RESOLUTION NO. 2024-44
RESOLUTION NO. PFA-01
ORDINANCE NO. 2024-01

AGENDA

OUR MISSION

Protect, enhance, and develop Calaveras County's water resources and watersheds to provide safe, reliable, and cost-effective services to our communities.

2021-2026 Strategic Plan, Adopted April 28, 2021, and can be viewed at this link

Regular Board Meeting
Wednesday, July 10, 2024
1:00 p.m.

Calaveras County Water District
120 Toma Court
San Andreas, California 95249

Board Chambers are open to the public and the following alternative is available to members of the public who wish to participate in the meeting virtually:

Microsoft Teams meeting

Join on your computer, mobile app or room device

Click here to join the meeting

Meeting ID: 295 957 501 767

Passcode: 922DvY

Download Teams | Join on the web

Or call in (audio only)

+1 323-647-8603,,278504195#

Phone Conference ID: 278 504 195#

In compliance with the Americans with Disabilities Act, if you need special assistance to participate in this meeting, please contact the Administration Office at 209-754-3028. Notification in advance of the meeting will enable CCWD to make reasonable arrangements to ensure accessibility to this meeting. Any documents that are made available to the Board before or at the meeting, not privileged or otherwise protected from disclosure, and related to agenda items, will be made available at CCWD for review by the public.

ORDER OF BUSINESS

CALL TO ORDER / PLEDGE OF ALLEGIANCE

1. ROLL CALL

2. PUBLIC COMMENT

At this time, members of the public may address the Board on any non-agendized item. The public is encouraged to work through staff to place items on the agenda for Board consideration. No action can be taken on matters not listed on the agenda. Comments are limited to three minutes per person.

BOARD OF DIRECTORS

Russ Thomas, President — Bertha Underhill, Vice President
Cindy Secada, Director — Scott Ratterman, Director — Jeff Davidson, Director

3. CONSENT AGENDA

The following items are expected to be routine / non-controversial. Items will be acted upon by the Board at one time without discussion. Any Board member may request that any item be removed for later discussion.

3a Approval of Minutes for the Board Meeting of June 12, 2024
(Rebecca Hitchcock, Clerk to the Board)

3b Review Board of Directors Monthly Time Sheets for June 2024
(Rebecca Hitchcock, Clerk to the Board)

3c Ratify Claim Summary #628 Secretarial Fund in the Amount of $3,165,604.73 for June 2024
(Jeffrey Meyer, Director of Administrative Services) **RES 2024-_____**

4. NEW BUSINESS

4a Presentation of District's Retiree Health Trust Fund and Investment Strategies
(Jeffrey Meyer, Director of Administrative Services)

4b Discussion/Action regarding a Budget Adjustment PBI Engineering Consultants Copper Cove Clearwell and B Tank CIP #11083C
(Kevin Williams, Senior Civil Engineer) **RES 2024-_____**

4c Discussion/Action regarding La Contenta WWTP Improvements Engineering Design Consultant Selection for the Biolac and Clarifier Improvements CIP#15097
(Kevin Williams, Senior Civil Engineer) **RES 2024-_____**

5. REPORTS

5a Report on the June 2024 Operations Department
(Damon Wyckoff, Director of Operations)

5b*. General Manager's Report
(Michael Minkler)

6.* BOARD REPORTS / INFORMATION / FUTURE AGENDA ITEMS

7. NEXT BOARD MEETINGS

- Wednesday, July 24, 2024, 1:00 p.m., Regular Board Meeting
- Wednesday, August 14, 2024, 1:00 p.m., Regular Board Meeting

8. CLOSED SESSION

8a Conference with Legal Counsel – Anticipated Litigation. Significant exposure to litigation pursuant to subdivision (d)(2) of Government Code section 54956.9. - two potential case

9. REPORTABLE ACTION FROM CLOSED SESSION

10. ADJOURNMENT

*No information included in packet

CALAVERAS COUNTY WATER DISTRICT

Board of Directors

District 1	Scott Ratterman
District 2	Cindy Secada
District 3	Bertha Underhill
District 4	Russ Thomas
District 5	Jeff Davidson

