Utilities - BAO/SYPS/WTP Waste Disposal - WTP Water - SYPS
Health Sanitation Services Marborg Industries Pacific Gas & Electric San Miguel Garbage Company Santa Ynez River Water Conservation Stokes, Ray	303.03 112,003.25 450.04 176.96 193.92	Waste Disposal - SYPS Waste Disposal - BAO Utilities - BAO/SYPS/WTP Waste Disposal - WTP Water - SYPS Reimbursable Expenses - Cell Phone charges (3 months)
Health Sanitation Services Marborg Industries Pacific Gas & Electric San Miguel Garbage Company Santa Ynez River Water Conservation Stokes, Ray Surfnet Communications, Inc.	303.03 112,003.25 450.04 176.96 193.92 150.00	Waste Disposal - SYPS Waste Disposal - BAO Utilities - BAO/SYPS/WTP Waste Disposal - WTP Water - SYPS Reimbursable Expenses - Cell Phone charges (3 months) Wireless Internet - Chorro
Health Sanitation Services Marborg Industries Pacific Gas & Electric San Miguel Garbage Company Santa Ynez River Water Conservation Stokes, Ray Surfnet Communications, Inc. The Gas Company	303.03 112,003.25 450.04 176.96 193.92 150.00 7.91	Waste Disposal - SYPS Waste Disposal - BAO Utilities - BAO/SYPS/WTP Waste Disposal - WTP Water - SYPS Reimbursable Expenses - Cell Phone charges (3 months) Wireless Internet - Chorro Natural Gas - BAO
Health Sanitation Services Marborg Industries Pacific Gas & Electric San Miguel Garbage Company Santa Ynez River Water Conservation Stokes, Ray Surfnet Communications, Inc. The Gas Company US Bank	303.03 112,003.25 450.04 176.96 193.92 150.00 7.91 21.54	Waste Disposal - SYPS Waste Disposal - BAO Utilities - BAO/SYPS/WTP Waste Disposal - WTP Water - SYPS Reimbursable Expenses - Cell Phone charges (3 months) Wireless Internet - Chorro Natural Gas - BAO Cell Phone accessories
Health Sanitation Services Marborg Industries Pacific Gas & Electric San Miguel Garbage Company Santa Ynez River Water Conservation Stokes, Ray Surfnet Communications, Inc. The Gas Company US Bank Verizon Wireless	303.03 112,003.25 450.04 176.96 193.92 150.00 7.91 21.54 269.36	Waste Disposal - SYPS Waste Disposal - BAO Utilities - BAO/SYPS/WTP Waste Disposal - WTP Water - SYPS Reimbursable Expenses - Cell Phone charges (3 months) Wireless Internet - Chorro Natural Gas - BAO Cell Phone accessories Network Extender WTP
Health Sanitation Services Marborg Industries Pacific Gas & Electric San Miguel Garbage Company Santa Ynez River Water Conservation Stokes, Ray Surfnet Communications, Inc. The Gas Company US Bank	303.03 112,003.25 450.04 176.96 193.92 150.00 7.91 21.54	Waste Disposal - SYPS Waste Disposal - BAO Utilities - BAO/SYPS/WTP Waste Disposal - WTP Water - SYPS Reimbursable Expenses - Cell Phone charges (3 months) Wireless Internet - Chorro Natural Gas - BAO Cell Phone accessories



\$17,018,329.83



CENTRAL COAST WATER AUTHORITY

Bills for Approval

VENDOR	INVOICE AMOUNT	DESCRIPTION
State of California DWR	\$ 4,519,946.00	Capital Cost and Minimum OMP&R Charges -Sept'20
Subtotal - Bills for Approval	\$ 4,519,946.00	

Total Ratification and Approval Bills \$ 21,538,275.83



Statements of Net Position

<u>ASSETS</u>	_	Preliminary & Unaudited 6/30/2020		May 31, 2020
<u>Current Assets</u>				
Cash and investments	\$	15,372,687	\$	12,864,441
Accounts Receivable (Note 1)		75,061		15,500
Accrued interest receivable		422,019		356,670
Other assets	_	1,528,009		1,537,985
Total Current Assets	_	17,397,775	_	14,774,596
Restricted Assets				
Cash and investments with fiscal agents		492,039		492,039
Investment Accounts				
Operations and Maintenance Reserve Fund (Note 2)		2,133,440		2,133,028
DWR Reserve Fund (Note 3)		1,577,159		1,576,521
Rate Coverage Reserve Fund (Note 4)		9,461,318		9,466,856
Debt Service Payments (Note 5)		10,412,450		7,639,941
Department of Water Resources (Note 6a)		33,555,115		25,427,064
Credits Payable (Note 7)		390,416		390,115
Escrow Deposits (Note 8) Total Restricted Assets		525,562	_	525,330
Total Restricted Assets		58,547,500	_	47,650,895
Property, Plant and Equipment				
Construction in progress (Note 9)		245,991		1,815,462
Fixed assets (net of accumulated depreciation)	_	91,353,709	_	89,994,644
Total Property, Plant and Equipment		91,599,700	_	91,810,106
Other Assets				
Unamortized bond issuance costs (Note 10)		220,804		247,751
Long term receivable (Note 11)	_	1,270,283	_	1,366,067
Total Other Assets	_	1,491,087	_	1,613,818
Total Assets	\$	169,036,062	\$	155,849,414





Statements of Net Position

LIABILITIES AND FUND EQUITY Current Liabilities	_	Preliminary & Unaudited 6/30/2020		May 31, 2020
Accounts Payable	\$	341,621	\$	99,179
DWR and Warren Act Charge Deposits (Note 6a)		33,555,117		25,427,066
CCWA Variable Charge Deposits (Note 6b)		1,562,335		14,327
Accrued interest payable		739,126		657,001
Other liabilities		873,052		832,136
Rate Coverage Reserve Fund		1,577,159		1,576,521
DWR Reserve Fund		9,282,145		9,282,145
Unearned Revenue		21,010,209		13,601,126
Credits Payable to Project Participants		947,128		946,789
Total Current Liabilities		69,887,892		52,436,291
Non-Current Liabilities				
Bonds payable (Note 12)		19,710,000		19,710,000
Bond Original Issue Premium, net		591,930		664,168
OPEB Liability		818,000		818,000
Escrow Deposits		525,562		525,330
Net Pension Liability		3,494,467		3,494,467
Total Non-Current Liabilities		25,139,959		25,211,965
Commitments and Uncertainties				
Net Assets				
Contributed capital, net (Note 13)		22,562,433		22,562,433
Retained earnings		51,445,778		55,638,725
Total Net Assets		74,008,211	_	78,201,158
Total Liabilities and Net Assets	\$	169,036,062	\$	155,849,414



Statements of Revenues, Expenses and Changes in Net Position

		Preliminary & Unaudited 6/30/2020		May 31, 2020
Operating Revenues				
Operating reimbursements				
from project participants	\$	18,702,309	\$	21,835,812
Other revenues		211,417		91,073
Total Operating Revenues	_	18,913,726	_	21,926,885
Operating Expenses				
Personnel expenses		4,949,087		4,400,451
Office expenses		16,571		14,990
General and administrative		190,760		179,398
Professional services		509,814		377,247
Supplies and equipment		803,682		710,775
Monitoring expenses		97,187		75,886
Repairs and maintenance		263,108		217,609
Utilities		374,049		302,025
Depreciation and amortization		1,659,217		1,490,785
Other expenses		976,071		906,872
Total Operating Expenses	_	9,839,546		8,676,038
Operating Income	_	9,074,180		13,250,847
Non-Operating Revenues				
Investment income	_	1,314,183		1,226,539
Total Non-Operating Revenues		1,314,183	_	1,226,539
Non-Operating Expenses				
Interest		1,100,000		1,017,875
Current year credits payable		817,473	_	795,674
Total Non-Operating Expenses		1,917,473	_	1,813,549
Net Income		8,470,890		12,663,837
Retained Earnings				
Retained earnings at beginning of period		42,974,887		42,974,887
Retained earnings at end of period	\$	51,445,778	\$	55,638,725

Notes to Financial Statements

June 30, 2020 - Preliminary & Unaudited

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.

Project Participant	Amount
City of Guadalupe	\$ 28,516
City of Santa Maria	839,926
Golden State Water Company	25,924
Vandenberg AFB	396,872
City of Buellton	29,968
Santa Ynez ID #1 (Solvang)	77,771
Santa Ynez ID #1	25,706
Goleta Water District	231,354
Morehart Land Co.	10,369
La Cumbre Mutual Water Company	51,841
Raytheon Systems Company	2,592
City of Santa Barbara	155,542
Montecito Water District	154,236
Carpinteria Valley Water District	102,824
TOTAL:	\$ 2,133,440

Notes to Financial Statements

June 30, 2020 - Preliminary & Unaudited

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	24,084
City of Santa Maria	938,756
Golden State Water Company	37,441
City of Buellton	\$ 45,409
Santa Ynez ID #1 (Solvang)	124,412
Santa Ynez ID #1	130,159
Morehart Land Co.	18,958
La Cumbre Mutual Water Company	69,015
Raytheon Systems Co.	4,937
City of Santa Barbara	183,987
TOTAL:	\$1,577,159

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	\$ 195,909
City of Santa Maria	5,129,802
City of Buellton	281,925
Santa Ynez ID #1 (Solvang)	627,594
Santa Ynez ID #1	463,034
La Cumbre Mutual Water Company	410,614
Montecito Water District	1,483,231
Carpinteria Valley Water District	853,612
Shandon	15,597
TOTAL:	\$9,461,318

Notes to Financial Statements

June 30, 2020 - Preliminary & Unaudited

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	\$ 11,930
California Men's Colony	104,350
County of SLO	111,160
Cuesta College	52,179
Morro Bay	673,298
Oceano	87,226
Pismo Beach	144,163
Shandon	11,812
Guadalupe	148,461
Buellton	263,043
Santa Ynez (Solvang)	806,852
Santa Ynez	303,016
Goleta	2,543,129
Morehart Land	116,870
La Cumbre	559,110
Raytheon	24,473
Santa Barbara	1,563,332
Montecito	1,837,528
Carpinteria	1,050,518
TOTAL:	\$10,412,450

Notes to Financial Statements

June 30, 2020 - Preliminary & Unaudited

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	\$ 372,426
City of Santa Maria	10,672,135
Golden State Water Company	366,307
Vandenberg AFB	8,306,752
City of Buellton	399,846
Santa Ynez ID #1 (Solvang)	962,832
Santa Ynez ID #1	1,034,174
Goleta Water District	3,490,123
Morehart Land Co.	130,363
La Cumbre Mutual Water Company	697,338
Raytheon Systems Co.	64,027
City of Santa Barbara	2,901,311
Montecito Water District	2,623,954
Carpinteria Valley Water District	1,533,525
TOTAL:	\$ 33,555,115

Note 6b: Cash Payments for CCWA Variable Charges

Cash deposits for payments to CCWA for Variable Assessments.

Project Participant	Amount
City of Guadalupe	\$ 28,029
City of Santa Maria	316,755
Golden State Water Company	11,809
Vandenberg AFB	61,021
City of Buellton	13,387
Santa Ynez ID #1 (Solvang)	37,817
Santa Ynez ID #1	76,941
Goleta Water District	266,545
Morehart Land Co.	284
La Cumbre Mutual Water Company	-
Raytheon Systems Co.	4,497
City of Santa Barbara	237,827
Montecito Water District	237,827
Carpinteria Valley Water District	156,974
Shandon	4,620
Lopez Turnout	58,773
Chorro Turnout	 49,228
TOTAL:	\$ 1,562,335

Notes to Financial Statements

June 30, 2020 - Preliminary & Unaudited

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	(24)
Golden State Water Company	(0)
Vandenberg AFB	411,148
City of Buellton	(2)
Santa Ynez ID #1 (Solvang)	(5)
Santa Ynez ID #1	(20,308)
Goleta Water District	526
Morehart Land Co.	(0)
La Cumbre Mutual Water Company	(1)
Raytheon Systems Co.	(0)
City of Santa Barbara	(1)
Montecito Water District	386
Carpinteria Valley Water District	233
Shandon	(1,785)
Lopez Turnout	132
Chorro Turnout	118
TOTAL:	\$ 390,416

Note 8: Escrow Deposits

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

Project	
Participant	Amount
Morehart Land Company	\$ 414,922
Raytheon Systems Company	110,640
TOTAL:	\$ 525,562

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	\$	12,413
Materials		59,730
Overhead		173,849
Project CIP Total:	\$	245,991

Notes to Financial Statements

June 30, 2020 - Preliminary & Unaudited

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	Long-Term	
Participant	R	Receivable
Avila Beach	\$	2,905
California Men's Colony		64,873
County of SLO		69,185
Cuesta College		32,439
Morro Bay		496,260
Oceano		19,787
Pismo Beach		32,669
Shandon		2,387
Guadalupe		84,373
Buellton		13,733
Santa Ynez (Solvang)		36,632
Santa Ynez		16,233
Goleta		208,558
Morehart Land		960
La Cumbre		4,801
Raytheon		1,267
Santa Barbara		45,531
Montecito		72,432
Carpinteria		65,259
TOTAL:	\$	1,270,283

Note 12: Bonds Payable

Bonds payable represents outstanding Series 2016-A revenue bonds outstanding. The next Series 2016-A principal and interest payment is due on October 1, 2020 in the amount of \$10,107,750.

Notes to Financial Statements

June 30, 2020 - Preliminary & Unaudited

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:	\$	22,562,433



		Preliminary & Unaudited						
			6/30/2020					
				Percent				
		Budget	Actual	Expended ⁽¹⁾				
Operating Revenues								
Fixed operating assessments (2)	\$	10,029,667	8,628,442	86.03%				
Variable operating assessments		3,259,787	863,622	26.49%				
Other revenues		-	-	N/A				
Non-annual recurring revenues		-	-	N/A				
Total Operating Revenues		13,289,454	9,492,064	71.43%				
Operating Expenses (2)								
Personnel expenses		5,201,852	4,949,087	95.14%				
Office expenses		20,500	16,571	80.83%				
General and administrative		309,710	190,760	61.59%				
Professional services		432,843	509,814	117.78%				
Supplies and equipment		2,297,803	803,682	34.98%				
Monitoring expenses		105,604	97,187	92.03%				
Repairs and maintenance		285,620	263,108	92.12%				
Utilities		1,331,312	374,049	28.10%				
Depreciation and amortization		-	-	N/A				
Other expenses		1,547,670	976,071	63.07%				
Total Operating Expenses		11,532,913	8,180,329	70.93%				
Operating Income	_	1,756,541	1,311,735					
Non-Operating Revenues								
Interest income		-	-					
Total Non-Operating Revenues		<u>-</u>	-					
Non-Operating Expenses								
	_	<u> </u>	-					
Total Non-Operating Expenses	_	- -						
Net Income (Loss)	\$	1,756,541	1,311,735					

(1) Percent of year expended: 100%

(2) Includes revenues and expenses for Turnouts and adjusted for carryover revenues from FY 2018/19 to FY 2019/20 and for carryover revenues from FY 2019/20 to FY 2020/21



Budget and Actual Administration

	_	Pre		ary & Unaudit /30/2020	ed
			-		Percent
	_	Budget		Actual	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		935,880	94.39%
Office expenses		10,500		9,465	90.14%
General and administrative		202,460		145,251	71.74%
Professional services		254,171		345,434	135.91%
Supplies and equipment		-		-	N/A
Monitoring expenses		-		-	N/A
Repairs and maintenance		29,935		30,905	103.24%
Utilities		15,203		14,568	95.82%
Depreciation and amortization		-		-	N/A
Other expenses		252,898		458,962	181.48%
Total Operating Expenses	_	1,756,637		1,940,465	110.46%
Operating Income	_	111,580		(72,248)	
Non-Operating Revenues					
Investment Income		-			
Total Non-Operating Revenues	_	-		-	
Non-Operating Expenses					
Current Year credits payable	_				
Total Non-Operating Expenses	<u> </u>	-		-	
Net Income (Loss)	\$	111,580		(72,248)	

⁽¹⁾ Percent of year expended: 100%

⁽²⁾ Includes revenues and expenses for Turnouts and adjusted for carryover revenues from FY 2018/19 to FY 2019/20 and for carryover revenues from FY 2019/20 to FY 2020/21



Budget and Actual Water Treatment Plant

		Prelii	minary & Unaudite	ed
			6/30/2020	
				Percent
		Budget	Actual	Expended (1)
Operating Revenues				
Fixed operating assessments (2)	\$	4,498,633	3,887,711	86.42%
Variable operating assessments		2,198,977	764,216	34.75%
Other revenues		-	-	N/A
Non-annual recurring revenues		-	-	N/A
Total Operating Revenues		6,697,610	4,651,927	69.46%
Operating Expenses (2)				
Personnel expenses		2,477,227	2,317,748	93.56%
Office expenses		6,000	4,832	80.53%
General and administrative		73,000	30,836	42.24%
Professional services		75,239	77,216	102.63%
Supplies and equipment		2,194,892	723,017	32.94%
Monitoring expenses		105,604	97,187	92.03%
Repairs and maintenance		166,485	141,243	84.84%
Utilities		188,801	170,351	90.23%
Depreciation and amortization		-	-	N/A
Other expenses		525,576	254,409	48.41%
Total Operating Expenses		5,812,823	3,816,837	65.66%
Operating Income		884,787	835,090	
Non-Operating Revenues				
Interest income		-	-	
Total Non-Operating Revenues		-	-	
Non-Operating Expenses				
Interest		<u> </u>		
Total Non-Operating Expenses	_	-	-	
Net Income (Loss)	\$	884,787	835,090	

⁽¹⁾ Percent of year expended: 100%

⁽²⁾ Includes revenues and expenses for Turnouts and adjusted for carryover revenues from FY 2018/19 to FY 2019/20 and for carryover revenues from FY 2019/20 to FY 2020/21

Polonio Pass Water Treatment Plant Fixed and Variable Cost per Acre-Foot

6/30/2020

																									•	Total for
WTP Fixed O&M Costs	Jı	uly 2019	Α	ug. 2019	Se	ept. 2019	C	Oct. 2019	N	ov. 2019	D	ec. 2019	J	an. 2020	F	eb. 2020	N	lar. 2020	Α	oril 2020	N	lay 2020	Jı	une 2020		Year
Fixed O&M Expenses	\$	334,149	\$	213,877	\$	219,798	\$	245,736	\$	304,255	\$	240,004	\$	217,970	\$	208,757	\$	204,503	\$	216,384	\$	296,125	\$	374,643	\$	3,076,200
Annual Table A Amount (1)		43,908		43,908		43,908		43,908		43,908		43,908		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	\$	4.96	\$	4.75	\$	4.66	\$	4.93	\$	6.74	\$	8.53	\$	70.06
WTP Variable O&M Costs																										
Variable O&M Expenses	\$	77,325	\$	98,037	\$	95,697	\$	82,191	\$	33,343	\$	39,594	\$	45,415	\$	54,803	\$	46,338	\$	51,240	\$	30,231	\$	86,421	\$	740,637
Actual Water Treated		2,486		2,463		2,250		2,255		635		1,178		992		1,043		1,118		1,025		1,439		1,702		18,586
Variable WTP Cost per AF	\$	31.10	\$	39.80	\$	42.53	\$	36.45	\$	52.51	\$	33.61	\$	45.78	\$	52.54	\$	41.45	\$	49.99	\$	21.01	\$	50.78	\$	39.85

9/16/2020 47558_2

⁽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.



Budget and Actual Mission Hills II

		Prelin	ninary & Unaudite	ed
			6/30/2020	.
		Budget	Actual	Percent Expended ⁽¹⁾
Operating Revenues				-
Fixed operating assessments (2)	\$	366,691	358,040	97.64%
Variable operating assessments		-	-	N/A
Other revenues		-	-	N/A
Total Operating Revenues	_	366,691	358,040	97.64%
Operating Expenses (2)				
Personnel expenses		222,268	208,913	93.99%
Office expenses		513	292	56.83%
General and administrative		4,392	1,870	42.57%
Professional services		13,265	6,798	51.25%
Supplies and equipment		13,198	10,060	76.23%
Monitoring expenses		-	-	N/A
Repairs and maintenance		11,439	9,474	82.82%
Utilities		8,528	3,149	36.92%
Depreciation and amortization		-	-	N/A
Other expenses		25,815	47,189	182.80%
Total Operating Expenses		299,417	287,744	96.10%
Operating Income	_	67,273	70,296	
Non-Operating Revenues				
Interest income		-	-	
Total Non-Operating Revenues		<u> </u>		
Non-Operating Expenses				
Interest		-	-	
Total Non-Operating Expenses	_	<u> </u>	-	
Net Income (Loss)	\$	67,273	70,296	

(1) Percent of year expended: 100%

(2) Includes revenues and expenses for Turnouts and adjusted for carryover revenues from FY 2018/19 to FY 2019/20 and for carryover revenues from FY 2019/20 to FY 2020/21



Budget and Actual Santa Ynez I

		Prelin	ninary & Unaudite	ed
	_		6/30/2020	Percent
		Budget	Actual	Expended (1)
Operating Revenues				
Fixed operating assessments (2)	\$	635,277	582,327	91.66%
Variable operating assessments		, -	-	N/A
Other revenues		-	-	N/A
Total Operating Revenues	_	635,277	582,327	91.66%
Operating Expenses (2)				
Personnel expenses		312,860	306,368	97.92%
Office expenses		722	410	56.84%
General and administrative		6,183	2,632	42.58%
Professional services		18,671	8,308	44.49%
Supplies and equipment		18,577	14,339	77.18%
Monitoring expenses		-	-	N/A
Repairs and maintenance		16,102	8,636	53.64%
Utilities		12,004	7,236	60.29%
Depreciation and amortization		-	-	N/A
Other expenses		76,026	22,408	29.47%
Total Operating Expenses	_	461,145	370,337	80.31%
Operating Income	_	174,132	211,989	
Non-Operating Revenues				
Interest income		<u> </u>	-	
Total Non-Operating Revenues	_	- .	-	
Non-Operating Expenses				
Interest		-	-	
Total Non-Operating Expenses		-	-	
Net Income (Loss)	\$	174,132	211,989	

(1) Percent of year expended: 100%

(2) Includes revenues and expenses for Turnouts and adjusted for carryover revenues from FY 2018/19 to FY 2019/20 and for carryover revenues from FY 2019/20 to FY 2020/21



Budget and Actual Santa Ynez II

		Preli	minary & Unaudite	ed
			6/30/2020	
				Percent
	В	udget	Actual	Expended (1)
Operating Revenues				
Fixed operating assessments (2)	\$	1,186,914	743,566	62.65%
Variable operating assessments		1,060,810	99,406	9.37%
Other revenues		-		N/A
Total Operating Revenues		2,247,724	842,972	37.50%
Operating Expenses ⁽²⁾				
Personnel expenses		449,302	415,615	92.50%
Office expenses		1,037	589	56.84%
General and administrative		8,879	3,780	42.58%
Professional services		26,814	51,597	192.43%
Supplies and equipment		26,679	21,095	79.07%
Monitoring expenses		-	-	N/A
Repairs and maintenance		23,124	24,294	105.06%
Utilities		1,078,049	149,310	13.85%
Depreciation and amortization		-	-	N/A
Other expenses		279,840	70,869	25.32%
Total Operating Expenses		1,893,723	737,149	38.93%
Operating Income		354,001	105,823	
Non-Operating Revenues				
Interest income		-	-	
Total Non-Operating Revenues		-		
Non-Operating Expenses				
Interest		-	-	
Total Non-Operating Expenses		-	-	
Net Income (Loss)	\$	354,001	105,823	

(1) Percent of year expended: 100%

(2) Includes revenues and expenses for Turnouts and adjusted for carryover revenues from FY 2018/19 to FY 2019/20 and for carryover revenues from FY 2019/20 to FY 2020/21



		Preliminary & Unaudited 6/30/2020					
		Budget	Actual	Percent Expended ⁽¹⁾			
Operating Revenues							
Fixed operating assessments (2)	\$	747,465	582,746	77.96%			
Variable operating assessments		-	-	N/A			
Other revenues		-	-	N/A			
Total Operating Revenues	_	747,465	582,746	77.96%			
Operating Expenses (2)							
Personnel expenses		346,171	303,409	87.65%			
Office expenses		799	454	56.82%			
General and administrative		6,841	2,912	42.57%			
Professional services		20,659	8,292	40.13%			
Supplies and equipment		20,555	15,939	77.54%			
Monitoring expenses		-	-	N/A			
Repairs and maintenance		17,816	18,329	102.88%			
Utilities		13,282	9,829	74.01%			
Depreciation and amortization		-	-	N/A			
Other expenses		197,842	92,202	46.60%			
Total Operating Expenses	_	623,966	451,366	72.34%			
Operating Income	_	123,500	131,380				
Non-Operating Revenues							
Interest income		-	-				
Total Non-Operating Revenues	_	<u>-</u>	-				
Non-Operating Expenses							
Interest		-	-				
Total Non-Operating Expenses	_	-	-				
Net Income (Loss)	\$	123,500	131,380				

(1) Percent of year expended: 100%

(2) Includes revenues and expenses for Turnouts and adjusted for carryover revenues from FY 2018/19 to FY 2019/20 and for carryover revenues from FY 2019/20 to FY 2020/21



		Prelin	ninary & Unaudite	ed
			6/30/2020	
		Budget	Actual	Percent Expended (1)
Operating Revenues				
Fixed operating assessments (2)	\$	249,039	241,344	96.91%
Variable operating assessments	•	, -	, -	N/A
Other revenues		-	-	N/A
Total Operating Revenues	_	249,039	241,344	96.91%
Operating Expenses (2)				
Personnel expenses		167,480	154,604	92.31%
Office expenses		387	220	56.82%
General and administrative		3,310	1,409	42.57%
Professional services		9,995	3,195	31.96%
Supplies and equipment		9,945	7,703	77.45%
Monitoring expenses		-	-	N/A
Repairs and maintenance		8,620	6,871	79.72%
Utilities		6,426	6,186	96.27%
Depreciation and amortization		-	-	N/A
Other expenses		19,452	11,655	59.92%
Total Operating Expenses	_	225,613	191,843	85.03%
Operating Income	_	23,426	49,502	
Non-Operating Revenues				
Interest income		-	-	
Total Non-Operating Revenues	_	<u>-</u>		
Non-Operating Expenses				
Interest		-	-	
Total Non-Operating Expenses		<u>-</u>	-	
Net Income (Loss)	\$	23,426	49,502	

(1) Percent of year expended: 100%

(2) Includes revenues and expenses for Turnouts and adjusted for carryover revenues from FY 2018/19 to FY 2019/20 and for carryover revenues from FY 2019/20 to FY 2020/21



		Preliminary & Unaudited					
			6/30/2020				
				Percent			
		Budget	Actual	Expended (1)			
Operating Revenues							
Fixed operating assessments (2)	\$	162,220	159,388	98.25%			
Variable operating assessments		-	-	N/A			
Non-annual recurring revenues		-	-	N/A			
Other revenues		-	-	N/A			
Total Operating Revenues		162,220	159,388	98.25%			
Operating Expenses (2)							
Personnel expenses		110,285	91,503	82.97%			
Office expenses		255	145	56.81%			
General and administrative		2,179	928	42.56%			
Professional services		6,582	1,836	27.89%			
Supplies and equipment		6,548	4,983	76.10%			
Monitoring expenses		-	-	N/A			
Repairs and maintenance		5,676	2,336	41.16%			
Utilities		4,231	2,018	47.70%			
Depreciation and amortization		-	-	N/A			
Other expenses		12,809	7,096	55.40%			
Total Operating Expenses		148,565	110,844	74.61%			
Operating Income	_	13,654	48,543				
Non-Operating Revenues							
Interest income		-	-				
Total Non-Operating Revenues		-	-				
Non-Operating Expenses							
Interest		-	-				
Total Non-Operating Expenses		-	-				
Net Income (Loss)	\$	13,654	48,543				

(1) Percent of year expended: 100%

⁽²⁾ Includes revenues and expenses for Turnouts and adjusted for carryover revenues from FY 2018/19 to FY 2019/20 and for carryover revenues from FY 2019/20 to FY 2020/21



		Preliminary & Unaudited						
			6/30/2020					
				Percent				
	_	Budget	Actual	Expended (1)				
Operating Revenues		_						
Fixed operating assessments (2)	\$	70,133	68,183	97.22%				
Variable operating assessments		-	-	N/A				
Non-annual recurring revenues		-	-	N/A				
Other revenues		-	-	N/A				
Total Operating Revenues	_	70,133	68,183	97.22%				
Operating Expenses (2)								
Personnel expenses		47,283	40,662	86.00%				
Office expenses		109	63	57.30%				
General and administrative		934	401	42.92%				
Professional services		2,822	794	28.13%				
Supplies and equipment		2,808	2,155	76.75%				
Monitoring expenses		, -	-	N/A				
Repairs and maintenance		2,434	1,010	41.51%				
Utilities		1,814	625	34.43%				
Depreciation and amortization		, -	-	N/A				
Other expenses		5,492	3,068	55.87%				
Total Operating Expenses	_	63,695	48,777	76.58%				
Operating Income	_	6,438	19,405					
Non-Operating Revenues								
Interest income		_	-					
Total Non-Operating Revenues	<u> </u>	-	-					
Non-Operating Expenses								
Interest		_	_					
Total Non-Operating Expenses		-	-					
Net Income (Loss)	\$	6,438	19,405					

⁽¹⁾ Percent of year expended: 100%

⁽²⁾ Includes revenues and expenses for Turnouts and adjusted for carryover revenues from FY 2018/19 to FY 2019/20 and for carryover revenues from FY 2019/20 to FY 2020/21



	_	Prelin	ninary & Unaudite	ed
	_	Budget	Actual	Percent Expended (1)
Operating Revenues				
Fixed operating assessments (2)	\$	114,934	111,776	97.25%
Variable operating assessments		-	-	N/A
Non-annual recurring revenues		-	-	N/A
Other revenues		<u>-</u>		N/A
Total Operating Revenues	_	114,934	111,776	97.25%
Operating Expenses (2)				
Personnel expenses		77,507	67,612	87.23%
Office expenses		179	102	56.82%
General and administrative		1,532	652	42.56%
Professional services		4,626	1,290	27.89%
Supplies and equipment		4,602	3,502	76.10%
Monitoring expenses		-	-	N/A
Repairs and maintenance		3,989	2,496	62.57%
Utilities		2,974	1,015	34.14%
Depreciation and amortization		-	-	N/A
Other expenses		9,002	4,987	55.40%
Total Operating Expenses	_	104,411	81,656	78.21%
Operating Income		10,524	30,120	
Non-Operating Revenues				
Interest income		-	-	
Total Non-Operating Revenues			-	
Non-Operating Expenses				
Interest		-	-	
Total Non-Operating Expenses		-	-	
Net Income (Loss)	\$	10,524	30,120	

(1) Percent of year expended: 100%

(2) Includes revenues and expenses for Turnouts and adjusted for carryover revenues from FY 2018/19 to FY 2019/20 and for carryover revenues from FY 2019/20 to FY 2020/21

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

System Name:Central Coast Water AuthoritySystem Number:4210030Treatment Plant Name:Polonio Pass Water Treatment PlantJuly2020

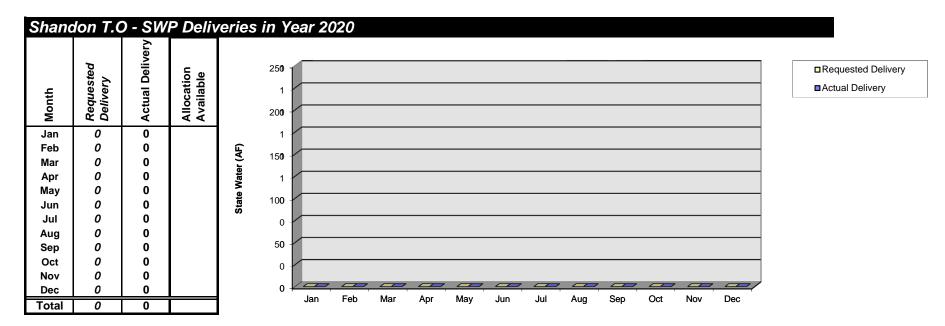
Date:	RW pH (SU)	RW Turbidity (NTU)	SW Turbidity (NTU)	RW Odor (TON)	RW Total Coliform (MPN)	RW E. Coli (MPN)		RW Alkalii	nity (mg/L)	RW Hardr	ness (mg/L)	RW E.C.	RW TOC
							(mg/L)	Total Phenol		Total Ca		(uS/cm)	(mg/L)
1	8.74	2.05	0.35	1.5			67	75	8	93	47		4.0
2	8.82	2.18	0.35	2.0			63	71	7	93	49		
3	8.83	2.28	0.32	1.5			68	72	8	91	45		
4	8.93	1.97	0.35	1.0			67	71	9	91	44		
5	8.90	1.68	0.34	2.0			71	71	9	93	48		
6	8.80	1.47	0.32	2.0	50	<1	68	73	7	93	47	452	
7	8.93	1.67	0.39	2.5			67	74	11	89	47		
8	8.77	1.43	0.58	2.5			67	73	5	90	48		
9	8.65	1.28	0.36	2.5			68	75	7	94	48		
10	8.72	1.50	0.41	2.5			66	74	8	96	49		
11	8.72	1.60	0.38	1.5			67	75	6	95	47		
12	8.76	1.85	0.31	3.0			67	76	7	92	49		
13	8.90	2.53	0.36	3.0	>2,419	2	68	75	13	96	47	448	
14	8.98	3.00	0.36	3.5			67	74	10	94	50		
15	9.04	4.25	0.43	2.5			65	74	11	92	48		
16	8.99	4.48	0.58	2.0			64	74	10	95	45		
17	8.90	4.42	0.74	2.0			63	74	10	92	46		
18	8.77	3.93	0.87	2.5			63	71	7	91	47		
19	8.62	3.55	0.75	1.5			62	72	4	90	45		
20	8.49	2.93	0.62	2.0	1733	1	60	73	3	90	47	399	
21	8.30	2.87	0.55	2.0			60	79	0	88	44		
22	8.23	4.35	0.49	1.5			59	78	0	90	45		
23	8.20	3.62	0.40	1.0			59	76	0	87	42		
24	8.33	4.83	0.40	1.5			59	74	0	83	43		
25	8.38	4.93	0.50	1.0			59	76	0	84	42		
26	8.50	5.67	0.46	1.0			54	78	2	78	42		
27	8.58	5.03	0.44	1.0	1986	<1	56	76	2	81	42	361	
28	8.63	4.65	0.44	1.5			50	69	6	84	46		
29	8.60	4.53	0.43	1.5			45	68	5	80	42		
30	8.58	4.60	0.40	1.5			43	67	4	77	37		
31	8.45	3.88	0.44	1.0			41	68	1	76	43		
Avg	8.68	3.19	0.46	1.9	1256	2	61	73	6	89	46	415	4.0

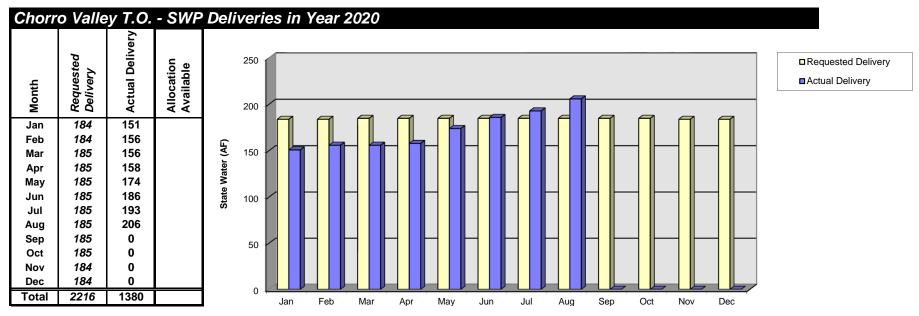
MONTHLY SUMMARY OF MINERAL AND PHYSICAL ANALYSIS TREATED WATER (TW) & CLEARWELL (CW)

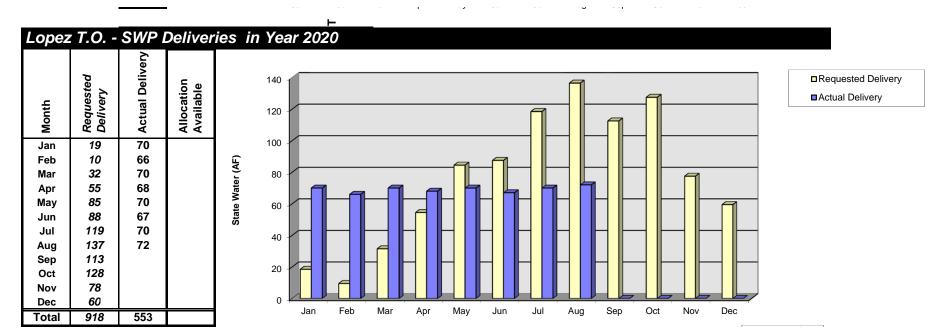
 System Name:
 Central Coast Water Authority
 System Number:
 4210030

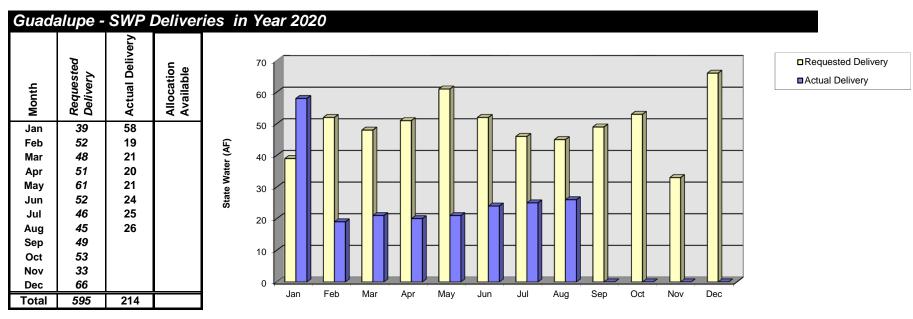
 Treatment Plant Name:
 Polonio Pass Water Treatment Plant
 July
 2020

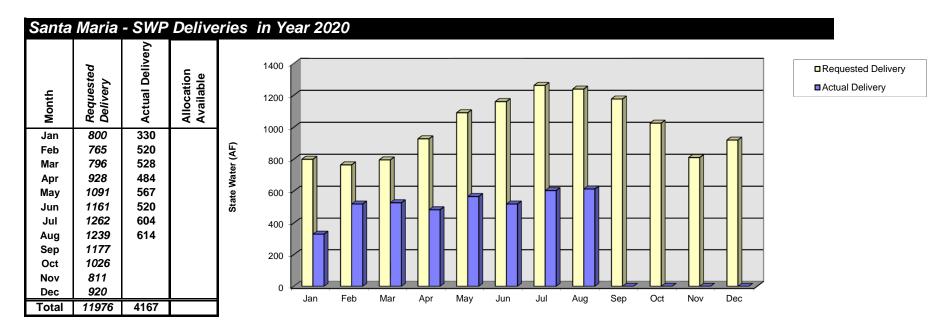
Date:	TW pH	TW	Filter Rate	CW Odor	TW Total	CW CI-	CW Total	CW Hardn	ess (mg/L)	TW Chlorine (mg/L)		CCB3	TW NH3-N (mg/L)		(CCB3 CI2	CW E.C.	TW TOC
	(SU)	Turbidity	(gpm/ft ²)	(TON)	Coliform	(mg/L)	Alk					Chlorine			Free) / (TW	(uS/cm)	(mg/L)
		(NTU)					(mg/L)					Free			NH3-N Total)		
_	0.10	0.07	4.64		4 B C E N E			Total	Ca	Total	Free	(mg/L)	Total	Free			2.2
1	8.40	0.07	4.61	0.0	ABSENT	71	67	94	46	3.51	0.00	3.27	0.65	0.00	5.0		2.3
2	8.35	0.07	4.78	0.0	ABSENT	68	67	90	44	3.40	0.00	3.30	0.65	0.00	5.1		
3	8.40	0.07	4.86	0.0	ABSENT	69	67	93	43	3.52	0.00	3.37	0.64	0.00	5.3		
4	8.40	0.08	4.79	0.0	ABSENT	71	64	92	45	3.43	0.00	3.28	0.64	0.00	5.1		
5	8.43	0.08	4.86	0.0	ABSENT	75	64	95	47	3.49	0.00	3.28	0.67	0.00	4.9		
6	8.36	0.07	4.86	0.0	ABSENT	73	63	94	47	3.42	0.00	3.23	0.62	0.00	5.2	498	
7	8.46	0.08	4.72	0.0	ABSENT	74	70	89	47	3.37	0.00	3.23	0.62	0.00	5.2		
8	8.25	0.10	4.74	0.0	ABSENT	71	67	91	47	3.37	0.00	3.24	0.62	0.00	5.2		
9	8.38	0.08	4.46	0.0	ABSENT	72	67	95	49	3.38	0.00	3.32	0.62	0.00	5.4		
10	8.35	0.08	4.51	0.0	ABSENT	72	67	98	49	3.31	0.00	3.18	0.61	0.00	5.2		
11	8.36	0.08	4.25	0.0	ABSENT	73	70	93	46	3.30	0.00	3.15	0.60	0.00	5.3		
12	8.42	0.08	3.88	0.0	ABSENT	73	70	95	45	3.30	0.00	3.17	0.60	0.00	5.3		
13	8.48	0.09	4.15	0.0	ABSENT	73	68	99	49	3.30	0.00	3.18	0.61	0.00	5.2	502	
14	8.32	0.09	4.12	0.0	ABSENT	72	62	97	49	3.42	0.00	3.29	0.63	0.00	5.2		
15	8.49	0.08	3.69	0.0	ABSENT	70	63	94	47	3.40	0.00	3.24	0.63	0.00	5.1		
16	8.46	0.08	3.69	0.5	ABSENT	68	63	93	45	3.40	0.00	3.26	0.62	0.00	5.3		
17	8.40	0.08	3.69	0.0	ABSENT	67	65	93	47	3.39	0.00	3.29	0.63	0.00	5.2		
18	8.42	0.09	3.79	0.0	ABSENT	67	63	91	46	3.41	0.00	3.26	0.63	0.00	5.2		
19	8.42	0.09	3.94	0.0	ABSENT	66	66	92	46	3.35	0.00	3.25	0.63	0.00	5.2		
20	8.35	0.09	4.15	0.0	ABSENT	63	65	90	46	3.42	0.00	3.31	0.63	0.00	5.3	461	
21	8.26	0.09	4.61	0.0	ABSENT	64	71	87	46	3.40	0.00	3.22	0.63	0.00	5.1		
22	8.42	0.09	4.45	0.0	ABSENT	63	71	91	46	3.33	0.00	3.33	0.62	0.00	5.4		
23	8.41	0.10	4.49	0.0	ABSENT	64	66	85	41	3.33	0.00	3.32	0.64	0.00	5.2		
24	8.38	0.09	4.85	0.0	ABSENT	62	70	84	42	3.25	0.00	3.28	0.61	0.00	5.4		
25	8.43	0.09	4.85	0.0	ABSENT	63	72	83	43	3.25	0.00	3.14	0.61	0.00	5.1		
26	8.42	0.09	4.65	0.0	ABSENT	56	68	78	42	3.42	0.00	3.20	0.63	0.00	5.1		
27	8.35	0.10	4.45	0.0	ABSENT	59	71	79	41	3.32	0.00	3.34	0.62	0.00	5.4	409	
28	8.33	0.10	4.40	0.0	ABSENT	55	62	84	42	3.33	0.00	3.40	0.62	0.00	5.5		
29	8.38	0.10	4.46	0.0	ABSENT	52	62	80	46	3.40	0.00	3.31	0.63	0.00	5.3		
30	8.37	0.11	4.41	0.0	ABSENT	50	61	78	38	3.27	0.00	3.31	0.60	0.00	5.5		
31	8.38	0.09	4.17	0.0	ABSENT	46	60	76	40	3.43	0.00	3.31	0.63	0.00	5.3		
Avg	8.39	0.09	4.40	0.02		66	66	89	45	3.37	0.00	3.27	0.63	0.00	5.2	468	2.30