Legal Counsel

Matthew Weber, Esq.
Downey Brand, LLP

Financial Services

Umpqua Bank
US Bank
Wells Fargo Bank

Auditor

Richardson & Company, LLP

CCWD Committees / Membership**

*Engineering Committee	Thomas / Davidson (alt. Secada)
*Finance Committee	Secada / Underhill (alt. Thomas)
*Legal Affairs Committee	Ratterman / Davidson (alt. Thomas)
*External Relations Committee	Thomas / Secada (alt. Underhill)
Real Estate Review Committee (ad hoc)	Thomas / Ratterman

Joint Power Authorities

ACWA / JPIA	Ratterman (alt. Michael Minkler)
CCWD Public Financing Authority	All Board Members
Calaveras-Amador Mokelumne River Authority (CAMRA)	Ratterman / Secada (alt: Michael Minkler)
Calaveras Public Power Agency (CPPA)	Michael Minkler (alt. Damon Wyckoff)
Eastern San Joaquin Groundwater Authority	Thomas
Tuolumne-Stanislaus Integrated Regional Water Management Joint Powers Authority (T-Stan JPA)	Underhill (alt. Thomas)
Upper Mokelumne River Watershed Authority (UMRWA)	Davidson (alt. Ratterman)

Other Regional Organizations of Note

Calaveras County Parks and Recreation Committee	Thomas (alt. Ratterman)
Mountain Counties Water Resources Association (MCWRA)	All Board Members
Mokelumne River Association (MRA)	All Board Members
Tuolumne-Stanislaus Integrated Regional Water Mgt. Watershed Advisory Committee to the JPA (WAC)	Kelly Gerkensmeyer (alt: Juan Maya)
Eastern San Joaquin Groundwater Authority-Technical Advisory Committee	Mark Rincon-Ibarra (alt: Sam Singh)

* Standing committees, meetings of which require agendas & public notice 72 hours in advance of meeting.
** The 1st name listed is the committee chairperson.

3a

AGENDA ITEM

3a

MINUTES

CALAVERAS COUNTY WATER DISTRICT
REGULAR BOARD MEETING

JUNE 12, 2024

Directors Present:	Russ Thomas President Bertha Underhill, Vice-President Scott Ratterman, Director Cindy Secada, Director Jeff Davidson, Director
Staff Present:	Michael Minkler, General Manager Matt Weber Esq, General Counsel* Kate Jesus, Human Resources Technician Damon Wyckoff, Director of Operations John Coleman, Water Resources Manager Jeffrey Meyer, Director of Administrative Services Stacey Lollar, Human Resources Manager* Mark Rincon-Ibarra, District Engineer* Joe Darby, Senior Distribution Worker* Haley Airola, Engineering Coordinator* Dylan Smith, IT Administrator* Quentine Smith, IT Technician* Corinne Skrbina, Customer Service* Kate Darby, Customer Service* Michael Bear, Accountant* Kylie Muetterties, Accountant* Kelly Soulier-Doyle, Accounting Technician* Bana Rouson-Gedese, Water Resources Specialist*
Others Present:	Patrick Roy Francisco de la Cruz Robert Owens Michael Rodgers*

*Attended Virtually

ORDER OF BUSINESS

CALL TO ORDER / PLEDGE OF ALLEGIANCE

1. ROLL CALL

President Thomas called the Regular Board Meeting to order at 1:00 p.m. and led the Pledge of Allegiance. All Directors were present.

2. **PUBLIC COMMENT**

Public comment was given by Bertha Underhill, Francisco de la Cruz, and Patrick Roy.

3 **CONSENT AGENDA**

3a Approval of Minutes for the Board Meeting of May 22 and May 29, 2024 (Rebecca Hitchcock, Clerk to the Board)

3b Review Board of Directors Monthly Time Sheets for May 2024 (Rebecca Hitchcock, Clerk to the Board)

Director Secada pulled Item 3c from the Consent Agenda

3c Ratify Claim Summary #627 Secretarial Fund in the Amount of $3,185,548.85 for May 2024
(Jeffrey Meyer, Director of Administrative Services) **RES 2024-_____**

Director Ratterman pulled Item 3d from the Consent Agenda

3d Approval of Whistleblower Protection Policy
(Stacey Lollar, Human Resources Manager) **RES 2024-_____**

MOTION: Director Secada moved to approve the Consent Agenda Items 3a and 3b as presented, Director Ratterman seconded the motion, and it was approved (5-0).

PUBLIC COMMENT: No public comment was heard.

AYES: **Directors Secada, Ratterman, Underhill, Davidson, and Thomas**
NOES: **None**
ABSTAIN: **None**
ABSENT: **None**

OFF CONSENT AGENDA

Director Secada pulled Item 3c from the Consent Agenda

3c Ratify Claim Summary #627 Secretarial Fund in the Amount of $3,185,548.85 for May 2024
(Jeffrey Meyer, Director of Administrative Services) **RES 2024-31**

DISCUSSION: Director Secada recommended a few changes to the Claim Summary report.

MOTION: Director Secada moved to approve the Consent Agenda Item 3c as presented, Director Ratterman seconded the motion, and it was approved (5-0).

PUBLIC COMMENT: No public comment was heard.

AYES: **Directors Secada, Ratterman, Underhill, Davidson, and Thomas**
NOES: **None**
ABSTAIN: **None**
ABSENT: **None**

OFF CONSENT AGENDA

Director Ratterman pulled Item 3d from the Consent Agenda

3d Approval of Whistleblower Protection Policy
(Stacey Lollar, Human Resources Manager) **RES 2024-32**

DISCUSSION: Director Ratterman commended staff for putting this policy in place as a result of the audit.

MOTION: Director Ratterman moved to approve the Consent Agenda Item 3d as presented, Director Davidson seconded the motion, and it was approved (5-0).

PUBLIC COMMENT: No public comment was heard.

AYES: **Directors Ratterman, Davidson, Secada, Underhill, and Thomas**
NOES: **None**
ABSTAIN: **None**
ABSENT: **None**

President Thomas opened the Public Hearing at 1:10 p.m.

4. PUBLIC HEARING

4a Discussion/Action regarding the Adoption of the Fiscal Year 2024-25 Operating and Capital Improvement Plan Budget
(Jeffrey Meyer, Director of Administrative Services) **RES 2024-33**

MOTION: Director Davidson moved to Adopt the Fiscal Year 2024-25 Operating and Capital Improvement Plan Budget, Director Ratterman seconded the motion.

Discussion/Action regarding the Adoption of the Fiscal Year 2024 25 Personnel Allocation Budget
(Jeffrey Meyer, Director of Administrative Services) **RES 2024-34**

DISCUSSION: Mr. Meyer reviewed the items incorporated into the proposed budget since the budget workshop on May 29, 2024. He responded to questions from the Board.

MOTION: Director Davidson moved to Adopt the Fiscal Year 2024 25 Personnel Allocation Budget, Director Secada seconded the motion.

Vice President Thomas closed the Public Hearing at 1:50 p.m.

PUBLIC COMMENT: There was no public comment.

The following votes were taken for the Motion to Adopt the Fiscal Year 2024-25 Operating and Capital Improvement Plan Budget

AYES: **Directors Davidson, Ratterman, Secada, Underhill, and Thomas**
NOES: **None**
ABSTAIN: **None**
ABSENT: **None**

The following votes were taken for the Motion to Adopt the Fiscal Year 2024 25 Personnel Allocation Budget

AYES: **Directors Davidson, Secada, Ratterman, Underhill, and Thomas**
NOES: **None**
ABSTAIN: **None**
ABSENT: **None**

5. **NEW BUSINESS**

5a Discussion/Action on issuing a Contract Amendment to PBI Engineers for Design and Engineering of the Lake Tulloch Intertie Project, CIP#11104
(Sam Singh, Engineering Technician) **RES 202-35**

DISCUSSION: Sam Singh presented the proposed amendment to the PBI Engineers contract and responded to questions from the Board.