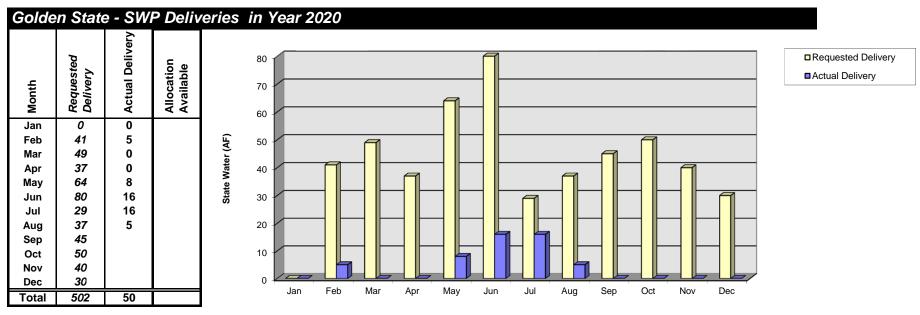


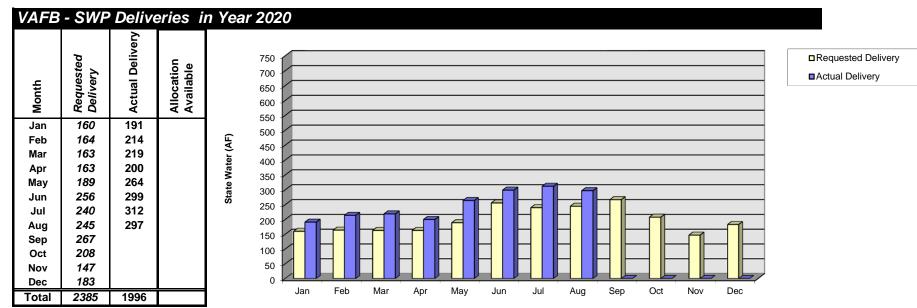


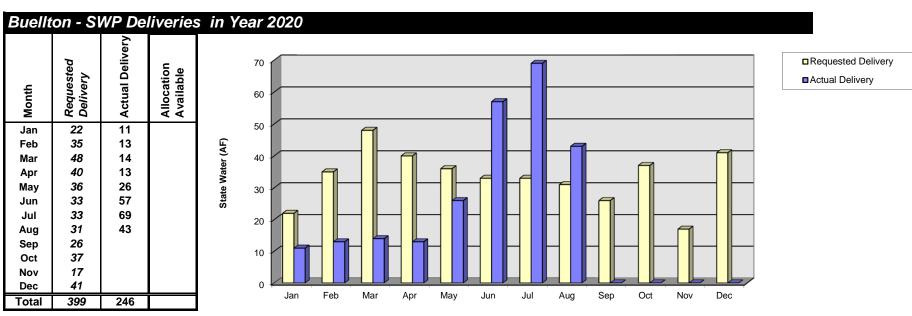






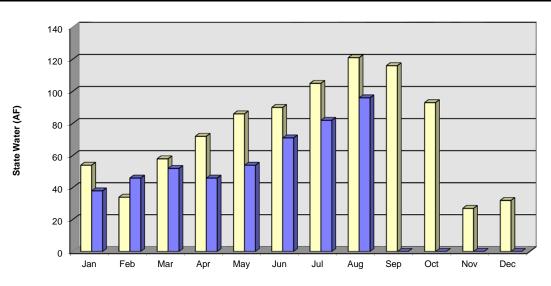






Santa Ynez - Solvang Only - SWP Deliveries in Year 2020

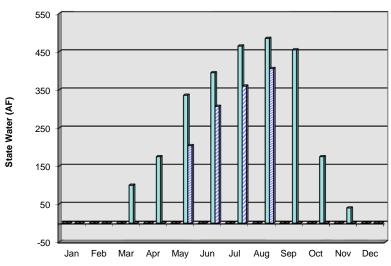
Santa	IIIGZ	Julya	ng On
Month	Requested Delivery	Actual Delivery	Allocation Available
Jan	54	38	
Feb	34	46	
Mar	58	52	
Apr	72	46	
May	86	54	
Jun	90	71	
Jul	105	82	
Aug	121	96	
Sep	116		
Oct	93		
Nov	27		
Dec	32		
Total	888	485	



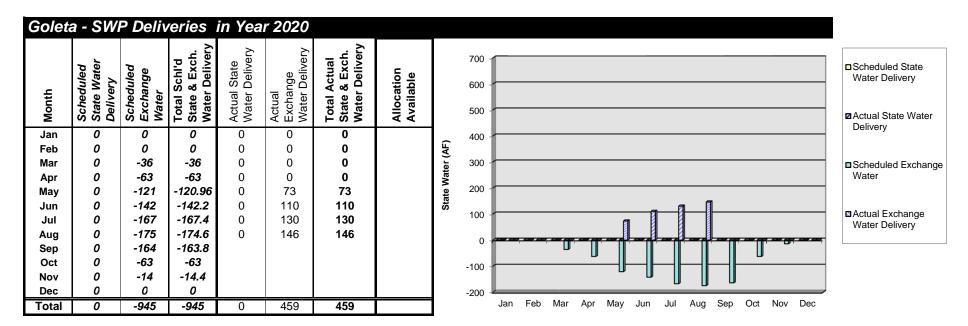
■ Requested Delivery
■ Actual Delivery

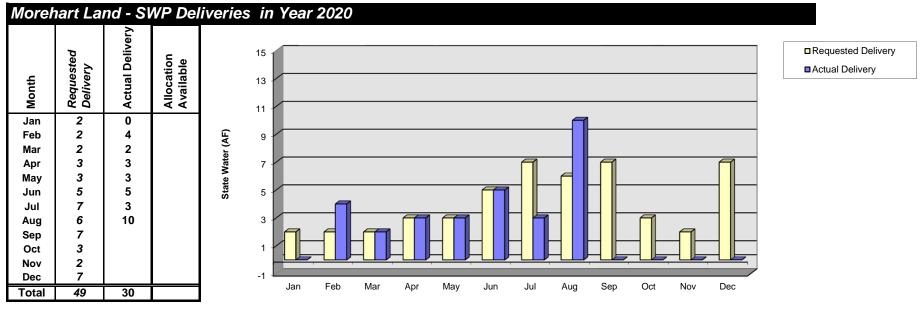
Santa Ynez (Without Solvang) - SWP Deliveries in Year 2020

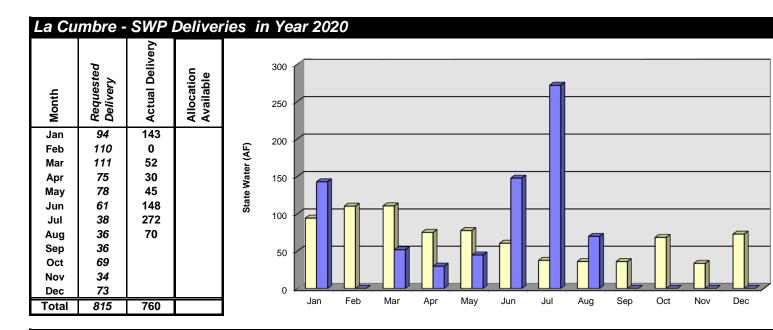
Month	Scheduled State Water Delivery	Scheduled Exchange Water	Total Schl'd State & Exch. Water Delivery	Actual State Water Delivery	Actual Exchange Water Delivery	Total Actual State & Exch. Water Delivery	Allocation Available
Jan	0	0	0	0	0	0	
Feb	0	0	0	0	0	0	
Mar	0	100	100	0	0	0	
Apr	0	175	175	0	0	0	
May	0	336	336	0	204	204	
Jun	0	395	395	0	307	307	
Jul	0	465	465	0	360	360	
Aug	0	485	485	0	406	406	
Sep	0	455	455				
Oct	0	175	175				
Nov	0	40	40				
Dec	0	0	0				
Total	0	2626	2626	0	1277	1277	







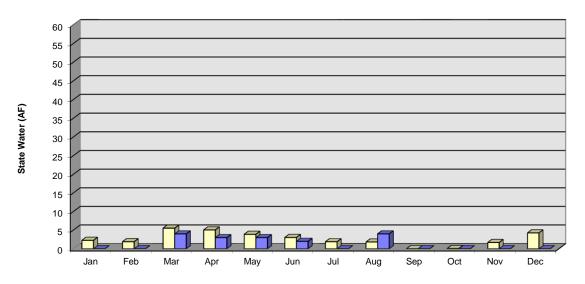




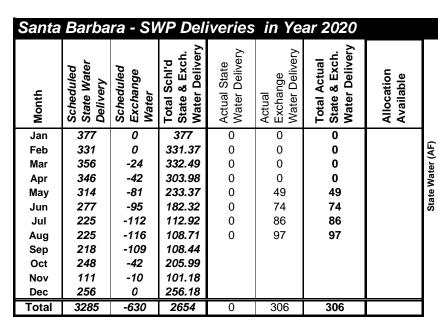
■ Requested Delivery
■ Actual Delivery

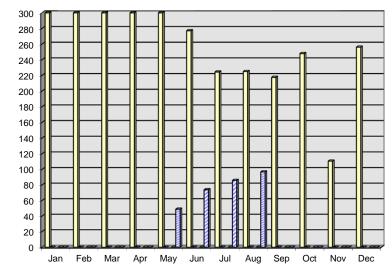
Raytheon (SBRC) - SWP Deliveries in Year 2020

Month	Requested Delivery	ьоνων ο ο Actual Delivery	Allocation Available
Jan	2	0	
Feb	2	0	
Mar	6	4	
Apr	5	3	
May	4	3	
Jun	3	2	
Jul	2	0	
Aug	2	4	
Sep	0		
Oct	2 2 6 5 4 3 2 2 0 0 2 4		
Nov	2		
Dec			
Total	31	16	



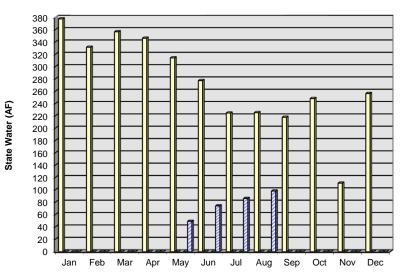
■ Requested Delivery
■ Actual Delivery



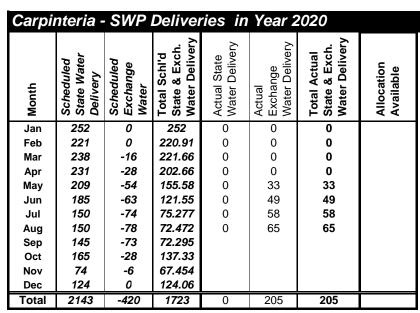


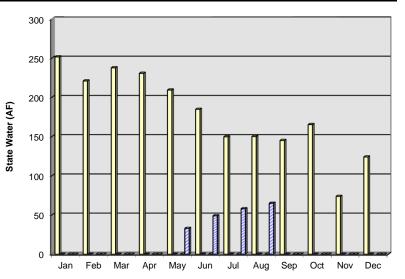
Scheduled State Water Delivery
☑ Actual State Water Delivery
Scheduled Exchange Water
■Actual Exchange Water Delivery

Monte	ecito - S	SWP D	eliveri	es in '	Year 20)20	
Month	Scheduled State Water Delivery	Scheduled Exchange Water	Total Schl'd State & Exch. Water Delivery	Actual State Water Delivery	Actual Exchange Water Delivery	Total Actual State & Exch. Water Delivery	Allocation Available
Jan	377	0	377	0	0	0	
Feb	331	0	331.37	0	0	0	
Mar	356	-24	332.49	0	0	0	
Apr	346	-42	303.98	0	0	0	
May	314	-81	233.37	0	49	49	
Jun	277	-95	182.32	0	74	74	
Jul	225	-112	112.92	0	86	86	
Aug	225	-116	108.71	0	98	98	
Sep	218	-109	108.44				
Oct	248	-42	205.99				
Nov	111	-10	101.18				
Dec	256	0	256.18				
Total	3285	-630	2654	0	307	307	









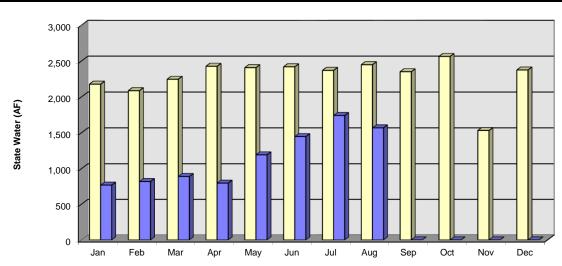
□Scheduled State Water Delivery
☑Actual State Water Delivery
Scheduled Exchange Water
Delivery Scheduled

■ Actual Exchange

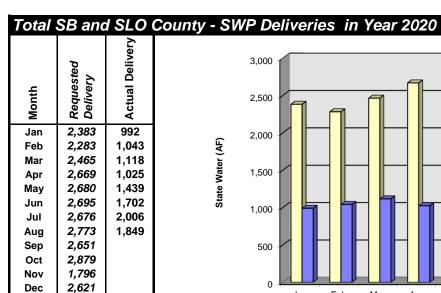
Water Delivery

Total SB County - SWP Deliveries in Year 2020

Month	Requested Delivery	Actual Delivery
Jan	2,180	771
Feb	2,089	821
Mar	2,248	892
Apr	2,429	799
May	2,410	1,195
Jun	2,422	1,449
Jul	2,372	1,743
Aug	2,451	1,571
Sep	2,353	
Oct	2,566	
Nov	1,534	
Dec	2,377	
Total	27,431	9,241

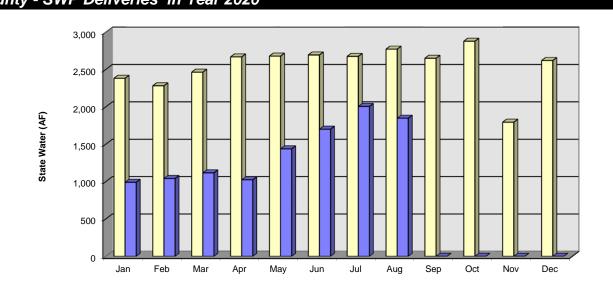


■ Requested Delivery
■ Actual Delivery



30,565 11,174

Total



■Requested Delivery

■ Actual Delivery



CENTRAL COAST WATER AUTHORITY MEMORANDUM

September 16, 2020

TO: CCWA Board of Directors

FROM: Ray A. Stokes

Executive Direct

SUBJECT: Final State Water Project Delivery Capability Report 2019

DISCUSSION

On August 26, 2020, DWR released its Final 2019 Delivery Capability Report (DCR) 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."

The 2019 DCR shows a decrease in the long-term DWR SWP delivery capability from the current 62% (2017 DCR) to 58%. The main reasons for the decrease are shown in the following table:

Model Difference	Impact on Banks SWP exports
December 2018 COA Addendum	~ -115 TAF
Reclamation model updates in 2018 (primarily CVP operations improvement and refinement of Settlement contractor demands)	~ -25 TAF
Oroville storage target increase from 1.0 to 1.3 MAF	~ -47 TAF
Changes in regulations in ITP/RoC on LTO	~ +40 TAF
Oroville storage target increase from 1.3 to static (flat) 1.6 MAF	~ -14 TAF
Refinement of SWP allocation procedure in DCR 2019 CalSim II model	~ +36 TAF
Total	~ -125 TAF

The link to the full DCR shown below, provides a detailed explanation on each of the Model Difference issues listed in the table above.

The 2019 DCR provides projections for wet and dry periods for both current conditions and future conditions in the year 2040 with a 45 centimeter sea ledvel rise. The following table summarizes the results on each of those scenarios from the 2019 DCR:

Annual Table A Allocation

Annual Table A	Year 2020	Year 2040
Long-term Average	58%	52%
Single Dry Year (1977)	7%	10%
2-Year Drought (1976-77)	32%	23%
4-Year Drought (1931-34)	30%	23%
6-Year Drought (1987-92)	26%	22%
6-Year Drought (1929-34)	28%	23%

A full copy of the Final 2019 DCR can be found at the following link as well as on the CCWA website at www.ccwa.com

https://data.cnra.ca.gov/dataset/state-water-project-delivery-capability-report-dcr-2019/resource/119da5c5-1c47-4142-8896-334628ca61cd

RAS



CENTRAL COAST WATER AUTHORITY MEMORANDUM

September 16, 2020

TO: CCWA Board of Directors

FROM: Ray A. Stokes

Executive Directo

SUBJECT: Request for Approval to Retain the Services of Provost & Prichard and the

Hallmark Group for Phase I of the Water Management Strategies Study

Summary

The Central Coast Water Authority (CCWA) and the San Luis Obispo County Flood Control and Water Conservation District (SLO County) are jointly pursuing a project to identify and evaluate strategies for optimizing the yield from the State Water Project (SWP). In order to evaluate the options available to our entities, CCWA submitted a Request for Qualifications to various consulting firms with expertise in evaluating options and strategies and ultimately selected the team of Provost & Prichard and the Hallmark Group.

Because the project is being jointly pursued by both CCWA and SLO County, a joint funding agreement is being proposed between our two agencies (Attachment A). On June 16, 2020, SLO County considered the joint funding agreement, but it was not approved. SLO County reconsidered the agreement in August 2020, and it was approved for an amount not to exceed \$75,000. The current estimate for the total project provided by Provost & Prichard is around \$200,000.

CCWA has included \$75,000 in the current fiscal year budget and staff believes it is appropriate for CCWA to pay a larger share of the total project costs (i.e., \$50,000) than SLO County based on the belief that CCWA will most likely receive a greater benefit than SLO County. Therefore, staff proposes to approve retaining the services of Provost & Prichard and Hallmark Group for an amount not to exceed \$150,000 in FY 2020/21 (the current fiscal year), and then include an additional \$50,000 in the CCWA FY 2021/22 Budget for the remaining completion of the project which begins on July 1, 2021.

Background

CCWA and SLO County are jointly pursuing a project to identify and evaluate strategies for optimizing the yield from the SWP. Due to the lack of sufficient storage capacity locally, both agencies have historically relied upon the SWP's San Luis Reservoir for storage of carryover water. Although this method of storage is currently available, it has an

associated on-going risk of losing carryover water during a "spill event" at the San Luis Reservoir. This is the primary challenge to optimally managing SWP water supplies for both agencies.

It is anticipated that the risk of a "spill event" at San Luis Reservoir will increase in the future, particularly if projects such as the Delta Conveyance Project are constructed and operated. Further, through prior participation in existing groundwater banking operations, CCWA has experienced certain limitations on the return of water from these operations during times of drought as well as on the delivery of water to these operations prior to spill events at San Luis Reservoir. Consequently, a more reliable method of managing carryover water is needed.

The State Water Supply Contract currently has a pending amendment that provides a set of new water management tools. These tools were developed primarily by the SWP contractors and arose from many of the lessons learned during the last severe drought. CCWA and SLO County aim to consider and evaluate the pending water management tool amendment of the State Water Supply Contract. The objective is to identify both physical and administrative methods to optimize the overall management of SWP supplies.

Request For Qualification

CCWA staff collaborated with SLO County staff and subsequently prepared a Request for Qualification (RFQ) for this project. The emphasis of the RFQ was to identify a consulting firm with a high level of expertise in the SWP operations, design and management.

The project RFQ was finalized and subsequently issued on April 6, 2020 to a list of approximately 20 qualified consulting firms that were identified by staff's research. The RFQ was also advertised through posting on CCWA's website. Two Addenda were issued, one extended the deadline for submitting Statement of Qualifications and the second to require electronic submittals only. The deadline for responding to the RFQ was May 1, 2020. On this date, CCWA received a total of four Statement of Qualifications.

The submitted Statement of Qualifications (SOQ) were reviewed by a panel of CCWA staff and SLO County staff. The panel ranked each SOQ, as described by the RFQ. While all four consulting firms that submitted SOQs were very well qualified and each had its own unique set of strengths, the panel concluded the SOQ submitted by the Provost & Pritchard Consulting Group and Hallmark Group team was the most qualified for our specific project. (Attachment B.) This team included a group of professionals with a very high level of expertise in the SWP operations, design and management.

As described in the RFQ, once the most qualified consulting firm was identified, CCWA and SLO County staff initiated negotiations to determine the specific scope of work and cost. This process has been completed. CCWA also informed the other consulting firms that submitted SOQs for the project by letter that another consulting firm was selected.

Funding

Since this project is being pursued for the benefit of both CCWA and SLO County, a mutually acceptable joint funding agreement was developed by both CCWA and SLO County legal counsel (attached to this report). SLO County received approval for this Joint Funding Agreement from their Board in August 2020 for an amount not to exceed \$75,000. The total estimated cost of this project provided by Provost & Prichard and Hallmark Group is about \$200,000, or \$50,000 above the estimates used by both CCWA and SLO County.

CCWA staff believes that CCWA will receive a greater benefit from the proposed project and therefore recommends that the additional \$50,000 be paid by CCWA from the FY 2021/22 budget beginning on July 1, 2021. It is anticipated that the project will take approximately one year to complete, and so the current funding amount of \$150,000 (\$75,000 each from CCWA and SLO County) will cover the expenses during this fiscal year, with an additional \$50,000 proposed to be funded from the following fiscal year budget.

RECOMMENDATION

CCWA staff recommends the following:

- 1. That the Executive Director be authorized to retain the services of Provost & Prichard and the Hallmark Group for the Water Management Strategies Study in coordination with SLO County.
- 2. That the Executive Director be authorized to execute the attached "Funding Agreement for Consultant Services Water Management Tools Study."
- 3. That CCWA staff include \$50,000 in the FY 2021/22 CCWA Budget for completion of the Water Management Tools study in that fiscal year.

RAS

Attachments

FUNDING AGREEMENT FOR CONSULTANT SERVICES WATER MANAGEMENT TOOLS STUDY

This Funding Agreement for Consultant Services ("Agreement") is made and entered into by and between the Central Coast Water Authority ("CCWA") and the San Luis Obispo County Flood Control and Water Conservation District ("District") (each a "Party" and collectively the "Parties"), with reference to the following facts and intentions:

Recitals

WHEREAS, the State Water Project ("Project") is a state-wide regional water project, which includes the Coastal Branch Aqueduct comprising water storage, conveyance, and treatment facilities to deliver project water ("Project Water") for use within the Counties of San Luis Obispo and Santa Barbara (collectively, "Central Coast"); and

WHEREAS, both the District and CCWA member agencies receive Project Water either as contractors or subcontractors pursuant to the water supply contracts with the State of California ("Water Supply Contracts") for implementation and operation of the Project; and

WHEREAS, a proposed amendment to the Water Supply Contracts known as the "Water Supply Contract Amendment for Water Management" provides new water management tools ("WMTs") to increase Project contractor and subcontractor flexibility with respect to the adoption of water management actions; and

WHEREAS, in order to maximize the utility of the WMTs, the Parties desire to conduct a study ("Study") to develop strategies to optimize their Project Water supplies and the delivery of Project Water to the Central Coast in accordance with the terms of the proposed amendment; and

WHEREAS, the Parties have reviewed the scope of work required to complete the Study ("Scope of Work") provided by Provost & Prichard and the Hallmark Group ("Consultant") in its response to CCWA's Request for Qualifications dated April 6, 2020 ("RFQ") and agree that Consultant is qualified to do the work. A copy of the Scope of Work is attached to this Agreement as Exhibit A and incorporated by this reference; and

WHEREAS, the Parties further agree that CCWA is the appropriate lead agency for procuring the Consultant to conduct the Study and to enter into a Professional Engineering Services Agreement with Consultant ("Consultant Contract") in the general

form of the template attached to the RFQ subject to the terms and conditions of this Agreement; and

WHEREAS, the total cost of the Scope of Work is estimated to be two hundred thousand dollars (\$200,000), and the Parties intend to share the cost of the Study, with CCWA paying up to \$125,000 and SLO County paying up to \$75,000 of the cost of the work pursuant to the terms and conditions of this Agreement.

NOW THEREFORE, the Parties agree as follows:

I. JOINT AGENCY SUPPORT

The Parties shall provide all information necessary for the Consultant to complete the Study in accordance with the timelines set forth in the task orders issued by CCWA and shall designate staff from each Party to participate in the review of all draft Consultant deliverables. CCWA shall be responsible for coordinating the joint staff review with the Consultant.

II. PROFESSIONAL SERVICES WORK

CCWA shall administer the preparation and development of the Study through the Consultant Contract and issue task orders in accordance with the Scope of Work. Any revision to the Scope of Work or task orders that deviate from the Scope of Work shall be mutually agreed upon in writing by the District and CCWA prior to CCWA authorizing the Consultant to commence any such revised work / task by the Consultant. No task order shall increase the total not-to-exceed amount of two hundred thousand dollars (\$200,000) for services performed by the Consultant pursuant to the Consultant Contract without both Parties' prior written approval unless such additional services shall be paid solely by either CCWA or SLO County.

III. PAYMENT FOR WORK

CCWA shall invoice the District one-half the amount of each invoice submitted by the Consultant to CCWA, and the District agrees to pay all such invoices for work satisfactorily performed by the Consultant pursuant to the terms of the Consultant Contract, any task orders issued pursuant the Consultant Contact and this Agreement within thirty (30) days of the date of each CCWA invoice in a total amount not to exceed seventy-five thousand dollars (\$75,000).

IV. REVISIONS TO THE CONSULTANT CONTRACT

Notwithstanding the template attached to the RFQ, the completed Consultant Contract shall be amended to provide: (1) that the Consultant shall name the District, its elected officials, officers, consultants, contractors and employees as additional insureds with respect to the Consultant's commercial general and automobile liability policies and the Consultant shall provide District with Certificates of Insurance evidencing the foregoing upon District's request; (2) District, its elected officials, officers, consultants, contractors and employees shall be added as indemnitees with respect to the Consultant's indemnification obligations; and (3) all reports, studies, exhibits, maps, agreements, data, computer software and other words, materials or documents prepared or used to prepare engineering work product under the Consultant Contract shall be the property of both CCWA and District.

V. EFFECTIVE DATE AND TERM.

This Agreement shall be effective on the date that the last Party executes this Agreement and shall remain in effect until all of the Parties' respective obligations are fully performed.

VI. GENERAL CONDITIONS

<u>Entire Agreement</u>. This Agreement constitutes the entire agreement between the Parties and supersedes all contemporaneous agreements, representations, and understandings of the Parties. This Agreement may be altered, amended or modified only by a supplemental writing executed by the Parties to this Agreement and by no other means. Each Party waives their future right to claim, contest or assert that this Agreement was modified, canceled, superseded, or changed by any oral agreement, course of conduct, waiver, or estoppel.

<u>Execution</u>. This Agreement may be executed in counterparts, each of which shall be deemed to be an original, but all of which, when taken together, shall constitute one and the same agreement. This Agreement may be executed and delivered by facsimile or scanned signature by any of the parties and the receiving party may rely on the receipt of such document so executed and delivered by facsimile or email as if the original had been received.

<u>Notices</u>. All notices, requests, demands and other communications under this Agreement shall be in writing and shall be deemed to have been duly given on the date of service if personally served or on the second day after mailing if mailed by first-class

mail, registered or certified, return receipt requested, postage prepaid and properly addressed as follows:

To: Executive Director
Central Coast Water Authority
255 Industrial Way
Buellton, CA 93427-9565

To: Public Works Deputy Director
San Luis Obispo Flood Control and Water Conservation District
Public Works Department
976 Osos Street
San Luis Obispo, CA 93408-1002

Any party may change their address for the purpose of this paragraph by giving the other party written notice of the new address in the above manner.

<u>Assignment</u>. This Agreement shall not be assigned by either Party without the prior written consent of the other Party.

<u>Waiver</u>. No waiver of a provision of this Agreement shall constitute a waiver of any other provision, whether or not similar. No waiver shall constitute a continuing waiver. No waiver shall be binding unless executed in writing by the Party making the waiver.

Construction of Terms. All parts of this Agreement shall in all cases be construed according to their plain meaning and shall not be construed in favor or against either of the Parties. If any term, provision, covenant or condition of this Agreement is held by a court of competent jurisdiction to be invalid, void or unenforceable, in whole or in part, the remainder of this Agreement shall remain in full force and effect and shall not be affected, impaired, or invalidated. In the event of such invalidity, voidness or unenforceability, the Parties hereto agree to enter into supplemental agreements to effectuate the intent of the Parties and the purposes of this Agreement.

<u>Controlling Law</u>. This Agreement shall be construed in accordance with and governed by the laws of the State of California.

<u>Authorization</u>. All officers and individuals executing this and other documents on behalf of the respective Parties certify and warrant that they have the capacity and have been duly authorized to execute said documents on behalf of the entities indicated.

IN WITNESS WHEREOF, the above Parties have executed this Agreement on the dates set forth below and this Agreement shall be effective as of the date signed by both Parties.

CENT	RAL COAST WATER AUTHORITY:	
Ву:		Date:
	Ray Stokes, Executive Director	
SAN I	LUIS OBISPO COUNTY FLOOD CONTROL A RICT:	ND WATER CONSERVATION
Ву:		Date:
	Christopher Lopez	
	Director of Central Services	
Ву:		Date:
	John Diodati	
	Interim Director of Public Works	
APPR	OVED AS TO FORM AND LEGAL EFFECT:	
RITA	L. NEAL	
Count	y Counsel	
D		Data
ву:	Deputy County Counsel	Date:
	Dopaty County Country	

Central Coast Water Authority
Consulting Services to Develop Water
Management Strategies to Maximize Yield of
the State Water Project for San Luis Obispo and
Santa Barbara Counties



Statement of Qualifications

May 1, 2020





Attachment B

COVER SHEET

CCWA

RFQ FOR Engineering Consultant

Name of Firm:		Provost & Pri	chard Consulting Group	
Mailing Address: Contact Person:		10860 Gold Center Drive, Suite 275		
		Ranc	no Cordova, CA 95670	
		Terry Erlewine, PE		
Telephone:		(916) 918-2020	Fax (559) 326-1090	
Firm is a:	Califor Partne	enture rnia Corporation ership Proprietorship	(x) (x) () ()	
Firm's Fede	ral Tax I	D Number: <u>94-2187</u>	078	
Firm's or Individual's Profession Signature of Authorized Repre Terry Erlewine, PE Typed name of Authorized Repre		•	tration Number: Ci <u>vil Engineer,</u> Date: <u>May 1, 2020</u>	California #32985
		norized Representat	- ve	
		· -	Date <u>May 1, 2020</u>	
Signature of	f Authori	zed Representative		
		E, Vice President	-	
I vned nam	e ot Autl	horized Representat	IV C	

May 1, 2020

John Brady, Deputy Director Central Coast Water Authority 255 Industrial Way Buellton, California 93427

Subject: Consulting Services to Develop Water Management Strategies to Maximize Yield of the State

Water Project for San Luis Obispo and Santa Barbara Counties

Dear Mr. Brady:

Thank you for the opportunity to submit this proposal to provide professional services to develop water management strategies to optimize water yield for the State Water Project (SWP). This proposal discusses our understanding of the project, recommends a scope of services with deliverables, sets forth our assumptions and discusses other services that may be of interest as the project proceeds. Provost & Pritchard (P&P) and Hallmark Group are partnering for this proposal to form a team with exceptional capability in strategic water resource development and management.

We understand that Central Coast Water Authority (CCWA) is investigating the potential of water management alternatives including banking, exchanging and transferring State Water Project (SWP) and other water supplies. Since 2008, severe operational constraints on the SWP have resulted in limited periods of surplus water availability. While the periods of water availability are limited, when they do occur, the quantities of Article 21 Water or at-risk carryover water (Article 56 Water) available can be relatively large and exceed the capability of several SWP contractors (Contractors), like CCWA, to fully utilize their available supply. In recent years, occasional periods of wet conditions in the Sacramento-San Joaquin Delta, coupled with significant quantities of water carried over by Contractors in San Luis Reservoir, resulted in lost opportunities by CCWA and other Contractors to take advantage of excess flows. The growing number of factors that will impact future SWP supplies requires Contractors to constantly adapt their water management strategies. To assist with such adaptation, the Department of Water Resources (DWR) and the Contractors negotiated in 2018 to amend the SWP Water Service Contract (Water Management Tools Amendment) to increase water management flexibility for Contractors. This contract amendment will expand the range of options available to Contractors like CCWA.

At the same time as the SWP supply and regulatory conditions are evolving, a recent CCWA study identified additional conveyance capacity available in the Coastal Branch downstream of the Polonio Pass Treatment Plant. The additional conveyance, together with the Water Management Tools Amendment, provides an opportunity for reevaluating how San Luis Obispo and Santa Barbara Counties' SWP allocation can be optimized to meet the needs of both agencies. We have prepared a draft scope of work that addresses the factors needed to identify, evaluate and select water management strategies to meet the needs of San Luis Obispo and Santa Barbara County SWP water users.

Provost & Pritchard has been providing engineering and related services in Central California for 52 years, with a major emphasis on water resources. Hallmark Group has provided program management services for some of the largest water infrastructure and planning processes in California specializing in water resources management.

The Provost & Pritchard/Hallmark Group team will be relying in large part on the experience of Terry Erlewine, Curtis Creel, Jim Beck, Dan Flory, and Harry Starkey, which have a combined 150 years of experience working on the SWP, Central Valley Project (CVP), Banking and Groundwater projects that are the core of CCWA's proposed project. As a summary:

Mr. Erlewine worked on groundwater in the San Joaquin Valley and water supply operations for DWR, being
involved in initial development of the Kern Water Bank during that period. More recently, Mr. Erlewine was
General Manager at the State Water Contractors, where he was involved in all aspects of SWP contractual and
operating activities.

- Prior to joining the Hallmark Group, Mr. Creel worked for DWR for 19 years with a significant focus on SWP operations including his role as Chief of the SWP Operations Planning Branch. Additionally, Curtis spent nearly 15 years of his water management career with Kern County Water Agency (KCWA) continuing his participation in SWP and CVP operations review, managing local water transfer and banking activities, and serving as the colead negotiator for the Area of Origin Settlement. During his last three years at KCWA, he served as General Manager leading negotiations for the SWP Coordinated Operations Agreement.
- Mr. Flory has extensive experience with the SWP, being employed by DWR for 23 years, primarily working on SWP issues with the State Water Project Analysis Office (SWPAO) and including six years as chief of SWPAO. Subsequent to his DWR experience, Mr. Flory went on to serve as General Manager for Antelope Valley-East Kern Water Agency where he continued to be involved in SWP management activities, including groundwater banking development and water transfers. Most recently, with Provost & Pritchard, Mr. Flory has worked for Dudley Ridge Water District and other Contractors in representing their interests in SWP issues.
- Mr. Beck participated in a wide range of water management activities during his 32-year tenure at the KCWA, including 11 years as the General Manager. These water management activities included participation in SWP operations and transfer activities. Jim performed multiple water supply assessments for KCWA operations. He was influential in the development of the Kern Water Bank, later serving on the Board of Directors during its formation. Most recently, Mr. Beck has been instrumental in the development of Groundwater Sustainability Plans for Groundwater Sustainability Agencies in Kern County and other locations.
- Mr. Starkey's 30-year career in water has focused on water and power management in Kern County. As the former General Manager of the West Kern and Berrenda Mesa Water Districts, Harry has extensive water banking experience in and around Kern County. His experience includes the permitting, designing, constructing, financing, acquiring rights of and operating water banking projects on the Kern Fan including the management of the Cross Valley Canal. In addition to his capital program management expertise, Harry has developed urban water management plans, water shortage contingency plans, water banking programs, and preparation of various environmental compliance documents for permanent water transfers in California to further secure water reliability in Kern County.

In addition to the five primary study participants, Provost & Pritchard/Hallmark Group have a wide array of experience in water resources projects through their ongoing water management, engineering, water banking and groundwater analysis experience. With implementation of the Sustainable Groundwater Management Act (SGMA), Provost & Pritchard and Hallmark Group have been intensely involved in the development of Groundwater Sustainability Plans (GSPs) in the San Joaquin Valley and other parts of California. A summary of this experience is contained in this proposal.

We believe that the experience summarized above, and presented in more detail in the attached proposal, will allow the Provost & Pritchard/Hallmark Group Team to efficiently develop the proposed water management strategy. We are pleased to be able to submit this project and look forward to hearing from you.

Respectfully,

Provost & Pritchard Consulting Group

Terry Erlewine, RCE 32985

Principal Engineer / Principal-in Charge

Hallmark Group

Charles R. Gardner, Jr., PgMP

Clade L Date

CEO

Randy Hopkins, RCE 63538

Vice-President

Central Coast Water Authority

Consulting Services to Develop Water Management Strategies to Maximize Yield of the State Water Project for San Luis Obispo and Santa Barbara Counties

Statement of Qualifications

May 1, 2020

Prepared for:
Central Coast Water Authority
John Brady, Deputy Director
255 Industrial Way • Bulleton, California 93427
Telephone: (805) 688-2292 • Email: jlb@ccwa.com

Submitted by: Provost & Pritchard Consulting Group 10760 Gold Center Dr. Ste. 275 Rancho Cordova, CA 95670

Telephone: (916) 918-2020 • Fax: (559) 326-1090

Website: www.provostandpritchard.com

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Appendix A: Resumes

Appendix B: Acknowledgement of Addendum

Statement of Qualifications

Firms' Capabilities

Provost & Pritchard



Provost & Pritchard was founded in 1968 in Fresno California in the heart of

the Central Valley. Our first client, Laguna Irrigation District was experiencing difficulty in delivering surface water through their canal system to irrigate the farm fields around Riverdale, California. Jim Provost took on this work, evaluated the canal system, the check structures, the pipelines, and the size of the canals and our work in water was born!

Over the course of the last 52 years, the firm has grown in size, services offered, and geography; office locations in Sacramento, Chico, Modesto, Merced, Los Banos, Clovis, Fresno, Visalia, and Bakersfield. With nearly 190 employees, our staff is diverse in its specialties, and includes water resource, civil and agriculture engineers, hydrogeologists, planners, environmental specialists, land surveyors, construction managers and field representatives.

Water Resource Engineering

Since the firm's beginning, Provost & Pritchard Consulting Group has been an integral part of the development of irrigated agriculture throughout California. The firm's consulting and engineering services are rooted in this tradition. Today's challenges go beyond the design of new water projects. Increased competition for water supplies, drainage needs, and water quality issues demand new approaches and innovative solutions. Provost & Pritchard continues to lead the way by providing a variety of services to help clients maximize the benefits from their water supplies.

With significant knowledge of the water issues facing municipal and agricultural entities in California, Provost & Pritchard integrates water policy, water conservation, operational knowledge and value engineering in many of our projects.

Services Include:

- District Management and Engineering
- Civil Engineering Design
- Water Resource Management Planning
- Groundwater Management and Design
- Surface Water Hydrology and Modeling
- Water Rights and Transfers
- Dams, Reservoirs and Levees
- Grant Writing and Grant Management
- CEQA and NEPA documentation
- Land Surveying
- Geographic Information Systems Mapping
- Construction Management and Field Services
- Unmanned Aircraft Systems (UAS)

Hallmark Group



Hallmark Group Capital

Program Management was founded in 2001 in response to the needs of project owners who sought expert administration and management for their most important programs. Excelling in the leadership and management of complex programs for both government and private clients, our areas of focus include project management, water resources management, and strategic development and implementation.

Our expert team brings proven industry expertise to the clients we serve. Whether it is complex water management, strategic development, or a capital program, we provide the resources to expertly manage projects. Our team has a demonstrated record of success for public and private clients. Hallmark Group's sound strategies enable owners to make confident decisions about their programs and see them through to successful completion.

Project Personnel

Provost & Pritchard Key Personnel

Terry Erlewine, PE

Principal-in-Charge

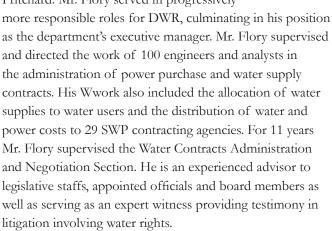
Terry Erlewine has more than 38 years of experience providing water resources planning and analysis. He has conducted many surface and groundwater resources studies, including



water uses, operations studies, groundwater modelling, and groundwater conjunctive use programs. For the last twenty-three years, Mr. Erlewine worked for the State Water Contractors (SWC), most recently serving as General Manager for 14 years. Previously, Mr. Erlewine worked as a consultant on water resources. Mr. Erlewine began his career with the California Department of Water Resources (DWR). In his 13-year tenure with the Department, he was involved in all aspects of surface water and groundwater projects. This DWR experience included operating the State Water Project (SWP)/Central Valley Project (CVP) operations model and planning work on development of Kern Water Bank.

Dan Flory, PE

Dan Flory has more than 35 years of experience in water resources engineering including over 20 years with the DWR and the past four years as a principal engineer at Provost & Pritchard. Mr. Flory served in progressively



Dale Melville, PE

Dale Melville is a principal engineer and Chair of the Board of Director's at Provost & Pritchard. With over 45 years of consulting engineering experience, he has been involved with projects related to all aspects of agricultural

and municipal infrastructure projects. He has been district engineer to several municipal and agricultural districts. Mr. Melville's experience includes site investigations, feasibility studies, management of projects related to design and construction of both municipal and agricultural water and wastewater conveyance and treatment systems, wastewater reclamation, agricultural irrigation and drainage systems, water transfers/exchanges, and groundwater recharge/recovery facilities. Mr. Melville has established working relationships with numerous state and federal government agencies in preparing applications and securing grant and loan funds for infrastructure projects.

David Halopoff, PE

David Halopoff is a project manager and senior engineer at Provost & Pritchard's Bakersfield office with more than seven years of professional experience. His experience includes water resources and civil engineering, design, and construction. Mr. Halopoff has been involved with projects related to all aspects of municipal and agricultural water supply and distribution, groundwater recharge and recovery projects (direct and in-lieu), groundwater hydrogeology, groundwater engineering, groundwater well design and construction, groundwater quality, water supply studies, pump design, and construction oversight of public works and agricultural facilities. Mr. Halopoff has worked on over 50 well projects that include design and construction of municipal, industrial, and agricultural groundwater production wells.

Hallmark Group Key Personnel

Curtis Creel, PE

As Hallmark Group Director of Water Supply Management, Curtis brings over 33 years of California water resources expertise earned through valued relationships and a unique perspective of both public and private water



strategy and management. As General Manager of the Kern County Water Agency (KCWA) Mr. Creel participated in the management of some of the most significant water programs in the history of the State, from technical and policy guidance for the State Water Project (SWP) and Central Valley Project (CVP), to contributing to the State approval of the California WaterFix plan in 2017. A substantial portion of his work has involved managing large groups of stakeholders including United States Bureau of Reclamation (USBR), State and federal permitting agencies, non-government organizations, water agencies and private sector participants with diverse and sometimes adverse interests.

Jim Beck

With over 30 years of experience in the Kern County water resource community, Jim brings unparalleled depth of knowledge of operations as related to the SWP, CVP, GSPs, and banking. As the Executive Director for local Kern



Groundwater Sustainability Agencies and former General Manager of the Kern County Water Agency (KCWA), Jim has been implementing initiatives to meet Kern County's complex water needs for most of his career. Jim's decades of California water policy leadership are reflected by the efficacy of his work with the California WaterFix. Jim conducted a series of meetings locally to provide project updates and to develop a Kern County implementation strategy and contributed to the negotiation of State and local funding agreements. During his time with KCWA, Jim served key roles on many programs—including the State Water Project—that placed the agency at the vanguard of good water management practices. He also managed KCWA's urban water district—Improvement District No. 4 (ID4)—which provides a supplemental water supply for the Metropolitan Bakersfield area, and led KCWA staff in such critical projects as the expansion of ID4's Henry C. Garnet Water Purification Plant, and expansion of the Cross Valley Canal.