MOTION: Director Davidson moved to Approve the Amendment to the PBI Engineers contract for Design and Engineering of the Lake Tulloch Intertie Project, CIP#11104, Director Ratterman seconded the motion, and it was approved (5-0).

PUBLIC COMMENT: No public comment was heard.

AYES: **Directors Davidson, Underhill, Ratterman, Secada, and Thomas**
NOES: **None**
ABSTAIN: **None**
ABSENT: **None**

5b Discussion/Action regarding Award of Engineering and Design Contract for the Huckleberry Lift Station Improvement Project, CIP#15092
(Sam Singh, Engineering Technician) **RES 2024-36**

DISCUSSION: Sam Singh presented the proposed contract for Engineering and Design Services for the Huckleberry Lift Station Improvement Project. He responded to questions from the Board.

MOTION: Director Davidson moved to Approve the Engineering and Design Services for the Huckleberry Lift Station Improvement Project, CIP #15092, Director Secada seconded the motion, and it was approved (5-0).

PUBLIC COMMENT: No public comment was heard.

AYES: **Directors Davidson, Secada, Underhill, Ratterman, and Thomas**
NOES: **None**
ABSTAIN: **None**
ABSENT: **None**

6. **REPORTS**

6a Report on the May 2024 Operations Department
(Pat Burkhardt, Construction and Maintenance Manager)

DISCUSSION: Damon Wyckoff presented the June 2024 Monthly Operations report. He reviewed

items of interest and answered questions from the Board.

PUBLIC COMMENT: No public comment was heard.

6b General Manager's Report
(Michael Minkler)

Mr. Minkler reported on the following activities: 1) the Quarterly utilities meeting, Legal Affairs meeting, Engineering Committee meeting and the Lenny Lind Town Hall all on Tuesday June 4th; 2) the Jenny Lind A-B town hall and possible construction impacts; 3) paving coordination between CCWD and Calaveras County on the Jenny Lind A-B project; 4) a team meeting with Tuolumne Utilities District; 5) meetings with the Hwy 4 Regional Water Planning Group; 6) the NCPA Commission meeting; and 7) the Finance and External Relations Committee meetings were cancelled.

7. **BOARD REPORTS / INFORMATION / FUTURE AGENDA ITEMS**

Director Underhill asked about a town hall for Ebbetts Pass.

Director Ratterman reported on the Town Hall meeting in Jenny Lind, the MCWRA Reception, the ACWA JPIA meeting, and the Real Estate Ad Hoc Committee.

Director Davidson asked about the report on the ISO ratings.

Director Secada had nothing to report.

Director Thomas reported on the MCWRA Reception.

8. **NEXT BOARD MEETINGS**

a. Wednesday, June 26, 2024, 1:00 p.m., Regular Board Meeting
b. Wednesday, July 10, 2024, 1:00 p.m., Regular Board Meeting

9. **CLOSED SESSION**

The meeting adjourned into Closed Session at approximately 2:31 p.m. Those present were Board Members: Scott Ratterman, Cindy Secada, Russ Thomas, Bertha Underhill, and Jeff Davidson; staff members Stacey Lollar, Human Resources Manager (for item 9a), Michael Minkler, General Manager; and General Counsel Matt Weber.

9a Government Code § 54957.6 Agency Negotiators: General Manager Michael Minkler, HR Manager Stacey Lollar regarding Negotiations with Employee Organization SEIU Local 1021

9b Conference with Legal Counsel-Existing Litigation Government Code 54956.9(d)(1)
California Sportfishing Protection Alliance v. All persons interested in the matter of the validity of the Eastern San Joaquin Groundwater Subbasin groundwater sustainability plan et al. (Stanislaus County Superior Court Case # CV20-1720)

9c Conference with Legal Counsel – Anticipated Litigation. Significant exposure to litigation pursuant to subdivision (d)(2) of Government Code section 54956.9. - two potential case

10. **REPORTABLE ACTION FROM CLOSED SESSION**

The Board reconvened into Open Session at approximately 3:35 p.m. There was no reportable action.

11. **ADJOURNMENT**

With no further business, the meeting adjourned at approximately 3:35 p.m.

By: ATTEST:

_____ _____

Michael Minkler
General Manager

Rebecca Hitchcock
Clerk to the Board


3b
AGENDA
ITEM
3b

Agenda Item

DATE: July 10, 2024

TO: Michael Minkler, General Manager

FROM: Rebecca Hitchcock, Clerk to the Board

SUBJECT: Review Board of Directors Time Sheets for June 2024

RECOMMENDED ACTION:

For information only.

SUMMARY:

Pursuant to direction from the Board of Directors, copies of the Board's monthly time sheets, which the Board is compensated from, are included in the monthly agenda package for information. Attached are copies of the Board's time sheets for the month of June 2024.

Board Members can be reimbursed for mileage cost to travel to meetings/conferences and are paid at the current IRS rate.

FINANCIAL CONSIDERATIONS:

Monthly compensation and mileage reimbursement costs are included in the FY 23-24 budget.

STRATEGIC PLAN INTIATIVES:

FR-08 Communicate the District's fiscal obligations and accountability to our customers through transparency and effective public outreach.

Attachments: Board of Directors Time Sheets for June 2024

CALAVERAS COUNTY WATER DISTRICT
2024 DIRECTOR REIMBURSEMENT FORM

For Admin Use — Payroll ✓ / Expense

Month/Yr June 2024

Name S. Ratterman

Activity Date	Meeting or Other Expense Description	Designated Rep. Yes	Designated Rep. No	Association List Yes	Association List No	Prior Approval Yes	Prior Approval No	Cost Meeting	Cost Expense	Total Miles
5-28	Mt. Counties Planning Mtg. -	Virtual								
5-29	CCWD Special Mtg.									7
6-3	JPIA Personnel Mtg. - Virtual									
6-4	JPIA Property Review Mtg									
6-4	CCWD Legal Affairs Mtg.							$120.-		7
6-4	CCWD Town Hall - Jenny Lind									34
6-6	Mt. Counties Reception - Mokelumne Hill							120.-		21
6-7	Mt. Counties Mtg - Virtual							120.-		
6-12	CCWD Reg. Mtg.							120.-		7
6-12	ACWA SLC Feedback Com. Mtg.	Virtual								
6-20	JPIA WC & Property Mtgs.									
6-21	JPIA Executive Comm Mtg.									
6-25	CCWD Real Estate Ad hoc - Jenny Lind							120.-		30
6-26	CCWD Reg. Mtg.							120.-		7
Total	For Totals line, multiply miles by the IRS rate: 1/1/2024 $0.670									113
								Totals (use IRS mileage rate)		$75.71

Pursuant to Board Policy 4030, receipts required; report /materials required.

The undersigned, under penalty of perjury states: This claim and the items set forth herein are true and correct; that expenses incurred, meetings attended and business conducted are necessary to District affairs; that this claim is proper and within the scope of California Water Code Section 20200 et seq, and District Ordinance 2015-02; that the service was actually rendered; and that the amount(s) herein are justly true.

Signature of Claimant: S. Ratterman

Administrative Review: _____ **Date:** 6/28/24

Orig to Finance Dept.

CALAVERAS COUNTY WATER DISTRICT
2023 DIRECTOR REIMBURSEMENT FORM

For Admin Use	
Payroll	
Expense	

Month/Yr: Jun-24

Name: Cindy Secada

Activity Date	Meeting or Other Expense Description	Designated Rep. Yes	Designated Rep. No	Association List Yes	Association List No	Prior Approval Yes	Prior Approval No	Cost Meeting	Cost Expense	Total
12-Jun	CCWD Regular Meeting							120		38.7
26-Jun	CCWD Regular Meeting							120		38.7
Total	*For Totals line, multiply miles by the IRS rate:*	1/1/2023	$0.670						0	77.4
				Totals (use IRS mileage rate)				$240.00	$0.00	$51.86

Pursuant to Board Policy 4030, receipts required; report /materials required.