Harry Starkey, PE

Harry has dedicated his 30-year career to Kern County water resources planning, development, and implementation. Formerly serving as the General Manager for the West Kern Water District, his leadership in Kern



County is demonstrated through the delivery of the West Kern Recharge and Recovery groundwater banking project and multiple groundwater banking and exchange programs agreements that leverage current groundwater storage and recovery assets to develop additional water supply at no cost to the District (current yield = 51,000 af of new water). In addition to his capital program management expertise, Harry has developed urban water management plans, water shortage contingency plans, water banking programs such as Berrenda Mesa, Pioneer, Kern Water Bank, West Kern Banking Programs, and preparation of environmental compliance documents for permanent water transfers in California to increase water reliability in Kern County.

Additional Resources			
Team Member	Title	Years of Experience	Area of Expertise
Provost & Pritchard Consulting Group			
Brian Ehlers, PE	Principal Engineer	38 years	Groundwater Studies
			Groundwater Banking
Tom Glover, PE	Principal Engineer	41 years	SWP Contract Negotiations
Kevin Johansen, PE	Principal Water Resources Engineer	35 years	Water Transfers
			Supervision of Water Operations
Rick Iger, PE	Principal Engineer	43 years	Groundwater Recharge and Banking
			SGMA Compliance
Hallmark Group Capital Program Management			
Charles R. Gardner, Jr., PgMP	President and Strategic Advisor	30 years	Strategic Planning
			State and Federal Coordination
Jessica Alwan	Senior Project Manager	15 years	Reporting Development
			Workshop Facilitation
Taylor Blakslee	Project Manager	12 years	Stakeholder Engagement
			Project Team and Coordination

State Water Project Operations

California Department of Water Resources

Sacramento, California, SWPAO Division Chief
For six years working for the Department of Water Resources
(2000-2006), Mr. Flory supervised and directed the work of
100 engineers and analysts in the administration of water
supply and power purchase contracts. The operating budget,
including power purchases was about \$300 million a year.
Work included the allocation of water supplies to SWP water
users, review and approval of water transfers, interpretation
of water supply contracts and the distribution of water and
power costs to 29 SWP contracting agencies.

State Water Project Allocations

State Water Project Contractors

In 2000, DWR reduced the SWP allocation from 100 percent to 90 percent after its analysis showed a potential for a significant reduction in water supplies available to the SWP. This conclusion was based on previous practice by DWR to consider extremely conservative water supply forecasts when making decisions about SWP allocations. As a result, the SWP was not being operated to its full potential. Contractors approached DWR about adjusting its procedure to optimize the use of the water supplies available to the SWP. Mr. Creel, as the Chief of the SWP Operations Planning Branch, (SWPOPB) lead a process to investigate enhancements to how his staff would perform the SWP allocation analyses and make recommendations to the DWR Director on what water supply allocations the SWP could support. Both Mr. Erlewine and Mr. Flory played integral roles in supporting the development of SWPOPB process. The ultimate outcome was a significant improvement in SWP operations and allocations.

Ongoing Consulting Services

Dudley Ridge Water District, Kings County, California Provost & Pritchard continues to provide ongoing consulting services to the Dudley Ridge Water District. Mr. Melville has

been the manager-engineer for this agricultural water district, administering their State Water Project contract for over 25 years. In addition to his management duties, he has developed conjunctive use and long-term transfer/exchange programs for the District, including groundwater banking projects with the Kern Water Bank Authority and Cawelo Water District, exchange programs with Kern County Water Agency, Tulare Lake Basin Water Storage District, and San Gabriel Valley Municipal Water District, and numerous annual water transfers and exchanges. He also assisted in the formation of the Kern Water Bank Authority, a public agency involved in the acquisition, development, and operation of a 20,000acre groundwater banking facility, which was the largest groundwater recharge project in the world (Mr. Melville was a founding member of the board of directors for the Kern Water Bank Authority). Mr. Melville has also assisted the District in the permanent transfers of State Water Project Table A water to Mojave Water Agency and Antelope Valley-East Kern Water Agency.

State Water Project Water Allocation

State Water Contractors, Statewide

Provost & Pritchard staff conducted ongoing reviews SWP water supply allocations while at SWC, as General Manager and Engineer. The analysis included regular meetings with DWR staff and managers to discuss current water supply allocations. At differentce times, evaluated SWP allocations procedures and developed proposals for revising SWP operations and allocations to meet SWP contractor needs.

Area of Origin Settlement

South-of-Delta SWP Contractors

In 2008, four North-of-Delta Contractors filed a lawsuit against DWR regarding implementation of Article 18 of the SWP Water Service Contract. Their lawsuit contended a priority right for water supplies from the SWP above other Contractors based on the Area of Origin statute in the California Water Code. In 2009 the plaintiffs, DWR and other Contractors that intervened in the litigation on behalf of DWR (Intervenors), were directed to enter settlement

discussions by the Superior Court. Mr. Creel was the co-lead negotiator for the Intervenors. He managed the analyses performed on behalf of the Intervenors, participated in the development of settlement approaches, and helped negotiate a successful outcome. The provisions of the settlement required a creative approach to allowing the plaintiffs access to SWP storage facilities and water supplies while minimizing potential water supply impacts to other Contractors.

Central Valley Project Operations

Coordinated Operations Agreement Negotiations

California Department of Water Resources and U.S. Bureau of Reclamation

In 2016, DWR and USBR began an intensive review of the Coordinated Operations Agreement (COA) as specified within the agreement. Article 14 of the COA requires that DWR and USBR review the agreement and make changes, if necessary. After an unsuccessful series of discussions about how to review and update the COA, DWR and USBR entered into a broader negotiation to address issues related to Endangered Species Act and SWRCB compliance, as well as cooperation on developing joint infrastructure projects like the California WaterFix and Sites Reservoir. The initial part of the negotiations required a focused discussion regarding changes to the COA. Mr. Creel was the lead negotiator for the Contractors regarding COA matters. He worked closely with other Contractor staff as well as key DWR staff to develop an approach that could result in a successful negotiation outcome. He also worked closely with CVP contractors to work through a compromise that would provide for an equitable sharing of available water supplies and water requirements among the CVP and SWP.

General Water Transfers/Exchanges,

Various Clients, San Joaquin Valley, California
Provost & Pritchard has assisted numerous public agency
and private clients with negotiations and obtaining regulatory
approvals (SWRCB, DWR, USBR, and local agencies)
including CEQA and NEPA compliance for water transfers
totaling more than 500,000 acre-feet. Provost & Pritchard
staff have prepared applications, drafted agreements, and
obtained regulatory approvals for change of place-of-use
or point of delivery agreements for typically two to five
water transfers per year since the mid-1990s. Transfers have
included: SWP contractors in Kings, Kern, Tulare, San
Luis Obispo, Stanislaus, and Los Angeles counties; San Luis

Unit-CVP water, Friant-CVP water, and Kern, Kaweah, Tule, and Kings Rivers. Water has been transferred to San Luis Unit-Central CVP contractors, Friant-CVP contractors, SWP contractors, environmental purposes, and individual landowners within CVP and SWP service areas.

California WaterFix

California Department of Water Resources In 2009, the Hallmark Group began managing the Delta Habitat Conservation and Conveyance Program, which was tasked with addressing the State of California's need for a more reliable water system and to protect the delicate Delta ecosystem. Serving as program manager, Hallmark Group successfully gained Department of Water Resources (DWR) certification of the 60,000-page California WaterFix the environmental analysis. Obtaining the signed Notice of Determination from DWR took nearly eight years of careful coordination with state, SWP, CVP, and key stakeholders, at the local, state, and federal level. It required development of the biological assessment, negotiation and issuance of biological opinions, multiple facility refinements to meet project objectives and respond to over 16,000 comments. The efforts of the Hallmark team resulted in California Department of Fish and Wildlife issuance of the Incidental Take Permit for WaterFix construction and operation in compliance with Section 2081(b) of the California Endangered Species Act. Key design and project features included a 10% complete design, class III construction cost estimate, level II schedule, and program-level risk register, all produced under Hallmark Group leadership.

Coordinated Operations Agreement Analysis

State Water Contractors, Statewide

Provost & Pritchard staff participated in analysis of the coordinated operations of the SWP and the CVP as part of recurring reviews of the Coordinated Operations Agreement. These efforts occurred as a consultant with Provost & Pritchard for the SWC, and previously as General Manager for the SWC. The efforts involved direction and review of operations studies of the SWP and CVP, analysis of the relative benefits for the SWP and the CVP and participation in negotiations. This work lead to the Napa Agreement in 2003 and the recent update to the Coordinated Operation Agreement (COA).

Groundwater Sustainability Plans

Groundwater Sustainability Plan Development

North Fork Kings GSA, Fresno County, California Provost & Pritchard prepared the GSP for the North Fork Kings GSA. The team actively worked with the North Fork Kings Managers since 2017. Beginning 2018, monthly public meetings were held to review the regulations and requirements, discuss alternatives, provide recommendations, prepare draft chapter language and address comments received from the committee, and address comments from the public. The completed GSP was adopted by the GSA in December 2019 and submitted to DWR in January 2020.

Groundwater Sustainability Plan Development

San Gorgonio Pass Water Agency, Beaumont, California Provost & Pritchard is currently managing development of a GSP for the 64,000-acre San Gorgonio Pass Subbasin. Mr. Erlewine is the project manager in charge of completion for the project. The GSP will serve three GSAs in the subbasin – the San Gorgonio Pass GSA, Verbenia GSA and a portion of the Desert Water Agency GSA. The GSP will address groundwater sustainability in an area of limited water supply availability and increasing urban development. The GSP will be completed and adopted by GSAs prior to January 2022.

Basin Coordination

Kern Groundwater Authority, Bakersfield, California Provost & Pritchard is currently acting as the Basin Coordinator for the Kern Groundwater Authority, which is the largest GSA in the Kern Subbasin. Mr. Erlewine initially served as acting general manager (Basin Coordinator) and subsequently served in a senior advisory role. While acting Basin Coordinator, he developed Kern Groundwater Authority budget and schedule for GSP preparation. He also provided technical advice on groundwater modeling and other GSP preparation elements. He developed projected future water supply conditions for the SWP considering climate change for use in SGMA groundwater modeling projections.

Cuyama Basin Groundwater Sustainability Agency

Cuyama Basin Water District, Kern County, California The Cuyama Basin Groundwater Sustainability Agency was formed by a Joint Exercise Powers Agreement (JEPA) by multiple agencies and districts under the Sustainable Groundwater Management Act. The Cuyama Groundwater Basin has been identified by the California Department of Water Resources as a high priority Basin and subject to conditions of critical overdraft. The Agency must develop a Groundwater Sustainability Plan with identified actions and projects to determine sustainability levels and how the Basin will implement and monitor them to maintain sustainability.

The Hallmark Group provides all Board reporting and facilitation, ensuring Brown Act compliance, document control, project controls, financial management services, budget development and tracking, schedule management, consultant management, contract management, stakeholder outreach facilitation, committee management, and coordination with the California Department of Water Resources for grant administration and reporting. Jim Beck serves as Executive Director of the GSA.

Within a very short timeframe, the Hallmark Group team managed the proposal review and selection of key consultants for the program, developed annual and program budgets, developed and facilitated negotiations for program cost allocation among participants, developed the program schedule, and implemented executive level Board reporting.

Eastside Water Management Area

Eastside Water Management Area

The Kern Sub-basin of the Tulare Basin has been identified as a high priority Basin by the California Department of Water Resources, which is subject to conditions of critical overdraft. Non-district landowners in the eastern portion of Kern County contracted with the Hallmark Group to form the Eastside Water Management Area (EWMA) to best represent their interests in developing a Groundwater Sustainability Plan chapter as required by the Sustainable Groundwater Management Act (SGMA). The EWMA membership draws from a 153,000-acre area and currently includes 42 members representing nearly 35,000 acres.

The Hallmark Group's organizational expertise provided for the cohesion of a diverse group of non-district landowners into a formal non-profit entity to best represent their unique interests under the Kern Groundwater Authority GSA. Additionally, the Hallmark Group's knowledge of local water resources and robust relationships in the water community have allowed the EWMA to work directly with adjacent water districts in resolving SGMA-related issues. Hallmark Group provides Board reporting and facilitation, project controls, schedule management, consultant management,

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contract management, stakeholder outreach facilitation, and representation at Kern Groundwater Authority meetings. Within a very short timeframe, the Hallmark Group team managed the proposal review and selection of key consultants for the program, and facilitated negotiations for program cost allocation among participants, and implemented executive level Board reporting.

Sustainable Groundwater Management Act of 2014 Kern County Water Agency

As General Manager, Jim Beck led KCWA's participation in development of the Sustainable Groundwater Management Act (SGMA) of 2014. The bill was developed for the state California as a framework for sustainable, groundwater management to stop overdraft and bring groundwater basins into balanced levels of pumping and recharge. SGMA empowers local agencies to form Groundwater Sustainability Agencies (GSAs) to manage basins sustainably and requires those GSAs to adopt Groundwater Sustainability Plans (GSPs) for crucial groundwater basins in California. Mr. Beck oversaw the review of draft language of the bill, met with local policy leaders to evaluate the bill and develop a response. Jim also directly engaged with then Governor Brown to express concerns over the Governor's proposed bill and to provide recommend changes.

Groundwater Banking Operations

Orestimba Creek Recharge and Recovery Project

San Joaquin River Exchange Contractors Water Authority, Los Banos, CA

Provost & Pritchard has been working with the San Joaquin River Exchange Contractors Water Authority since 2012 on the Orestimba Creek Recharge and Recovery Project. The Orestimba Creek Recharge and Recovery Project includes construction of groundwater banking facilities along Orestimba Creek between the DMC and the Eastin Water District Boundary. The Orestimba Creek and DMC would be used to convey water to and from the bank. The purpose of the project is to provide a place to store high flow and carryover supplies which would be regulated to provide a critical year water supply and provide water to meet peak demands in the summer. Provost and Pritchard provided design and construction management for two 0.5-acre test recharge ponds and a 20-acre pilot project. The work

included surveying, coordination and analysis of geotechnical sampling, pond and conveyance facility design, permitting and grant application support, operations oversight and test result analysis.

Recharge and Recovery Enhancement Project

Kern Water Bank Authority, Kern County, California Provost & Pritchard provided planning and design engineering services for the Recharge and Recovery Enhancement Project for the Kern Water Bank Authority. The project included the construction of 190 net acres of new recharge ponds, three new recovery wells and 1.7 miles of pipelines. The project team prepared planning documents needed for a successful grant application under the IRWMP program. As a part of the planning documents the team developed a water availability analysis using historical data and projected operations to approximate the amount of stored and recovered groundwater resulting from the proposed project implementation. Upon receipt of the grant, Provost & Pritchard prepared the project design documents, assisted with permitting, reviewed well drilling work, and assisted with construction management. The total cost of the project was approximately \$3.5M, of which \$2.3M was funded through the IRWMP grant.



Kern Water Bank

DWR and the Kern Water Bank Participants
The Kern Water Bank is located on a large, undeveloped

section of the Kern River's sandy alluvial fan and covers nearly 30 square miles. It has about 7,000 acres of recharge ponds which, on average, recharge at a rate of 0.3 feet per day.

Originally, the KWB was conceived as a supplemental water supply project for the SWP. During the time it was being developed by DWR, Terry Erlewine (while at DWR), Jim Beck and Harry Starkey (at KCWA) worked on project permitting and facility planning and development. Jim Beck and Harry Starkey both assisted in the effort that led to the acquisition of the property and associated facilities by local Kern County interests. Following that local acquisition, Jim Beck represented Improvement District No. 4 on the Kern Water Bank Board of Directors.

The KWB has become recognized as a world-class groundwater recharge and recovery facility. Its development required the successful navigation of extremely complicated regulatory and contractual processes. The property has over 20,000 acres of recharge facilities, over 85 groundwater recovery wells and a canal that integrates the project with the SWP as well as the Friant Kern Canal and the Kern River. Having participated in the initial development of the various facilities, afforded our team members to apply that experience to the development and operation of additional groundwater banking projects.

Pioneer and Berrenda Mesa Groundwater Banking Projects

KCWA Member Units

In 1992, KCWA purchased 2,253 acres of land to develop additional water recharge and banking facilities, referred to as the Pioneer Properties. The Pioneer Properties consist of two parcels on either side of the Kern River southwest of Bakersfield. KCWA developed the project to assist local water districts in their water resource management through recharge water to and recover water from the groundwater basin. Jim Beck participated in the permitting and development of this vital resource while Harry Starkey served in an engineering and construction management capacity. In addition, Jim Beck was part of the team that developed agreements with the local water districts that govern the financing and operation of the facility.

The Berrenda Mesa banking project is located along the south side of the Kern River just upstream of the Pioneer Properties. The project consists of 369 acres with an annual recharge capacity of 58,000 af and an annual recovery capacity of 46,000 af. The Projected was initially developed by the Berrenda Mesa Water District, who acquired the property. The Project was one of the first to optimize recharge of imported surface water in the natural channel

of the Kern River. As General Manager of the Berrenda Mesa Water District, Harry Starkey represented the interests of the property owner in the management and operation of the Project, that also included several other KCWA member units.

West Kern Water District Groundwater Banking Project

West Kern Water District

Harry Starkey led the development and operation of the West Kern Banking Project. The project involved the acquisition of 500 acres of land for recharge ponds, drilling and equipping of five water wells, constructing an associated 4.5 megawatts solar project and the construction of a 30-inch ductile iron trunk line. This project was primarily developed for the conjunctive use of West Kern's highly variable SWP supply. The project evolved to allow for local water marketing purposes that generated supplemental revenue insulating customers from rate increases particularly during mandatory conservation measures.



Scope of Work

To meet Central Coast Water Authority's ("CCWA") identified needs, the following scope of work has been developed. This scope addresses the topics identified in the CCWA SOQ and provides elaboration on how each topic would be completed. As described in greater detail below, this scope of work envisions using an annual planning model to determine the estimated operation and quantification of water supplies. Should it be determined through the course of the work that this level of planning is too course and limits the understanding of how a specific alternative might operate and the resulting supply that would result from the program, an optional scope task (Subtask 4.6) has been included that would allow for the opportunity to evaluate specific alternatives in more detail. This additional task includes components based on an annual analysis of water management options. Depending on the complexity of that analysis and the interest of local stakeholders, a more detailed monthly planning model would be developed to refine potential operations.

Task 1.0 - Project Management

This task includes overall project administration, subconsultant management, preparing monthly progress reports, and contract administration with the CCWA Program Manager.

This task also includes attending monthly meetings with the GSA (in-person or on-line, subject to the then-current health requriements). These meetings will focus on a series of topics shown under Task 2 through 5. At each meeting a presentation will be given on progress and results, and comments will be solicited on draft sections and upcoming work. In addition, focused workshops on important topics, such as Development of Selection Criteria, or review of the completed Optimization Alternatives, may also be held. A description of the anticipated meetings is provided below:

Initial Project Meeting

An initial meeting will be held to review the project requirements, provide an overview of the proposed scope of work, budget and schedule, identify available information and reference, and develop an effective strategy for developing a water management strategy. This will result in a detailed roadmap for future work so all parties are familiar with and concur with the project approach.

Strategy Development Meetings

Throughout the course of the project, Provost & Pritchard and Hallmark Group will conduct regular meetings with the CCWA Program Manager. Each meeting will focus on a specific list of topics described below under Tasks 2, 3, 4 and 5. These meetings are anticipated to be monthly for the first six months, with quarterly meetings expected after the initial six-month effort. Attendance at other committee meetings would also be included in this task to assist with strategy coordination and development

Deliverables:

- Monthly Progress Reports
- Prepare material and presentations for monthly meetings with GSP Working Group through 2020, with quarterly meetings afterwards

Task 2.0 – Review and Summarize Pertinent Rules and Requirements

Applicable regulatory requirements for water management options will be identified. As a State Water Project ("SWP") contractor, the starting point will be CCWA's Water Supply Contract for the SWP. As currently operational, these contracts include provisions addressing factors such as storage in SWP facilities and outside a contractor's service area (Article 56), transportation of non-project water (Article 55), and water transfers and exchanges. Additionally, there are supplemental guidelines (for example Notice to State

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Water Project Contractors #17-11) that address how the contract is being implemented. As noted in CCWA's SOQ, the current SWP contract provisions have proven to be an impediment to many beneficial water management practices for SWP contractors seeking to maximize the utility of their SWP water supply and integrate it with their local resources. Finally, there are ongoing practices that SWP contractors have developed, in coordination with DWR's Operations Control Office that address more short term and real time operations specific to carryover water, interruptible water, and annual allocations.

As noted in the CCWA SOQ, a Water Management amendment is currently being finalized. The new amendment will make significant changes to the existing rules in the SWP Water Supply Contracts that will greatly facilitate implementation of effective water management strategies for agencies such as CCWA. The new amendment, for example, will allow annual or multi-year transfers that have been limited in the past.

In addition to SWP regulations, other agencies have jurisdiction over potential water management actions (such as banking, transfers and exchanges) that may need to be addressed depending on the actions. These other agencies include the Department of Water Resources, the State Water Resources Control Board, the U.S. Bureau of Reclamation, the Delta Stewardship Council, the California Department of Fish and Wildlife, the U.S. Fish and Wildlife Service, Groundwater Sustainability Agencies, and County Governments. Depending on the situation, other agencies with jurisdiction could include Integrated Regional Water Management Agencies, an adjudicated groundwater basin watermaster, and the Regional Water Quality Control Board.

The product of this process will be a concise summary of the regulations that affect different types of water management actions at different locations. A generalized checklist will be developed for different types of management actions that will be useful for ongoing development and implementation of those actions.

Deliverable:

 Summary of Rules and Regulations affecting water management options for Central Coast and its member agencies.

Task 3.0 – Development of Selection Criteria

This task will involve a process to develop local consensus for the criteria to be used for identifying selection criteria for water management alternatives. The CCWA SOQ identifies many of the criteria that would be appropriate for selecting a project – cost, reliability and control of conveyance, ability to deliver water, ability to return water, water losses and other factors. These factors, and additional potential factors (e.g., water quality, location), will be summarized and reviewed with CCWA and affected stakeholders to develop final selection criteria. At least two meetings (potentially in conjunction with other meetings) will be conducted with CCWA and identified stakeholders to review potential selection criteria, refine the criteria, and settle on the final criteria and appropriate weighting.

Deliverable:

 Selection criteria for reviewing selecting water management alternatives.

Task 4.0 – Development of Optimization Alternative

The development and selection of alternative management strategies will be the primary task for the scope of work. Considering this, the task has been broken into several subtasks as described below. As noted earlier, the anticipated initial approach will be to pursue development of a simplified annual analysis. The limitations of this approach will be identified and, if imperative, a more detailed monthly model will be developed for evaluating alternatives.

The subtasks for completing Task 4 are proposed as follows:

Subtask 4.1 – Identify Water Management Components An initial task will be to summarize the water management alternatives that are available to meet CCWA's needs. The alternatives will include physical alternatives (such as a water bank) and operational alternatives (for example, transfers or exchanges with other agencies). A wide range of potential alternatives will be identified, including alternatives in San Luis Obispo and Santa Barbara Counties that have been proposed by local stakeholders. Each alternative will be described consistent with selection criteria identified in Task 3, including a narrative overview, facilities configuration,

capital cost, operating cost, conveyance requirements, total storage capacity, intake conveyance capability, and extraction conveyance capacity.

Deliverable:

• Summary of Water Management Components

Subtask 4.2 – Identify Local and System Capacity Limitations

Conveyance will be needed to the sites to implement certain water management alternatives (both local and remote) and for return of water to the CCWA surface area (for remote alternatives). The recent capacity assessment of the Coastal Branch prepared by WSC is helpful in this regard - identifying existing and potential capacities for delivering water within San Luis Obispo and Santa Barbara Counties that is in excess of the design capacity level. Access to increased capacity for the Coastal Branch downstream of Polonio Pass Treatment Plant ("PPTP") will also necessitate possible modifications at the treatment plant to provide the higher capacities identified. Coastal Branch capacity upstream of the PPTP is generally available for the reaches downstream of Devils Den Pumping Plant ("DDPP") due to the higher capacity designed into those reaches to optimize power operations. Capacity in the Coastal Branch reaches upstream of the DDPP and in the California Aqueduct will be quantified based on recent operational capacity (reflecting impacts of subsidence) and historical delivery patterns for other water users.

Capacity in the California Aqueduct and other conveyance facilities needed for water management alternatives, such as water banks, will be quantified for the period of interest. For example, the ability to store carryover water later in the year will depend on the use of facilities by other water managers and the relative priority of a CCWA alternative as compared to other water users. The intent of this review will be to confirm that conveyance for recharge water is available during high demand periods when it is most needed. A similar analysis will be performed for conveyance to return water from a water bank, exchange or some other type of water management alternative. Experiences during recent drought periods demonstrated that there can be limited capacity to return water by instantaneous exchange (for projects such as groundwater storage downstream of the Coastal Aqueduct) during extreme drought periods when the water is needed.

Subtask 4.3 – Quantify SWP Supply Capability

A primary goal of the evaluation will be to sync up the local demands with available SWP water supplies and water management alternatives. The primary source of SWP water supply information will be CALSIM reservoir operations studies for different assumptions about future regulatory conditions, facilities, and climate conditions. CALSIM studies will be obtained for monthly deliveries to SWP contractors for use in evaluations. Initially, these study results for Table A, Article 56, and Article 21 Water will be computed for San Luis Obispo and Santa Barbara Counties based on their Table A allocations. These monthly results will also be summarized annually for use in the management alternatives.

As a complement to direct use of CALSIM study results, an analysis of SWP operations trends in recent years will be conducted. Initial review of SWP operations shows that actual SWP storage in San Luis Reservoir is normally considerably higher than the assumptions used for CALSIM studies. Actual SWP San Luis Reservoir storages that are 100,000s of acre-feet higher than CALSIM study results would mean that the quantity and occurrence of carryover water being spilled may be considerably higher in the real world than what is indicated by CALSIM results. Adjustments to CALSIM operations based on actual operations will be developed and applied to CALSIM results as an alternative for analysis that may improve the utility of the results. The result of the SWP water supply analysis will be tables showing monthly and annual amounts of various types of SWP water available for San Luis Obispo and Santa Barbara Counties, as well as for other SWP contractors that may be partners in water management alternatives such as banking, exchanges, or transfers.

Subtask 4.4 – Evaluate Management Alternatives
The water supply and conveyance information identified in Subtasks 4.2 and 4.3 will be combined with demand information for Central Coast water users to evaluate individual and combined water management alternatives. From three to ten different water management alternatives will be evaluated on an annual basis to quantify their performance for meeting Central Coast water users water needs. The evaluation will quantify the minimum level of deliveries, average level of deliveries, storage in banking sites, cost, and other parameters to be considered in the selection criteria. The use of annual operations analysis for the evaluation will be reviewed early in the process to

Scope of Work

determine its adequacy. If that approach is not adequate to meet CCWA planning needs, then a specific proposal for the optional Subtask 4.6 will be presented to CCWA for their consideration.

Deliverable:

 Presentation of water supply provided to CCWA Stakeholders for evaluated alternative strategies

Subtask 4.5 – Select Management Alternatives

This subtask will involve presentation of the results of
Subtask 4.4 in relation to the selection criteria identified
in Task 3. The performance of the various management
alternatives will be reviewed with CCWA and appropriate
stakeholders to identify the best individual alternative
or combination of alternatives. It is also possible that
refinements to the alternatives can be developed based on
feedback from CCWA and stakeholders. The completed
result of this task will be an approach for water management
options that meets CCWA needs in the most effective
manner.

Subtask 4.6 (Optional) – Develop More Detailed Local Planning Model

As noted in Subtask 4.4, the initial approach of reliance on an annual planning model will be reviewed as an initial step. It is possible that a more detailed monthly model may be helpful for more accurate analysis of water management alternatives. This model would include different delivery zones within CCWA along with monthly capacities for the Coastal Branch, the Chorro Valley and Lopez Pipelines, other local conveyance, groundwater basins, and other features that have the potential to improve overall water management. This task would be scoped early in the study and reviewed with CCWA and its stakeholders to confirm the need for the analysis and define the level of effort for the subtask.

Task 5.0 – Consideration of Increased Table A Amount

CCWA is currently pursuing increasing its SWP Table A amounts through purchase of the Suspended Coastal Branch Table A and through SWP-wide projects such as the Delta Conveyance Facility project. The benefits and usability of SWP Table A amounts will be developed using the CALSIM review described above. The raw water supply benefits of the Suspended Coastal Branch Table A purchase will be

quantified, together with the benefits that can be achieved through a broader water management approach and the associated costs of that approach. Similar analysis would be conducted for projects like the Delta Conveyance Facility, if requested. The results of these analyses would be presented to CCWA for their consideration in making management choices.

Deliverable:

 Memorandum summarizing Benefits and Risks for increased Table A Options

Time Availability

Provost & Pritchard and Hallmark Group staff will be available as needed to perform their specific service associated with the CCWA. Even with the recent events surrounding COVID-19, our team has continued to be available to our clients either through in-person meetings or remotely. We have the diversity and the depth of staff needed for the Water Authority's project.

Provost & Pritchard and Hallmark Group utilize a scheduling software to allocate individual staff at all levels of involvement with the project from start to finish. The principal-in-charge will check weekly availability of each assigned staff so that the agreed upon schedule and critical deadlines are met. This weekly review of allocated staff hours to the Authority's project will protect against staff being pulled off to other assignments. Additionally, for the Authority's project our principal-in-charge, can commit additional support staff as needed to meet the agreed upon schedule.

Provost & Pritchard and Hallmark Group employs highly trained staff with experience in a wide range of disciplines. With integrated computer and telephone systems and video conferencing capabilities between our firm's nine office locations, our project teams are able to function efficiently and effectively as one, allowing the convenient utilization of staff expertise and resources from our other locations, as necessary. This convenience and efficient ability to communicate within our offices allows our project teams to focus on providing quality products for our clients while keeping their projects on schedule and within budget.

Rate Sheet

Provost & Pritchard	
Principal Engineer	\$185.00 - \$225.00
Senior Engineer	\$150.00 - \$178.00
Associate Engineer	\$120.00 - \$145.00
Assistant Engineer	\$95.00 - \$120.00
Senior Technician	\$130.00 - \$150.00
Associate Technician	\$103.00 - \$125.00
Assistant Technician	\$75.00 - \$95.00
Project Administrator	\$78.00 - \$98.00
Hallmark Group	
Principal & Strategic Advisor / Vice President and Program Manager	\$300.00
Director Water Resources / Supply	\$250.00
Project Controls Manager	\$225.00
Senior Project Manager	\$200.00
Project Manager	\$175.00
Senior Project Analyst	\$155.00
Project Analyst / Contract Administrator	\$140.00
Project Coordinator / Document Control	\$125.00
Project Administrator	\$110.00

References

Agency	Contact	Telephone	Email	Project
Provost & Pritchard				
North Fork Kings GSA 4886 East Jensen Avenue Fresno, CA 93725	Mark McKean	(559) 866-8600	mckean@psnw.com	Groundwater Sustain- ability Plan Development
Central California Irrigation District P.O. Box 1231 Los Banos, CA 93635	Jarrett Martin	(209) 826-1421	jmartin@ccidwater.org	Los Banos Creek Diversion Project
San Gorgonio Pass Water Agency 1210 Beaumont Avenue Beaumont, CA 92223	Jeff Davis	(909) 845-2577	jdavis@sgpwa.com	Groundwater Sustain- ability Plan Development
Hallmark Group				
California Department of Water Resources 1416 9th Street Sacramento, CA 95814	Karla Nemeth	(916) 653-7007	karla.nemeth@resources. ca.gov	 WaterFix Transition Services and Environmental Planning Program Management
Westlands Water District 3131 N. Fresno Street P.O. Box 6056 Fresno, CA 93703-6056	Tom Birmingham	(559) 241-6201	tbirmingham@wwd.ca.gov	Yolo Ranch Restoration Project
Metropolitan Water District of SoCal P.O. Box 54153 Los Angeles, CA 90054-0153	Jeff Kightlinger	(213) 217-6211	jkightlinger@mwdh2o.com	WaterFix Environmen- tal Planning Program Management

Appendix A: Resumes

Appendix A: Resumes

Terry Erlewine, PE

Principal-in-Charge Provost & Pritchard

Education

- ✓ M.S., Civil Engineering, University of California, Davis
- ✓ B.S., Civil Engineering, University of California, Davis

Licenses/Registrations/Certifications

✓ Civil Engineer, California #32985

Affiliations

✓ Groundwater Resources Association

Areas of Expertise

- ✓ Water Resources
- ✓ Groundwater Resource Studies
- ✓ Groundwater Modeling
- ✓ Groundwater Conjunctive Use Programs
- ✓ Surface Water Studies

Professional Summary

Terry Erlewine is Principal Water Resources Engineer with Provost & Pritchard who has more than 38 years of experience providing water resources planning and analysis. He has conducted many surface and groundwater resources studies, including water uses, operations studies, groundwater modeling, and groundwater conjunctive use programs. For twenty-three years, Mr. Erlewine worked for the State Water Contractors, most recently serving as General Manager for 14 years. Previously, Mr. Erlewine worked as a consultant on water resources. Mr. Erlewine began his career with the California Department of Water Resources. In his 13-year tenure with the Department, he was involved in all aspects of surface water and groundwater projects.

Relevant Experience

San Gorgonio Pass Water Agency, Beaumont, California, Project Manager

– Mr. Erlewine is currently managing development of a Groundwater Sustainability Plan for the 64,000-acre San Gorgonio Pass Subbasin. The GSP will serve three GSAs in the subbasin – the San Gorgonio Pass GSA, Verbenia GSA and a portion of the Desert Water Agency GSA. The GSP will address groundwater sustainability in an area of limited water supply availability and increasing urban development. The GSP will be completed and adopted by GSAs prior to January 2022.

North Fork Kings GSA, Riverdale, California, Project Engineer – Mr. Erlewine developed water budget for the North Fork Kings GSA, quantifying water budget components including agricultural water use, M&I water use, effective precipitation, groundwater seepage and groundwater pumping. The analysis also considered climate change, including effects on evapotranspiration, precipitation and local water supplies.

Kern Groundwater Authority, Bakersfield, California, Basin Coordinator –

Mr. Erlewine served as Basin Coordinator for the Kern Groundwater Authority, which is the largest Groundwater Sustainability in the Kern Subbasin. Mr. Erlewine initially served as acting general manager (Planning Manager) and subsequently served in a senior advisory role. While acting Planning Manager, he developed KGA budget and schedule for GSP preparation. He also provided technical advice on groundwater modeling and other GSP preparation elements. He developed projected future water supply conditions for the State Water Project considering climate change

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Terry Erlewine, PE (continued)

Principal-in-Charge

for use in SGMA groundwater modeling projections.

State Water Contractors, Sacramento, California, General Manager – Mr. Erlewine managed the State Water Contractors, developing consensus on a wide variety of issues related to State Water Project (SWP) and other factors for the 27 member agencies of the State Water Contractors. He organized and directed monthly meetings for a nine-member Board of Directors, regularly reported on water supply and management issues, and provided annual reports on objectives for the State Water Contractors.

Mr. Erlewine routinely discussed water supply impacts of Delta regulations with State Water Resources Control Board, U.S. Fish and Wildlife Service, National Marine Fisheries Service, and California Department of Fish and Wildlife Staff. Frequently presented views of the SWP contractors at State Water Resources Control Board hearings.

Water Supply Impact Analysis, State Water Contractors,
Sacramento, California – Mr. Erlewine prepared an analysis of
water supply impacts to the State Water Project of federal
endangered species act regulatory measures. Water supply
impacts included reduction in water deliveries to State Water
Project customers leading to reduced crop acreage, increased
costs for alternative supplies and groundwater level impacts.
Testimony was presented to Eastern District of California
Federal Court in litigation on implementation of the
Operations Criteria and Plan biological opinion.

State Water Contractors, Sacramento, California, General Manager - Worked with Agricultural Economist and Water Supply Engineers in developing approach for analyzing water supply and economic impacts of water supply scenarios for State Water Project (SWP) contractor districts over multi-year drought periods. Developed water supply data for selected SWP contractors to apply in analysis of shortages during recent drought periods.

Semitropic Water Bank, Semitropic Water Storage District, Wasco, Groundwater Task Lead – Evaluated groundwater level impacts from proposed Metropolitan Water District of Southern California water banking program with Semitropic Water Storage District in the San Joaquin Valley. Groundwater levels were projected for a three-year period with and without the proposed banking program. Significant impacts of the proposed banking operation were summarized and present in California Environmental Quality Act documentation.

Sacramento Valley Water Management Agreement, State Water Contractors, Sacramento, Committee Co-Chair – Mr. Erlewine served as co-chair of the Technical Measurement and Monitoring Committee for the Sacramento Valley Water Management Agreement. The Technical Measurement and Monitoring Committee collectively developed groundwater monitoring approaches that would identify water supply benefits and impacts for proposed water management actions, primarily conjunctive use projects. Membership in the Technical Measurement and Monitoring Committee included representatives of the SWP Contractors, the CVP Contractors, Sacramento Valley Water Users, the Department of Water Resources and the U.S. Bureau of Reclamation.

San Joaquin Valley Groundwater Study, Department of Water Resources, Fresno, Project Manager – Modified and updated finite element groundwater model for San Joaquin Valley, California. Modified elements in network to reflect geology and variations in recharge due to surface water supply. Calibrated groundwater model for 12 years through comparison of modeled results to average water levels as determined from geostatistical analysis.

Kern Fan Element Water Bank, Department of Water Resources, Bakersfield, Project Manager – Developed finite difference groundwater model for 40,000-acre conjunctive use site and vicinity in Kern County, California. Model was developed with multiple layers and used to simulate impacts of proposed recharge basin and extraction well configurations. Pre-processing program was developed to quantify pumping and recharge amounts for various project alternatives.

Dan Flory, PE

Provost & Pritchard

Education

- ✓ B.S., Civil Engineering, California State University, Chico
- ✓ Executive Management Program, University of California, Davis

Licenses/Registrations/Certifications

✓ Civil Engineer, California #33004

Areas of Expertise

- ✓ Water Resources Engineering
- ✓ Water Banking
- ✓ Water Transfers
- ✓ Bid Documents
- ✓ Data Analysis

Professional Summary

Dan Flory is a Principal Engineer specializing in water resources with Provost & Pritchard. Mr. Flory has more than 30 years of experience in water resources engineering including water banking and transfers. He served in 28 progressively more responsible roles for the California Department of Water Resources, culminating in his position as the department's executive manager. He worked an additional four years in engineering with the California Department of Water Resources. He is an experienced advisor to legislative staffs, appointed officials and board members as well as serving as an expert witness providing testimony in litigation involving water rights.

Relevant Experience

Westside Recharge Basin, Antelope Valley East Kern Water Agency, General Manager – Led the development of three groundwater banks in the Antelope Valley, including recharge basins and over 30 extraction wells to meet local water quantity and dry year supply needs.

AVEK 2014-15 Dry Year Exchanges, Antelope Valley East Kern Water Agency, General Manager – negotiated water transfer and exchange agreements involving SWP supplies to firm up dry year supplies and recover over \$13 million in SWP costs for the Agency.

Monterey Amendment, Water Supply Contract Negotiation, California Department of Water Resources, Principal Engineer – negotiate and draft contract language for long term water supply for the Department with Local Agencies and SWP contractors.

Term 91 Supply Study, State Water Resources Control Board, Associate Engineer – perform analysis of surface water rights to determine the availability of unappropriated water in the Sacramento – San Joaquin watershed.

Previous Experience

Antelope Valley-East Kern Water Agency, Palmdale, California, General Manager – Reporting to the Board of Directors, Mr. Flory was responsible to oversee all operations of the Agency. He managed a \$45 million budget and 40 operations and administrative staff. His position also included supplying water through four water treatment plants to a population of about 400,000 and 2,400 square miles in the Mojave Desert and Antelope Valley. He led the development of three local water banks recharging SWP water in 2011 allowing the Agency to meet all water quality and water supply needs during a four-year drought. He also negotiated water delivery and exchange agreements to net \$13 million in additional revenue for the Agency. (2015-2015)

Dan Flory, PE (continued)

California Department of Water Resources, Sacramento, California, Executive Manager - Reporting to the SWP Deputy Director and leading the Department's efforts to renegotiate and extend the long-term water supply contracts, Mr. Flory developed new and revised contract terms to fund major capital improvements including the through Delta facilities and address SWP bonding and cash flow issues. He provided expert testimony and technical support to defend the Department's long-standing practices in the allocation of water and power costs among the water contractors. As Executive Manager for FloodSAFE California he provided oversight and executive direction to the FloodSAFE program with an annual budget was over \$700 million a year. He also directed the work of a large multi-disciplinary matrix management team of Department staff and consultants; developed the bond expenditure plan and managed over one hundred programs and projects and reported to the legislature and Department management all expenses and progress of the work. (2006-2009)

California Department of Water Resources, Sacramento, California, Division Chief – For six years, Mr. Flory supervised and directed the work of 100 engineers and analysts in the administration of power purchase and water supply contracts. The operating budget, including power purchases was about \$300 million a year. Work included the allocation of water supplies to water users and the distribution of water and power costs to 29 SWP contracting agencies. He also developed the 400 page annual report documenting the costs to contractors. (2000-2006)

California Department of Water Resources, Sacramento,
California, Principal Engineer – Mr. Flory supervised and
directed the work of the Water Supply Reliability Branch.
Water resource planning related to the SWP, including the
Bay Delta Water Rights Hearing Group, the Arroyo Pasajero
Flood Study Team and the Future Water Supply Studies
Group. (1997-2000)

California Department of Water Resources, Sacramento, California, Section Chief – For 11 years Mr. Flory supervised the Water Contracts Administration and Negotiation Section. He directed the work of 20 engineers and technicians, approving water delivery schedules, documenting deliveries and facilitating water transfers. He also developed contracts for the use of the SWP facilities. (1992-1997)

California State Water Resources Control Board, Sacramento, California, Water Rights Engineer – Mr. Flory was responsible to investigate, document and to present findings to the State Water Resources Control Board on water right applications and disputes. He gave presentations at public hearings and in one-on-one staff briefings of Board members; organized staff reports; facilitated public testimony and developed the hearing record on water right hearings and adjudicatory processes for surface and groundwater resources. (1986-1992)

California Department of Water Resources, Sacramento, California, Civil Design Engineer – Mr. Flory developed civil design drawings and specifications for major SWP projects including the Bottlerock Geothermal Power Plant and the Suisun Marsh Water Quality Control Structures. (1983-1986)

California State Water Resources Control Board, Sacramento, California, Associate Engineer – As an Associate Engineer, Mr. Flory performed a special study to determine the water available for appropriation in the Sacramento San Joaquin watershed. He analyzed all water rights held in the Central Valley including all appropriative and riparian rights; determined the applicability of standard water right restrictions on diversions; took field measurements and documented water diversions for a court ordered adjudication. (1980-1983)

Dale K. Melville, PE

Provost & Pritchard

Education

- ✓ M.S. Civil Engineering, University of California, Davis
- ✓ B.S. Mechanical Engineering, University of California, Davis

Licenses/Registrations/Certifications

✓ Civil Engineer, California #28098

Affiliations & Positions

- ✓ Manager Engineer- Dudley Ridge Water District
- ✓ Executive Director Southwest Kings Groundwater Sustainability Agency
- ✓ Director South Valley Water Resources Authority
- ✓ Director Westside Water Quality Coalition
- ✓ Civil and Environmental Engineering Advisory Board Member, California Polytechnic State University, San Luis Obispo

Areas of Expertise

- ✓ Water Transfers & Exchanges
- ✓ Agricultural & Municipal Infrastructure
- ✓ Agricultural & Municipal District Management
- ✓ Water/Wastewater Distribution, Treatment & Recycling

Professional Summary

Dale Melville is a principal water resources engineer and Chair of the Board of Director's at Provost & Pritchard. With over 45 years of consulting engineering experience, he has been involved with projects related to all aspects of agricultural and municipal infrastructure projects. He is or has been consulting or district engineer to several municipal and agricultural districts. Mr. Melville's experience includes site investigations, feasibility studies, management of projects related to design and construction of both municipal and agricultural water and wastewater conveyance and treatment systems, wastewater reclamation, agricultural irrigation and drainage systems, water transfers/exchanges, and groundwater recharge/recovery facilities.

Mr. Melville has established working relationships with numerous state and federal government agencies in preparing applications and securing grant and loan funds for infrastructure projects. His experience includes serving both private and public agency clients.

Relevant Experience

Ongoing Consulting Services, Dudley Ridge Water District, Kings County, California, District Manager-Engineer - Mr. Melville has been the managerengineer for this agricultural water district, administering their State Water Project contract for over 25 years. In addition to his management duties, he has developed conjunctive use and long-term transfer/exchange programs for the District, including groundwater banking projects with the Kern Water Bank Authority and Cawelo Water District, exchange programs with Kern County Water Agency, Tulare Lake Basin Water Storage District, and San Gabriel Valley Municipal Water District, and numerous annual water transfers and exchanges. He also assisted in the formation of the Kern Water Bank Authority, a public agency involved in the acquisition, development, and operation of a 20,000-acre groundwater banking facility, which was the largest groundwater recharge project in the world (Mr. Melville was a founding member of the board of directors for the Kern Water Bank Authority). Mr. Melville has also assisted the District in the permanent transfers of State Water Project Table A water to Mojave Water Agency and Antelope Valley-East Kern Water Agency.

General Water Transfers/Exchanges, Various Clients, San Joaquin Valley, California, Project Manager – Mr. Melville has assisted numerous public agency and private clients with negotiations and obtaining regulatory approvals (State Water Resources Control Board, Department of Water Resources, U.S. Bureau of Reclamation, and local agencies) including California Environmental Quality Act (CEQA)/National Environmental Policy Act (NEPA) compliance for water transfers totaling more than 500,000 acre-feet. He prepared applications, drafted agreements, and obtained regulatory approvals for change of place-of-use or point of delivery agreements for typically two to five water transfers per year

Dale K. Melville, PE (continued)

since the mid-1990s. Transfers have included: State Water Project contractors in Kings, Kern, Tulare, San Luis Obispo, Stanislaus, and Los Angeles counties; San Luis Unit-Central Valley Project water, Friant-Central Valley Project water, and Kern, Kaweah, Tule, and Kings Rivers. Water has been transferred to San Luis Unit-Central Valley Project contractors, Friant-Central Valley Project contractors, State Water Project contractors, environmental purposes, and individual landowners within Central Valley Project and State Water Project service areas.

Water Acquisitions, Transfers, and Contracts, Westside Water Districts, Kern and Kings Counties, California, Project Manager

– Since 2008 Mr. Melville has represented Belridge Water Storage District, Berrenda Mesa Water District, Dudley Ridge Water District, Lost Hills Water District, and Wheeler Ridge-Maricopa Water Storage District in the acquisition, negotiations, contract development, transfer documents, CEQA/NEPA compliance, and approvals of annual and longer-term transfers and exchanges from water purveyors from northern California, the Central Coast, and the San Joaquin Valley.

Warren Act Contract, Kern-Tulare Water District, and Rag Gulch Water District, Tulare and Kern Counties, California, Project Manager – Mr. Melville was responsible for preparation of a NEPA environmental document and U.S. Bureau of Reclamation application for a Warren Act contract to convey State Water Project and Kern River water in the Friant-Kern Canal to increase the water management options available to the districts.

Cawelo Conjunctive Use Program, Dudley Ridge Water District & Cawelo Water District, Kern County, California, Project Manager

- Mr. Melville prepared an application and obtained a \$7.5 million state grant used to develop a groundwater banking and conjunctive use program between Dudley Ridge and Cawelo Water Districts. Mr. Melville was instrumental in the negotiations and preparation of the operating agreement between the districts and approvals from other agencies. The program included design and construction of two groundwater recharge sites along Poso Creek (245 acres of ponds), five recovery wells and associated pipeline, diversion facilities, and appurtenances.

Water Supply Evaluation, Confidential Client, Central Valley, California, Project Manager – Mr. Melville was responsible for the preparation of a comprehensive evaluation of potential water supplies that could be pursued by an agricultural water district. The evaluation included a fatal flaw analysis, cost estimates of securing and transferring surface water supplies, and developing a prioritized list of several surface and groundwater programs for the district.

Water Contract Assignment/Water Transfer, Westlands Water District, Fresno and Kings Counties, California, Project Manager

– Mr. Melville was responsible for an environmental impact report/environmental impact study (EIR/EIS) for a water contract assignment and water transfer from a Central Valley Project contractor to the district in compliance with CEQA/NEPA requirements and an extremely short client time schedule. He also served as project manager to assist the district in the preparation of two other CEQA documents, including up to 200,000 acre-feet per year in water transfers and for a groundwater pump-in program to the California Aqueduct.

Drought Water Bank, State Water Purchasing Committee, California, Committee Member – Mr. Melville was a participating member of the State Water Purchasing Committee for the 1991 Drought Water Bank (the first emergency water bank formed in the state) to secure a pricipal good water good process of the Druden Bidge Water.

critical-need water supply for the Dudley Ridge Water District, a State Water Project contractor. Mr. Melville was also a participant in almost all of the subsequent dry year water purchase programs administered through the Department of Water Resources or the State Water Contractors, Inc.

Water Transfer, Poso Creek Water Company and Paramount Farming Company, Fresno and Kern Counties, California, Project Manager – Mr. Melville prepared documents and obtained approvals from the California Department of Water Resources, State Water Resources Control Board, and the State Water Contractors for a long-term change in place of use to facilitate annual water transfers between state and federal water districts.

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David Halopoff, PE

Provost & Pritchard

Education

- ✓ M.S. Civil Engineering, Emphasis in Water & Environmental (in progress), California State University, Fresno
- ✓ B.S. Civil Engineering, Emphasis in Water & Environmental, California State University, Fresno

Licenses/Registrations/Certifications

✓ Civil Engineer, California #87340

Affiliations

✓ American Society of Civil Engineers (ASCE)

Areas of Expertise

- ✓ Water Resources Engineering and Consulting
- ✓ Hydrogeology
- ✓ Groundwater Well Design and Construction
- ✓ Groundwater Engineering
- ✓ Irrigation Water Supply and Distribution
- ✓ Irrigation District Infrastructure Design
- ✓ Pump Design
- ✓ Sustainable Groundwater Management Act (SGMA)
- ✓ Regulatory Program Compliance
- ✓ Contaminant Fate & Transport
- ✓ Water Distribution System Design & Standards
- ✓ Geoenvironmental
- ✓ Soil Mechanics

Professional Summary

David Halopoff is a project manager and senior engineer at Provost & Pritchard with more than seven years of professional experience. His experience includes water resources and civil engineering, and construction. Mr. Halopoff has been involved with projects related to all aspects of municipal and agricultural water supply and distribution, groundwater recharge and recovery projects (direct and in-lieu), groundwater hydrogeology, groundwater engineering, groundwater well design and construction, groundwater quality, water supply studies, pump design, and construction oversight of public works and agricultural facilities. Mr. Halopoff has worked on over 50 well projects that include design and construction of municipal, industrial, and agricultural groundwater production wells. Water quality concerns are a common issue and many of the wells have required depth zone specific water quality formation sampling to allow effective design of the wells.

Relevant Experience

Turnipseed Basin Phase 3 Expansion, Delano-Earlimart Irrigation District, Delano, California, Project Engineer – Mr. Halopoff provided engineering and design services in preparing design and construction documents for the Delano-Earlimart Irrigation District Turnipseed Basin Phase 3 Expansion. The Project consists of 320-acres of recharge basins, a new 100 cfs water delivery lateral to the site consisting of a cast-in-place pressurized junction box on an existing 72-inch lateral and a 54-inch distribution lateral. The existing gravity lateral has existing downstream demands, and in order to alleviate potential issues delivering surface water to downstream users, motorized flow control valves were implemented on the turnout manifolds to maintain adequate head pressure in the cast-in-place junction box to provide for downstream deliveries on the existing 72-inch lateral.

Water Banking Screening Analysis, South Valley Water Resources Authority, Kern, Tulare, Kings, and Fresno Counties, California, Project Manager and Project Engineer - Mr. Halopoff provided engineering and consulting services for a two-phase screening analysis of potential water banking projects in the San Joaquin Valley, south of the Sacramento-San Joaquin Delta (area of interest). The first phase consisted of a high-level screening analysis of potential water banking projects in the area of interest with the intent to identify a limited number of projects that warranted a further in-depth feasibility analysis. The potential projects included existing, planned, and new water banking projects in the area of interest. The first phase involved collecting information related to existing water banking programs, preparing a mapping analysis of future potential recharge areas, identifying future potential water banking projects, preparing rudimentary hydrogeology and water storage information, identifying potential agencies to partner with on future banking projects, and identifying potential agencies to partner with on short or long-term exchange projects. The

David Halopoff, PE (continued)

work resulted in providing an initial screening of potential water banking projects and water exchange opportunities for the SVWRA to consider investing in to further enhance the water supplies of its Members. The Project also resulted in the negotiation and drafting of a multi-year water transfer agreement with an agency in the northern San Joaquin Valley where excess available surface water supplies would be transferred the South Valley Water Resources Authority via the California Aqueduct.

Groundwater Storage Analysis, Confidential Client, Kern County, California, Project Engineer – Mr. Halopoff provided engineering and evaluation services in preparing a report that provided an analysis of the various water banking options for the Semitropic Water Storage District Groundwater Banking Program located in California's San Joaquin Valley. This analysis evaluated the relative advantages and disadvantages of three buy in options to the Semitropic Groundwater Banking Program. The analysis included a water supply forecast model that analyzed the feasibility of using surface water originating north of the Sacramento-San Joaquin Delta to bank in the Semitropic Groundwater Banking Program and the availability of the recovered groundwater on an annual basis. An economic analysis of each of the three options was also provided to identify the capital and operational cost of storing and recovering the banked water supplies.

Well Rehabilitation and Well Field Management, Arvin-Edison Water Storage District, Arvin, California, Project Engineer – Mr. Halopoff has been assisting in the review of the performance and condition of Arvin-Edison Water Storage District's 76 existing groundwater recovery wells and developing a masterplan for their rehabilitation and replacement. Many of the wells are nearly 50 years old and are approaching the end of their expected lives. The master plan is also reviewing whether additional wells are needed to meet District demands, and if yes, recommending locations for additional wells. The project team has been working with the District to rehabilitate several existing pumps and motors, and to replace three groundwater recovery wells that failed during the recent drought. The team manages the collection and analysis of data on all the District groundwater recovery wells, pumps,

and motors. When pumps and/or motors are identified to have problems, the team develops solutions, and manages bidding and rehabilitation and replacement work by well drillers and pump and motor suppliers (including field review of that work). To date the project has included the siting, design, construction, and equipping of ten (10) replacement groundwater recovery wells, some requiring new laterals to the District distribution facilities. One of the replacement wells included depth zone specific water quality formation sampling in the pilot hole to mitigate for arsenic water quality concerns, which was successful. The new recovery wells ranged in depths from 1,000 feet to 1,350 feet with casing sizes ranging from 16 inch to 18 inch. The work also includes design, bidding, and construction oversight expanding the District's overhead 12kV system to the new groundwater recovery wells, and installation of the control panel, well pump starter, and site electrical facilities to provide for fully functioning groundwater recovery well sites.

Aqueduct Pump Back Project, Dudley Ridge Water District, Kern County, California, Project Engineer – Mr. Halopoff provided design engineering services for the preparation of installing 2 – 250 cfs pump stations along the California Aqueduct to pump water upgradient and across two existing check structures in order to deliver water from downstream in the California Aqueduct to the Dudley Ridge Water District and other areas of Northern Kern County. Mr. Halopoff reviewed proposed pump system pump and system curves, pump characteristics, system piping, and preparation of preliminary design and construction documents. Mr. Halopoff also worked directly with the California Department of Water Resources office and field staff reviewing the proposed installation and in preparation of operation agreements.

Curtis Creel, PE

Hallmark Group

Education

- ✓ B.S Environmental Resources Engineering, Emphasis in Water Resources, Humboldt State University
- ✓ Advanced Water Resources Modeling Courses, Humboldt State University and California State University, Sacramento

Licenses/Registrations/Certifications

- ✓ Civil Engineer
- ✓ Co-authored two professional journals on operations modeling for the State Water Project

Affiliations

✓ Member of American Society of Civil Engineers

Professional Summary

Curtis has over 33 years of expertise focused on water resources development and management in California effectively collaborating among local, State and federal teams. He began his career with the California Department of Water Resources (DWR) as an engineer working on computer models to simulate the operations of the State Water Project (SWP) and transitioned to the role of Chief of the State Water Project Operations Planning Branch where he oversaw the tactical and strategic water operations of the SWP. Specifically, Mr. Creel was responsible for recommending SWP allocations to the Director, deciding how much water would be exported into the California Aqueduct, complying with State and federal regulations, ensuring DWR policy implementation and overseeing operations modeling.

In 2005, Curtis left DWR to continue his career in public service with the Kern County Water Agency (KCWA) comprised of a seven-member Board. As the Water Resources Manager, Curtis administered water supply contracts, administered local groundwater banking and conveyance projects and represented the KCWA on SWP matters with other public water agencies as well as DWR. He became KCWA's General Manager in 2016 and oversaw the operation and administration of KCWA (a \$500M agency). Curtis now resides in the Sacramento area and remains focused on Water Supply Management for Hallmark Group.

Curtis has operated with direct accountability in an executive management capacity for large-scale water programs throughout the State and has demonstrated effective facilitation, engagement and the unique ability to gain concurrence among a variety of stakeholders

Relevant Experience

California WaterFix - KCWA 2013-2019

Curtis served as the lead negotiator for KCWA to extend the water service contracts for the SWP, as well as the California WaterFix Contract Amendment. California WaterFix (formerly the Bay Delta Conservation Plan), is a \$17 billion program to provide a more reliable water supply to over 25 million California residents. Most recently, Mr. Creel lead the Agency's team in negotiations on contract amendments for the Delta Conveyance facilities.

State Water Contactors, Inc. - Board Director 2010-2019

Curtis served as a Director on the State Water Contractors, Inc. (SWC) Board for nine years. The SWC's is an association comprised of 27 public water agencies working to provide a reliable water supply to more than 27 million residents and 750,000 acres of farmland throughout the State. In his role on the Board, Curtis represented SWC on energy policy, endangered species protections and water supply development. During his tenure he provided policy direction to SWC staff and acted as a technical

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Curtis Creel, PE (continued)

lead for various activities including expansion of Central Valley Project (CVP) and SWP modeling capabilities.

Oroville Facilities - 2001-2005

Curtis has direct experience with modeling and participated in DWR's efforts to obtain an updated Federal Energy Regulatory Commission (FERC) license for the Oroville Facilities. Located on the Feather River in Butte County, the principal features include the Oroville Dam and Reservoir, Edward Hyatt Powerplant, Thermalito Facilities, Feather River Fish Hatchery, and associated recreational, fish and wildlife preservation and enhancement facilities. The hydroelectric facilities have a combined license capacity of approximately 762 megawatts, which produce an average of 2.2 billion kilowatt-hours of electricity each year. As DWR's lead on the Engineering and Operations Workgroup, Curtis worked with stakeholders to provide project updates regarding possible changes to facility operations and led a team responsible for modeling operations and water quality conditions for the Feather River. His team included both DWR and consultant experts that developed important information about how the operations of the Oroville Complex could be adjusted to meet specific objectives identified in the relicensing process.

Biological Opinions for the CVP and SWP – DWR Lead Representative 1995-2005

While working as DWR Chief of the State Water Project Operations Planning Branch, Curtis acted as the Department's lead representative for the development of biological opinions to cover the operations of the SWP and CVP. Curtis participated in a variety of technical and policy driven activities and was involved in discussions with fishery agencies to develop appropriate criteria.

CALFED – Chief of Compliance Monitoring, Engineering Assistant to Chief Deputy Director, and Chief of the SWP Operations Planning Branch 1992-2005

In 1994, the State and federal administrations developed a framework to improve environmental conditions in the Sacramento-San Joaquin Delta. The framework included (1) developing new criteria to protect beneficial uses of water in the Delta, (2) developing structural changes in the Delta to improve the interaction between human and environmental needs, and (3) improving coordination among State and federal administrations and stakeholders on the operation of the SWP and CVP. Curtis played a vital role in determining how the SWP and CVP would be operated to provide water supply while improving conditions for the environment.

State Water Project - DWR Chief of Compliance 1992-1997

Curtis served as Chief of the Compliance Section at DWR. During this time, he directed work of staff to ensure compliance with State Water Resources Control Board (SWRCB) water rights criteria for the operations of the SWP, as well as compliance FERC license requirements. Curtis regularly interacted with SWRCB staff and was responsible for coordinating with State and federal agencies. Additionally, Curtis participated in the development of the Delta Accord and directed DWR staff to develop administrative procedures to ensure compliance with the Delta Accord criteria.

Appendix A: Resumes

Jim Beck

Hallmark Group

Education

- M.S. Water Quality, University of Pittsburgh Graduate School of Public Health
- ✓ B.S. Biological Sciences and History, Emphasis in Environmental Biology, Minor in Chemistry

Licenses/Registrations/Certifications

- ✓ Water Quality Analyst Grade IV American Water Works Association
- ✓ Water Treatment Plant Operator Grade III State of California
- ✓ Water Distribution Operator Grade II State of California

Affiliations

✓ American Water Works Association

Professional Summary

Jim has over 30 years of expertise implementing initiatives to meet California's water needs. Formerly the General Manger of the Kern County Water Agency, Mr. Beck oversaw operation and administration, and held broad water-supply management responsibilities within Kern County. He has been instrumental in many programs that have placed the agency at the forefront of water management statewide. These programs include coordinating local participation in the State Water Project, developing and operating groundwater banking programs, operating the Cross Valley Canal, and overseeing the Henry C. Garnett Water Purification Plant.

Relevant Experience

Cuyama Basin Groundwater Sustainability Agency (\$2.9M) Executive Director 2017-Present

Jim serves as the Executive Director for the Cuyama Basing Groundwater Sustainability Agency (CBGSA) that was formed by a Joint Exercise of Powers Agreement (JEPA) by multiple agencies and districts under the Sustainable Groundwater Management Act. The Cuyama Groundwater Basin has been identified by the California Department of Water Resources (DWR) as a high priority basin and subject to conditions of critical overdraft. The CBGSA must develop a Groundwater Sustainability Plan that prevents undesirable results and identifies and implements actions and projects to reach its sustainability goal and bring the basin in balance by 2040.

In 2017, the Hallmark Group was selected to lead the CBGSA and provide Executive Director services. Within a very short timeframe, Jim directed the proposal review and selection of key consultants for the program, developed annual and program-level budgets, developed and facilitated negotiations for program cost allocation among participants, developed the program schedule, and implemented executive-level Board reporting.

Eastside Water Management Area (\$400k) Executive Director 2018-Present

Jim serves as the Executive Director for the Eastside Water Management Area (EWMA). The Kern Sub-basin of the Tulare Basin has been identified as a high priority Basin by DWR, which is subject to conditions of critical overdraft. Non-district landowners in the eastern portion of Kern County contracted with the Hallmark Group to form the Eastside Water Management Area (EWMA) to best represent their interests in developing a Groundwater Sustainability Plan chapter as required by SGMA. The EWMA membership draws from a 153,000 acre area and currently includes 42 members representing nearly 35,000 acres. The Hallmark Group provides Board reporting and facilitation, project controls, schedule management, consultant management, contract management, stakeholder outreach facilitation, and representation at Kern Groundwater Authority meetings.

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Jim Beck (continued)

California WaterFix (\$17B) KCWA General Manager 2007-2017

Jim's 30 years of California water policy leadership are reflected by the efficacy of his work with the California WaterFix (formerly the Bay Delta Conservation Plan), a \$15.5 billion program to provide a more reliable water supply to over 25 million California residents. Jim worked with stakeholders to provide project updates and to develop a Kern County implementation strategy. He also contributed to the negotiation of State and local funding agreements that identified not only the costs borne by Kern County, but also the terms and conditions for Kern County's participation in the planning effort.

Treated Water Capacity Expansion Project (\$143M) and Cross Valley Canal Expansion (\$100M) KCWA General Manager 2001-2012

Jim managed KCWA's urban water district, which provides a supplemental water supply for the metropolitan Bakersfield area, and has led agency staff in two major capital improvement projects: the Treated Water Capacity Expansion Project (TWCEP) and the expansion of the Cross Valley Canal. The TWCEP included the expansion of the Henry C. Garnett Water Purification Plant, construction of new pump stations and pipelines to deliver treated water to the north, northwest and east portions of metropolitan Bakersfield, and construction of a 1MW solar photovoltaic system and electrical substation. These improvements improved drinking water quality, supply, and reliability; doubled the treatment capacity of the Henry C. Garnett Water Purification Plant; offset energy costs through solar and electrical substation facilities (over \$1M in seven years); and utilized renewable energy through use of the solar project. Expansion of the Cross Valley Canal included raising the liner to increase capacity and installing additional interties and turnouts. These efforts increased the capacity of the CVC by 54% and improved water supply reliability for CVC participants.

Kern County Local Mediation KCWA General Manager 2003-2006

Jim managed the effort in Kern County to resolve numerous local water-management issues with stakeholders. As the lead spokesperson for the KCWA, he addressed issues including

local State Water Project (SWP) contract issues, groundwater issues and development, use and assignment of facilities, rights, and other KCWA assets. The effort involved over 50 stakeholder representatives which realized key advances in several areas: technical workgroups reached a consensus on draft guidelines for calculating hydrologic balances for agricultural and urban water districts, and preliminary discussions on asset allocation provided the foundation for formal agreements on allocating KCWA assets.

Groundwater Banking Programs KCWA 1987-1995

Jim participated in the development of world-class banking projects in Kern County including the Kern Water Bank and KCWA's Pioneer Banking Project. Jim's role included technical support, project development and management, and agreement development. These projects added roughly 20,000 acre-feet (af) of recharge and 100,000 af of recovery for KCWA's Member Unit agencies. Investment and improvements to these banking programs provided increased water reliability and flexibility, improved water quality and provided habitat benefits to numerous native species and migrating waterfowl.

Harry Starkey, PE

Hallmark Group

Education

 B.S. Mechanical Engineering, California Polytechnic, San Luis Obispo

Licenses/Registrations/Certifications

✓ Professional Engineer, CA

Affiliations

- ✓ Association of California Water Agencies Board and Committee Member
- ✓ American Water Works Association
- ✓ Kern Bar Association Arbitrator

Professional Summary

Harry Starkey's 30-year career in water has focused on water management and development in Kern County. As the former General Manager of the West Kern and Berrenda Mesa Water Districts, Harry has extensive water banking experience in and around Kern County. His experience includes the planning, permitting, design, construction, financing, right of way acquisition and operation of water banking projects on the Kern Fan including the management of the Cross Valley Canal. In addition to his capital program management expertise, Harry has developed urban water management plans, water shortage contingency plans, water banking programs such as Berrenda Mesa, Pioneer, Kern Water Bank, West Kern Banking Programs, and preparation of various environmental compliance documents for permanent water transfers in California to further secure water reliability in Kern County.

Relevant Experience

North Recharge and Recovery Project (\$35M) General Manager 2010-2011

Harry oversaw the project which involved the acquisition of right of way for the construction of a 500 acre groundwater banking project. The project has an annual recovery capacity of 12,000 acre-feet and an annual recharge capacity in excess of 20,000 acre-feet. The project included 5 water wells, recharge basins and pipelines that deliver stored water into the District's distribution system, the Cross Valley Canal and the California Aqueduct.

West Kern Solar Project (\$19M) Project Manager 2012-2013

This project involved the equipping of 9 electric wells each with single axis 0.5 megawatt solar arrays. Harry acted as the Project Manager and was involved from project conception, through complex environmental permitting, financing and construction. The project received \$5M in Performance Based Incentive grants from PG&E.

Kern County Water Agency Emergency 23 Well (\$9.5M) Project Engineer-1991

Under an emergency drought declaration in 1991, Harry worked with a team of engineers to drill and equip wells to provide an emergency dry year water supply for Kern County agriculture. The project involved site work and the equipping of water wells with pumps and electrical switchgear. In addition, these wells were plumbed with distribution pipelines for delivery to the Cross Valley and Kern River Canals.

Kern County Water Agency 5 Well Project (\$2.5M) Project Engineer 1988

While working as a project engineer at the Kern County Water Agency, Harry was responsible for the design and construction management of

Harry Starkey, PE (continued)

five recovery wells on the Kern Fan. The project involved the equipping of five water wells with pumps and electrical switchgear. In addition, these five wells were plumbed with distribution pipelines for delivery to the Cross Valley Canal.

Kern Fan Water Banking Operations Project Engineer/CVC Manager/GM 1990-2019

Harry has direct experience operating numerous water banking projects on the Kern Fan including the Pioneer Project, Berrenda Mesa Project, Kern Water Bank and the West Kern North and South Recharge and Recovery Projects. Operational responsibilities included the scheduling of water deliveries for recharge activities, coordination for the recovery of banked water and central record keeping for all water accounting.

Kern Water Bank Project Engineer 1996

Harry worked on the initial construction and start-up operation of the recharge ponds for the Kern Water Bank. The work included the coordination of levee construction and placement of inter basin structures.

Appendix B: Acknowledgement of Addendum

Central Coast Water Authority ADDENDUM #1 Date of Issue: April 9, 2020

REQUEST FOR QUALIFICATIONS

Consulting Services to Develop Water Management Strategies to Maximize Yield of the State Water Project for San Luis Obispo and Santa Barbara Counties.

March 27, 2020

Addendum #1 is to document the change in the deadline for submitting Statement of Qualifications for the project. The sections of the Request For Qualifications that have been modified are presented below. Additional language are underscored and deletions are shown with strikethrough font, as follows:

PDF PAGE 2

Invitation

The Central Coast Water Authority (CCWA) is issuing a Request for Qualifications (RFQ) for professional services to develop water management strategies to optimize the yield of the State Water Project for San Luis Obispo and Santa Barbara Counties. The Project has a defined scope and timeframe and will require the services of a qualified engineering consulting firm ("Consultant") with specific experience with the California State Water Project operations to develop, facilitate and implement the Project tasks.

It is the policy of CCWA that the selection of a Consultant that will provide professional services shall be on the basis of demonstrated competence and on the professional qualifications necessary for the satisfactory performance of the services required.

CCWA is inviting qualified Consultants to respond to this RFQ. The deadline for submitting Statement of Qualification is April 17, 2020. May 1, 2020

And

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Instructions for Submittals

Four (4) copies of the SOQ's must be received by 3:00 p.m. on April 17, 2020 May 1, 2020. Late or faxed submittals will not be accepted.

And

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Anticipated Schedule

CCWA has identified the following tentative timetable for submittal and evaluation of the SOQ, negotiation and approval of the standard Professional Engineering Services Agreement:

March 27, 2020 Issue RFQ April 17, 2020 May 1, 2020 Submittal Deadline for all Qualifications April 27, 2020 May 18 - 21, 2020 Consultant Interviews (if necessary) May 1, 2020 May 25 - 28, 2020 Selection of Consultant and Notification May1, 2020 May 28, 2020 Commence Scope-of-Work Negotiations May15, 2020 June 15, 2020 Complete Scope-of-Work Negotiations May28, 2020 June 25, 2020 **Board Approval of Consultant Contract** Notice to Proceed May 28, 2020 June 25, 2020

While every attempt will be made to adhere to the above schedule following the Submittal Deadline for the SOQ, CCWA reserves the right to adjust or modify the selection process schedule. Where such changes to the selection process schedule are necessary, CCWA will advise all submitting Consultants in writing of any scheduling changes as soon as practicable

ACKNOWLEDGEMENT OF ADDENDUM #1

4/9/2020

Signature and Date

Page **2** of **2** 47357

Central Coast Water Authority ADDENDUM #2 Date of Issue: April 27, 2020

REQUEST FOR QUALIFICATIONS

Consulting Services to Develop Water Management Strategies to Maximize Yield of the State Water Project for San Luis Obispo and Santa Barbara Counties.

March 27, 2020

Addendum #2 is to document the change in the Statement of Qualifications (SOQ) submittal format. Considering the current working conditions related to COVID19, SOQs shall be submitted in electronic format. The sections of the Request For Qualifications that have been modified are presented below. Additional language are underscored and deletions are shown with strikethrough font, as follows:

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Instructions for Submittals

Four (4) copies of the All SOQ's must be submitted in electronic format via email received by 3:00 p.m. on April 17, 2020 May 1, 2020. The email submittal may include the SOQ as an attachment or may provide a link for downloading the SOQ. Late or faxed submittals will not be accepted

ACKNOWLEDGEMENT OF ADDENDUM #1

4/2//2020

Signature and Date

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CCWA June 25, 2020 Board Mtg.



CENTRAL COAST WATER AUTHORITY MEMORANDUM

September 17, 2020

TO: CCWA Board of Director

FROM: Ray Stokes

Executive Director

SUBJECT: Discussion Regarding Water Management Amendment to the State Water

Supply Contract, Draft Resolution Approving the Same for Consideration by the Board On October 22, 2020, and DWR's Final Environmental Impact Report for the Water Management Amendment and DWR's CEQA Findings of Fact and

Statement of Overriding Considerations

SUMMARY

CCWA has a long term water supply contract (SWP Contract) with the State of California Department of Water Resources (DWR) for the delivery of State Water Project (SWP) water. Under the existing SWP Contract, water transfers are permitted in a limited and very specific manner, resulting in their infrequent use. In addition, while the existing SWP Contract allows for bona fide exchanges of water, it lacks specificity regarding the parameters of such exchanges. Consequently, public water agencies that have SWP Contracts with DWR (PWAs) have relied upon DWR's case by case application, which provides less certainty for planning purposes.

Given changes in hydrology and further constraints placed on DWR's operation of the SWP and to provide flexibility in the future, PWAs and DWR conducted a series of public negotiations with the goal of agreeing on concepts to supplement and clarify the existing water transfer and exchange provisions of the SWP Contracts to provide improved water management. In a December 2017 Notice to Contractors, DWR indicated its desire to supplement and clarify the water management tools through this public process. In June 2018, PWAs and DWR agreed upon an Agreement in Principle (AIP), which included specific principles to accomplish this goal. These principles included clarifying existing practices for exchanges, providing new flexibility for single and multi-year non-permanent water transfers, allowing PWAs to set terms of compensation for transfers and exchanges, providing for the limited transfer of carryover and Article 21 water, and adding provisions to ensure transparency, among some others. In October 2018, a Draft Environmental Impact Report (DEIR) was circulated for the proposed project.

In addition, the AIP at the time included certain cost allocation sections for the California WaterFix project (WaterFix). In early 2019, the Governor decided not to move forward with WaterFix and DWR rescinded its approvals of the project. After this shift the PWAs and DWR

¹ The SWP Contract was executed in 1963 by the Santa Barbara County Flood Control and Water Conservation District (District) and DWR. On November 12, 1991, the District and CCWA entered into the Transfer of Financial Responsibility Agreement whereby CCWA assumed full responsibility for all of the District's obligations pursuant to the SWP Contract. However, the District remains the contracting party to the SWP Contract.

held a public negotiation and agreed to remove the WaterFix cost allocation sections from AIP, but to keep all of the water management provisions in the AIP. The AIP was finalized on May 20, 2019. DWR decided to amend and recirculate the DEIR. In February 2020, DWR published the Partially Recirculated DEIR for the State Water Project Supply Contract Amendments for Water Management (Project) and in August 2020, DWR certified the Final EIR for the Project.

The proposed amendments to the SWP Contract for consideration by the Board of Directors are based on the AIP, which has been converted into contract amendment language developed by PWA and DWR attorneys. If approved by the Board, the proposed amendment would be effective when 24 of the SWP PWAs execute the amendment. The proposed contract amendment – "Amendment No. 20 (Water Management Amendment) to the SWP Contract" – is attached to this report as Attachment A.

At CCWA's **October 22, 2020** Board Meeting, Staff will request the Board's consideration of Resolution No. 20-___ to (1) approve Amendment 20 (Water Management Amendment) to CCWA's SWP Contract with DWR and authorize the Executive Director to transmit Amendment No. 20 to the Santa Barbara County Board of Supervisors for its execution of the amendment on behalf of CCWA, and (2) make responsible agency findings pursuant to the California Environmental Quality Act for the Final Environmental Impact Report for the State Water Project Supply Contract Amendments for Water Management, and adopt CEQA Findings and Statement of Overriding Considerations for the Project.

Also at CCWA's **October 22, 2020** Board Meeting, Staff anticipates requesting the Board's direction to prepare any policies and procedures as may be necessary or convenient to implement Amendment No. 20 within CCWA, subject to and consistent with the Water Supply Agreements between CCWA and each CCWA Participant, for consideration by the Board on a date to be determined.

DISCUSSION

Background

The SWP Contract has been amended nineteen (19) times; most recently in 2003. The last update to the water management rules governing SWP operations was in 1994.

Existing article 56(d) of the SWP Contract provides the only mechanism for non-permanent transfers of SWP water between PWAs. This mechanism is called the Turnback Pool. As indicated above, it allows transfers in a limited and specific manner and it is rarely utilized. In addition, Section 56(f) allows PWAs to enter into bona fide exchanges of water with other PWAs, but it lacks specificity regarding the parameters. As a result, DWR has applied Section 56(f) on a case by case basis, which has provided less certainty for PWA planning purposes.

Consequently, DWR and the PWAs worked together to find solutions to develop water supply management practices to enhance management flexibility for SWP water supplies in a changing environment. The proposed contract amendment for the Board's consideration supplements and clarifies terms of the SWP water supply contract related to water transfers and exchanges within the SWP service area to improve water management capabilities and options. The proposed amendment does not increase SWP diversions or change SWP operations.

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<u>Transfers</u>

Specifically, the proposed contract amendment does the following, among other things, regarding transfers:

- Removes the Turnback Pool language from the contract.
- Creates new flexibility for non-permanent transfers, including allowing PWAs to transfer
 water to other PWAs outside their service area, to determine the duration (either single
 or multi-year) and terms of compensation for transfers, to execute Transfer Packages (2
 or more transfer agreements between the same PWAs), and to transfer water stored
 outside their service territory directly to other PWAs.
- Requires certain conditions be met to avoid harm to the SWP and other PWAs.
- Requires DWR approval based on satisfaction of such conditions.
- Permits PWAs to transfer Article 21 water with DWR approval after a demonstration of special need.
- Allows PWAs to transfer or exchange up to 50% of their carryover water.
- Adds provisions to ensure transparency.
- Provides for a dispute resolution process for non-participating PWAs who feel they may be adversely impacted by a transfer.

Exchanges

The proposed contract amendment does the following, among other things, with regards to exchanges of water:

- Establishes clear criteria for exchanges to provide more clarity.
- Sets exchange ratios based on Annual Table A water allocation percentages, up to 5 to 1.
- Sets the maximum cost compensation for an exchange.
- Allows exchanges to be carried out over a 10 year period (meaning water could be returned over 10 years).
- Permits the exchange or transfer of up to 50% of PWAs carryover water.
- Requires certain conditions to be met to avoid harm to the SWP and other PWAs.
- Adds provisions to ensure transparency.
- Provides for a dispute resolution process for non-participating PWAs who feel they may be adversely impacted by an exchange.

In addition to the above, the proposed amendment permits PWAs to participate in multiple transfers or exchanges each year, as well as to be both buyers and sellers in the same year. PWAs may also petition DWR for exceptions to the some of the above criteria upon a demonstration of special needs or circumstances. Overall, the proposed amendments provide improved flexibility for PWAs to utilize water transfers and exchanges to better manage their SWP water supplies in a dynamic environment.

Proposed Amendment Implementation Schedule

The proposed contract amendment to the SWP Contract is a uniform amendment that all PWAs are considering. Pursuant to the terms of the proposed amendment, it will not go into effect until the last day of the month after 24 PWAs have executed the contract amendment. If 24 or more PWAs have not executed the amendment by February 28, 2021, DWR may decide in consultation with those PWAs who have executed it whether to allow the amendment to take effect.

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DWR's CEQA Determination

On February 28, 2020, DWR published the 2020 Partially Recirculated DEIR for the Project. The Partially Recirculated DEIR was circulated for 94 days through June 1, 2020. On August 25, 2018, DWR certified the Final EIR for the Project. The Final EIR determined that the Project would have significant and unavoidable impacts to groundwater hydrology and water quality, and cumulatively considerable and unavoidable impacts to groundwater supplies and subsidence. As such, DWR adopted CEQA Findings of Fact and Statement of Overriding Considerations for the Project. On August 28, 2020, DWR filed a Notice of Determination for the Project. The Final EIR and CEQA Findings of Fact and Statement of Overriding Considerations comply with CEQA. DWR's Notice of Determination, Partially Recirculated DEIR, and Final EIR can be found on the official DWR website at: https://water.ca.gov/News/Public-Notices/2020/August/SWP-Water-Supply-Contract-EIR. DWR's CEQA Findings and Statement of Overriding Considerations is attached to this staff report.

Before approving the proposed amendment to the SWP Contract, CCWA, as a Responsible Agency under CEQA, is required to certify that it has reviewed and considered the information in the certified Final EIR for the Project. In addition, because the certified Final EIR identified significant and unavoidable impacts to the environment, CCWA must adopt CEQA Findings of Fact and Statement of Overriding Considerations.

CCWA Implementing Policies and Procedures

Staff anticipates that the Board's approval of the proposed amendment may require that CCWA adopt policies and procedures to implement the proposed amendment within CCWA. For example:

- Due Diligence: In the event that CCWA proposes an exchange or transfer pursuant to the proposed amendment, CCWA must certify to DWR that the proposed exchange or transfer will not negatively impact either DWR or CCWA's ability to meet their demand or have a negative financial impact on DWR or CCWA. Accordingly, CCWA would need to obtain certification from the project participants proposing the exchange or transfer.
- 2. Stored Water/Carryover Water: Similarly, in the event that a CCWA project participant proposes to exchange or transfer more than 50% of its carryover water, CCWA must certify to DWR that the transaction will not prevent the participant from meeting critical water supply needs during a proscribed period. Accordingly, CCWA would need to obtain certification from the project participants proposing the exchange or transfer.
- 3. Transfer of Article 21Water: The proposed amendment allows for the transfer of Article 21 with DWR approval. Article 21 is allocated on a real-time basis, meaning if DWR declares Article 21 to be available, it is taken in real-time. Historically, CCWA has allocated Article 21 to CCWA participants that are actually taking SWP water at the time. It may be appropriate to develop policies and procedures regarding any CCWA participant's election to transfer any Article 21 water allocated to them.
- 4. Long-Term Transfers: The proposed amendment will allow for the long-term transfer of Table A amount for the duration of the term of the SWP Contract. Procedures may be required to clarify how this option may be implemented consistent with CCWA's Water Supply Agreements with each CCWA participant.

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5. Exchange/Transfers: To accommodate concurrent exchanges and transfers where CCWA participants are acting as buyers and sellers, CCWA will need to develop a program to administer these transactions. CCWA's Supplemental Water Purchase Program only addresses transactions whereby one or more CCWA participants are the buyer.

At CCWA's October 22, 2020 Board meeting, Staff anticipates requesting Board direction to prepare policies and procedures necessary or convenient to implement the proposed amendment, including but not limited to the implementation issues described above. In advance of requesting Board consideration of any such proposed policies and procedures, Staff will seek input and comments from CCWA participants and the Operating Committee.

FINANCIAL CONSIDERATIONS

N/A

RECOMMENDATION

N/A. The proposed Amendment and associated documentation pursuant to CEQA are provided for the Board's review only. Board consideration will be requested at the October 22, 2020 Board meeting.

Attachments:

- 1. Resolution No. 20-
- 2. Amendment No. 20 to State Water Supply Contract
- 3. DWR's CEQA Findings and Statement of Overriding Consideration

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RESOLUTION NO. 20-

A RESOLUTION OF THE BOARD OF DIRECTORS OF
THE CENTRAL COAST WATER AUTHORITY
(1) APPROVING AMENDMENT NO. 20 (WATER MANAGEMENT
AMENDMENT) TO THE WATER SUPPLY CONTRACT BETWEEN THE
STATE OF CALIFORNIA DEPARTMENT OF WATER RESOURCES
AND SANTA BARBARA COUNTY FLOOD CONTROL AND WATER
CONSERVATION DISTRICT; AND
(2) MAKING RESPONSIBLE AGENCY FINDINGS PURSUANT TO
CEQA FOR THE FINAL ENVIRONMENTAL IMPACT REPORT FOR
AMENDMENT NO. 20, AND ADOPTING CEQA FINDINGS AND
STATEMENT OF OVERRIDING CONSIDERATIONS

WHEREAS, in 1963, following the voters' 1960 approval of the California Water Resources Development Bond Act, the Santa Barbara County Flood Control and Water Conservation District (District) and the Department of Water Resources (DWR), acting on behalf of the State of California, executed that certain agreement dated February 26, 1963 for the supply of State Water Project (SWP) water to Santa Barbara County (State SWP Contract); and

WHEREAS, the SWP Contract is substantially identical to agreements between DWR and 28 other public water agencies in California;

WHEREAS, on November 12, 1991, the District and the Central Coast Water Authority (Authority) entered into the Transfer of Financial Responsibility Agreement whereby the Authority assumed full responsibility for all of the District's obligations pursuant to the SWP Contract, and said agreement also contemplates a future assignment of the SWP Contract to the Authority; and

WHEREAS, to date, the SWP Contract has not been assigned to the Authority, therefore the County remains the contracting party to the SWP Contract; and

WHEREAS, to date, the SWP Contract has been amended on nineteen (19) separate occasions since its execution; and

WHEREAS, under the existing SWP Contract, water transfers are permitted in a limited and very specific manner, resulting in their infrequent use, and the parameters for exchanges of water, while allowed, lack specificity and clear guidance, which impede planning; and

WHEREAS, the Authority, along with other public water agencies with SWP Contracts (PWAs) conducted a series of public negotiations with DWR with the goal of agreeing on concepts to supplement and clarify the existing water transfer and exchange provisions of the SWP Contracts to provide improved water management; and

WHEREAS, in June 2018, PWAs and DWR agreed upon an Agreement in Principle (AIP), which included specific principles to clarify and enhance the terms of the

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SWP water supply contract related to water transfers and exchanges to improve water management capabilities and PWA options; and

- WHEREAS, in October 2018, DWR circulated a Draft Environmental Impact Report (2018 DEIR) that considered impacts related to the AIP, which at that time also included certain cost allocation sections for the California WaterFix project (WaterFix); and
- **WHEREAS**, in early 2019, Governor Newsom decided not to move forward with California WaterFix and DWR rescinded its approvals of the AIP project. The PWAs and DWR subsequently held a public negotiation and agreed to remove the WaterFix cost allocation sections from AIP, but to retain the water management provisions, and the AIP was finalized on May 20, 2019; and
- **WHEREAS**, the proposed amendment to the Authority's SWP Contract for consideration by the Board (Amendment) articulates in contract language the principles of the final AIP; and
- WHEREAS, DWR is the lead agency for the Amendment which is called the "State Water Project Supply Contract Amendments for Water Management" (Project), pursuant to CEQA (Pub. Res. Code §§ 21000, et seq.) and the State CEQA Guidelines (14 CCR §§ 15000, et seq.). As the lead agency, DWR is responsible for assuring that an adequate analysis of the Project's environmental impacts is conducted; and
- **WHEREAS**, on February 28, 2020, DWR issued a Partially Recirculated Draft Environmental Impact Report (DEIR) for the Project, which was circulated for public review for 94 days through June 1, 2020; and
- WHEREAS, DWR prepared a Final Environmental Impact Report for the Project, which included the DEIR, appendices, comments on the DEIR, responses to comments on the DEIR, and revisions to the DEIR (collectively, FEIR); and
- **WHEREAS**, on August 25, 2020, DWR certified the FEIR, adopted CEQA Findings of Fact and Statement of Overriding Considerations and approved the Project; and
- **WHEREAS**, the FEIR concluded that the Project would have significant and unavoidable impacts to groundwater hydrology and water quality, and cumulatively considerable and unavoidable impacts to groundwater supplies and subsidence. As such, DWR adopted CEQA Findings of Fact and Statement of Overriding Considerations for the Project (attached as Exhibit "A"); and
- **WHEREAS**, the Authority and DWR propose to amend the SWP Contract by approving the Amendment attached as Exhibit "B" to this Resolution (Amendment No. 20), the environmental effects of which were studied in the FEIR; and
- **WHEREAS**, the Authority is a responsible agency and has more limited approval and implementing authority over the Amendment than does the DWR; and
- WHEREAS, the Board of Directors of the Authority, at its scheduled public meeting on ______ independently reviewed and considered the FEIR, CEQA Findings of

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Fact and Statement of Overriding Considerations, and other related documents and evidence in the record before it; and

WHEREAS, the Board of Directors of the Authority independently reviewed and considered the FEIR, CEQA Findings of Fact and Statement of Overriding Consideration, and other related documents and evidence in the records before and determines that the Findings of Fact and Statement of Overriding Considerations adequately describe the impacts and considerations applicable within the Authority's jurisdiction; and

WHEREAS, all the procedures of CEQA and the State CEQA Guidelines have been met, and the FEIR prepared in connection with the Project is sufficiently detailed so that all the potentially significant effects of the Project and the Amendment on the environment and measures feasible to avoid or substantially lessen such effects have been evaluated in accordance with CEQA; and

WHEREAS, as contained herein, the Authority has endeavored in good faith to set forth the basis for its decision on the Amendment.