The undersigned, under penalty of perjury states: This claim and the items set forth herein are true and correct; that expenses incurred, meetings attended and business conducted are necessary to District affairs; that this claim is proper and within the scope of California Water Code Section 20200 et seq, and District Ordinance 2015-02; that the service was actually rendered; and that the amount(s) herein are justly true.

Signature of Claimant: Cindy Secada

Administrative Review: _____ **Date:** 6/28/24

Orig to Finance Dept.

CALAVERAS COUNTY WATER DISTRICT
2024 DIRECTOR REIMBURSEMENT FORM

For Admin Use	Payroll ⊘ / Expense

Month/Yr: Jun-24

Name: Bertha Underhill

Activity Date	Meeting or Other Expense Description	Designated Rep. Yes	Designated Rep. No	Association List Yes	Association List No	Prior Approval Yes	Prior Approval No	Cost Meeting	Cost Expense	Total Miles
25-Apr	Lunch meeting with County representatives							120		64
4-Jun	Legal Affairs Committee - attendee							120		0
12-Jun	CCWD Regular Board Meeting							120		64
17-Jun	White Pines Park Committee							120		0
18-Jun	Ebbetts Pass Fire District							120		0
26-Jun	CCWD Regular Board Meeting							120		64
Total	***For Totals line, multiply miles by the IRS rate:*** 1/1/2024		$0.670						0	192
	Pursuant to Board Policy 4030, receipts required; report /materials required.			Totals *(use IRS mileage rate)*				$720.00	$0.00	$128.64

The undersigned, under penalty of perjury states: This claim and the items set forth herein are true and correct; that expenses incurred, meetings attended and business conducted are necessary to District affairs; that this claim is proper and within the scope of California Water Code Section 20200 et seq, and District Ordinance 2015-02; that the service was actually rendered; and that the amount(s) herein are justly true.

Signature of Claimant: *Bertha Underhill*

Administrative Review: _____ **Date:** 6/28/24

Orig to Finance Dept.

CALAVERAS COUNTY WATER DISTRICT
2024 DIRECTOR REIMBURSEMENT FORM

For Admin Use		
	Payroll	✓
	Expense	

Month/Yr: Jun-24

Name: Russ Thomas

Activity Date	Meeting or Other Expense Description	Designated Rep. Yes	Designated Rep. No	Association List Yes	Association List No	Prior Approval Yes	Prior Approval No	Cost Meeting	Cost Expense	Total Miles
22-May	CCWD Regular Meeting							120		44
23-May	Parks and Recreation Commission							0		46
28-May	External Relations Committee Meeting							120		44
29-May	CCWD Budget Workshop Meeting							120		44
31-May	2x2 Meeting with NCPA Board Members							0		44
4-Jun	Engineering Committee Meeting							120		44
12-Jun	CCWD Budget Approval Meeting							120		44
25-Jun	Ad hoc Property Committee (At Jenny Lind)							120		48
Total	***For Totals line, multiply miles by the IRS rate:*** 1/1/2024		$0.670						0	358
	Pursuant to Board Policy 4030, receipts required; report /materials required.			*Totals* (use IRS mileage rate)				$720.00	$0.00	$239.86

The undersigned, under penalty of perjury states: This claim and the items set forth herein are true and correct; that expenses incurred, meetings attended and business conducted are necessary to District affairs; that this claim is proper and within the scope of California Water Code Section 20200 et seq, and District Ordinance 2015-02; that the service was actually rendered; and that the amount(s) herein are justly true.

Signature of Claimant: Russ Thomas

Administrative Review: _____ **Date:** 6/28/24

Orig to Finance Dept.