NOW, THEREFORE, BE IT RESOLVED as follows:

SECTION 1.

The above recitals are true and correct and are incorporated herein as though set forth in full.

SECTION 2.

Based on the findings set forth herein, the Board of Directors approves Amendment No. 20 (The Water Management Amendment) to the SWP Contract, which is attached hereto and incorporated herein as Exhibit "B." This resolution constitutes complete and final agreement by the Authority to be bound by the terms of Amendment No. 20 (The Water Management Amendment) to the Contract and this Resolution shall take effect immediately.

SECTION 3.

Pursuant to the Transfer of Financial Responsibility Agreement, the Board of Directors hereby authorizes the Executive Director of the Authority to transmit Amendment No. 20 to the Board of Supervisors of the County of Santa Barbara for the Board's execution and delivery of Amendment No. 20 to DWR.

SECTION 4.

- A. The FEIR prepared for the Project, which can be found at https://water.ca.gov/News/Public-Notices/2020/August/SWP-Water-Supply-Contract-EIR, is hereby received by the Board and incorporated herein by this reference.
- B. Pursuant to State CEQA Guidelines section 15096 and in its limited role as a responsible agency under CEQA, the Board has reviewed and considered the FEIR, as well as DWR's certification of the FEIR and approval of the Project, and DWR's

CEQA Findings of Fact and Statement of Overriding Considerations, and the Board incorporates those items herein by reference. As to those resources within the Authority's power and authority as a responsible agency under CEQA, the Board exercises its independent judgment and finds that the FEIR contains a complete, objective and accurate reporting of the Amendment's impacts.

- C. Exercising its independent judgment, the Board concurs with the CEQA Findings of Fact and Statement of Overriding Considerations approved by DWR and hereby adopts those CEQA Findings of Fact and Statement of Overriding Considerations, attached hereto as Exhibit "A" and incorporated herein by this reference. The Board further finds that there are no feasible mitigation measures or alternatives within its authority that would substantially lessen or avoid any significant effects that the Project would have on the environment, for the reasons explained in the FEIR.
- D. The Board concurs with the Statement of Overriding Considerations adopted by DWR and finds that, within its jurisdiction, the benefits of the Amendment outweigh the adverse environmental impacts not reduced to below a level of significance.
- E. The Board hereby authorizes and directs staff to file and have posted a Notice of Determination with the County Clerk and with the State Clearinghouse within five (5) working days of the adoption of this Resolution.
- F. The documents and materials that constitute the record of proceedings for this Resolution are located at 255 Industrial Way, Buellton, CA 93427 Attn: Board Secretary.



Resolution No. 2020 Page 5				
I certify that the foregoing Board of Directors of the Centre				
		Eric Freidman, Chair	man	
[Seal]				
Attest:				
Elizabeth Watkins Secretary to the Board of Directors				
	VOTING PERCENTAGE	AYE NAY	ABSTAIN	ABSENT
City of Buellton	2.21%			
Carpinteria Valley Water District	7.64%			
Goleta Water District	17.20%			
City of Guadalupe	1.15%			
Montecito Water District	9.50%			
City of Santa Barbara	11.47%			
City of Santa Maria	43.19%			
Santa Ynez River Water Conservation District, Improvement District No. 1	7.64%			
APPROVED AS TO FORM:				
Brownstein Hyatt Farber Schre General Counsel to the Centra		rity		
Stephanie Osler Hastings				

STATE WATER PROJECT WATER SUPPLY CONTRACT AMENDMENT FOR WATER MANAGEMENT Execution Version

STATE OF CALIFORNIA CALIFORNIA NATURAL RESOURCES AGENCY DEPARTMENT OF WATER RESOURCES

AMENDMENT NO. 20 (THE WATER MANAGEMENT AMENDMENT)
TO WATER SUPPLY CONTRACT
BETWEEN
THE STATE OF CALIFORNIA DEPARTMENT OF WATER RESOURCES
AND
SANTA BARBARA COUNTY FLOOD CONTROL AND WATER CONSERVATION
DISTRICT

THIS AMENDMENT to the Water Supply Contract is made this _____ day of _____, 20____ pursuant to the provisions of the California Water Resources Development Bond Act, the Central Valley Project Act, and other applicable laws of the State of California, between the State of California, acting by and through its Department of Water Resources, herein referred to as the "State," and Santa Barbara County Flood Control and Water Conservation District, herein referred to as the "Agency."

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RECITALS

- A. The State and the Agency entered into and subsequently amended a water supply contract (the "contract"), dated February 26, 1963, providing that the State shall supply certain quantities of water to the Agency and providing that the Agency shall make certain payments to the State, and setting forth the terms and conditions of such supply and such payments; and
- B. The State and the Agency, in an effort to manage water supplies in a changing environment, explored non-structural solutions to provide greater flexibility in managing State Water Project (SWP) water supplies; and
- C. The State and the Agency, in an effort to support the achievement of the coequal goals for the Delta set forth in the Delta Reform Act, sought solutions to develop water supply management practices to enhance flexibility and reliability of SWP water supplies while the Agency is also demonstrating its commitment to expand its water supply portfolio by investing in local water supplies; and
- D. The State and the Agency, in response to the Governor's Water Resiliency Portfolio, wish to maintain and diversify water supplies while protecting and enhancing natural systems without changing the way in which the SWP operates; and
- E. The State and the Agency sought to create a programmatic solution through transfers or exchanges of SWP water supplies that encourages regional approaches among water users sharing watersheds and strengthening partnerships with local water agencies, irrigation districts, and other stakeholders; and
- F. The State and the Agency, in an effort to comply with the Open and Transparent Water Data Platform Act (Assembly Bill 1755), sought means to create greater transparency in water transfers and exchanges; and
- G. The State, the Agency and representatives of certain other SWP Contractors have negotiated and agreed upon a document (dated May 20, 2019), the subject of which is "Draft Agreement in Principle for the SWP Water Supply Contract Amendment for Water Management" (the "Agreement in Principle"); and
- H. The Agreement in Principle describes that the SWP Water Supply Contract Amendment for Water Management "supplements and clarifies terms of the SWP water supply contract that will provide greater water management regarding transfers and exchanges of SWP water within the SWP service area"; the principles agreed to would achieve this without relying upon increased SWP diversions or changing the way in which the SWP operates, and consistent with all applicable contract and regulatory requirements; and

- I. The State, the Agency and those Contractors intending to be subject to the contract amendments contemplated by the Agreement in Principle subsequently prepared an amendment to their respective Contracts to implement the provisions of the Agreement in Principle, and such amendment was named the "SWP Water Supply Contract Amendment for Water Management"; and
- J. The State and the Agency desire to implement continued service through the contract and under the terms and conditions of this "SWP Water Supply Contract Amendment for Water Management";

NOW, THEREFORE, IT IS MUTUALLY AGREED that the following changes and additions are hereby made to the Agency's water supply contract with that State:

AMENDED CONTRACT TEXT

ARTICLE 1 IS AMENDED TO ADD THE FOLLOWING DEFINITIONS, PROVIDED THAT IF THIS WATER MANAGEMENT AMENDMENT TAKES EFFECT BEFORE THE CONTRACT EXTENSION AMENDMENT TAKES EFFECT, THE ADDITIONS HEREIN MADE SHALL CONTINUE IN EFFECT AFTER THE CONTRACT EXTENSION AMENDMENT TAKES EFFECT NOTWITHSTANDING THE CONTRACT EXTENSION AMENDMENT'S DELETION AND REPLACEMENT OF ARTICLE 1 IN ITS ENTIRETY:

1. Definitions

(au) "Article 56 Carryover Water" shall mean water that a contractor elects to store under Article 56 in project surface conservation facilities for delivery in a subsequent year or years.

ARTICLES 21 and 56 ARE DELETED IN THEIR ENTIRETY AND REPLACED WITH THE FOLLOWING TEXT:

21. Interruptible Water Service

(a) Allocation of Interruptible Water

Each year from water sources available to the project, the State shall make available and allocate interruptible water to contractors in accordance with the procedure in Article 18(a). Allocations of interruptible water in any one year may not be carried over for delivery in a subsequent year, nor shall the delivery of interruptible water in any year impact the Agency's approved deliveries of Annual Table A Amount or the Agency's allocation of water for the next year. Deliveries of interruptible water in excess of the Agency's Annual Table A Amount may be made if the deliveries do not adversely affect the State's delivery of Annual Table A Amount to other contractors or adversely affect project operations. Any amounts of water owed to the Agency as of the date of this amendment pursuant to former Article 12(d), any contract provisions or letter agreements relating to wet weather water, and any Article 14(b) balances accumulated prior to 1995, are canceled. The State shall hereafter use its best efforts, in a manner that causes no adverse impacts upon other contractors or the project, to

avoid adverse economic impacts due to the Agency's inability to take water during wet weather.

(b) Notice and Process for Obtaining Interruptible Water

The State shall periodically prepare and publish a notice to contractors describing the availability of interruptible water under this article. To obtain a supply of interruptible water, including a supply from a transfer of interruptible water, the Agency shall execute a further agreement with the State. The State will timely process such requests for scheduling the delivery of the interruptible water.

(c) Rates

For any interruptible water delivered pursuant to this article, the Agency shall pay the State the same (including adjustments) for power resources (including on-aqueduct, off-aqueduct, and any other power) incurred in the transportation of such water as if such interruptible water were Table A Amount water, as well as all incremental operation, maintenance, and replacement costs, and any other incremental costs, as determined by the State. The State shall not include any administrative or contract preparation charge. Incremental costs shall mean those nonpower costs which would not be incurred if interruptible water were not scheduled for or delivered to the Agency. Only those contractors not participating in the repayment of the capital costs of a reach shall be required to pay any use of facilities charge for the delivery of interruptible water through that reach.

(d) Transfers of Interruptible Water

- (1) Tulare Lake Basin Water Storage District, Empire West-Side Irrigation District, Oak Flat Water District, and County of Kings may transfer to other contractors a portion of interruptible water allocated to them under subdivision (a) when the State determines that interruptible water is available.
- (2) The State may approve the transfer of a portion of interruptible water allocated under subdivision (a) to contractors other than those listed in (d)(1) if the contractor acquiring the water can demonstrate a special need for the transfer of interruptible water.

(3) The contractors participating in the transfer shall determine the cost compensation for the transfers of interruptible water. The transfers of interruptible water shall be consistent with Articles 56(d) and 57.

56. Use, Storage-of Project Water Outside of Service Area and Article 56 Carryover Water

(a) State Consent to Use of Project Water Outside of Service Area

Notwithstanding the provisions of Article 15(a), the State hereby consents to the Agency storing project water in a groundwater storage program, project surface conservation facilities and in nonproject surface storage facilities located outside its service area for later use by the Agency within its service area and to the Agency transferring or exchanging project water outside its service area as set forth herein.

(b) Groundwater Storage Programs

The Agency shall cooperate with other contractors in the development and establishment of groundwater storage programs. The Agency may elect to store project water in a groundwater storage program outside its service area for later use within its service area. There shall be no limit on the amount of project water the Agency can store outside its service area during any year in a then existing and operational groundwater storage program.

(1) Transfers of Annual Table A Amount stored in a groundwater storage program outside a contractor's service area.

In accordance with applicable water rights law and the terms of this article, the Agency may transfer any Annual Table A Amount stored on or after the effective date of the Water Management Amendment in a groundwater storage program outside its service area to another contractor for use in that contractor's service area. These transfers must comply with the requirements of Articles 56(c)(4)(i)-(v), (6) and (7), and Article 57. The Agency will include these transfers in its preliminary water delivery schedule required in Article 12(a).

(2) Exchanges of any Annual Table A Amount stored in a groundwater storage program outside a contractor's service area.

In accordance with applicable water rights law and the terms of this article, the Agency may exchange any Annual Table A Amount stored on or after the effective date of the Water Management Amendment in a groundwater storage program outside its service area with another contractor for use in that contractor's service area. These exchanges must comply with the requirements in Article 56(c)(4)(i)-(v). The Agency shall include these exchanges in its preliminary water delivery schedule pursuant to Article 12(a).

(c) Article 56 Carryover Water and Transfers or Exchanges of Article 56 Carryover Water

(1) In accordance with any applicable water rights laws, the Agency may elect to use Article 56 Carryover Water within its service area, or transfer or exchange Article 56 Carryover Water to another contractor for use in that contractor's service area in accordance with the provisions of subdivision (c)(4) of this article. The Agency shall submit to the State a preliminary water delivery schedule on or before October 1 of each year pursuant to Article 12(a), the quantity of water it wishes to store as Article 56 Carryover Water in the next succeeding year, and the quantity of Article 56 Carryover Water it wishes to transfer or exchange with another contractor in the next succeeding year. The amount of project water the Agency can add to storage in project surface conservation facilities and in nonproject surface storage facilities located outside the Agency's service area each year shall be limited to the lesser of the percent of the Agency's Annual Table A Amount shown in column 2 or the acre-feet shown in column 3 of the following table, depending on the State's final Table A water supply allocation percentage as shown in column 1. For the purpose of determining the amount of project water the Agency can store, the final water supply allocation percentage shown in column 1 of the table below shall apply to the Agency. However, there shall be no limit to storage in nonproject facilities in a year in which the State's final water supply allocation percentage is one hundred percent. These limits shall not apply to water stored pursuant to Articles 12(e) and 14(b).

4		
1.	2.	3.
Final Water Supply	Maximum Percentage of	Maximum Acre-Feet
Allocation Percentage	Agency's Annual Table	That Can Be Stored
	A Amount That Can Be	
	Stored	
50% or less	25%	100,000
51%	26%	104,000
52%	27%	108,000
53%	28%	112,000
54%	29%	116,000
55%	30%	120,000
56%	31%	124,000
57%	32%	128,000
58%	33%	132,000
59%	34%	136,000
60%	35%	140,000
61%	36%	144,000
62%	37%	148,000
63%	38%	152,000
64%	39%	156,000
65%	40%	160,000
66%	41%	164,000
67%	42%	168,000
68%	43%	172,000
69%	44%	176,000
70%	45%	180,000
71%	46%	184,000
72%	47%	188,000
73%	48%	192,000
74%	49%	196,000
75% or more	50%	200,000

- (2) Storage capacity in project surface conservation facilities at any time in excess of that needed for project operations shall be made available to requesting contractors for storage of project and nonproject water. If such storage requests exceed the available storage capacity, the available capacity shall be allocated among contractors requesting storage in proportion to their Annual Table A Amounts for that year. The Agency may store water in excess of its allocated share of capacity as long as capacity is available for such storage.
- (3) If the State determines that a reallocation of excess storage capacity is needed as a result of project operations or because of the exercise of a

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contractor's storage right, the available capacity shall be reallocated among contractors requesting storage in proportion to their respective Annual Table A Amounts for that year. If such reallocation results in the need to displace water from the storage balance for any contractor or noncontractor, the water to be displaced shall be displaced in the following order of priority:

First, water, if any, stored for noncontractors;

Second, water stored for a contractor that previously was in excess of that contractor's allocation of storage capacity; and

Third, water stored for a contractor that previously was within that contractor's allocated storage capacity.

The State shall determine whether water stored in a project surface water conservation facility is subject to displacement and give as much notice as feasible of a potential displacement. If the Agency transfers or exchanges Article 56 Carryover Water pursuant to this subdivision to another contractor for storage in such facility, the State shall recalculate the amount of water that is subject to potential displacement for both contractors participating in the transfer or exchange. The State's recalculation shall be made pursuant to subdivision (4) of this article.

(4) Transfers or Exchanges of Article 56 Carryover Water

The Agency may transfer or exchange its Article 56 Carryover Water as provided in this subdivision under a transfer or exchange agreement with another contractor. Water stored pursuant to Articles 12(e) and 14(b) and nonproject water shall not be transferred or exchanged. Transfers or exchanges of Article 56 Carryover Water under this subdivision shall comply with subdivision (f) of this article and Article 57 as applicable, which shall constitute the exclusive means to transfer or exchange Article 56 Carryover Water.

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On or around January 15 of each year, the State shall determine the maximum amount of Article 56 Carryover Water as of January 1 that will be available for transfers or exchanges during that year. The State's determination shall be consistent with subdivisions (c)(1) and (c)(2) of this article.

The State shall timely process requests for transfers or exchanges of Article 56 Carryover Water by participating contractors. After execution of the transfer or exchange agreement between the State and the contractors participating in the transfer or exchange, the State shall recalculate each contractor's storage amounts for the contractors participating in the transfer or exchange. The State's recalculation shall result in an increase by an amount of water within the storage amounts for the contractor receiving the water and a decrease by the same amount of water for the contractor transferring or exchanging water. The State's recalculation shall be based on the criteria set forth in the State's transfer or exchange agreement with the participating contractors. The State's calculations shall also apply when a contractor uses Article 56 Carryover Water to complete an exchange.

Transfers and exchanges of Article 56 Carryover Water shall meet all of the following criteria:

- (i) Transfers or exchanges of Article 56
 Carryover Water are limited to a singleyear. Project water returned as part of
 an exchange under subdivision (c)(4)
 Article 56 Carryover Water may be
 returned over multiple years.
- (ii) The Agency may transfer or exchange an amount up to fifty percent (50%) of its Article 56 Carryover Water to another contractor for use in that contractor's service area.
- (iii) Subject to approval of the State, the Agency may transfer or exchange an amount greater than 50% of its Article 56 Carryover Water to another

contractor for use in that contractor's service area. The Agency seeking to transfer or exchange greater than 50% of its Article 56 Carryover Amount shall submit a written request to the State for approval. The Agency making such a request shall demonstrate to the State how the Agency will continue to meet its critical water needs in the current year of the transfer or exchange and in the following year.

- (iv) The contractor receiving the water transferred or exchanged under subdivisions (4)(i) or (ii) above shall confirm in writing to the State its need for the water that year and shall take delivery of the water transferred or exchanged in the same year.
- Subject to the approval of the State, the (v) Agency may seek an exception to the requirements of subdivisions (4)(i), (ii), and (iii) above. The Agency seeking an exception shall submit a written request to the State demonstrating to the State the need for 1) using project surface conservation facilities as the transfer or exchange point for Article 56 Carryover Water if the receiving contractor cannot take delivery of the transfer or exchange water in that same year, 2) using project surface conservation facilities for the transfer or exchange of one contractor's Article 56 Carryover Water to another contractor to reduce the risk of the water being displaced. or 3) for some other need.
- (5) The restrictions on storage of project water outside a Agency's service area provided for in this subdivision (c), shall not apply to storage in any project off-stream storage facilities constructed south of the Delta after the date of the Monterey Amendment.

- (6) For any project water stored outside its service area pursuant to subdivisions (b) and (c), the Agency shall pay the State the same (including adjustments) for power resources (including on-aqueduct, offaqueduct, and any other power) incurred in the transportation of such water as the Agency pays for the transportation of Annual Table A Amount to the reach of the project transportation facility from which the water is delivered to storage. If annual entitlement is stored, the Delta Water Charge shall be charged only in the year of delivery to interim storage. For any stored water returned to a project transportation facility for final delivery to its service area, the Agency shall pay the State the same for power resources (including on-aqueduct, offaqueduct, and any other power) incurred in the transportation of such water calculated from the point of return to the aqueduct to the turn-out in the Agency's service area. In addition, the Agency shall pay all incremental operation, maintenance, and replacement costs, and any other incremental costs, as determined by the State, which shall not include any administrative or contract preparation charge. Incremental costs shall mean those nonpower costs which would not be incurred if such water were scheduled for or delivered to the Agency's service area instead of to interim storage outside the service area. Only those contractors not participating in the repayment of a reach shall be required to pay a use of facilities charge for use of a reach for the delivery of water to, or return of water from, interim storage.
- (7) A Agency electing to store project water in a nonproject facility within the service area of another contractor shall execute a contract with that other contractor prior to storing such water which shall be in conformity with this article and will include at least provisions concerning the point of delivery and the time and method for transporting such water.
- (d) Non-Permanent Water Transfers of Project Water

Notwithstanding the provisions of Article 15(a), the State hereby consents to the Agency transferring project water outside its service area in accordance with the following:

- (1) The participating contractors shall determine the duration and compensation for all water transfers, including single-year transfers, Transfer Packages and multi-year transfers.
- (2) The duration of a multi-year transfer shall be determined by the participating contractors to the transfer, but the term of the transfer agreement shall not extend beyond the term of the Contract with the earliest term.
- (3) A Transfer Package shall be comprised of two or more water transfer agreements between the same contractors. The State shall consider each proposed water transfer within the package at the same time and shall apply the transfer criteria pursuant to Article 57 in the review and approval of each transfer. The State shall not consider a Transfer Package as an exchange.

(e) Continuance of Article 12(e) Carry-over Provisions

The provisions of this article are in addition to the provisions of Article 12(e), and nothing in this article shall be construed to modify or amend the provisions of Article 12(e). Any contractor electing to transfer or exchange project water during any year in accordance with the provisions of subdivision (c) of this article, shall not be precluded from using the provisions of Article 12(e) for carrying over water from the last three months of that year into the first three months of the succeeding year.

(f) Bona Fide Exchanges Permitted

Notwithstanding the provisions of Article 15(a), the State hereby consents to the Agency exchanging project water outside its service area consistent with this Article. Nothing in this article shall prevent the Agency from entering into bona fide exchanges of project water for use outside the Agency's service area with other parties for project water or nonproject water if the State consents to the use of the project water outside the Agency's service area. Also,

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nothing in this article shall prevent the Agency from continuing those exchange or sale arrangements entered into prior to September 1, 1995. Nothing in this article shall prevent the Agency from continuing those exchange or sale arrangements entered into prior to [1 which had previously received any required State approvals. The State recognizes that the hydrology in any given year is an important factor in exchanges. A "bona fide exchange" shall mean an exchange of water involving the Agency and another party where the primary consideration for one party furnishing water to another party is the return of a substantially similar amount of water, after giving due consideration to the hydrology, the length of time during which the water will be returned, and reasonable payment for costs incurred.. In addition, the State shall consider reasonable deductions based on expected storage or transportation losses that may be made from water delivered. The State may also consider any other nonfinancial conditions of the return. A "bona fide exchange" shall not involve a significant payment unrelated to costs incurred in effectuating the exchange. The State, in consultation with the contractors, shall have authority to determine whether a proposed exchange of water constitutes a "bona fide exchange" within the meaning of this paragraph and not a disguised sale.

(g) Exchanges of Project Water

Exchanges of project water shall be consistent with Article 57. In addition, the State shall apply the following criteria to its review of each exchange of project water as set forth below:

(1) Exchange Ratio

Exchange ratio shall mean the amount of water delivered from a contractor's project supply in a year to another contractor compared to the amount of water returned to the first contactor in a subsequent year by the other contactor. All exchanges shall be subject to the applicable exchange ratio in this article as determined by the allocation of available supply for the Annual Table A Amount at the time the exchange transaction between the contractors is executed.

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- (a) For allocations greater than or equal to 50%, the exchange ratio shall be no greater than 2 to 1.
- (b) For allocations greater than 25% and less than 50%, the exchange ratio shall be no greater than 3 to 1.
- (c) For allocations greater than 15% and less than or equal to 25%, the exchange ratio shall be no greater than 4 to 1.
- (d) For allocations less than or equal to 15%, the exchange ratio shall be no greater than 5 to 1.

(2) Cost Compensation

The State shall determine the maximum cost compensation calculation using the following formula:

The numerator shall be the exchanging Agency's conservation minimum and capital and transportation minimum and capital charges, including capital surcharges. DWR will set the denominator using the State Water Project allocation which incorporates the May 1 monthly Bulletin 120 runoff forecast.

If a Agency submits a request for approval of an exchange prior to May 1, the State shall provide timely approval with the obligation of the contractors to meet the requirement of the maximum compensation. If the maximum compensation is exceeded because the agreement between the contractors is executed prior to the State Water Project allocation as defined in (c)(2) above, the contractors will revisit the agreement between the two contractors and make any necessary adjustments to the compensation. If the contractors make any adjustments to the compensation, they shall notify the State.

(3) Period During Which the Water May Be Returned:

The period for the water to be returned shall not be greater than 10 years and shall not go beyond the

expiration date of this Contract. If the return of the exchange water cannot be completed within 10 years, the State may approve a request for an extension of time.

(h) Other Transfers

Nothing in this article shall modify or amend the provisions of Articles 15(a), 18(a) or Article 41, except as expressly provided for in subdivisions (c) and (d) of this article and in subdivision (d) of Article 21.

NEW CONTRACT ARTICLES

ARTICLE 57 IS ADDED TO THE CONTRACT AS A NEW ARTICLE AS FOLLOWS:

- 57. Provisions Applicable to Both Transfers and Exchanges of Project Water
 - (a) Nothing in this Article modifies or limits Article 18 (a).
 - (b) Transfers and exchanges shall not have the protection of Article 14(b).
 - (b) The Agency may be both a buyer and seller in the same year and enter into multiple transfers and exchanges within the same year.
 - (d) Subject to the State's review and approval, all transfers and exchanges shall satisfy the following criteria:
 - (1) Transfers and exchanges shall comply with all applicable laws and regulations.
 - (2) Transfers and exchanges shall not impact the financial integrity of the State Water Project, Transfers and exchange agreements shall include provisions to cover all costs to the State for the movement of water such as power costs and use of facility charge.
 - (3) Transfers and exchanges shall be transparent, including compliance with subdivisions (g) and (h) of this article.
 - (4) Transfers and exchanges shall not harm other contractors not participating in the transfer or exchange.
 - (5) Transfers and exchanges shall not create significant adverse impacts to the service area of each contractor participating in the transfer or exchange.
 - (6) Transfers and exchanges shall not adversely impact State Water Project operations.
 - (e) The Agency may petition the State and the State shall have discretion to approve an exception to the criteria set forth in subdivision (d) in the following cases:

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- (1) When a transfer or exchange does not meet the criteria, but the Agency has determined that there is a compelling need to proceed with the transfer or exchange.
- (2) When a Agency that has received water in a transfer or exchange cannot take all of the water in the transaction in the same year, the Agency may request to store its water consistent with Article 56(c), including in San Luis Reservoir.
- (f) The State will timely process such requests for scheduling the delivery of the transferred or exchanged water. Contractors participating in a transfer or exchange shall submit the request in a timely manner.
- (g) Each contractor participating in a transfer or exchange shall confirm to the State in a resolution or other appropriate document approving the transfer or exchange, including use of Article 56(c) stored water, that:
 - (1) The Agency has complied with all applicable laws.
 - (2) The Agency has provided any required notices to public agencies and the public.
 - (3) The Agency has provided the relevant terms to all contractors and to the Water Transfers
 Committee of the State Water Contractors
 Association.
 - (4) The Agency is informed and believes that the transfer or exchange will not harm other contractors.
 - (5) The Agency is informed and believes that the transfer or exchange will not adversely impact State Water Project operations.
 - (6) The Agency is informed and believes that the transfer or exchange will not affect its ability to make all payments, including payments when

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due under its Contract for its share of the financing costs of the State's Central Valley Project Revenue Bonds.

(7) The Agency has considered the potential impacts of the transfer or exchange within its service area.

(h) Dispute Resolution Process Prior to Executing an Agreement

The State and the contractors shall comply with the following process to resolve disputes if a contractor that is not participating in the transfer or exchange claims that the proposed transfer and/or exchange has a significant adverse impact.

- i. Any claim to a significant adverse impact may only be made after the Agency has submitted the relevant terms pursuant to Article 57(g)(3) and before the State approves a transfer or exchange agreement.
- ii. In the event that any dispute cannot be resolved among the contractors, the State will convene a group including the Department's Chief of the State Water Project Analysis Office, the Department's Chief Counsel and the Department's Chief of the Division of Operations or their designees and the contractors involved. The contractor's representatives shall be chosen by each contractor. Any contractor claiming an adverse impact must submit written documentation to support this claim and identify a proposed solution. This documentation must be provided 2 weeks in advance of a meeting of the group that includes the representatives identified in this paragraph.
- iii. If this group cannot resolve the dispute, the issue will be taken to the Director of the Department of Water Resources and that decision will be final.

WATER MANAGEMENT AMENDMENT IMPLEMENTING AND ADMINISTRATIVE PROVISIONS

IT IS FURTHER MUTUALLY AGREED that the following provisions, which shall not be part of the Water Supply Contract text, shall be a part of this Amendment and be binding on the Parties.

1. EFFECTIVE DATE OF WATER MANAGEMENT AMENDMENT

- (a) The Water Management Amendment shall take effect ("Water Management Amendment effective date") on the last day of the calendar month in which the State and 24 or more contractors have executed the Water Management Amendment, unless a final judgment by a court of competent jurisdiction has been entered that the Water Management Amendment is invalid or unenforceable or a final order has been entered that enjoins the implementation of the Water Management Amendment.
 - (b) If any part of the Water Management Amendment of any contractor is determined by a court of competent jurisdiction in a final judgment or order to be invalid or unenforceable, the Water Management Amendments of all contractors shall be of no force and effect unless the State and 24 or more contractors agree any the remaining provisions of the contract may remain in full force and effect.
 - (c) If 24 or more contractors have not executed the Water Management Amendment by February 28, 2021 then within 30 days the State, after consultation with the contractors that have executed the amendment, shall make a determination whether to waive the requirement of subdivision (a) of this effective date provision. The State shall promptly notify all contractors of the State's determination. If the State determines, pursuant to this article to allow the Water Management Amendment to take effect, it shall take effect only as to those consenting contractors.
 - (d) If any contractor has not executed the Water Management Amendment within sixty (60) days after its effective date pursuant to subdivisions (a) through (c) of this effective date provision, this amendment shall not take effect as to such contractor unless the contractor and the State, in its discretion, thereafter execute such contractor's Water Management Amendment, in which case the Water Management Amendment effective date for purposes of that contractor's amendment shall be as agreed upon by the State and

contractor, and shall replace the effective date identified in subdivision (a) for that contractor.

2. ADMINISTRATION OF CONTRACTS WITHOUT WATER MANAGEMENT AMENDMENT

The state shall administer the water supply contracts of any contractors that do not execute the Water Management Amendment in a manner that is consistent with the contractual rights of such contractors. These contractors' rights are not anticipated to be affected adversely or benefited by the Water Management Amendments.

3. OTHER CONTRACT PROVISIONS

Except as amended by this amendment, all provisions of the contract shall be and remain the same and in full force and effect, provided, however, that any reference to the definition of a term in Article 1, shall be deemed to be a reference to the definition of that term, notwithstanding that the definition has been re-lettered within Article 1. In preparing a consolidated contract, the parties agree to update all such references to reflect the definitions' lettering within Article 1.

4. DocuSign

The Parties agree to accept electronic signatures generated using DocuSign as original signatures.

IN WITNESS WHEREOF, the Parties hereto have executed this Amendment on the date first above written.

Approved as to Legal Form and Sufficiency:	STATE OF CALIFORNIA DEPARTMENT OF WATER RESOURCES
Chief Counsel Department of Water Resources	Director
	Date
Approved as to Form:	SANTA BARBARA COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT
General Counsel Santa Barbara County Flood Control and Water Conservation District	General Manager
	Date

CEQA Findings of Fact and Statement of Overriding Considerations for the State Water Project Water Supply Contract Amendments for Water Management

Section 1. Description of the Project

The proposed project includes amending certain provisions of the State Water Resources Development System (SWRDS) Water Supply Contracts (Contracts). SWRDS (defined in Wat. Code, Section 12931), or more commonly referred to as the SWP, was enacted into law by the Burns-Porter Act, passed by the Legislature in 1959 and approved by the voters in 1960. The Department of Water Resources constructed and currently operates and maintains the SWP, a system of storage and conveyance facilities that provide water to 29 State Water Contractors known as the Public Water Agencies (PWAs)¹. The Contracts include water management provisions as the methods of delivery, storage and use of water and financial provisions for recovery of costs associated with the planning, construction, and operation and maintenance of the SWP.

DWR and the PWAs have a common interest to ensure the efficient delivery of SWP water supplies and to ensure the SWP's financial integrity. In order to address water management flexibility DWR and the PWAs agreed to the following objectives:

 Supplement and clarify terms of the SWP water supply contract that will provide greater water management regarding transfers and exchanges of SWP water supply within the SWP service area.

The proposed project would add, delete, and modify provisions of the Contracts and clarify certain terms of the Contracts that will provide greater water management regarding transfers and

¹ The State Water Project Public Water Agencies include Alameda County Flood Control and Water Conservation District (Zone 7), Alameda County Water District, Antelope Valley-East Kern Water Agency, City of Yuba City, Coachella Valley Water District, County of Butte, County of Kings, Crestline-Lake Arrowhead Water Agency, Desert Water Agency, Dudley Ridge Water District, Empire West Side Irrigation District, Kern County Water Agency, Littlerock Creek Irrigation District, The Metropolitan Water District of Southern California, Mojave Water Agency, Napa County Flood Control and Water Conservation District, Oak Flat Water District, Palmdale Water District, Plumas County Flood Control and Water Conservation District, San Bernardino Valley Municipal Water District, San Gorgonio Pass Water Agency, San Luis Obispo County Flood Control and Water Conservation District, Santa Barbara County Flood Control and Water Conservation District, Santa Clarita WA (formerly Castaic Lake WA), Solano County Water Agency, Tulare Lake Basin Water Storage District, and Ventura County Flood Control District.

exchanges of SWP water within the SWP service area. In addition, the proposed project would not build new or modify existing SWP facilities nor change any of the PWA's annual Table A amounts.² The proposed project would not change the water supply delivered by the SWP, as SWP water would continue to be delivered to the PWAs consistent with current Contract terms and all regulatory requirements. The May 20, 2019 AIP is included as Appendix A of the 2020 Partially Recirculated Draft Environmental Impact Report (RDEIR).

Section 2. Findings Required Under CEQA

CEQA requires that the lead agency adopt mitigation measures or alternatives, where feasible, to substantially lessen or avoid significant environment impacts that would otherwise occur. Mitigation measures or alternatives are not required, however, where such changes are infeasible or where the responsibility for the project lies with some other agency. (CEQA Guidelines, Section 15091, sub. (a), (b).)

With respect to a project for which significant impacts are not avoided or substantially lessened, a public agency, after adopting proper findings, may nevertheless approve the project if the agency first adopts a statement of overriding considerations setting forth the specific reasons why the agency found that the project's "benefits" rendered "acceptable" its "unavoidable adverse environmental effects." (CEQA Guidelines, Sections 15093, 15043, sub. (b); see also Pub. Resources Code, Section 21081, sub. (b).)

In seeking to effectuate the substantive policy of CEQA to substantially lessen or avoid significant environmental effects to the extent feasible, an agency, in adopting findings, need not necessarily address the feasibility of both mitigation measures and environmentally superior alternatives when contemplating approval of a proposed project with significant impacts. Where a significant impact can be mitigated to an "acceptable" level solely by the adoption of feasible mitigation measures, the agency, in drafting its findings, has no obligation to consider the feasibility of any environmentally superior alternative that could also substantially lessen or avoid that same impact — even if the alternative would render the impact less severe than would the proposed project as mitigated. (*Laurel Hills Homeowners Association v. City Council* (1978) 83 Cal.App.3d 515, 521; see also *Kings County Farm Bureau v. City of Hanford* (1990) 221 Cal.App.3d 692, 730-731; and *Laurel Heights Improvement Association v. Regents of the University of California* ("*Laurel Heights I'*") (1988) 47 Cal.3d 376, 400-403.)

In cases in which a project's significant effects cannot be mitigated or avoided, an agency, after adopting proper findings, may nevertheless approve the project if it first adopts a statement of overriding considerations setting forth the specific reasons why the agency found that the "benefits of the project outweigh the significant effects on the environment." (Pub. Resources Code, Section 21081, sub. (b); see also, CEQA Guidelines, Sections 15043, sudb. (b), 15093.)

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² The maximum amount of SWP water that the PWAs can request pursuant to their individual water supply contract. annual Table A amounts also serve as a basis for allocation of some SWP costs among the contractors.

CEQA Findings of Fact and Statement of Overriding Considerations for the SWP Water Supply Contract Amendments for Water Management

In the Statement of Overriding Considerations found at the conclusion of this exhibit, DWR identifies the benefit that, in its judgment, outweigh the significant environmental effects that the projects would cause.

The California Supreme Court has stated that "[t]he wisdom of approving ... any development project, a delicate task which requires a balancing of interests, is necessarily left to the sound discretion of the local officials and their constituents who are responsible for such decisions. The law as we interpret and apply it simply requires that those decisions be informed, and therefore balanced." (Citizens of Goleta (1990) 52 Cal.3d 553, 564.)

In support of its approval of the proposed project, DWR's findings are set forth below for the potentially significant environmental effects and alternatives of the proposed project identified in the EIR pursuant to Public Resources Code, Section 21080 and Section 15091 of the CEQA Guidelines.

These findings do not attempt to describe the full analysis of each environmental impact contained in the 2018 DEIR and 2020 RDEIR (collectively referred to in this document as the DEIR). Instead, a full explanation of these environmental findings and conclusions can be found in the DEIR and these findings hereby incorporate by reference the discussion and analysis in the DEIR supporting the determination regarding the impacts of the proposed project. In making these findings, DWR ratifies, adopts and incorporates in these findings the determinations and conclusions of the DEIR and Final EIR (FEIR) relating to environmental impacts except to the extent any such determinations and conclusions are specifically and expressly modified by these findings.

As described below and in the DEIR, there were two significant impacts identified for the proposed project and they were associated with groundwater hydrology and water quality. There were no mitigation measures identified in the DEIR to substantially lessen or avoid the potentially significant and significant groundwater resource impacts of the proposed project. Therefore, a Mitigation Monitoring and Reporting Program was not developed for the proposed project and is not included herein.

Unless otherwise specified, all page references presented herein are to the 2020 RDEIR.

2.1. Significant and Unavoidable Impacts

The following significant and potentially significant environmental impacts of the project are unavoidable and cannot be mitigated in a manner that would lessen the significant impact to below the level of significance. Notwithstanding disclosure of these impacts, DWR elects to approve the project due to overriding considerations as set forth below in Section 7, the statement of overriding considerations.

Impact Category: Groundwater Hydrology and Water Quality

Impact 5.10-1: The increase in groundwater pumping associated with changes in transfers and exchanges implemented by PWAs could substantially deplete groundwater supplies in some areas of the study area. [p. 5.10-17 – 5.10-21]

Finding. It is possible that transfers and exchanges of SWP water among the PWAs could result in benefits to groundwater levels, as transferred or exchanged water could be used instead of groundwater supplies or this water could be used for groundwater recharge. However, it is also possible that transfers and exchanges from agricultural to M&I PWAs could result in an increase in groundwater pumping resulting in a net deficit in aquifer volume or lowering the local groundwater table in some areas of the study area. DWR's conclusion is based on a program-level analysis, as there is uncertainty in the amount of groundwater use that may occur.

Because the Sustainable Groundwater Management Act (SGMA) is in the process of being implemented and because the extent, location, and implementation timing of groundwater pumping associated with changes in transfers and exchanges implemented by PWAs are not known, assumptions related to the ability of SGMA to mitigate any changes in groundwater levels are speculative.

PWAs could propose feasible mitigation measures to reduce significant impacts to less than significant in some cases, although it is not possible for DWR to conclude that feasible mitigation measures would be available to avoid or mitigate significant groundwater effects in all cases. Per CEQA Guidelines Section 15091(a)(2), implementation and enforcement mitigation measures are within the responsibility and jurisdiction of another public agency and not the agency making the finding.

The extent, location, and implementation timing of groundwater pumping associated with changes in transfers and exchanges implemented by PWAs are not known. Therefore, it is concluded that the potential increase in groundwater pumping could result in a net deficit in aquifer volume or lowering the local groundwater table. **For these reasons, this impact is significant and unavoidable.**

Impact 5.10-2: The increase in groundwater pumping associated with changes in transfers and exchanges implemented by PWAs could result in subsidence in some of the study area. [p. 5.10-22 - 5.10-25]

Finding. It is possible that transfers and exchanges among the PWAs could result in benefits to groundwater levels, as transferred or exchanged water could be used instead of groundwater supplies or this water could be used for groundwater recharge. However, it is also possible that transfers and exchanges from agricultural to M&I PWAs could result in an increase in groundwater pumping in some areas of the study area causing subsidence due to a net deficit in aquifer volume or lowering the local groundwater table. Because the extent, location, and implementation timing of groundwater pumping associated with changes in transfers and exchanges implemented by PWAs are not known, it is concluded that groundwater pumping in

some areas of the study area would cause subsidence due to a net deficit in aquifer volume or lowering the local groundwater table and the impact would be potentially significant.

Because SGMA is in the process of being implemented and because the extent, location, and implementation timing of groundwater pumping associated with changes in transfers and exchanges implemented by PWAs are not known, assumptions related to the ability of SGMA to mitigate any changes in groundwater levels or related subsidence are speculative.

PWAs could propose feasible mitigation measures to reduce significant impacts to less than significant in some cases, although it is not possible for DWR to conclude that feasible mitigation measures would be available to avoid or mitigate significant groundwater effects in all cases. Per CEQA Guidelines Section 15091(a)(2), implementation and enforcement mitigation measures are within the responsibility and jurisdiction of another public agency and not the agency making the finding.

DWR has no information on specific implementation of the transfers and exchanges from the proposed project and it has no authority to implement mitigation measures in the PWA service area. For these reasons, this impact is significant and unavoidable.

Section 3. Cumulative Impacts

Cumulative impacts, as defined in Section 15355 of the CEQA Guidelines, refer to two or more individual effects that, when taken together, are "considerable" or that compound or increase other environmental impacts. Cumulative impacts can result from individually minor, but collectively significant, actions when added to the impacts of other closely related past, present, or reasonably foreseeable future projects. Pertinent guidance for cumulative impact analysis is provided in Section 15130 of the CEQA Guidelines.

The DEIR presents the cumulative impact analysis for the proposed project. Each impact discussion in the DEIR assesses whether the incremental effects of the proposed project could combine with similar effects of one or more of the projects identified in the 2020 RDEIR (p.6-2 – 6.14) to cause or contribute to a significant cumulative effect. If so, the analysis considers whether the incremental contribution of the proposed project would be cumulatively significant (p. 6-8 –6-14).

DWR hereby finds that implementation of the proposed project would not result in physical environmental impacts on the following resource areas: hazards and hazardous materials; noise; population, employment and housing; public services and recreation; surface water hydrology and water quality; transportation; and utilities and service systems. Therefore, these resource areas would not contribute to a cumulative effect and would not compound or increase an environmental impact of these other projects.

The cumulative impact analysis associated with the remaining resource areas (aesthetics, agriculture and forest resources, air quality, biological resources, cultural resources, energy, geology and soils, GHG, groundwater hydrology and water quality, land use and planning, and water supply) focused on six types of impacts that were identified as less than significant or

potential impacts of the proposed project that could contribute to cumulative impacts with the cumulative projects (Contract Extension Project, Monterey Amendment and Settlement Agreement, and Sustainable Groundwater Management Act Implementation) identified in the DEIR. The six types of impacts are impacts to groundwater supplies, subsidence, fallowing and changes in crop patterns, energy and Greenhouse Gas (GHG), reservoir storage, and surface water flow above or below diversions. Impacts associated with fallowing and changes in crop patters, energy and GHG, reservoir storage, and surface water flow above or below diversions were determined to be less than significant with no mitigation required.

Related to groundwater supplies and subsidence, DWR hereby finds as follows:

Groundwater Supplies and Subsidence

Findings. The incremental contribution of the proposed project's effect on groundwater supplies and subsidence would be cumulatively considerable when viewed in connection with the effects of past projects, and current and probable future projects (as full implementation of SGMA is not anticipated until 2040 or 2042). This cumulative impact would be **significant**. PWAs may provide mitigation in their project-level analysis for exchanges and transfers. However, per CEQA Guidelines Section 15091(a)(2), implementation and enforcement mitigation measures are within the responsibility and jurisdiction of another public agency and not the agency making the finding.

Because DWR has no information on specific implementation of the transfers and exchanges from the proposed project and it has no authority to implement mitigation measures in the PWA service area, the cumulative impact would remain **significant and unavoidable**.

Section 4. Significant Irreversible Environmental Changes

According to Sections 15126, subd. (c) and 15126.2, subd. (c) of the CEQA Guidelines, an EIR is required to address any significant irreversible environmental changes that would occur should the proposed project be implemented.

The proposed project would add, delete and modify provisions of the Contracts to clarify terms of the Contracts that will provide greater water management regarding transfers and exchanges of SWP water supply within the service area. The proposed project would not build or modify existing SWP facilities nor change each PWA's contractual maximum Table A amounts. The proposed project would amend and add financial provisions to the Contracts based on the negotiated Agreements in Principle between DWR and the PWAs. Therefore, the proposed project would not result in the commitment of nonrenewable natural resources such as gravel, petroleum products, steel, and slowly renewable resources such as wood products any differently than under existing conditions, and there would be no significant irreversible environmental changes.

Section 5. Growth-Inducing Effects

The CEQA Guidelines Section 15126.2, subd. (d) requires that an EIR evaluate the growth-inducing impacts of a project. As identified in CEQA Section 15126.2(d), growth inducement is not in and of itself an "environmental impact;" however, growth can result in adverse environmental consequences. Growth inducement may constitute an adverse impact if the growth is not consistent with or accommodated by the land use plans and policies for the affected area. Local land use plans, typically General Plans, provide for land use development patterns and growth policies that allow for the "orderly" expansion of urban development supported by adequate urban public services, such as water supply, sewer service, and new roadway infrastructure. A project that would induce "disorderly" growth (i.e., a project in conflict with local land use plans) could indirectly cause adverse environmental impacts. To assess whether a project with the potential to induce growth is expected to result in significant impacts, it is important to assess the degree to which the growth associated with a project would or would not be consistent with applicable land use plans.

In California, cities and counties have primary authority³ over land use decisions, while water suppliers, through laws and agreements, are expected and usually required to provide water service if water supply is available. Approval or denial of development proposals is the responsibility of the cities and counties in the study area. Numerous laws are intended to ensure that water supply planning, including planning for water supply infrastructure, and land use planning (such as the approval of, or establishment of constraints to, development) proceed in an orderly fashion.

The proposed project would not build new or modify existing SWP facilities nor change each PWA's contractual maximum Table A amounts. As discussed in DEIR Section 5.14, Population, Employment, and Housing, (p. 5.14-2 to 5.14-5) because there would be no new facilities built or existing facilities modified, no housing is proposed as part of the project or required as a result of it, nor would the project provide substantial new permanent employment opportunities. Therefore, the proposed project would not result in direct growth inducement.

Because the proposed project would not result in the construction of new or modification of existing water supply storage, treatment or conveyance facilities it would not remove an obstacle to growth associated with water supply.

As discussed in DEIR Section 5.3 Agricultural and Forestry Resources of the DEIR (p. 5.3-7 to 5.3-9), it is possible that transfers from agricultural to M&I PWAs could result in fallowing of agricultural lands and/or changes in crop patterns (e.g., switching from high water-using crops to low water-using crops) in the study area. It is also possible that exchange of SWP water from agricultural to M&I PWAs could occur. However, these transfers and exchanges and any associated fallowing of agricultural land and/or changes in cropping patterns in the study area would not be anticipated to change the existing agricultural land use designations because the land use would remain in agricultural use. Furthermore, additional water transfers or exchanges

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³ Although cities and counties have primary authority over land use planning, there are exceptions to this such as the CEC (with permit authority and CEQA lead agency status for some thermal power plant projects) and the CPUC (with regulatory authority and CEQA lead agency status for certain utility projects).

are not expected to substantially affect the acreage of land fallowed or put into dry farming compared to existing practices for other reasons (e.g., market conditions, economic conditions, etc.). As a result, it would not be anticipated that there would be a change in land uses associated with delivery of SWP water supplies including, conversion of agricultural land uses to urban uses or increased developed uses in urban areas.

While with the proposed amendments transfers and exchanges could be more frequent and longer in duration, they would not be a permanent transfer of a PWAs annual Table A amounts; therefore, it would not represent a viable long-term source of urban water supply to support additional unplanned growth. Therefore, the proposed amendments would not result in additional water supply that could support growth over what is currently planned for in those jurisdictions and the proposed project would not result in indirect growth inducement.

Furthermore, cities and counties are responsible for considering the environmental effects of their growth and land use planning decisions (including, but not limited to, conversion of agricultural land to urban uses, loss of sensitive habitats, and increases in criteria air emissions). As new developments are proposed, or general plans adopted, local jurisdictions prepare environmental compliance documents to analyze the impacts associated with development in their jurisdiction pursuant to CEQA. The impacts of growth would be analyzed in detail in general plan EIRs and in project-level CEQA compliance documents. Mitigation measures for identified significant impacts would be the responsibility of the local jurisdictions in which the growth would occur. If identified impacts could not be mitigated to a level below the established thresholds, then the local jurisdiction would need to adopt overriding considerations.

Section 6. Alternatives

DWR has considered the project alternatives presented and analyzed in the DEIR and presented during the comment period and public hearing process. DWR finds that these alternatives are infeasible. Based on the impacts identified in the DEIR and other reasons summarized below, and as supported by substantial evidence in the record, DWR finds that approval and implementation of the proposed project as proposed is the most desirable, feasible, and appropriate action and hereby rejects the other alternatives and other combinations and/or variations of alternatives as infeasible based on consideration of the relevant factors set forth in CEQA Guidelines Section 15126.6, subdivision (f). (See also CEQA Guidelines, Section15091, subd. (a)(3).) Each alternative and the facts supporting the finding of infeasibility of each alternative are set forth below.

Alternatives Considered and Dismissed from Further Consideration

The alternative described below was rejected for further consideration (p 7-3-7-4).

Implement New Water Conservation Provisions in the Contracts: Agriculture and urban water efficiency, conservation, and management measures are governed by the existing regulatory and legal requirements independent from the proposed project, including Assembly

Bill 1668 and Senate Bill 606. Additional water conservation measures in the Contracts would not provide greater water management regarding transfers and exchanges of SWP water as compared to the proposed project because water conservation is already required. Consequently, these actions are independent from the proposed project and do not meet the basic project objectives. Therefore, amending the Contracts to require implementation of agriculture and M&I water conservation measures was rejected, as these actions are required by state statute and are met by local water agencies under existing law.

Summary of Alternatives Considered

CEQA requires that an EIR describe and evaluate a range of reasonable alternatives to a project or to the location of a project that would feasibly attain most of the basic project objectives and avoid or substantially lessen significant project impacts. The purpose of the alternatives analysis is to determine whether or not a variation of the proposed project would reduce or eliminate significant project impacts within the framework of the project's basic objectives.

The alternatives considered in the DEIR include:

- Alternative 1: No Project
- Alternative 2: Reduce Table A Deliveries
- Alternative 3: Reduced Flexibility in Water Transfers/Exchanges
- Alternative 4: More Flexibility in Water Transfers/Exchanges
- Alternative 5: Only Agriculture to M&I Transfers Allowed

Alternative 1: No Project

Description

CEQA Guidelines section 15126.6, subd. (e) requires consideration of a No Project Alternative. The purpose of this alternative is to allow the decision makers to compare impacts of approving a project with impacts of not approving a project. Under the No Project Alternative, DWR takes no action, and DWR and the PWAs would continue to operate and finance the SWP under the current Contracts.

Facts in Support of Finding of Infeasibility

Alternative 1 would not meet the objective of the project because Alternative 1 does not provide greater water management regarding transfers and exchanges of SWP water supply within the SWP service area and as compared to the proposed project. In addition, impacts under Alternative 1 would be similar but greater when compared to the proposed project. Alternative 1 could result in new potentially significant impacts associated with the construction and operation of new water supply facilities that were not identified for the proposed project. In addition, if alternative sources of water are not available, then the less than significant impacts identified for the proposed project could be potentially significant.

Alternative 2: Amending Contract to Reduce Table A Deliveries

Description

Under Alternative 2, as with the proposed project, DWR and the PWAs would agree to amend the Contracts based on the May 20, 2019 AIP. However, unlike the proposed project, the Contracts would be amended to reduce annual Table A amounts proportionately for all the PWAs.

Facts in Support of Finding of Infeasibility

Alternative 2 would not meet the objectives of the project because it would cause a reduction in delivery of annual Table A amounts proportional for all PWAs and would not provide greater water management regarding transfers and exchanges. In addition, impacts under Alternative 2 would be similar but greater when compared to the proposed project. Alternative 2 could result in new potentially significant impacts associated with the construction and operation of new water supply facilities that were not identified for the proposed project. In addition, if alternative sources of water are not available, then the less than significant impacts identified for the proposed project could be potentially significant.

Alternative 3: Less Flexibility in Water Transfers/Exchanges

Description

Under Alternative 3, as with the proposed project, DWR and the PWAs would agree to amend the Contracts based on the May 20, 2019 AIP. However, unlike the proposed project, the Contracts would not be amended to modify provisions of the Contracts and clarify certain terms of the Contracts to provide greater water management regarding transfers and exchanges of SWP water supply within the SWP service area. Some increase in flexibility of exchanges and transfers would be agreed to, but not all. For example, Alternative 3 would amend the Contracts to allow PWAs to transfer carryover water in San Luis Reservoir, but only 20 percent of the carryover water (the proposed project allows for 50 percent), allow limited multi-year transfers of five years or less (the proposed project allows for up to the Contract term), and not allow use of Transfer Packages. In addition, unlike the proposed project, PWAs would transfer water based on cost compensation established by DWR. Also, under Alternative 3, the Contracts would not amend the text in Article 56(f) regarding water exchanges to add provisions, such as conducting water exchanges as buyers and sellers in the same year and increasing the compensation allowed to facilitate the exchanges. Therefore, Alternative 3 would result in a similar or slightly less amount of water transfers among the PWAs than the proposed project, due to the less flexibility in water transfers and exchanges.

Facts in Support of Finding of Infeasibility

Alternative 3 would meet the objectives of the project, but to a lesser degree because the water transfers and exchanges would not provide as much water management flexibility regarding transfers and exchanges. In addition, impacts under Alternative 3 would be similar but greater

when compared to the proposed project. Alternative 3 could result in new potentially significant impacts associated with the construction and operation of new water supply facilities that were not identified for the proposed project. In addition, if alternative sources of water are not available, then the less than significant impacts identified for the proposed project could be potentially significant.

Alternative 4: More Flexibility in Water Transfer/Exchanges

Description

Under Alternative 4, as with the proposed project, DWR and the PWAs would agree to amend the Contracts. However, unlike the proposed project, the Contracts would be amended to allow PWAs more flexibility in water transfers and exchanges. Similar to the proposed project, PWAs would be able to transfer carryover water in San Luis Reservoir, transfer water for multiple years without permanently relinquishing that portion of their Table A amounts, and transfer water in Transfer Packages. Similar to the proposed project, PWA would be able to transfer water based on terms they establish for cost compensation and duration, and store and transfer water in the same year. Unlike the proposed project that only allows for a single-year transfers associated with carryover water, Alternative 4 would allow transfers and exchanges to include up to 100 percent of a PWA's carryover in San Luis Reservoir and allow multi-year use of its carryover water in both transfers and exchanges. Similar to the proposed project, the proposed exchange provisions of the AIP would establish a larger range of return ratios in consideration of varying hydrology and also maximum compensation with respect to SWP charges and allow PWAs to conduct additional water exchanges as buyers and sellers in the same year.

Facts in Support of Finding of Infeasibility

Alternative 4 would meet the objectives of the project. In addition, Under Alternative 4 the less than significant impacts associated with changes in flow including, adverse effects to special-status fish or terrestrial species, and water supply would be similar to the proposed project. However, similar to the proposed project, there is potential for Alternative 4 to result in a net deficit in aquifer volume, lowering of the local groundwater table, or subsidence in some areas of the study area with impacts that may be significant and unavoidable.

Alternative 5: Greater Water Management – Only Agriculture to M&I Transfers Allowed

Description

Under Alternative 5, as with the proposed project, DWR and the PWAs would agree to amend the Contracts based on the May 20, 2019 AIP.

Unlike the proposed project, DWR and PWAs would amend Contract provisions to allow the transfer of Table A water only from agricultural PWAs to M&I PWAs and not change any current Contract provisions for exchanges. Transfers from M&I PWAs to M&I PWAs, M&I PWAs to agricultural PWAs, and agricultural PWAs to agricultural PWAs would not be allowed. Similar to

the proposed project, PWAs could transfer carryover water in San Luis Reservoir to PWAs, transfer water for multiple years without permanently relinquishing that portion of their Table A amounts and request DWR's approval of Transfer Package; however, unlike the proposed project, these transfers would only be from agricultural PWAs to M&I PWAs. Similar to the proposed project, Alternative 5 would revise the Contract to allow the PWAs to transfer water based on terms they establish for cost compensation and duration. An agricultural PWA would be able to store and transfer water in the same year to M&I PWAs, and transfer up to 50 percent of its carryover water, but only for a single-year transfer to an M&I PWA (i.e., a future or multi-year commitment of transferring carryover water is not allowed). Under Alternative 5, the Contracts would not be amended to modify the text in Article 56(f) regarding water exchanges to include additional provisions, such as conducting water exchanges as buyers and sellers in the same year.

Similar to the proposed project, Alternative 5 would not build new or modify existing SWP facilities nor change any of the PWA's contractual maximum Table A amounts. Also similar to the proposed project, Alternative 5 would not change the water supply delivered by the SWP as SWP water supply would continue to be delivered to the PWAs consistent with current Contracts terms, including Table A and Article 21 deliveries. Operation of the SWP under this alternative would be subject to ongoing environmental regulations including for water rights, water quality and endangered species protection, among other State and federal laws. Also similar to the proposed project, Alternative 5 would not require additional permits or approvals.

Facts in Support of Finding of Infeasibility

Alternative 5 would meet some of the objectives of the project, but to a lesser degree because the water transfers and exchanges would not provide as much water management flexibility regarding transfers and exchanges. In addition, impacts under Alternative 5 would be similar but greater when compared to the proposed project. Alternative 5 could result in new potentially significant impacts associated with the construction and operation of new water supply facilities that were not identified for the proposed project. In addition, if alternative sources of water are not available, then the less than significant impacts identified for the proposed project could be potentially significant.

Environmentally Superior Alternative

CEQA Guidelines Section 15126.6 subd. (e) requires the identification of an environmentally superior alternative to the proposed project.

As presented in the DEIR, implementation of the proposed project would result in less than significant or no physical environmental impacts to all resource areas except for impacts related to groundwater supplies and subsidence, which are significant and unavoidable.

Alternative 4 would result in similar impacts as the proposed project (e.g., net deficit in aquifer volume, lowering of the local groundwater table, or subsidence in some areas of the study area). Alternatives 1, 2, 3, and 5 could result in impacts similar or greater (new potentially significant impacts associated with the construction and operation of new water supply facilities that were not identified for the proposed project) than the proposed project. Therefore, because the

proposed project and Alternative 4 would result in similar impacts and the other alternatives may result in similar or greater impacts, Alternative 4 was determined to be the environmentally superior alternative.

Section 7. Statement of Overriding Considerations

DWR hereby declares that, pursuant to CEQA Guidelines Section 15093, it has balanced the benefits of the proposed project against any unavoidable environmental impacts in determining whether to approve the proposed project. Pursuant to the CEQA Guidelines, if the benefits of the proposed project outweigh the unavoidable adverse environmental impacts, those impacts may be considered "acceptable."

Having evaluated the reduction of adverse significant environmental effect of the proposed project to the extent feasible, considered the entire administrative record on the Project, and weighed the benefits of the proposed project against its unavoidable adverse impact, DWR has determined that each of the following benefits of the proposed project separately and individually outweigh the potential unavoidable adverse impacts and render those potential adverse impacts acceptable based upon the following overriding considerations. The following represents the specific reasons to support this determination based on the final EIR and information contained therein.

Water Transfers

The proposed project would add, delete, and modify provisions of the Contracts and clarify certain terms of the Contracts that will provide greater water management regarding transfers and exchanges of SWP water within the SWP service area.

The transfer provisions of the proposed project would facilitate the PWAs ability to:

- Transfer SWP water for multiple years and multiple parties without permanently relinquishing that portion of their annual Table A amounts;
- negotiate cost compensation and duration among the PWAs on a willing seller-willing buyer basis for water transfers; and
- Transfer SWP water stored outside of the transferring PWA's service area to the receiving PWA's service area

All these proposed transfer provisions would provide the PWAs with increased flexibility for short-term and long-term planning and management of their SWP water supplies. The proposed project, however, would not include any change to the PWA's permanent annual Table A amounts.

Since the Monterey Amendment, DWR has approved short-term water transfers pursuant to Articles 15(a) and 41, and has administered the short-term Turn-Back Water Pool Program pursuant to Article 56 of the Contracts. The Turn-Back Water Pool Program allows a PWA to sell Table A water that it will not use, subject to certain conditions, for a set price that is either 50

percent or 25 percent of the Delta Water Rate for that year. DWR has also administered, on a demonstration basis, a multi-year water pool program for 2013-2014 and 2015-2016 that allowed PWAs to participate in the two-year program as either a buyer or seller for each of the two years (a decision made at the beginning of each of the two-year programs) with greater compensation for the water than allowed under the Turn-Back Water Pool Program. DWR has allowed transfers of Table A water among two PWAs with the same landowner in their respective service areas that do not include an exchange of money.

The proposed project would remove all language related to the Turn-back Pool from the Contracts and, compared to the Turn-Back Water Pool Program where DWR established the price based on the Delta water rate, the proposed project would revise the Contracts to allow the PWAs to transfer water based on terms they establish for cost compensation and duration. Also, in contrast to the Turn-Back Water Pool Program, a water transfer could be as long as the remainder of the term of the PWA's Contract. In addition, a PWA would be able to store and transfer water in the same year, and transfer up to 50 percent of its carryover water in San Luis Reservoir, but only for a single-year transfer (i.e., a future or multi-year commitment of transferring carryover water is not allowed).

The proposed amendments would result in a greater amount of water transfers among the PWAs than under the current Contract provisions. Based on past experience and discussions with PWAs, most water transfers that occur due to the proposed amendments would occur among the PWAs located south of the Delta and would not involve additional export of SWP water from the Delta. Water transfers would be implemented using the existing physical facilities and existing operational and regulatory processes, including CEQA compliance.

Water Exchanges

The proposed project would amend the text in Article 56(f) regarding water exchanges to include additional provisions. The proposed exchange provisions of the AIP would establish return ratios (up to a 5:1 ratio) based on a consideration of varying hydrology and would set compensation based on a PWA's SWP charges.

The proposed amendments would allow PWAs to exchange carryover water in San Luis Reservoir, and exchange up to 50 percent of their carryover water in a single-year transaction (i.e., a future or multi-year commitment of exchanging carryover water is not allowed). The proposed provisions would also allow PWAs to conduct water exchanges of carryover water as buyers and sellers in the same year.

While DWR has approved water exchanges pursuant to Articles 15(a), 41, and 56(f), the proposed project would provide the PWAs with increased flexibility for short-term and long-term planning of water supplies. Under the proposed project, exchanges may be used more frequently to respond to variations in hydrology, such as wet years, and in single dry-year and multiple dry-year conditions.

Acronyms and Glossary

AIP Agreement in Principle

CEQA California Environmental Quality Act

CFR Code of Federal Regulations

Contracts Water Supply Contracts

DEIR Draft Environmental Impact Report

DWR California Department of Water Resources

EIR Environmental Impact Report

FEIR Final EIR

PRC California Public Resources Code

PWAs Public Water Agencies

RDEIR Recirculated Draft Environmental Impact Report

SGMA Sustainable Groundwater Management Act

SWC State Water Contractors SWP State Water Project



CENTRAL COAST WATER AUTHORITY MEMORANDUM

September 15, 2020

TO: CCWA Board of Directors

FROM: John Brady

Deputy Director, Operations and Engineering

SUBJECT: Request for Approval of Carryover of Project Funds from FY 19/20 to FY 20/21

SUMMARY

Certain capital expenditures included in the FY 19/20 budget were not expended due to timing and scheduling. This report will request carryover of these funds from the FY 19/20 budget to the FY 20/21 budget.

DISCUSSION

The following capital and expense projects are funded from project participant assessments. CCWA staff is requesting that these project funds be retained and carried over to the FY 20/21 budget so that the projects can be completed.

Capitalized Projects

- WTP PLC Upgrade Bid Documents (C-18PLCDOC) \$52,500 (WTP) Capitalized Project: Staff requests carryover of \$52,500 to complete the WTP PLC Upgrade Bid Documents. This project is combined with the current year PLC Upgrade Project C-20PLCUPG.
- DIST IC&R Technician Truck (C-19TRUCK1) \$44,793 (DIST-ALL) Capitalized Project. Staff requests carryover of \$44,793 to complete this project. The truck was ordered in FY19/20 and was received in FY 20/21.
- Filter Actuators Phase 3 (C19FILACT) \$47,628 (WTP) Capitalized Project: Staff requests carryover of \$47,628 to complete the procurement of filter actuators. These parts were ordered in FY 19/20 and will be received and installed in FY20/21.
- Fire Pump Controller (C-19FPCNTR) \$26,250 (WTP) Capitalized Project. Staff requests carryover of \$26,250 to complete the procurement of the Fire Pump Controller. These parts were ordered in FY 19/20 and will be received and installed in FY20/21.
- Chlorine Scrubber (C-19SCRUB) \$288,750 (WTP) Capitalized Project. Staff requests carryover of \$288,750 to complete the procurement of the Chlorine Scrubber Unit. This unit was purchased in FY 19/20 and will be received and installed in FY20/21.

- Tank 2 Electrical Vault Wiring (C-19T2WIRE) \$58,250 (33B) Capitalized Project. Staff requests carryover of \$58,250 to complete the project. Work on the project is complete but invoicing will occur in FY 20/21.
- Santa Ynez Pumping Plant Electrical Switchboard Upgrade (C-19SYPPEU) -\$326,250 (SYII) - Capitalized Project. Staff requests carryover of \$292,071.69 to complete the project. Work on the project was started in FY 19/20 and will finish in FY 20/21.
- Lopez Turnout Sleeve Valve Replacement (C19LZVALV) \$52,500 (Lopez TO) Capitalized Project. Staff requests carryover of \$52,500 to complete the project. Preliminary work was initiated on the project in FY 19/20 and will finish in FY 20/21.
- Self-Contained Breathing Apparatus Replacement Distribution (C-19SCBA-D) -\$15,309 (DIST-ALL) - Capitalized Project. Staff requests carryover of \$15,309 to complete the project. Preliminary work was initiated on the project in FY 19/20 and will finish in FY 20/21.
- Self-Contained Breathing Apparatus Replacement WTP (C-19SCBA-WTP) -\$15,876 (DIST-ALL) – Capitalized Project. Staff requests carryover of \$15,876 to complete the project. Preliminary work was initiated on the project in FY 19/20 and will finish in FY 20/21.
- Fall Protection Equipment WTP (C18FALLPE) \$11,340 Capitalized Project. Staff requests carryover of \$2,849.40 to complete this project. Equipment has been procured in FY 19/20 and staff anticipates final invoicing in FY 20/21.
- Fall Protection Equipment Distribution (C18FALL-D) \$9,537.30 Capitalized Project. Staff requests carryover of \$9,537.30 to complete this project. Preliminary work was initiated in FY 19/20 and staff anticipates procurement in FY 20/21.
- Office Space Renovation for WTP (C17WTPOFF) \$84,000 (WTP) Capitalized Project: Staff requests a carryover of \$79,913 to complete the project in FY 20/21. This project has been combined with the current Fiscal Year Project (C-20WTPOFF). The design is currently complete and construction will begin in FY 20/21.
- Seismic Joint Pipe Spools and Parts (C17SMCJNT) \$68,040 (33B) Capitalized Project: Staff requests carryover of \$68,040 to complete the procurement of spare pipe spools and parts for the seismic joint. Staff will complete this procurement in FY 20/21
- SYI Pipe Spools (C17PIPSPL) \$39,690 (SYII) Capitalized Project: Staff requests carryover of \$39,690 to complete the procurement of spare pipe spools and parts for Reach SYI. Staff will complete this procurement in FY 20/21
- SYII Pipe Spools (C17PIPESP) \$38,181.50 (SYII) Capitalized Project: Staff requests carryover of \$38,181.50 to complete the procurement of spare pipe spools and parts for Reach SYII. Staff will complete this procurement in FY 20/21

- Santa Ynez Pumping Plant Surge Tank Pedestal Repair (C-15SURGRP) \$84,000
 (SYII) Capitalized Project: Staff requests carryover of \$84,000. This project implements the designed repair of the failing pedestal. This project will be implemented during a timeframe in which the Santa Ynez Pumping Plant will not need to be operated at 100% capacity for a 4 week period of time.
- Santa Ynez Pumping Plant Surge Tank Pedestal Investigation (C-14SURGTK) -\$2,260.27 (SYII) Capitalized Project: Staff requests carryover of \$2,260.27. This project consisted of the investigation and design of the repair of the damaged Surge Tank Pedestal. The design work is complete; however, engineering support will be needed during the planned repair work, which can only be implemented during a timeframe in which the Santa Ynez Pumping Plant will not need to be operated at 100% capacity for a 4 week period of time.

Total for Capitalized Projects:

\$ 1,218,399.16

Expensed Projects

- Arc-Flash Study (E-19ARCSTY) \$36,7500 (WTP) Expense Project: Staff is requesting \$28,296 in carryover to complete this project. This project was initiated in FY 19/20 and will be completed FY 20/21.
- Tank Inspection for the WTP Clearwells and Tank 2 (E-19TKINSP) \$21,065.90 (WTP) Expense Project. Staff is requesting \$21,065.90 in carryover to complete this project. This project was initiated in FY 19/20 and scheduled to be completed in FY 20/21.
- Consultant Review of Process Safety Mgmt. Plan (E-19CRPSMP) \$7,875 (WTP)
 Expense Project. Staff is requesting \$7,875 in carryover to complete this project. This project was initiated in FY 19/20 and scheduled to be completed in FY 20/21.
- Safety Equipment (E-19SAFEQP) \$14,742 (WTP/DIST ALL) Expense Project. Staff
 is requesting \$6,270.28 in carryover to complete this project. This project was initiated
 in FY 19/20 and scheduled to be completed in FY 20/21.
- Construction Records Scan and Organize (E-18SCAN) \$10,500 (ALL/WTP)
 Expense Project. Staff is requesting \$10,500 in carryover to complete this project.

 Staff expects the project to be complete in FY 20/21.
- Full Drawing Scanner (E-18SCANNR) \$8,505 (ALL/WTP) Expense Project. Staff is requesting \$8,505 in carryover to complete this project. Staff expects the project to be complete in FY 20/21.
- Tank 2 Erosion Repair (E-16T2ERRP) \$10,000 (33B) Expensed Project: Staff requests \$10,000 in carryover. This project will involve addressing hill-side erosion that is resulting in the perimeter drainage ditches of the Tank 2 facility filling with sediment. Staff expects this project will be complete in FY 20/21.

• French Drain Installation at Lagoon C (E-13DRAIN) - \$37,814 (WTP) Expensed Project: Staff requests carryover of \$37,814. This project implements the recommendation of the engineering evaluation of the Lagoon C seepage issue. The design of the French Drain is under preparation by CCWA staff.

Total for Expensed Projects: \$130,326.17

RECOMMENDATION

That the Board approve the carryover of project funds from FY 19/20 to FY 20/21 as follows:

Capitalized Project: \$1,218,399.16 Expensed Project \$130,326.17

Total: \$1,348,725.33

JLB



CENTRAL COAST WATER AUTHORITY MEMORANDUM

September 14, 2019

TO: CCWA Board of Directors

FROM: John Brady

Deputy Director, Operations and Engineering

SUBJECT: Request for Approval for the Use of Appropriated Contingency in the Amount of

\$43,401 for Bradbury Bypass Pipeline Budget Exceedance

BACKGROUND

<u>Approved Bypass Pipeline Installation and Removal Plan – March 2017</u>

In March 2017, CCWA prepared and submitted an installation and removal plan for the Bradbury Penstock Bypass Pipeline (bypass pipeline) to the US Bureau of Reclamation (Bureau). The Bureau reviewed and subsequently approved CCWA's plan on April 7, 2017 via email from Mr. Michael Jackson.

Our plan outlined two primary alignments of the bypass pipeline. The first alignment is used when the lake level is below the elevation of the bedrock shelf located on the lake-side of the spillway gate. When using this alignment, our bypass pipeline would enter the spillway, pass through the spillway gate and extend to the edge of the bedrock shelf. The second alignment is used when the lake level rises above the bedrock shelf elevation but less than the spillway gate threshold elevation. In this situation, CCWA would remove the portion of the pipeline that passes through the spillway gate to the edge of the bedrock shelf. This second alignment allows for continued water deliveries to the lake through discharging water over the spillway gate threshold onto the concrete apron on the lake-side of the spillway gate. Finally, when lake levels rise to the spillway gate threshold elevation, CCWA is required to promptly remove the portion of bypass pipe that passes over the spillway gate threshold in order to allow the Bureau to close the spillway gate and prevent a spill.

In February 2019, the lake levels were rising and eventually rose above the spillway gate threshold elevation. CCWA staff was able to promptly remove the section of bypass pipeline from the spillway gate, as called out in our plan. Consequently, CCWA's lake deliveries ceased on February 12, 2019.

Approved Bypass Pipeline Over Top of Dam – August 2019

Once the spillway gates closed in February 2019, CCWA did not have any approved facilities available for lake deliveries. Consequently, CCWA lake delivery operations were shutdown indefinitely. CCWA staff responded by working with the Bureau in developing a detailed proposal to build a new bypass alignment up the face and over the top of the Dam. Due to concerns over Dam safety in the wake of the Oroville Dam Spillway failure, the Bureau's Division of Dam Safety expressed a list of concerns and issues about the new proposed alignment. In response, CCWA prepared a detailed design and operations plan that specifically addressed

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each of the Bureau's concerns, which was submitted in June 2019. After a detailed review, the Bureau provided design comments to CCWA in July 2019. CCWA responded immediately by addressing each comment and incorporating the comments into the design. This design revision was submitted to the Bureau in July 2019 and the Bureau subsequently approved the design on August 14, 2019.

In anticipation of the Bureau's approval of the new bypass pipeline alignment over the top of the Dam, CCWA staff requested authorization from the Board to construct the project during the July 2019 CCWA Board of Directors Meeting. The Board authorized the project to procced and established a budget of \$77,800.

DISCUSSION

The construction of the bypass pipeline was completed in early January 2020. However, the project costs exceeded the approved budget. The purpose of this Memorandum is to seek Board authorization to utilize the FY 2019/2020 appropriated contingency budget as the source of funding to address exceeding the project budget by \$43,400.12 and to close out the project.

The project was started immediately following the Bureau approval of the CCWA design in August 2019. The long lead time items were ordered, which included special fabrication of ground anchor assemblies and the procurement of the pipe road ramp. Once these long lead items arrived, CCWA staff initiated work to construct the pipeline during the first week of December 2019.

CCWA staff were confronted with many challenges during the construction process, which partially led to the cost overruns. These challenges included rental equipment failures, stormy weather and the holidays, all of which resulted in the construction taking four weeks rather than the planned two week timeframe. The bypass pipeline was completed in the first week of January 2020 and lake deliveries resumed on January 4, 2020.

The total cost of the project was \$121,200.12 and the budget was \$77,800. Therefore, the budget was exceeded by \$43,400.12. The two primary reasons for the cost exceedances were the extended timeframe for the rental equipment and the higher than expected costs for the fabricated ground anchor assemblies. The two main drivers for the cost exceedances are briefly discussed below:

- <u>Fabrication of Ground Anchor Assemblies</u>. This item was budgeted for \$10,000 but actual cost was \$36,174, exceeding budget by \$26,174. At the time of preparing the budget in July 2019, the complexity of the fabrication and field installation effort was under-estimated.
- Extended Equipment Rental. These items were budgeted for \$30,300 but actual costs were \$47,526.12exceeding budget by \$17,226.12. This was a result of the construction requiring four rather than two weeks.

The CCWA Budget includes an appropriated contingency fund, which is established at 2% of the total budget, excluding variable electrical and chemical budget amounts. To utilize this fund, Board approval is required. Staff seeks Board authorization to use these funds to cover the cost overrun and to close out the project. This measure will ensure that carryover funds and Participant credits from FY 2019/2020 are properly accounted for.

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FINANCIAL

The CCWA Fiscal Year 2019/2020 Budget includes an appropriated contingency fund for the Distribution Department. The available amount of these funds and the proposed charge to the accounts are presented below:

Distribution

Item	Amount
FY 19/20 Appropriated Contingencies 5900.70 – Distribution	\$45,779
Bypass Pipeline Budget Exceedance	(\$43,401)
Remaining	\$2,378

RECOMMENDATION

That the Board:

• Authorize the Executive Director to utilize funds from the appropriated contingency budget in the amount of \$43,401 to address the Bradbury Dam Bypass Pipeline Budget Exceedance as described in this Board Report.

JLB

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CENTRAL COAST WATER AUTHORITY MEMORANDUM

September 11, 2020

TO: CCWA Board of Directors

FROM: John Brady

Deputy Director, Operations and Engineering

SUBJECT: Request for Approval of Award of Riser and Manway Repair Project - C-20RISERP

in the Amount of \$87,220

Background

Air Vacuum - Air Release (AVAR) valves are important components of a pipeline system. They facilitate purging of air that may have entered into a pipeline and they also prevent the generation of vacuum pressure within a pipeline. These functions serve to allow efficient conveyance of water through a pipeline system and prevents potential damage that may arise from a pressure transient or water hammer.

During routine inspections, staff identified corrosion of the riser pipes of certain AVAR valves located downstream of Tank 5. The riser pipe is the piping that joins the AVAR valves to the main aqueduct pipeline. If the corrosion causes a leak, the AVAR valve may need to be isolated through closing its isolation valve, which eliminates the protective function of the AVAR valves. This will place the pipeline at risk of significant damage should a significant pressure transient occur.

This Project consists of three phases to implement repairs at twenty-five AVAR locations. The first phase was completed last fiscal year and it included an engineering evaluation of each AVAR location by CCWA's engineering consultant, HDR Engineering. In addition, the first phase included the development of design and specifications for the repair work as well as completion of a pilot repair at one AVAR valve location during the 2019 Winter Shutdown to help test out the repair plan and design.

The current procurement is related to Phase 2 of the project, which is to complete repair work at eight AVAR Valve locations during the 2020 Winter Shutdown. Phase 3 will consist of the future repair of the remaining sixteen locations.

Discussion

CCWA staff prepared a Request for Bids (RFB) using the specifications and design prepared by HDR Engineering. The RFB was posted on the CCWA website and advertised twice in the Santa Barbara News Press, on August 21 and 23, 2020, as required. A mandatory pre-bid job conference and virtual tour of the project work sites was conducted on August 26, 2020. Staff also provide an optional physical tour of the work locations on the same day. Four bidders attended the on line virtual tour.

Two Addenda were issued prior to Bid Opening. Addendum #1 changed the Bid Opening Date to September 9, 2020 and Addendum #2 addressed Bidder requests for information. Sealed Bids were publically opened on Wednesday, September 9, 2020 at 3:00 PM via an advertised Zoom Meeting in compliance with CCWA's COVID19 mitigation protocol. The Bid Tabulation is shown below:

CCW/ PM	CCWA Pipe Riser Repairs preliminary Bid Tabulation - Bid Opening 9/9/2020 at 3:00 PM						
Item No.	Description		James C. Cushman Inc.	Cedro Construction Inc.	Kies & Sons Construction Inc.		
1	Mobilization, bonds and insurance.	L.S.	\$5,000.00	\$5,000.00	\$5,000.00		
2	Riser Repairs in Valve Vault at Station 862+86	L.S.	\$11,160.00	\$35,100.00	\$21,140.00		
3	Riser Repairs in Valve Vault at Station 868+08	L.S.	\$9,570.00	\$35,100.00	\$26,031.00		
4	Riser Repairs in Valve Vault at Station 1022+55	L.S.	\$6,350.00	\$10,000.00	\$12,856.00		
5	Riser Repairs in Valve Vault at Station 1056+30	L.S.	\$6,350.00	\$10,000.00	\$12,856.00		
6	Riser Repairs in Valve Vault at Station 1074+50	L.S.	\$16,930.00	\$35,000.00	\$36,309.00		
7	Riser Repairs in Valve Vault at Station 1124+70	L.S.	\$11,800.00	\$35,000.00	\$46,852.00		
8	Riser Repairs in Valve Vault at Station 1143+91	L.S.	\$10,580.00	\$10,000.00	\$12,856.00		
9	Riser Repairs in Valve Vault at Station 1264+84	L.S.	\$ 9,480.00	\$10,000.00	\$28,531.00		
	Total Bid Amount		\$ 87,220.00	\$ 185,200.00	\$ 202,431.00		

Staff completed a review of the Bids to determine the lowest Bid that was responsive to the requirements outlined in the RFB and to determine if the contractor was responsible as defined by the RFB. Based on Staff's review, James C. Cushman Inc. Bid was determined to be the lowest responsive bid and was also determined to be a responsible contractor.

James C. Cushman Inc. was the same contractor that completed the pilot repair project during the 2019 Winter Shutdown.

Financial Considerations

The Riser and Manway Repair Project (C-20RISERP) is a Board approved project for fiscal year 2020/2021 and has a budget of \$236,250. Therefore, there are sufficient funds available for awarding the project to James C. Cushman Inc. in the amount of \$87,220.

Although the Bid was well below the established budget, it is important to note that the approved Budget was intended to cover costs to repair all twenty-five AVAR locations. Staff reduced the number of AVAR locations to repair in order to coordinate with the Biofilm Remediation Project

that is also planned for the 2020 Winter Shutdown. The AVAR Riser Repair Project needs to be complete exactly two weeks after winter shutdown starts in order to make way for the Biofilm Remediation Project. The James C. Cushman Inc. Bid amount is in line with the costs staff expected for the reduced scope of work.

Recommendation

That the Board:

• Authorize the Executive Director to award the Air Vacuum Air Release Valve Riser Repair Project (C-20RISERP) to James C. Cushman Inc. in the amount of \$87,220.



CENTRAL COAST WATER AUTHORITY MEMORANDUM

September 15, 2020

TO: CCWA Board of Directors

FROM: John Brady

Deputy Director, Operations and Engineering

SUBJECT: Request for Approval of Water Treatment Plant Process Logic Controller

Upgrade Project (C-18PLCDOC and C-20PLCUPG)-Procurement of

Engineering Services in the Amount of \$213,111

Background

Process Logic Controller (PLC) equipment plays a critical role in all of the automated control functions at the Water Treatment Plant (WTP). Consequently, it is vitally important to keep this equipment in good functioning condition at all times. Part of the effort to properly maintain PLC equipment is to ensure that there are always spare parts and technical support immediately available for use in managing breakdown events. Through having access to spare parts and technical support, PLC equipment breakdowns can be quickly repaired, which will minimize downtime of the WTP operation.

Typically, PLC manufacturers provide the needed spare parts and technical support. However, PLC manufacturers also have ongoing efforts to improve their products and they will develop new products that offer more advanced capabilities through time. Even though newer more advanced PLC equipment are made available for purchase, Manufacturers do continue to maintain spare parts and provide technical support for the older versions of their PLC equipment. However, this service does end after a period of time.

The Modicon Process Logic Controllers (PLCs) that are currently in use at the WTP are now considered obsolete and product support from the manufacturer will be no longer available. Spare parts and technical support can still be readily obtained on the open market, but this will only reduce with time. Consequently, a project was budgeted and approved by the Board to replace the obsolete PLC components with current technology at the WTP.

Due to the complexity of the controls at the WTP, staff concluded that this project requires the use of an engineering firm with significant PLC experience. This project was also discussed with CCWA's engineering consultant, HDR Engineering, during CCWA's annual project planning meeting and they concurred with staff's conclusion. The scope of work for the engineering consultant will include preparation of bid specifications and design for a turn-key PLC upgrade project. These specifications and design will be used

by CCWA staff to solicit competitive bids from contractors to procure, configure, program, test and install the required PLC equipment.

Discussion

It is CCWA's policy to solicit competitive Request for Qualifications to procure professional services, when needed. Consequently, CCWA staff moved forward and prepared a Request for Qualification (RFQ) for the subject project. The emphasis of the RFQ was to identify highly experienced and competent engineering firms with substantial PLC equipment procurement, configuration, programing, and installation experience. The project RFQ was issued to firms that were identified by staff's research and was also posted on the CCWA website on June 2, 2020. One Addendum was issued on June 11, 2020 to address submitted questions and was subsequently issued to known plan holders as well as posted to the CCWA website. The deadline for responding to the RFQ was June 30, 2020. On this date, CCWA obtained Statement of Qualifications (SOQ) from the following firms:

- AECOM
- Aspect Engineering
- Cannon Engineering
- Northern Digital
- Westin Engineering

The submitted SOQs were reviewed by a panel of CCWA staff. The panel ranked each of the SOQs with weighted consideration given to (1) capabilities, experience and past performance, (2) key employees assigned to the project, (3) ability to perform the work, (4) any requested changes to the CCWA Professional Engineering Services Agreement and (5) any other information that may be pertinent. Based on the submitted SOQs, the CCWA panel ranked Cannon Engineering and Westin Engineering as the top two firms for the project.

CCWA staff moved forward with scheduling interviews with the top two firms. However, an unexpected acquisition of Westin Engineering occurred, which resulted in the loss of all of the proposed project staff on the Westin team. Consequently, only Cannon Engineering was interviewed. After full consideration, CCWA staff recommends that Cannon Engineering be awarded the project for the following reasons:

- Cannon Engineering's SOQ was well prepared and demonstrated extensive experience and capability in instrumentation and field devices, PLC and Supervisory Control and Data Acquisition (SCADA) programing, electrical as well as telemetry and network operations.
- Cannon Engineering is enrolled in the Alliance Partner Program with Schneider Electric, which is the manufacturer of the PLC platform currently in place at the WTP.
- Cannon Engineering clearly demonstrated both the engineering capability for the project but also demonstrated field experience with installation and on-call service.

- They also have a local presence and have experience with many local water agencies.
- Cannon Engineering presented a clear plan to implement this technically difficult and long term project. This project is aiming to have the PLC equipment installed tested and made fully operational during the 2021 Winter Shutdown.

As outlined in RFQ, CCWA staff negotiated with the highest ranked firm with regards to the scope of work and cost. To this end, CCWA staff requested Cannon Engineering to provide a written proposal to address all of the issues and elements of the project that were described in the RFQ and discussed in the formal interview. Cannon subsequently provided an initial proposal. CCWA staff and its engineering consultant, HDR Engineering, reviewed the proposal and developed a set of comments to bring the proposal to be more in line with CCWA's project concept and budget. A mutually acceptable proposal was ultimately developed by Cannon.

The finalized proposal is attached for review. The proposal states that the cost for the services to produce a turn-key design and specifications for the PLC upgrade is <u>\$213,111</u>. This cost will covers work performed in the current fiscal year, FY20/21. Staff anticipates that the design and the competitive bidding process will be completed in time to include the full cost of the construction phase of the project in the draft FY 21/22 Budget.

Financial Considerations

The Water Treatment Plant Process Logic Controller Upgrade Project (C-18PLCDOC and C-20PLCUPG) is a Board approved project. It is a three phase project with the first two phases currently being combined into one engineering phase. The sources of funds for the project are:

- C-18PLCDOC WTP PLC Upgrade Bid Document Preparation. This project is a carryover project and has a budget of \$52,500.
- C-20PLCUPG Water Treatment Plant Process Logic Controller Upgrade Project. This has a budget of \$210,000.

This provides a total of \$262,500 available for the engineering phase of the Water Treatment Plant Process Logic Controller Upgrade Project, which is sufficient to cover the costs presented in the Cannon Engineering proposal (\$213,111).

As part of the scope of work for Cannon Engineering, a construction cost estimate will be ready by the time the FY 21/22 Budget is presented to the Board for approval in April 2021. As shown in the CCWA Capital, Non-Capital and Extraordinary Project Schedule, the total cost for this project was estimated at \$400,000, including this phase of the project.

Recommendation

That the Board:

• Authorize the Executive Director to execute the CCWA Professional Engineering Services Contract to Cannon Engineering Inc. and to issue a Purchase Order to authorize work presented in the Cannon Engineering Proposal dated September 15, 2020 in the amount of **\$213,111**.

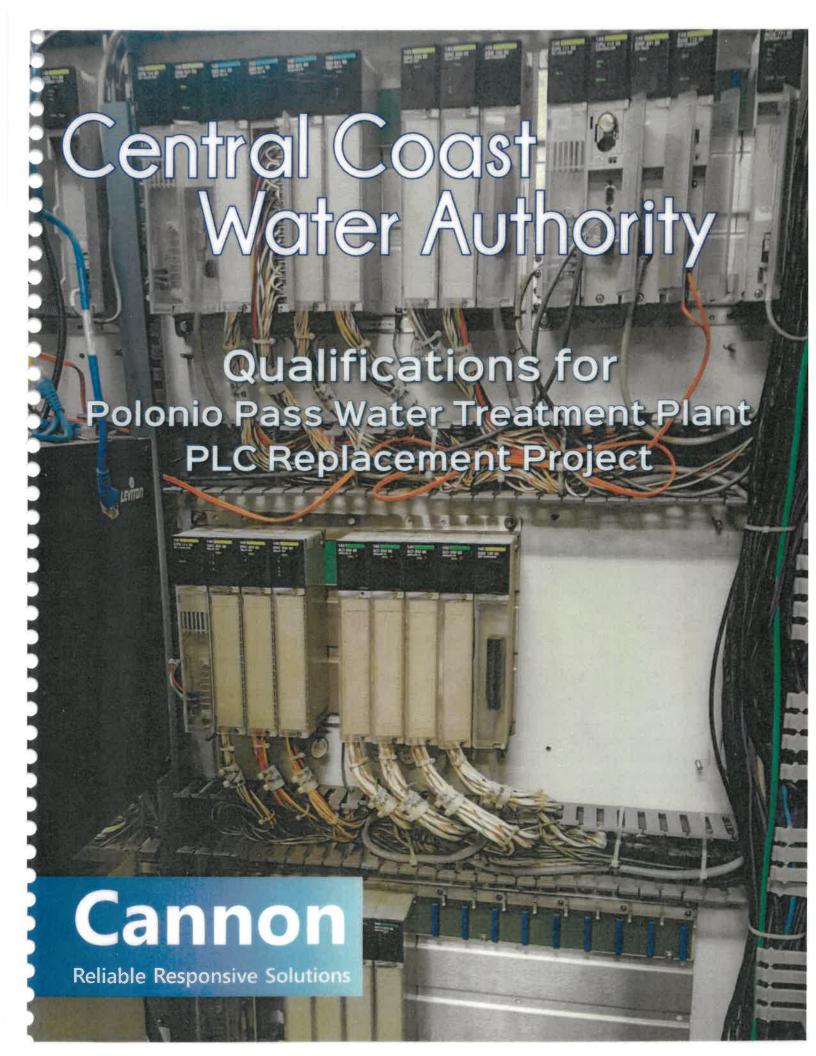
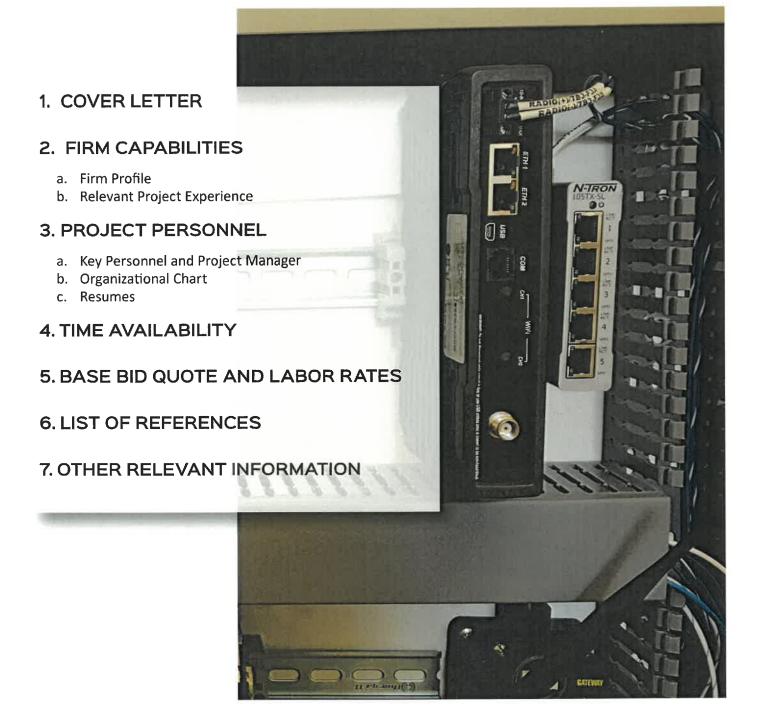


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Cover Letter

June 30, 2020

John Brady, Deputy Director Central Coast Water Authority 255 Industrial Way Buellton, CA 93427

Subject: Qualifications for Polonio Pass Water Treatment Plant

PLC Replacement Project

Dear Mr. Brady:

The Central Coast Water Authority (CCWA) has the opportunity to modernize the PLCs for the Polonio Pass Water Treatment Plant and set the agency up for continued success in operation and automation. We understand that the existing Modicon Quantum PLCs are at the "end of life" in their product lifecycle and support. This requires a complete and comprehensive overhaul of your PLCs. While this is commendable and a testament to the value CCWA staff has extracted from the initial equipment purchase, it is time for this upgrade.

To efficiently and reliably provide water to your clients, CCWA must have a robust, resilient and easy to maintain PLC infrastructure. We recognize that the key PLCs in your system must have process, network, and power redundancies to sustain continuous automated operations and prevent system downtime. In addition, the PLC system must work seamlessly with CCWA's existing ClearSCADA platform, which provides comprehensive control and monitoring of your entire system.

This is no small task. The two main plant PLCs are central to the entire operation, so the design must be well thought out, the hardware migration must be carefully planned, and the software functions must be thoroughly tested. Each project element must have the same cohesive goal: *successful implementation of plant automation on these new PLCs in two weeks*. The design must adjust to meet this goal in technical quality and schedule. The hardware approach must satisfy in physical layout and modernization. The software standardization and migration must confirm control and monitoring at or above existing levels. The construction schedule milestones and implementation plans must be tailored to meet this goal. As your design and construction representatives for the life of this project, we will work with CCWA from "cradle to grave" to confirm your November 2021 shutdown hits the mark.

To accomplish a well-conceived, planned, and implemented upgrade, CCWA requires a consultant that has recently and successfully provided these same services to other public agencies, such as the following:

- SCADA Assessments and Master Planning. This includes HMI selection, PLC upgrade path, network resiliency, equipment redundancy, disaster recovery, standardization, networking and radio telemetry, workshops, security).
- SCADA Infrastructure Design and Architecture for Specific Processes. This includes control narrative; panel layout, panel wiring, loop drawing, network block diagram, hardware and software specifications, and engineer estimates.

- SCADA system integration and programming of water systems. This includes an understanding of ramifications to operations for system upgrades, including effort required for installation, testing, "cut-over," and commissioning of new or upgraded control systems.
- Engineering Construction Services. This includes pre-bid meeting, respond to RFIs, bid addenda, bid evaluation, testing and commissioning requirements (FAT/SAT), construction management, assess quality of work, review progress payment requests, final punch list, documentation, and training.

These are all services we have successfully provided to several large agencies over the past few years. Our previous experience with similar projects and our ability to provide CCWA with these services make us an ideal candidate for your project. Our team includes engineers and technicians who have both conceptualized and designed SCADA systems and have built, implemented, and maintained them. We perform all these services in-house to confirm quality and continuity.

We understand the significance of this project. Our team is dedicated to continuing our history of successful projects. We look forward to further conversations about the opportunity to continue serving CCWA.

Sincerely,

We acknowledge receipt of all addenda for this proposal.

Dave Dutcher, PE

Principal Engineer, Control Systems, No. 78629

☎805.5035.4557 **8** 805.503.4557 **DaveD@CannonCorp.us**

Jeff Spannbauer, PE No. 66131

Director, Automation & Electrical Engineering

2805.503.4514 **3**805.928.7096 **3** JeffS@CannonCorp.us

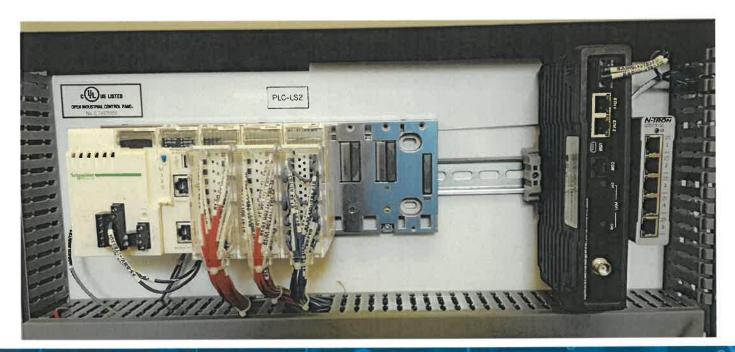
Cannon Corporation, 1050 Southwood Drive, San Luis Obispo, CA 93401, 🕿 805.544.7407 💲 Cannon Corp.us

Federal Tax ID: 77-0246249 CA DIR ID: 1000001861

California Business License: C1475706

State Tax ID: 34997544

C-10 Contractor's License: 970186 Small Business-Public Works Certification ID: 4979



2.

Firm Capabilities

Cannon Corporation - Providing Reliable Responsive Solutions since 1976

As a full-service engineering, surveying, and construction management firm, we take pride in our ability to offer clients a broad range of services. Our commitment to providing clients Reliable Responsive Solutions, whether the project scope is expansive or more specialized, spans 44 years. During that time, we have worked with many cities, counties and agencies throughout California to assess, design, and construct SCADA systems for numerous water resource and wastewater utilities.

As a multidisciplinary engineering firm, SCADA system integrator, UL 508A listed panel shop, and C-10 Electrical Contractor, we can provide a wide range of services to assist clients, including electrical and automation design, PLC/SCADA programming, PLC/SCADA system troubleshooting, instrumentation calibration, and maintenance.

Our automation and electrical engineers work side-by-side with our control system programmers, IT staff, and technicians to design reliable, innovative electrical, controls, instrumentation and SCADA systems for municipal agencies and private companies throughout the state of California. Our in-house team has extensive experience designing, fabricating, and servicing a wide variety of SCADA systems.

- PLC Programming
- RTU Panel Design and Fabrication
- SCADA System Security
- SCADA System Design
- SCADA Programming
- Instrumentation Design
- Instrumentation Installation,

- Calibration, and Service
- Software and Hardware Procurement
- Communication Systems including Wireless Radios, Fiber Networks, Cellular Modems, and RF Radios
- Database Servers

- Communication Protocols including Ethernet, DeviceNet, Modbus, and ControlNet
- Water System Hydraulics and Modeling, coordination with SCADA system
- Coordination with Utilities for power efficiency studies, power savings

We specialize in servicing commonly used hardware and software programs, including:

- Schneider Modicon
- Schneider Wonderware
- Emerson/Rosemount

- Rockwell Automation
- Endress+Hauser

- GE MDS
- Phoenix Contact

Experience Counts

Our Automation & Electrical team offers expertise in the following areas relevant to your project:



Instrumentation & Field Devices



PLC/SCADA Programming



Electrical



Telemetry & Networks

Financial Stability

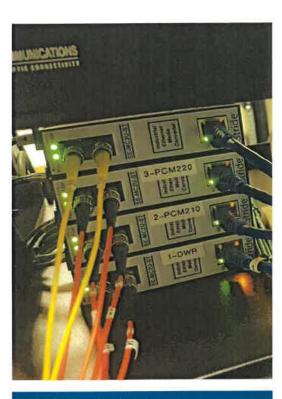
We continue to be a growing, financially stable organization, and are proud of the good credit rating we have earned from Dunn & Bradstreet. Cannon is incorporated in the state of California and has never been debarred, suspended or otherwise declared ineligible to contract by any federal, state or local public agency. Our average annual revenue for the past five years is \$14 million. We have provided engineering design services on projects for which construction costs have ranged from a few thousand to \$300 million.

Projects that demonstrate our experience with the elements inherent to your PLC Replacement Project include the following:

- San Luis Obispo Water Resource Reclamation Facility (WRRF), San Luis Obispo, California
- Water Distribution SCADA System Upgrade, San Luis Obispo, California
- Cypress Ridge SCADA Upgrade, Golden State Water Company, Santa Maria, California
- Orange County SCADA Upgrade, Golden State Water Company, Anaheim, California
- Arden SCADA Upgrade, Golden State Water Company, Rancho Cordova, California
- SCADA System Assessment, Norwalk, California
- WWTP Upgrade and SCADA Implementation, McFarland, California
- American Water SCADA Upgrades, VAFB, Vandenberg, California
- On Call A&E Services Golden State Water Company, Various Locations, California
- SCADA System Evaluation, Lynwood, California
- Water SCADA System Needs Assessment Study and Master Plan Report, Glendale Water and Power, Glendale, California
- Water and Wastewater SCADA System Upgrades, Pismo Beach, California

Certifications and Technical Registrations







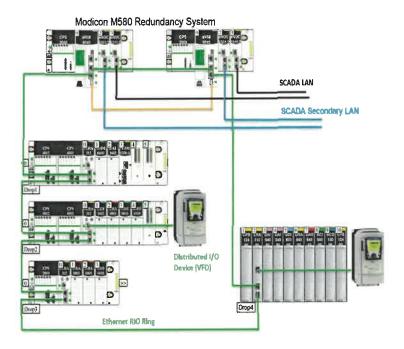
County, and State electrical codes.

Approach and Partnership

We understand that in replacing CCWA's Quantum PLCs, there already exists a path for implementation of the new redundant Modicon M580 platform. One of Cannon's Canons is to "stand on the shoulders of others." We will put that canon into action with this project. We trust and respect the expertise of the Schneider Electric and Graybar distribution team and understand the value that they bring to this PLC project upgrade. Thus, we propose that Schneider and Graybar Application Specialists provide QA/QC within our project design.

We will incorporate a proven hardware and network approach as well as details for software implementation and migration to confirm the best results for the project. We recognize that a detailed prescriptive design control narrative and software implementation plan will be required.

Figure 1 - Phased Approach to Quantum Upgrade to M580



Based on our experience with system integration projects, specifically, recent Modicon upgrade projects, we recognize that the first step will be developing a robust infrastructure approach. Due to physical layout and available space within existing PLC panels, we understand that a parallel hardware installation will be achievable without impacting operation.

Next, we recognize that a comprehensive Factory Acceptance Test (FAT) plan and Site Acceptance Test (SAT) plan will be necessary to confirm software testing that meets or exceeds the software functionality required from your team. The two-week outage limitation is a short period for a complete plant PLC upgrade, so planning and testing is critical for success. We will provide our design with testing and implementation in mind. Additionally, our scope of work will include support for CCWA during construction for FAT and SAT. We will support the CCWA team to confirm the contractor is providing the hardware and software functionality exactly as specified.





Recent Project Experience Summary

The following table demonstrates an at-a-glance look at Cannon's SCADA assessment, master planning, and technical support services relevant to the CCWA's RFQ. Learn more about our project experience on the following pages.

Cannon Projects	Project Management Processes	SCADA Design/Vendor Workshops	SCADA System Design	Telemetry + Network Design	Control Panel Design	Instrumentation Design	Power & Alternative Energy Design	Motor Control Design & Integration	System Integration & PLC/ SCADA Programming	Utility Coordination	On Call Emergency Repair	SCADA System Maintenance
San Luis Obispo WRRF Project, San Luis Obispo	V	V	\	V	>	V		>				
Golden State Water Company Orange County SCADA Design-Build	V	V	V	V	>	V		>	V	>	>	V
On-Call A&E Services California Men's Colony (CMC), San Luis Obispo	V		V	V	V	V			V			V
On-Call A&E Services - Golden State Water Company, Various Locations	V	V		V							V	V
Golden State Water Company Cypress Ridge SCADA Design-Build	V		V	V	V	V		<	V			
Golden State Water Company Bradshaw Filter Design, Barstow	V		V	V	V	V		V				
American Water SCADA Upgrades, VAFB	V		\	✓	V	V	V	>	>		V	V
Wastewater Collections SCADA Upgrade, Paso Robles	V	V	V	V	>		V	V	V	V		
SCADA System Assessment and Design, City of Norwalk	>	V	V	V	V	V	V		V	V	V	V
Water Distribution SCADA System Upgrade, San Luis Obispo	V	V	V	V	V	V	V	V		V	V	V
*Water & Wastewater SCADA System Upgrades, Pismo Beach	V	V	V	V	V	V			V			V

Experience Working with Municipal Agencies

Cannon has worked with many City and County staff members as well as local agency representatives to troubleshoot, design, and construct electrical and SCADA systems for numerous water and wastewater utilities, including the following:

- SCADA Assessment for Las Virgenes Municipal Water District, Calabasas, California
- 5-Year On-Call Electrical Engineering Services, Ventura, California
- On-Call Electrical and Automation Services for Suburban Water Systems, Covina, California
- SCADA System Upgrade, Nipomo, California
- On-Call Electrical Engineering Services, Benicia, California



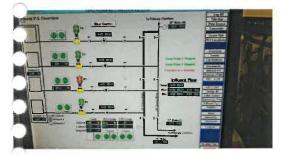
SCADA Evaluation - Las Virgenes Municipal Water District

Calabasas, California

Project Information Dates: October 2017 — March 2018 Key Personnel:

- Dave Dutcher, PE Project Manager
- Jeff Spannbauer, PE Principal-in-Charge
- Rajesh Kumar Lead Automation Specialist
- David Noellsch Automation Associate Engineer

Contract Amount: \$40,000





LVMWD sought modern technology and standardized solutions to inform their decision about the future of control system infrastructure for their water, wastewater, and composting facilities. Cannon was selected to assess and develop recommendations for SCADA standards, which leverage the functionality of the selected SCADA platform. Cannon's scope of work included assessing the gaps and needs across the different facilities and operations. Cannon identified operational function, security configuration, and network/telemetry architecture. Cannon worked closely with LVMWD staff to investigate challenges with the existing system, identify the most significant needs for the water and wastewater sites serving the District's users and connections, and understand the control system improvement outcomes.

Services included the selection of a reliable and cost-effective PLC platform, with consideration of existing installed-base of Modicon PLCs and Ovation DCS and the Human Machine Interface (HMI) functionality, which significantly impacted Operations' interactions with the control system and field devices. LVMWD's SCADA installed-base of Wonderware and Ovation DCS factored into primary decision points regarding reliability, maintenance, standardized functionality, initial and life-cycle costs, ease of use and integration/implementation, obsolescence and migration across products/ platforms, vendor reliability, and depth of technical support. Cannon conducted a Current and Future Needs Workshop with LVMWD to present field investigation findings and develop priorities for the key criteria in the SCADA evaluation. Cannon worked with vendors to establish a basis for product offerings and pricing for installation and projected 15-year operational costs. Cannon summarized results from field investigations, workshops, and evaluation processes in the final report.

Client Reference

Eric Schlageter, PE, ENV SP Senior Engineer
Las Virgenes Municipal Water District 4232 Las Virgenes Road
Calabasas, CA 91302 ☎ 818.251.2100 ☑ ESchlageter@lvmwd.com

Cypress Ridge SCADA Design-Build

Orcutt, California

Cannon was selected by Golden State Water Company to establish a new SCADA system for the Cypress Ridge water system, which was newly incorporated into the GSWC Service Area. The existing control system had limited alarming but no real-time monitoring. This water system is comprised of nine well sites, four booster pump stations, and six reservoirs. Cannon performed Radio Path Surveys in this difficult terrain and developed alternative telemetry design solutions, including a hybrid solution between 900MHz radio and cellular. Using GE MDS Orbit radios, we were able to provide both technologies in the same radio, allowing communication back to the GSWC office over 20 miles away from the sites. This upgrade required new instrumentation, new control panels with Modicon M340 PLCs, new Ethernet networks, redundant power supplies and power monitoring, and a completely new Wonderware System Platform 2017 SCADA system software. Cannon implemented the hardware and software standards developed from the SCADA Master Plan.

Client Reference

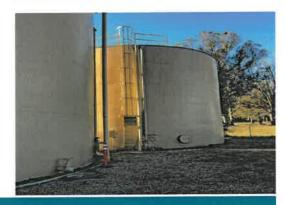
Ernie Gisler, PE, Capital Program Manager 3035 Prospect Park Drive, Suite 60, Rancho Cordova, CA 95670 ■ 916.853.3634 ☑ eagisler@gswater.com

Project Information

Dates: July 2019—Current Key Personnel:

- Dave Dutcher, PE Project Manager
- Jeff Spannbauer, PE Principal-in-Charge
- Rajesh Kumar Lead Automation Specialist
- David Noellsch Automation Associate Engineer

Contract Amount: \$809,927



Water Resources Recovery Facility

San Luis Obispo, California

Project Information Dates: August 2015 — Current Key Personnel:

- Dave Dutcher, PE Project Manager
- · Jeff Spannbauer, PE Principal-in-Charge
- Rajesh Kumar Lead Automation Specialist
- David Noellsch -Automation Associate Engineer

Contract Amount: \$276,469



n order to meet recently revised Municipal and Domestic Water Supply (MUN) effluent criteria, the City of San Luis Obispo is undertaking a series of upgrades to its Water Resource Recovery Facility (WRRF). Drivers for the project include future increases in flow in alignment with the City's General Plan; the ability to provide treatment to peak wet weather flows; addressing aging and out-of-date equipment and processes; incorporating features that embrace the value of the WRRF as a community asset; process redundancy to allow operational efficiency; odor control; and maximizing recycled water production.

Cannon, in partnership with CH2M, was selected to provide automation and electrical engineering design services for the facility. This design required an upgrade plant processes including modifications to existing SCADA system, implementation of intelligent motor control, upgrade of existing fiber optic network and components, and integration of multiple advance treatment package systems. The SCADA modifications included added information management tools, improved redundancy and reliability of PLC and network components, and upgrade alarm notification capability.

Additionally Cannon is providing site-civil, electrical, and structural engineering for the Administration Building aspect of the project, to house water, collection, and WRF staff.

Client Reference

Miguel Barcenas, Utilities Engineer 879 Morro Street, San Luis Obispo, CA 93401-2710 ☎805.781.7507 ☑mbarcenas@slocity.org

Bradshaw Filter Design - Golden State Water Company

Orange County, California

Cannon was selected by GSWC to work with a pre-selected filter manufacturer, Evoqua, to provide a multi-discipline design for a "greenfield" Ion Exchange (IX) Water Treatment System. This treatment system served the Bradshaw Well Field for Wells No. 2, 10, and 14. Due to the nitrate levels in the Bradshaw Well field, the overall system capacity was lower than desired. The treatment system provided the ability to blend two wells in order to achieve a reduced blended nitrate concentration.

Cannon provided the Civil, Mechanical, Structural, Electrical and Automation design to integrate the vendor package system into the site facilities and tie into their existing SCADA system. This required new plant control panels, network & telemetry design, intelligent motor control design, and instrumentation design. Furthermore, Cannon worked with the client and the package vendor to create control strategies to allow Operators to remotely control and monitor. This required knowledge and understanding of both Rockwell Automation PLCs, Modicon PLCs, and Wonderware SCADA software.

Client Reference

Ernie Gisler, PE, Capital Program Manager 3035 Prospect Park Drive, Suite 60, Rancho Cordova, CA 95670 ☎ 916.853.3634 ⊠ eagisler@gswater.com

Project Information

Dates: November 2018 - May 2020 Key Personnel:

- Dave Dutcher, PE Project Manager
- Jeff Spannbauer, PE Principal-in-Charge
- Rajesh Kumar Automation Specialist
- David Noellsch -Automation Engineer
 Contract Amount: \$331,600 (design total)

SCADA System Assessment and Design

Norwalk, California

Project Information Dates: February 2016 — September 2016

Number of users: 5 Length of tenure with client: years Key Personnel:

- · Dave Dutcher, PE Project Manager
- Jeff Spannbauer, PE Principal-in-Charge
- Juan Anderson Senior Automation Specialist
- Rajesh Kumar Automation Specialist
- David Noellsch, EIT Automation Design Engineer

Contract Amount: \$31,196



The City of Norwalk has water operations segregated across three different regions. As a result, the City has challenges with cost-effective water operations. In many cases, the City has to accept external sources of water due to limitations in their current system. The City has endeavored to make improvements in their water pipeline infrastructure and their water SCADA system infrastructure to better control costs and streamline water operations.

The first step to implementing a new City-wide SCADA system was to evaluate the existing infrastructure, identify the changes required to achieve the improved automation and operation of their system, and develop a plan to integrate all the sites into one common SCADA system platform. Cannon performed a SCADA Assessment for the City of Norwalk that targeted a system with minimal existing SCADA infrastructure. We conducted site assessments and performed radio path surveys at all 28 site locations as well as evaluated field instrumentation, control system functionality, and telemetry across the city.

As part of this evaluation, we objectively evaluated PLC and HMI vendor solutions based on City functional needs and life-cycle costs. Additionally, we evaluated multiple telemetry solutions and provided a recommendation for the best telemetry solution heading into the future. Cannon continues to work with the City to develop future SCADA implementations.

Client Reference

Eldon Davidson, City Engineer (Buckman Associates)
12700 Norwalk Boulevard, Norwalk, CA 90650
☎ 562.929.5700 ☑ eldon@bucknam.net; eldond48@gmail.com

Water and Wastewater SCADA System Upgrades

Pismo Beach, California

The City of Pismo Beach needed to upgrade their existing PLC's and HMI software at 23 of their water distribution and wastewater collection facilities because replacement parts were becoming difficult and expensive to find. Initially the City wished to replace the SCADA system using Alien-Bradley Compactlogix PLCs which would integrate nicely with the Allen-Bradley Compactlogix PLC's in use at the Wastewater Treatment Plant. However, the initial cost of these PLC's, IO Cards, and re-land the instrument loops on the IO Cards was more expensive than the City anticipated.

Cannon reviewed the City's existing system during the proposal process and proposed an alternative design that significantly reduced the overall project costs by replacing only the CPU of the PLC. The existing Base and IO Cards were reused and therefore no rewiring was required. The City's existing Think & Do HMI was replaced with Wonderware Archestra Platform and now houses all three systems: Water Distribution, Wastewater Collection, and the Wastewater Treatment Plant. Programming of the SCADA software included development of the HMI screens; alarm notifications and priorities; and reports. During the design and integration processes and until the City accepted the new SCADA system, Cannon made sure that the existing SCADA system was kept operational. As a final deliverable for the City, Cannon developed and produced a training program for City operators.

Client Reference

Benjamin Fine, Director of Public Works/City Engineer, City of Pismo Beach 760 Mattie Road, Pismo Beach, CA 93449 ☎ 805.773.4567 ☒ bfine@pismobeach.org



Project Information

Dates: August 2012—July 2014 Number of users: 10 Length of tenure with client: years Key Personnel:

- Jeff Spannbauer, PE Project Manager
- Larry Kraemer, PE Principal-in-Charge
- Juan Anderson Senior Automation Specialist
- Dave Dutcher, PE Lead Control Systems Engineer

Contract Amount: \$322,905

Project Personnel

Project Manager and Principal-in-Charge



Dave Dutcher, PE Project Manager

Dave Dutcher, PE has 18 years of experience designing and commissioning complex control systems for public agencies and private industries. He provides innovative solutions to automated processes, striving for efficiency during design, build, operations, and ongoing maintenance/support. He has worked on projects ranging from multi-million-dollar installations to small facility SCADA upgrades and retrofits.

Professional Control System Engineer, Oregon, No. 78629PE



Jeff Spannbauer, PE Principal-in-Charge

Jeff Spannbauer, PE has experience preparing plans and specifications for water systems for public agency and private industry projects since 1995. He has practical knowledge of operations and testing of water systems along with technical capabilities in current water modeling technologies, and brings in-depth understanding to SCADA system upgrades from planning through construction and integration.

Professional Civil Engineer, California No. C66131

Organizational Chart



Central Coast Water Agency

Jeff Spannbauer, PE Principal-in-Charge

No. C66131 - BS, Agricultural Engineering, California Polytechnic State University, San Luis Obispo, CA

Dave Dutcher, PE

SCADA Engineer and PM No. 78629PE - BS, Engineering Science, United States Air Force Academy, Colorado Springs, CO

Redundancy and Continuity of Staff

In addition to our key project team members in the organizational chart, Cannon is home to comprehensive engineering design staff who are ready to commence project work immediately. Members of our assigned project team will not be substituted without prior approval of CCWA.

Derek Romer, PE Electrical Engineer & QA/QC

No. 16396 - BS, Electrical Engineering, California Polytechnic State University, San Luis Obispo, CA

Taylor Groos, EIT Design Engineer EIT No. 159743 - BS, Electrical Engineering, California State University Chico, Chico, CA

David Noellsch, PE Project Engineer

No. CS 7576 - BS, Mechanical Engineering, University of Missouri, Columbia, MO

Rajesh Kumar Senior Automation Specialist

BS, Mechanical Engineering, Fiji Institute of Technology, Samabula, Fiji Darrick Baker Systems & Architecture Engineer

Schneider Gelectric

Resumes of our key personnel have been provided on the following pages.

Key Personnel



Derek Romer, PE QA/QC and Electrical Engineer

Mr. Romer has more than 20 years of experience in secondary power distribution, lighting, and instrumentation, including electrical system and SCADA design for municipal facilities, water wells, pump stations, reservoirs, sewage lift stations, and water/wastewater treatment plants. He is especially recognized for his ability to coordinate with clients and contractors to deliver turnkey, cost-effective projects.

Registered Electrical Engineer, California, No. 16396



David Noellsch, PE Controls Systems Engineer

Mr. Noellsch is responsible for working as part of the design team to create drawing packages, including P&IDs, PFDs, loop drawings, and panel layouts. He will coordinate system design and instrumentation selection with the Electrical Engineer, attend design review meetings with clients, and create control narratives to define how systems and processes should operate. Other tasks include creating cause-and-effect charts to define system alarms and shutdowns; programming PLC logic (taking into account functions required, safety, process optimization, and industry best practices); programming (or assisting) HMI design to client standards while considering industry best practices; and (where mechanical design is involved) conducting pipe stress and hydraulic analyses.

Control Systems Engineer, California, No. CS 7576



Taylor Groos, EIT Project Engineer

Mr. Groos provides Instrument and Controls Engineering services on various teams to support the ongoing improvements and development of water resource, wastewater, energy, manufacturing, and industrial facilities. Mr. Groos actively supports and learns to design and build computer system interfaces and specializes in programming line controls, process controls, and HMI. He is adept at building client relations and manages oversight of contractors.

Engineer-in-Training, California, No. 159743



Raj Kumar Senior Automation Specialist

As a Senior Automation Specialist, Mr. Kumar provides significant SCADA support services. He is responsible for radio/telemetry installation, testing, commissioning, and troubleshooting; PLC control panel fabrication and installation; SCADA system troubleshooting; instrumentation calibrations; and reporting/alarm management. In addition, Mr. Kumar provides SCADA programming, PLC programming, and SQL data management/storage.

Services for the CCWA will be performed primarily from our headquarters in San Luis Obispo, California. Cannon office locations include the following:

San Luis Obispo
1050 Southwood Drive
San Luis Obispo, CA 93401
8 805.544.7407
Bakersfield
4540 California Ave, Ste. 550
Bakersfield, CA 93309
661.328.6280

Ventura
93 South Chesnut St.
Ventura, CA 93001

■ 805.544.7407

Irvine
16842 Von Karman Ave., Ste. 150
Irvine, CA 92606

2 949.753.8111

Los Angeles 11900 West Olympic Blvd, Ste. 530 Los Angeles, CA 90064 310.664.1166

Resumes

Dave Dutcher, PE Project Manager



Professional Registration

Registered Control Systems
 Engineer, Oregon, 78629PE

Education

 Bachelor of Science, Engineering Science, U.S. Air Force Academy, Colorado Springs, Colorado

Specialized Computer Skills

- PLC Software: Allen-Bradley ControlLogix, Siemens S7, and Modicon Quantum
- HMI Software: Wonderware
 System Platform InTouch,
 FactoryTalk View ME/SE, Siemens
 WinCC
- Fieldbus Applications: Profibus, DeviceNet, ControlNet, and Modbus

Membership and Affiliations

 Member of Department of Homeland Security CISA ICS Joint Working Group for Critical Infrastructure

Dave will provide services from our San Luis Obispo office Since 2001, Mr. Dutcher has built extensive experience in designing and commissioning complex control systems for public agencies and private industries. His experience has provided clients with innovative solutions to automated processes while striving for efficiency at all levels — from design to build to operations and ongoing maintenance/support. Mr. Dutcher has worked on projects ranging from multi-million-dollar "greenfield" installations to small facility SCADA upgrades and retrofits. He has a passion for delivering elegant control system solutions that "make life easier" for clients.

On-Call A&E Services, Golden State Water District, Various Locations, California: Cannon was selected to be an on-call automation and electrical design engineer for Golden State Water Company for an indefinite term. Services have included SCADA and electrical engineering services, water balances, water system design, groundwater impact analysis, plans and specification preparation, water system upgrades, facility master planning, and regulatory compliance. Mr. Dutcher serves as Project Manager. Specific project work has included:

SCADA Assessment: Cannon conducted field investigations across seven districts and 37 service areas to provide an in-depth assessment of existing SCADA infrastructure. We evaluated the hardware, software, telemetry, and instrumentation against industry best practices. Additionally, GSWC was extremely concerned about cyber-security issues and limitations within their current systems. We conducted cyber-security evaluations to determine the security posture and opportunities for improved protection of their system

Select Project Experience Summary

- SCADA Evaluation Las Virgenes Municipal Water District, Calabasas, California
- Suburban Water Systems—Preliminary SCADA Assessment Study and SCADA Master Plan, Covina, California
- Mission Hills Community Services District (MHCSD) SCADA On-Call Services, Lompoc, California
- On-Call I&E Design Services and Upland Well for Water System, Solvang, California
- On-Call I&E Design Services, County of San Luis Obispo, Various Locations, California
- On-Call I&E Design Services, Thousand Oaks, California
- Design for American Water SCADA Upgrades, Vandenberg, California
- Programming Consultation, Livermore, California
- Fort Hunter Liggett Water System SCADA Upgrades, King City, California
- Engineering Services for Electrical Upgrades, Vernon, California
- SCADA Master Plan, Livermore, California
- Design for BVARA Wastewater Treatment Plant Facility Upgrades, Kern County, California
- Design for Wastewater Facilities, Collection System Integration, and SCADA Upgrades, McFarland, California
- Design for Water and Wastewater System SCADA Upgrades, Pismo Beach, California
- Design for MRWPCA Seawater Intrusion Project and Castroville Pump Station, Monterey, California

Jeff Spannbauer, PE Principal-in-Charge



Professional Registration

Registered Civil Engineer,
 California, No. 66131

Education

 Bachelor of Science, Agricultural Engineering, California Polytechnic State University, San Luis Obispo, California

Training and Development

- PMSJ Project Management Bootcamp
- Certified Master Modeling in WaterCAD and WaterGEMS Hydraulic Analysis Software by Bentley

Professional Affiliations

- International Society of Automation
- American Society of Civil Engineers
- Control System Integrators Association

design, construction, administrative, and related activities. He negotiates critical and controversial issues along with other Senior Principal engineers and officers of other companies or organizations. In addition, Mr. Spannbauer exhibits a superior level of creativity, foresight, and judgement in planning, organizing, and guiding project teams and engineering programs. Recognized as an expert in one or more specialties, he applies his extensive knowledge to complex projects and assumes responsibility for the department of automation and electrical engineering at Cannon.

Select Project Experience Summary

• SCADA Evaluation - Las Virgenes Municipal Water District, Calabasas, California

As Principal-in-Charge Mr. Spannbauer makes decisions and recommendations recognized as authoritative that have a far-reaching impact on Cannon's engineering

- SCADA System Upgrade, San Luis Obispo, California
- SCADA System Needs Assessment Study, Glendale, California
- SCADA System Evaluation, Lynwood, California
- Suburban Water Systems—Preliminary SCADA Assessment Study and SCADA Master Plan, Covina, California
- Water and Wastewater SCADA System Upgrades, Pismo Beach, California
- Mission Hills Community Services District (MHCSD) SCADA On-Call Services, Lompoc, California
- On-Call I&E Design Services and Upland Well for Water System, Solvang, California
- Design for Wastewater Facilities, Collection System Integration, and SCADA Upgrades, McFarland, California
- On-Call I&E Design Services, County of San Luis Obispo, Various Locations, California
- On-Call I&E Design Services, Thousand Oaks, California
- Design for American Water SCADA Upgrades, Vandenberg, California
- Programming Consultation, Livermore, California
- SCADA Master Plan, Livermore, California
- SCADA System Master Plan, Golden State Water Company, Los Angeles, California
- Fort Hunter Liggett Water System SCADA Upgrades, King City, California
- I&E Services for Warren Resources, Wilmington, California
- Design for Moss Avenue Pump Station VFD Replacement, Santa Monica, California
- Design for BVARA Wastewater Treatment Plant Facility Upgrades, Kern County, California
- Arc Flash Analysis, Anaheim, California
- Arc Flash Analysis for Water and Wastewater Treatment Plants, Benicia, California
- As-Built SCADA and Arc Flash Analysis, North of the River Sanitation District, Bakersfield, California
- Kern Medical Center Electrical Study, Bakersfield, California
- Design for Wastewater Facilities, Collection System Integration, and SCADA Upgrades, McFarland, California
- Design-Build SCADA Project, Golden State Water Company, Orange County, California

Jeff will provide services from our San Luis Obispo office

Derek Romer, PE Lead Electrical Engineer & QA/QC Manager



Professional Registration

- Registered Electrical Engineer, California, No. 16396
- Registered Electrical Engineer, Nevada, No. E15940
- Registered Electrical Engineer, Washington, No. 46296

Education

 Bachelor of Science, Electrical Engineering, California Polytechnic State University, San Luis Obispo, California

Training and Development

- PMSJ Project Management Bootcamp
- Fundamentals of Overhead Transmission Line Design
- SKM Power Systems Protection and Coordination
- SKM Power Systems Arc Flash Evaluation
- 2015 NFPA 70E: Electrical Safety in the Workplace
- CPR Certified

Professional Affiliations

- International Society of Automation
- Institute of Electrical and Electronics Engineers
- Southern California Water Utilities Association

Derek will provide services from our San Luis Obispo office As a Senior Principal Electrical Engineer, Mr. Romer is responsible for providing senior-level engineering design practices and techniques, recognizing design discrepancies in results, and detailing design processes/economic data. He applies his specialized insight and experience with electrical and automated control system processes, and has full technical responsibility for assisting with interpreting, analyzing, organizing, implementing, and coordinating projects as well as plan development and designs concerned with unique or controversial requirements that have a significant impact.

Select Project Experience Summary

Mr. Romer has served as Project Engineer, Manager, or Construction Manager/ Inspector on the following projects within the last five years:

- Design for Water System SCADA Upgrades, San Luis Obispo, California
- Design for American Water SCADA Upgrades, Vandenberg AFB, California
- Design for Hyla Flue Gas Scrubber and WESP SCADA System FM O&G, Arroyo Grande, California
- NORSD As-Built SCADA and Arc Flash Analysis, Bakersfield, California
- Design for Wastewater Facilities, Collection System Integration, and SCADA Upgrades, McFarland, California
- Design for Moss Avenue Pump Station VFD Replacement, Santa Monica, California
- Design for Plant 224 Pump Station and Back-up Generator, Covina, California
- Design and Construction Management for Well No. 16 (Rockhaven Well), Crescenta Valley Water District, Montrose, California
- Design, Survey, and Construction Inspection/Observation for 13th Street Sewer
 Main Upgrades and Lift Station No. 5 Project, Paso Robles, California
- Equipping and Related Site Work for Well No. 21, Vernon, California
- Arc Flash Protection, Santa Maria Energy, Santa Maria, California
- NFPA 70 Arc Flash Study, Pactiv, Bakersfield, California
- Arc Flash Analysis, Benicia, California
- Design for Golden Valley Road Wastewater Lift Station, Los Angeles County
 Department of Public Works, Los Angeles, California
- Design for Seven Wells for the Arsenic Mediation Project Water Production Facility, Phase 1, Delano, California
- Kern Medical Center Electrical Study, Bakersfield, California
- Design for Pressure Reducing Station and Sustaining Valve Design at Reservoir/Well No. 8, Lynwood, California
- Design for Motor Control Center Replacement for Eagle Canyon Reservoir,
 Crescenta Valley Water District, La Crescenta, California

David Noellsch, PE Project Engineer



Professional Registration

 Control Systems Engineer, California, No. CS 7576

Education

 Bachelor of Science, Mechanical Engineering, University of Missouri-Columbia, Columbia, Missouri

Training and Development

- PMSJ Project Management Bootcamp
- CPR Certified
- Overhead Power Line Safety Training
- Oilfield Hazard Awareness Training (H2S Awareness, Basic Arc Flash Safety, Confined Spaces, etc)

Professional Affiliations

 American Society of Mechanical Engineers

Specialized Software Skills

- PLC Software: Allen-Bradley RSLogix500, RSLogix 5000, Studio 5000, Siemens S7
- HMI Software: Rockwell FactoryTalk View SE/ME, Siemens WinCC

David will provide services from our San Luis Obispo office As a Project Engineer, Mr. Noellsch is responsible for working as part of the design team to create drawing packages, including P&IDs, PFDs, loop drawings, and panel layouts. He assists Senior Engineers with creating specification packages, selects system components optimally suited for client projects and designs, creates instrumentation data sheets (cut sheets), and obtains quotes from vendors for material cost estimates.

In addition to providing status updates to the Project Manager, Mr. Noellsch will coordinate system design and instrumentation selection with the Electrical Engineer, attend design review meetings with clients, and create control narratives to define how systems and processes should operate. Other tasks include creating cause-and-effect charts to define system alarms and shutdowns; programming PLC logic (taking into account functions required, safety, process optimization, and industry best practices); programming (or assisting) HMI design to client standards while considering industry best practices; and (where mechanical design is involved) conducting pipe stress and hydraulic analyses.

Select Project Experience Summary

- SCADA Evaluation Las Virgenes Municipal Water District, Calabasas, California
- Suburban Water Systems—Preliminary SCADA Assessment Study and SCADA Master Plan, Covina, California
- Design for Wastewater Collections SCADA Upgrades, Paso Robles, California
- On-Call I&E Services North of River Sanitation District, Bakersfield, California
- I&E Services, Delano, California
- I&E Services Operations and Maintenance Sentinel Peak Resources LLC, Arroyo Grande, California
- I&E Services Warren Resources, Long Beach, California
- Electrical Facility Studies, Kern County, California
- Design for Wastewater Collections SCADA Upgrades, Paso Robles, California
- Assessment of SCADA Systems Golden State Water Company, Los Angeles, California
- Design for Pinewood Booster Station Electrical System Golden State Water Company, Santa Maria, California
- Design for Surface Water Treatment Plant, Kettleman City, California
- Design for Mound Well No. 2, Ventura, California
- Well No. 22 SCADA Integration, Solvang, California
- Design for Wastewater Facilities, Collection System Integration, and SCADA Upgrades, McFarland, California
- Design for Zodiac Aerospace PLC/HMI Programming, Santa Maria, California
- SCADA System Master Plan, Golden State Water Company, Los Angeles, California
- Preliminary Design for SCADA System, Norwalk, California
- Design for American Water SCADA Upgrades, Vandenberg, California
- Design for Water Resource Recovery Facility, San Luis Obispo, California
- Design for Recycled Water Pump Station Upgrades, Simi Valley, California
- Design for Water System SCADA Upgrades, San Luis Obispo, California
- Design for Industrial Wastewater Treatment Plant, Wasco, California

Taylor Groos, EIT Project Engineer



Professional Registration

Engineer-in-Training, California,
 No. 159743

Education

 Bachelor of Science, Electrical Engineering, California State University Chico, Chico, California

Software Skills

- PLC Programming— 2010
- HMI Programming
- AutoCAD
- Ladder Logic
- Rockwell
- RSLogix/Studio

Certifications

- First Aid/CPR
- OSHA Confined Space Entry

Mr. Groos provides Instrument and Controls Engineering services on various teams to support the ongoing improvements and development of water resource, wastewater, energy, manufacturing, and industrial facilities. Mr. Groos actively supports and learns to design and build computer system interfaces. He is adept at building client relations and manages oversight of contractors. Mr. Groos is experienced in designing, developing, installing and managing equipment which is used to monitor and control engineering systems, machinery and processes. He specializes in programming line controls, process controls, and HMI.

On-Call A&E Services, Golden State Water District, Various Locations, California: Cannon was selected to be an on-call automation and electrical design engineer for Golden State Water Company for an indefinite term. Services have included SCADA and electrical engineering services, water balances, water system design, groundwater impact analysis, plans and specification preparation, water system upgrades, facility master planning, and regulatory compliance. Mr. Dutcher serves as Project Engineer. Specific project work has included:

SCADA Assessment: Cannon conducted field investigations across seven
districts and 37 service areas to provide an in-depth assessment of existing
SCADA infrastructure. We evaluated the hardware, software, telemetry, and
instrumentation against industry best practices. Additionally, GSWC was extremely
concerned about cyber-security issues and limitations within their current systems.
We conducted cyber-security evaluations to determine the security posture and
opportunities for improved protection of their system

American Water On-Call SCADA Upgrades, Vandenberg Air Force Base, Lompoc, California: In 2016, American Water Operations & Maintenance, Inc. assumed responsibility for Vandenberg AFB's water system and wished to eliminate deviations from normal operations and current industry best practices. Mr. Groos provided controls engineering services.

- Capital Projects: Cannon was selected to upgrade the existing SCADA system and install control systems at new sites to allow operations staff to monitor/operate the system in real-time from remote workstations. The scope of work included 14 water sites, 2 treatment facilities, and 4 lift stations. Cannon created and implemented standardized PLC and HMI functionality common across the water and wastewater facilities. Additionally, Cannon performed a telemetry assessment and radio path survey for all the sites. The telemetry assessment evaluated 3 different alternatives for radio communication: existing UHF frequency, new 900MHz frequency, or cellular communication.
- Design-Build Services: Design-build services for this project included design, fabrication and programming, Factory Acceptance Testing (FAT), installation and commissioning, Site Acceptance Testing (SAT), communication testing, Operations training, as-built drawings, and more.

Select Project Experience Summary

- SCADA Evaluation Las Virgenes Municipal Water District, Calabasas, California
- Suburban Water Systems—Preliminary SCADA Assessment Study and SCADA Master Plan, Covina, California
- Design for Wastewater Facilities, Collection System Integration, and SCADA Upgrades, McFarland, California

Taylor will provide services from our San Luis Obispo office

Rajesh Kumar Senior Automation Specialist



Education

- Electrical, Electronic, and Computer Controls Certificate, Iowa State University, Ames, Iowa
- Mechanical Technician Certificate,
 City and Guilds London Institute
- Diploma in Mechanical Engineering, Fiji Institute of Technology, Samabula, Fiji
- CWEA Electrical Instrumentation
 Grade 2 and Grade 3 Certification
- CWEA Mechanical Technologist Grade 3 Certification

Professional Affiliations

- International Society of Automation
- California Water Environment Association

Specialized Software Skills

- PLC Software: Allen-Bradley
 PanelBuilder, RSLogix5, RSLogix500,
 RSLogix5000, and Studio 5000
- HMI Software: Wonderware
 System Platform and InTouch,
 Rockwell Automation FactoryTalk
 View ME/SE, RSView32, Intellution
 (Fix32 and iFix)
- <u>Fieldbus Applications</u>: Profibus,
 DeviceNet, ControlNet, and
 Modbus
- 4-20mA and Hart calibration devices

Raj will provide services from our San Luis Obispo office As a Senior Automation Specialist, Mr. Kumar provides significant SCADA support services. He is responsible for radio/telemetry installation, testing, commissioning, and troubleshooting; PLC control panel fabrication and installation; SCADA system troubleshooting; instrumentation calibrations; and reporting/alarm management. In addition, Mr. Kumar provides SCADA programming, PLC programming, and SQL data management/storage.

Select Project Experience Summary

- SCADA Evaluation Las Virgenes Municipal Water District, Calabasas, California
- Suburban Water Systems—Preliminary SCADA Assessment Study and SCADA Master Plan, Covina, California
- On-Call I&E Design Services, County of San Luis Obispo, Various Locations,
 California
- Design-Build SCADA Project, Golden State Water Company, Orange County, California
- Design for Phase 1 Wastewater Treatment Plant Upgrades, Laguna County Sanitation District, Santa Maria, California
- Design for Water System SCADA Upgrades, San Luis Obispo, California
- Design for Water and Wastewater System SCADA Upgrades, Pismo Beach, California
- Design for Lopez Turnouts SCADA System Project, Arroyo Grande, California
- Preliminary Design for SCADA System, Norwalk, California
- SCADA Maintenance and Repair Services for California Mens Colony, San Luis Obispo, California
- I&E Services for Mission Hills Community Services District (MHCSD), Lompoc,
- I&E Services for Whale Rock, San Luis Obispo, California
- On-Call I&E Design Services for Water System and Upland Well, Solvang, California
- Design for Wastewater Facilities, Collection System Integration, and SCADA Upgrades, McFarland, California
- Design for American Water SCADA Upgrades, Vandenberg, California
- Fort Hunter Liggett Water System SCADA Upgrades, King City, California
- Programming Consultation, Livermore, California
- SCADA Master Plan, Livermore, California
- Design for BVARA Wastewater Treatment Plant Facility Upgrades, Kern County, California

Wastewater Treatment Plant Instrumentation and Electrical Upgrades, Livermore, California: During his time with the City of Livermore as the Electrical & Instrumentation Coordinator, Mr. Kumar assisted with the upgrade of aging electrical and instrumentation systems at the City's WWTP as well as the installation of a city-

wide radio telemetry system that feeds real time data back to the plant.



Time Availability

Our Automation and Electrical Engineering team currently holds active I&E Service/Design contracts with several agencies as demonstrated in our related projects section. Current availability for our proposed personnel is as follows:

Dave Dutcher, PE Project Manager





34% Availability

Jeff Spannbauer, PE Principal-in-Charge



Taylor Groos, EIT

Project Engineer



Derek Romer, PE QA/QC and **Electrical Engineer**

Senior Automation Specialist



15% Availability

David Noellsch, PE Controls Systems Engineer









Raj Kumar



30% Availability

38% Availability

41% Availability

Proposed Completion Schedule

sk 1 - Preliminary Design (50%)	AND RESIDENCE OF THE RESIDENCE					
Kickoff Meeting	September 1, 2020					
Preliminary Design Workshop	September 8, 2020					
Preliminary Design Submittal	September 30, 2020					
Preliminary Design Review	October 7, 2020					
ask 2 - Final Design (90%/100%)						
Address Preliminary Design Comments	October 14, 2020					
90% Design Submittal	November 11, 2020					
90% Design Review	November 18, 2020					
Address 90% Design Comments	November 25, 2020					
100% Design Submittal	December 9, 2020					
ask 3 - Bidding Services						
Bid support	December 9, 2020 - January 12, 2021					
Contractor Selection Support	January 12, 2021					
ask 4 - Construction Support						
Respond to RFIs	TBD					
Respond to Submittals	TBD					
Software Workshop 1	April 1, 2021					
Software Workshop 2	July 1, 2021					
FAT	September 20 - October 1, 2021					
SAT/Commissioning	November 5 - November 19, 2021					
Finish	November 19, 2021					

5.

Base Bid Quotes & Labor Rates

Accounting Specialist/Admin Assistant	\$ 45	-	\$ 65
Business Services Administrator I - III	\$ 62	-	\$ 72
Business Services Coordinator I - II	\$ 52	-	\$ 57
Associate Engineer	\$ 140	-	\$ 175
Automation Design/Project Engineer	\$ 115	-	\$ 135
Automation Specialist	\$ 135	-	\$ 145
Automation Technician	\$ 95	-	\$ 105
Clerical Assistant I - II	\$ 60	-	\$ 65
Design Engineer	\$ 110	-	\$ 130
Engineer Tech	\$ 98	-	\$ 108
Engineering Assistant I - II	\$ 80	-	\$ 95
I&E Construction Coordinator I - II	\$ 93	-	\$ 114
I&E Services Coordinator	\$ 80	-	\$ 90
Information Systems Admin/Manager	\$ 75	-	\$ 115
Lead Automation Specialist	\$ 147	-	\$ 157
Lead Automation Technician	\$ 105	-	\$ 115
Lead Designer	\$ 100	-	\$ 122

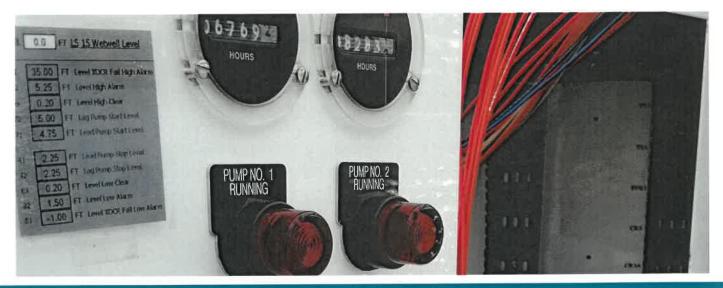
Principal Designer	\$ 110	-	\$ 134
Principal Engineer	\$ 170	-	\$ 202
Project Coordinator I - II	\$ 88	-	\$ 104
Project Designer	\$ 83	-	\$ 120
Project Engineer	\$ 120	-	\$ 145
Project Manager / Sr. Principal	\$ 195	-	\$ 220
Sr. Associate Engineer	\$ 150	-	\$ 180
Sr. Automation Specialist	\$ 163	-	\$ 170
Sr. Automation Technician	\$ 126	-	\$ 136
Sr. Principal Designer	\$ 110	-	\$ 150
Sr. Principal Engineer	\$ 180	-	\$ 230
Sr. Project Designer	\$ 105	-	\$ 130
Sr. Project Engineer	\$ 130	-	\$ 155
Sr. Project Manager	\$ 190	-	\$ 213
Electrical - Prevailing Wage			
Electrician			\$ 158

All of the above hourly rates include all direct labor costs and labor overhead, general and administrative expenses and profit.

Other Direct Charges

Black Line Plots	\$2.00 per page	Color Plots	\$5.00 per page
Outside Reproduction	Cost + 15%	Travel and Related Subsistence	Cost + 15%
Automation & Electrical Materials	Cost + 10% (+tax)	Standard Mileage Rate	IRS Rate per mile
Subconsultant Fees	Cost + 10%	Airplane Mileage Rate	GSA Rate per mile

All direct expenses, such as special equipment, shipping costs, travel other than by automobile, parking expenses, and permit fees will be billed at the actual cost plus 15%. If the client requests, or the client's schedule requires work to be done on an overtime basis, a multiplier of 1.5 will be applied to the stated rates for weekdays for daily hours in excess of 8 as well as weekends and a multiplier of 2.0 for daily hours in excess of 12 and holidays. If the client requests field services to be provided outside of normal working hours (between 6:00 p.m. and 6:00 a.m.), a multiplier of 1.5 will be applied to the stated rates. For prevailing wage projects, if the client requests field services to be provided on any given Sunday, a multiplier of 2.0 will be applied to the stated rates and on or around an observed holiday, other rates may be applied. Survey Crews and Automation Field staff are billed portal to portal, and mileage charges are included in the hourly rate. A minimum charge of 4 hours will be charged for any Automation Field Service calls outside of normal working hours (between 6:00 p.m. and 6:00 a.m.). The stated rates are subject to change, typically on an annual basis.



List of References

Below is a list of clients we've worked with in the past who can attest to our commitment to excellence, reliability, and responsiveness. Please feel free to contact them as you see fit.

Golden State Water Company

On-Call A&E Services, Various Locations, California Ernie Gisler, PE, Capital Program Manager 3035 Prospect Park Drive, Suite 60, Rancho Cordova, CA 95670 ☎ 916.853.3634 ⊠ eagisler@gswater.com

Cannon was selected to provide on-call automation and electrical design engineering services for Golden State Water Company for an indefinite term. Services have included SCADA and electrical engineering services, water balances, water system design, groundwater impact analysis, plans and specification preparation, water system upgrades, facility master planning, and regulatory compliance. Specific project work has included the following:

SCADA Assessment: Cannon conducted field investigations across seven districts and 37 service areas to provide an in-depth assessment of existing SCADA infrastructure. We evaluated the hardware, software, telemetry, and instrumentation against industry best practices.

Additionally, GSWC was extremely concerned about cyber-security issues and limitations within their current systems. We conducted cyber-security evaluations to determine the security posture and opportunities for improved protection of their system.

- SCADA Master Plan: Cannon followed up the SCADA Assessment with a SCADA Master Plan. We leveraged the information collected during the SCADA Assessment to develop a 10-year road map for SCADA across the company. The SCADA Master Plan identified the following standards and actions:
 - Company standardized SCADA templates,
 - Company cyber-security recommendations and implementation matrix;
 - Company disaster recovery plan;
 - Company staffing plan; and a
 - Company SCADA execution plan

City of San Luis Obispo

Water Distribution SCADA System Upgrade, San Luis Obispo, California

> Miguel Barcenas, Utilities Engineer City of San Luis Obispo, 879 Morro Street, San Luis Obispo, CA 93401 2 805.781.7215

The City of San Luis Obispo's Water Distribution Division wished to install a SCADA system to control their water conveyance system as well as their distribution system. The conveyance

system consists of an earthen reservoir, two tank reservoir systems, and two booster station sites. The Water Distribution system consists of 23 distributed and remote sites including: booster pumps, reservoirs, and pressure reducing stations. Cannon was selected to design the new SCADA system and prepare Plans, Specifications, and Engineer's Estimate (PS&E's) for the project. The PS&E's include a radio path study, network design, IO panel design, loop drawings, single lines, site layouts, control narrative, a master tag list, GE Fanuc iFIX server and historian specification, HMI screen layout with functionality, and required reports.

City of Norwalk

SCADA System Assessment and Design, Norwalk, California Eldon Davidson, City Engineer (Buckman Associates) 12700 Norwalk Boulevard, Norwalk, CA 90650 ☎ 562.929.5700
☑ eldon@bucknam.net; eldond48@gmail.com

Cannon performed a SCADA Assessment for the City of Norwalk that targeted a system with minimal existing SCADA infrastructure. We conducted site assessments and performed radio path surveys at all 28 site locations as well as evaluated

field instrumentation, control system functionality, and telemetry across the city.

As part of this evaluation, we objectively evaluated PLC and HMI vendor solutions based on City functional needs and life-cycle costs. Additionally, we evaluated multiple telemetry solutions and provided a recommendation for the best telemetry solution heading into the future. Cannon continues to work with the City to develop future SCADA implementations.



Other Relevant Information

Why Cannon?

44

TEAM STATISTICS

100+ 5

50+

40+

years in business years of design experience water agency / municipal clients professional engineers

Since 1976, Cannon has been committed to providing engineering services. Our reputation is a direct result of our consistent attention to our clients' needs. Eighty percent of our firm's business is from repeat clients who trust in our integrity, as well as our professional competence. We have the expertise, experience, and capabilities to meet your needs as demonstrated in the qualifications and experience detailed in this proposal. However, the real proof of this expertise is found in what our past and current clients have to say:

I would like to thank you for the superior service you provided the District. Your support was instrumental in restoring the lift station to operations. Your unselfish giving of your off time was noted by all and highly appreciated. The service and expertise you displayed were nothing short of superior. Thanks again for all your assistance. We look forward to working with you in the future.

- Mike Riley, General Manager, Mission Hills Community Services District

I've found [Cannon's] engineers to be extremely professional, diligent, and knowledgeable. I have been pleased with the services provided by Cannon and trust their knowledge and expertise in supporting Ventura with the City's capital improvements.

Chris Dejarme, PE, Senior Civil Engineer, City of Ventura

The projects that Cannon worked on for CVWD were on time and within budget. I have been pleased with the services provided by Cannon. I've found their personnel to be extremely thorough, diligent, and knowledgeable. I'd recommend their engineering consulting services without hesitation.

David Gould, PE, District Engineer, Crescenta Valley Water District

Local Team and Leadership

Cannon's engineers, construction managers, surveyors, and landscape architects are local to the Central Coast of California and our key team members work out of our San Luis Obispo offices. We are capable of meeting within short notice to assist with any need or request. We can provide a range of project support services from concept, to design, to construction.

Our long-standing relationships with adjacent City and County municipalities and surrounding agencies means that we understand local regulations. As a multidisciplinary firm, our team is able to provide integrated services that offer creativity, efficiency, and a high-level of technical expertise, which will provide valuable resources for facilitating our on-call services for CCWA.

Approach to Managing Resources

At Cannon, we take a proactive approach to project management with an emphasis on project familiarity, open communication, quality and cost control, and efficient project scheduling. We value these components as being equally important in the successful implementation and completion of our clients' projects.

Typically, all projects start with project research and reconnaissance to confirm the needs of our client, and to become completely familiar with site specifics, the scope of work, and the individual roles of the project team members. Open communication with the involved parties and agencies extends through each phase of a project. We use a comprehensive internal quality and cost control program based on peer review and weekly progress reporting to confirm that projects are meeting the established design guidelines, are within budget, and stay on-schedule.

Additionally, we bring substantial experience in other engineering disciplines (Civil, Electrical, Mechanical, Structural), Surveying, and Construction Management, which supports our clients and provide solutions to other unforseen challenges. For example, electrical permit drawings, electrical coordination, and/or arc-flash studies can be provided to support new electrical installations. If structural analysis is required at a facility, we can also provide the services of licensed structural (SE) engineers. To help CCWA achieve the completion of its projects, we are offering fully in-house services for instrumentation and controls/SCADA tasks as well as electrical engineering. Cannon can provide the full range of services you are requesting in the RFP, which include the following considerations:

Familiarity with Project Type

Our project team has a successful history of collaborating with our clients and providing specialized SCADA engineering and integration designs, technical assistance related to upgrade options, paths, and selection criteria for the existing SCADA system. As an integrator, we partner with our clients to develop a modern, functional, efficient, cohesive, standardized, and secure solution for a variety of automation infrastructure for both water and wastewater facilities. We have the knowledge and experience

designing to current standards and codes and will support clients throughout the process of selection, detailed design criteria, construction, and implementation.

Communication

We maintain open communication with all involved parties and agencies so that CCWAs expectations for design, construction, and future maintenance are understood and taken into consideration. Defined lines of communication between specifically named individuals will be established from the project onset.

Project Management

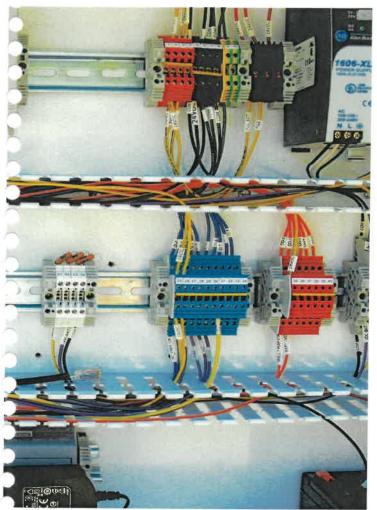
We understand the importance of meeting project schedules and deliverable deadlines. To assist in this area, we use Deltek Vision Management System as our accounting and project management database. With this system, we have detailed records of labor, subconsultant, and other direct costs and breakdowns by task and project milestones; the records are organized by project.

This software allows Cannon's project managers to employ an Earned Value Analysis (EVA) program for many of our more complex projects. Budgets and progress are reviewed monthly, and EVA's are performed as required by the project schedule: monthly, biweekly, or weekly. EVA is a method for managing projects based on the regular comparison of actual project costs to planned costs and to completed work. The phrase "earned value" comes from the concept that when a deliverable is completed, its value has been earned.

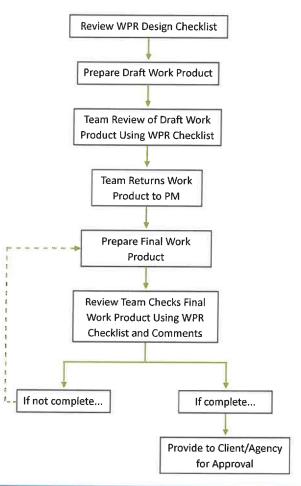


Quality Assurance/Quality Control

We believe quality means doing work right the first time, preparing a set of plans from which the Contractor can actually build, and reducing and hopefully eliminating the number of RFIs and plan clarifications. We have built and continue to develop a comprehensive internal control process to provide the highest level of quality to save our clients time and money. If you wish to learn more about these processes, please let us know.



Overview of Cannon's Quality Assurance/Quality Control Program



Examples of Cost Control and Cost Estimating Success

City of Norwalk SCADA Assessment

Cannon provided regular communication with the City's project manager about project status and budget. Multiple workshops were conducted to provide maximum transparency and understanding for City staff with regard to our assessment approach and recommendations. We identified and resolved change items as required with proactive communication with the City's project manager. As part of our assessment, we provided cost estimates for SCADA design and upgrade improvements, which will be rolled into the City's future SCADA upgrade project.

City of San Luis Obispo Water System SCADA Upgrades

Cannon provided the design for the City of San Luis Obispo Water SCADA system. As part of that design, we provided an Engineering Cost Estimate for the SCADA upgrade of all water distribution sites (total of 32 Sites). Our cost estimate was \$1.3M, and the Final Construction Bid was \$1.1M.

Summary of Automation and Electrical Services

Design, Integration, and Field Service

SCADA and HMI Development, Troubleshooting, and Upgrades

- Ignition
- RSView32
- FTView ME
- FTView SE
- Win 911
- Wonderware InTouch
- Wonderware System Platform
- Wonderware Historian
- Wonderware DreamReports
- Wonderware MES
- ClearSCADA
- Red Lion Crimson
- Siemens WinCC
- GE iFix/Intellution
- KepWare KepServer
- Visual Basic
- C/C+

PLC Programming, Troubleshooting and Modifications

- Modicon Unity Pro
- Modicon Concept
- Modicon ProWorx32
- RSLogix 500
- RSLogix 5000/Studio 5000
- Connected Components
 Workbench
- DirectLogix
- Siemens S7

SCADA Networks Design, Implementation, and Troubleshooting

- SCADA Security Assessments
- Fiber optic network design and implementation
- Redundant/ring network topology design and implementation
- Fieldbus networking
 - Ethernet
 - DeviceNet
 - ControlNet
 - DH+

Telemetry Design, Studies, Implementation, and Troubleshooting

- Radio Path Surveys
- Telemetry Assessment Reports
- Telemetry Installation and Integration
 - GE MDS
 - Ubiquity
 - Phoenix Contact

Control Narratives

- Cause-and-Effect Charts
- Logic Diagrams

Instrumentation Design, Installation, Calibration and Troubleshooting

- Flowmeters (E+H, Rosemount, Krohne, McCrometer)
- Pressure transmitters (Rosemount, E+H)
- Level transmitters (Siemens, E+H, Rosemount)

VFD Design, Integration, and Troubleshooting

- Allen Bradley Powerflex 700
- EATON SVX9000
- Square D Altivar
- ABB

Control Valves/Actuator Design, Integration and Troubleshooting

- Rotork
- Auma
- Limitorque
- Fisher
- CLA-VAL

Process Optimization

- Power Monitoring and Logic integration to SCADA
- Process cost optimization

Panel Fabrication

System Integration and Startup Support

Process Control Troubleshooting and Analysis

Record Drawings/System Documentation

Factory & Site Acceptance Testing

Control System Training





September 15, 2020

John Brady Deputy Director Central Coast Water Authority 255 Industrial Way Buellton, CA 93427

PROJECT: CCWA POLONIO PASS WTP - PLC REPLACEMENT PROJECT

Dear Mr. Brady,

We are pleased to learn that Central Coast Water Authority (CCWA) has selected Cannon to partner with your team for the Polonio Pass Water Treatment Plant (WTP) PLC Replacement Project. We look forward to working closely with you so that your November 2021 shutdown is as successful as possible.

We understand that in replacing CCWA's Quantum PLCs, there already exists a path for implementation of the new redundant Modicon M580 platform. We trust and respect the expertise of the Schneider Electric and Graybar distribution team and understand the value that they bring to this PLC project upgrade. We will actively include the Schneider and Graybar Application Specialists in our design, including the opportunity to provide QA/QC review.

We will incorporate a proven hardware and network approach as well as details for software implementation and migration to confirm the best results for the project. We recognize that a detailed prescriptive design control narrative and software implementation plan will be required.

We recognize that there is a lot of work between now and then. This letter proposal is to supplement our proposal response to CCWA's RFP. This will detail the scope and fee associated with Cannon's work.

I will follow up with you this week to further discuss this proposal.

Sincerely,

David M. Dutcher, PE*

Senior Principal Engineer, Control Systems

Automation and Electrical Division

*CA - CS 7615

*OR - CS 78629



SCOPE OF WORK

This scope of work was developed from RFP documents and previous conversations between Cannon and CCWA. As mentioned in our original proposal, the success of this project is highly dependent upon meeting one primary goal: upgrade of the plant PLCs during the November 2021 shutdown.

To achieve that goal, Cannon will provide the following tasks supporting the Design and Implementation of the upgraded PLCs.

Task 1. On-Site Technical Review of Existing PLC + SCADA

- Kickoff meeting prior to site visit
 - o Ensure all stakeholders understand the schedule and anticipated milestones
- Site Visit
 - Collect detailed physical layout and dimensional information
 - o Collect image of ClearSCADA application for replication at Cannon office
 - Collect backups of PLC programs
- Design workshop with CCWA stakeholders
 - Validate control narratives provided with RFP
 - o Identify the PLC programming software targets/standards
 - Identify networking/communication changes for PLC-to-PLC and PLC-SCADA

Task 2. Review of existing PLC and SCADA

- Cannon will review the ClearSCADA application to understand and validate the functionality that must return after the PLC upgrade.
 - Identify the current and new tag approach, as applicable
 - Identify the tags required per screen, and detail for test forms
- Cannon will provide a cursory review the ProWorx32 PLC program to validate the existing functionality against the control narratives.
- Cannon will perform a gap analysis between the ProWorx32 and UnityPro PLC programs.
 - We will partner with Schneider Electric in using UMAC conversion tool and identify the gaps in the conversion process.
 - Establish new communication paths, networks and protocols for new M580 hardware and Remote I/O approach.

Task 3. Drawing Preparation

- Cannon anticipates that the design effort will be broken into a Preliminary (50%) Design, 90% Design, and Final Design.
 - Each design milestones will have both internal QA/QC and client review.
 - The Final Design package will be packaged for the Bid phase of work.
- Design Package will include the following deliverables, at a minimum:
 - Network Architecture
 - Overview network diagram
 - Network diagram per panel
 - PLC Panel drawing updates
 - Panel layouts



- Panel demolition layouts
- Panel power diagram updates
- Loop Diagrams
 - Per I/O module

Task 4. Specification Preparation

- Cannon anticipates that the Front-End specifications will be provided by CCWA. Cannon will review and further develop the special conditions applicable to this project.
- Cannon will develop a small technical specification package for the 90% Design and Final Design deliverables.
 - Specification package shall address installation, testing and start-up requirements.
 - Cannon will sole-source the PLC hardware consistent with the PLC hardware in CCWA's possession and provide the sole-source justification.
- Specifications will include updated control narrative and direction for all testing and test plans.

Task 5. Project Budget Estimate

 Cannon will provide an Engineer's Budget Estimate for each phase of design, finalizing this prior to the bid package.

Task 6. Project Schedule

- Cannon will provide an initial project schedule at the Kickoff meeting.
- We will update the schedule for each phase of design, finalizing this prior to the bid package.

Task 7. Testing and Documentation

- Cannon will provide baseline testing standards for the contractor, including detailed FAT and SAT testing forms.
- Cannon will provide the detailed testing forms, which will be the basis of validation of all plant functions.

Task 8. Bid Package Preparation

- Cannon will partner with CCWA to assemble the Bid package.
- We will answer Request For Information (RFI) submittals.
- o We will provide addendum, as required
- We will update the schedule for each phase of design, finalizing this prior to the bid package.

Task 9. Construction Services

- Cannon will provide engineering services during construction which will include the following:
 - Review contractor submittals
 - Review/answer RFIs
 - Twice monthly coordination meetings
 - Development of Test Plans
 - Software Workshop 1



ASSUMPTIONS

Our fee for this work is based on the following assumptions:

- We will be given accurate electronic copies of the as-built drawings and PLC programs for the existing facilities. If as-built drawings or programs do not reflect the installed condition, this could increase the time to make modifications, should they be required.
- Working time shall be eight hours, Monday-Friday. If deviations to this schedule are required, additional labor may be required. We can shift the work as necessary with prior coordination.
- The fee estimate assumes that no COVID-19 restrictions will limit Cannon's ability to access the plant.
- Design workshop will provide validation of control narrative, which will serve as basis for the project. If PLC logic and operation is different from the listed control, additional fees may be required to update the control narrative accordingly.
- FAT will be performed at Cannon's SLO office, using our System Integration Lab servers for replica of ClearSCADA application. This also assumes that Cannon will not require special ClearSCADA licensing to run the application.
- Existing telemetry and network connections will be re-used to SCADA servers, Plant PLCs, Pump Station PLCs and Remote I/O (RIO) panels.
 - The existing coaxial cables to Remote I/O (RIO) will be abandoned in place.
 - The existing Ethernet infrastructure (fiber optic/copper network cabling) is assumed to be sufficient to create PLC-RIO specific network(s), as needed.
 - The telemetry hardware and links to remote sites will remain as existing to remote sites (i.e. pump stations and turn-outs).
- Existing power and UPS will be re-used in the PLC panels. It is assumed the power requirements will not change significantly for the design. If agency would like to modernize or update the UPS units, this will require additional material and labor fees.
- Panel layout drawings will provide dimensional layout of new PLC components and a separate drawing for demolition of existing PLC components. The layout drawing will be developed in AutoCAD with scaled images of existing panels to be used as the backgrounds.
- Services in this proposal apply through June 30, 2021. A subsequent proposal and fee will
 cover work for this project after that date.
- Terms and conditions are based on Attachment C Professional Engineering Services Agreement in the Request For Qualifications dated June 2, 2020.



FEES

Project will be billed on a fixed fee basis. Additional work not covered in the above scope of work will be billed as an addendum to this proposal on an Additional Services Agreement with prior written authorization from CCWA. The fees are not based upon current California Prevailing Wages.

Cost Summary	Hours	Price
Cannon Labor		
Task 1 - On-site Technical Review at CCWA	76	\$ 14,112.50
Task 2 - Review Existing PLC/SCADA	216	\$ 36,030.50
Task 3 - Drawing Preparation	356	\$ 57,520.50
Task 4 - Specification Preparation	70	\$ 18,329.50
Task 5 - Project Budget Estimate	40	\$ 7,564.50
Task 6 - Project Schedule	44	\$ 8,344.50
Task 7 - Testing & Documentation	188	\$ 30,654.50
Task 8 - Bid Package Preparation	80	\$ 13,342.50
Task 9 - Construction Support thru Jun 2020	154	\$ 27,212.00
Total (Services)	1,224	\$ 213,111.00



CENTRAL COAST WATER AUTHORITY MEMORANDUM

September 17, 2020

TO: CCWA Board of Directors

FROM: John Brady

Deputy Director, Operations and Engineering

SUBJECT: Budget Transfers for Various Projects

BUDGET TRANSFER REQUEST

There are three projects that were over-budget in FY 2019/2020, but are balanced by numerous projects that were completed under-budget. To provide clarity for the year-end carryover process and to ensure there are sufficient funds to cover the over-budget projects, several budget transfers are requested. Only one of the three projects will be carried over into FY 2020-2021, with all other projects being closed.

The proposed Budget Transfers are presented in the Table below:

Reach	Project	Deficit	Carryover?	Transfer Source of Funds	Reach	Project	Amount of
	Number					Number	Transfer
WTP	E-19SOLAR	\$8,082	No	Lagoon A Inlet Valve Repair	WTP	E-19LAIVRP	\$8,082
WTP/33B	E-19TKINSP	\$10,566	Yes	Pavement Slurry Seal Tank 2	33B	E-18PAVET2	\$10,566
WTP/DIST	E-19RISKRS	\$25,877	No	Pavement Slurry Seal Tank 2	33B	E-18PAVET2	\$25,876
	WTP WTP/33B	Number	Number \$8,082 WTP/33B E-19TKINSP \$10,566	Number Number WTP E-19SOLAR \$8,082 No WTP/33B E-19TKINSP \$10,566 Yes	Number S8,082 No Lagoon A Inlet Valve Repair WTP/33B E-19TKINSP \$10,566 Yes Pavement Slurry Seal Tank 2	Number Lagoon A Inlet Valve Repair WTP WTP E-19SOLAR \$8,082 No Lagoon A Inlet Valve Repair WTP WTP/33B E-19TKINSP \$10,566 Yes Pavement Slurry Seal Tank 2 33B	Number Number WTP E-19SOLAR \$8,082 No Lagoon A Inlet Valve Repair WTP E-19LAIVRP WTP/33B E-19TKINSP \$10,566 Yes Pavement Slurry Seal Tank 2 33B E-18PAVET2

RATIONAL

Siemens Solar Project Evaluation, E-19SOLAR. Siemens approached CCWA staff with a proposal to construct a solar panel electrical system at the Polonio Pass Water Treatment Plant. After consideration, CCWA staff conducted a preliminary analysis of the proposal and subsequently presented the proposal to the CCWA Operating Committee in March 2020. The Operating Committee offered suggestions related to additional analysis of the proposal and also indicated that they were open to further consideration of the proposal. Following up on suggestions, CCWA staff conducted additional research and analysis of the proposal and ultimately presented the proposal to the Board in April 2020. The Board authorized staff to proceed with retaining engineering and legal services related to negotiating a Project Development Agreement with Siemens, with a budget of \$20,000. Although the Board authorized the budget, staff needed to identify a source of funds. This budget transfer will transfer excess funds from the completed Lagoon A Inlet Valve Repair Project to cover the cost of the engineering services for the project.

Tank Inspection of the WTP Clearwell and Tank 2, C-19TKINSP. The recommended inspection frequency for potable water tanks is every five years. This project involves having a dive inspection performed for each of these tanks, which are due for inspection. The budget was developed based on the costs of prior dive inspection projects. However, following a competitive bidding process, the cost to complete these dive inspections was well over the budgeted amount. Staff would like to move forward with inspection of both tank sites due to the recommended inspection frequency. This budget transfer will transfer excess funds from the

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Tank 2 Slurry Seal Project (E-18PAVET2) to cover the budget deficit of the dive inspection. This project will be completed in the current fiscal year and therefore will be a carryover project.

Risk and Resilience Assessment, C-19RISKRS. The American Water Infrastructure Act of 2018 requires water agencies to perform a Risk and Resiliency Assessments (RRA) of their water systems and operations and to also update their respective Emergency Response Plans. This task will be required every five years going forward. EPA began implementing the program earlier than anticipated. Once it was clear that CCWA would be required to complete an RRA by March 30, 2020, the FY 19/20 Budget was already approved. Consequently, CCWA staff requested authorization to proceed with work on the project. The Board authorized a budget of \$50,000 and to transfer funds from the Seismic Joint Project to cover the new project budget. Staff initially utilized HDR Engineering to assist with the project. However, once the scope was clear, staff moved forward with completing the project with in-house resources only. This resulted in a reduced costs for the project. Staff would like to change the source of funds for the project to the Tank 2 Slurry Seal Project (E-18PAVET2) rather than the Seismic Joint Project (C-17SMCJNT). The Tank 2 Slurry Seal Project is complete, whereas the Seismic Joint Project is not. This change will preserve the budget for the Seismic Joint Project, which is a carryover project.

DISCUSSION

CCWA staff routinely attempts to complete all projects under budget. However, there are situations where the level of effort for a particular project was under-estimated or conditions changed that created a need for additional effort and resources to complete the project. Since all projects are funded on a current year basis, the only funds available to address an increased need for funds is through a Budget Transfer between projects.

CCWA policy allows for budget transfers of up to \$10,000. Projects that have been completed at costs less than the Project Budget will serve as a source of funds for projects needing additional funding.

In the current Budget Transfer Requests, two are over \$10,000. However, the Tank Inspection Project is only \$566 over the threshold amount. The full cost of this project is concurrently being requested as a carryover project. The requested budget transfer will ensure the requested carryover amount is properly accounted for. In the case of Risk and Resilience Assessment Project, the Board has already approved the Budget Transfer. Staff is only requesting to transfer funds from a completed project, rather than a project that is not complete.

RECOMMENDATION

That the Board:

 Authorize the Executive Director to make the Project Budget Transfers as described in this Report.

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BUDGET CHANGE FORM FY 2019/20 Budget

Date:							
	CIP FUNDI	NG CHA	NGE				
Department: ADMIN □ WTP □ DIST □							
•			\$ Available	\$ Transferred	\$ Balance		
Source(s) of Transfer Funds:							
					\$0		
					\$0		
Destination(s) of Transfer Funds:							
					\$0		
					\$0		
					\$0		
	Total		\$0	\$0.00	\$0		
	O & M FUNI	DING CH	ANGE				
Department:	ADMIN □	WTP	□ DIST				
			\$ Available	\$ Transferred	\$ Balance		
Source(s) of Transfer Funds:							
(1) E-19LAIVRP Lagoon A inlet valve	repair		\$14,224	(\$8,082)	\$6,142		
(2)					\$0		
Destination(s) of Transfer Funds:							
E-19SOLAR Siemens Solar Panel Sy	rstem		(\$8,082)	\$8,082	\$0		
(2)					\$0		
	O&M EXPENSE	ENCUM	BRANCE				
Department:	ADMIN □	WTP	☑ DIST				
					\$ Amount		
O&M Expense Account Name:					φ Amount		
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Current Available Balance:				Amount:			
Encumbrance Amount:				Amount:			
Amended Balance Available:				Amount:	\$ -		
Encumbrance Description:					<u> </u>		
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BUDGET CHANGE FORM FY 2019/20 Budget

Date:	6/19/2020					
	C	IP FUND	ING CHA	NGE		
Department:	ADN	MIN 🗆	WTP	□ DIST		
				\$ Available	\$ Transferred	\$ Balance
Source(s) of Trans	fer Funds:					-
		=====				\$0
						\$0
Destination(s) of Tr	ansfer Funds:					
						\$0
						\$0
						\$0
		Tota		\$0	\$0.00	\$0
	O 8	M FUN	DING CH	ANGE		
Department:	ADN	MIN 🗆	WTP	□ DIST		
				\$ Available	\$ Transferred	\$ Balance
Source(s) of Trans						
(1) Pavement Slurr	y Seal Tank 2 E-18PAVET	2		\$10,565.89	(\$10,565.89)	\$0.00
(2)						
Destination(s) of Tr	ansfer Funds:					
(1) Tank inspection	WTP Clearwells & Tank 2	2 E-19TK	INSP	\$10,500.00	\$10,565.89	\$21,065.89
(2)						
	O&M E	XPENS	E ENCUM	BRANCE		
Department:	ADI	MIN 🗆	WTP	☑ DIST		
						\$ Amount
O&M Expense Acc	ount Name:					
Current Available E					Amount:	
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BUDGET CHANGE FORM FY 2019/20 Budget

Date:	6/19/2020								
		CIP F	UNDI	NG CHAN	NGE				
Department:		ADMIN							
•					\$ Available	\$ Transferred	\$ Balance		
Source(s) of Tran	sfer Funds:								
							\$0		
							\$0		
Destination(s) of	Transfer Funds:								
							\$0		
							\$0		
							\$0		
			Total		\$0	\$0.00	\$0		
		O & M	FUNE	DING CH	ANGE				
Department:		ADMIN		WTP	□ DIST				
•					\$ Available	\$ Transferred	\$ Balance		
Source(s) of Tran	sfer Funds:								
(1) Pavement Slu	rry Seal Tank 2 E-18F	PAVET2			\$36,442	(\$25,876.11)	\$10,565.89		
(2)							\$0		
Destination(s) of	Transfer Funds:								
(1) Risk and Reso	ciliency Study E-19RIS	SKRS			\$0	\$25,876.11	\$25,876.11		
(2)							\$0		
	(O&M EXP	ENSE	ENCUM	BRANCE				
Department:		ADMIN		WTP	☑ DIST				
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