CALAVERAS COUNTY WATER DISTRICT
2024 DIRECTOR REIMBURSEMENT FORM

For Admin Use	Payroll ⊘ / Expense

Month/Yr: Jun-24

Name: Jeff Davidson

Activity Date	Meeting or Other Expense Description	Designated Rep. Yes	Designated Rep. No	Association List Yes	Association List No	Prior Approval Yes	Prior Approval No	Cost Meeting	Cost Expense	Total Miles
4-Jun	Engineering Committee Meeting	x						120		28
4-Jun	Legal Affairs Committee Meeting	x						0		0
4-Jun	Valley Springs Town Hall	x						0		0
12-Jun	CCWD Regular Board Meeting							120		28
26-Jun	CCWD Regular Board Meeting							120		28
Total	*For Totals line, multiply miles by the IRS rate:*	1/1/2024	$0.670						0	84
				Totals	*(use IRS mileage rate)*			$360.00	$0.00	$56.28

Pursuant to Board Policy 4030, receipts required; report /materials required.

The undersigned, under penalty of perjury states: This claim and the items set forth herein are true and correct; that expenses incurred, meetings attended and business conducted are necessary to District affairs; that this claim is proper and within the scope of California Water Code Section 20200 et seq, and District Ordinance 2015-02; that the service was actually rendered; and that the amount(s) herein are justly true.

Signature of Claimant: Jeff Davidson

Administrative Review: _____ **Date:** 6/24/24

Orig to Finance Dept.


3c
AGENDA
ITEM
3c

Calaveras County Water District
Claim Summary #628
May 2024 vs June 2024

	May 2024	Jun 2024
CCWD Operating Expenditures	1,053,153.28	1,547,255.24
Expenditures to be reimbursed/Fiduciary Payments	32,618.58	9,302.75
Capital Improvement Program Projects	1,504,454.35	1,002,614.11
Capital Outlay	-	0.00
Sub-Total Vendor Payments	**2,590,226.21**	**2,559,172.10**
Payroll Disbursed	590,831.98	601,356.74
Other EFT Payments	4,490.66	5,075.89
Total Disbursements	**3,185,548.85**	**3,165,604.73**

Project No.	CIP Projects Project Description	Total Project Budget	FY 23-24 Budgeted Cash Flow	Jun Expenditures Plus Labor	FY 23-24 Total Expenditures	Total Expenditures to Date	Remaining Project Balance
WATER							
Copper Cove							
11083C	Clearwell & Tank B / Repair & Paint	8,600,000	4,000,000	472,047	2,929,254	3,361,608	5,238,392
11104	Lake Tulloch Intertie Project	750,000	-	380	380	28,742	721,258
11122	CC Zone B-C Trans Pipeline & Pump Station	10,000,000	1,000,000	853	288,283	383,540	9,616,460
11132	Copper Cove O'Byrnes Water Line Extension	60,000	-	495	7,862	31,820	28,180
Ebbetts Pass							
11083S	Sawmill/Hunter's Tanks / Repair & Paint	3,050,000	-	380	380	11,131	3,038,869
11103	Hunter's Raw Water Pumps Renovation	2,400,000	2,000,000	8,547	26,315	200,087	2,199,913
Jenny Lind / Wallace							
11083J	Clearwell #2 / Repair & Paint	641,745	350,000	76,570	82,413	99,038	542,707
11088	JL Tanks A-B Trans Line	13,500,000	2,000,000	32,600	296,909	874,709	12,625,291
West Point / Wilseyville							
11106	West Point Backup Water Filter	2,380,000	561,097	(4,163)	703,359	2,820,203	(440,203)
WASTEWATER							
Arnold / Forest Meadows							
15095	Arnold Secondary Clarifier	8,000,000	1,000,000	28,714	106,293	699,171	7,300,829
Copper Cove							
15076	CC L/S #6, 8 & Force Main Bypass	5,500,000	3,000,000	293,574	704,288	3,726,586	1,773,414
15080	CC L/S #15 & 18 Renovations	3,600,000	3,100,000	4,453	1,666,361	2,787,688	812,312
15094T	CC Tertiary/UV Improvements	1,996,190	735,238	105,567	233,819	639,741	1,356,449
La Contenta / Wallace							
15097	LC Biolac, Clarifier & UV Improvements	5,500,000	500,000	664	10,837	12,554	5,487,446
15092	Huckleberry Lift Station Improvements	1,123,038	-	1,707	6,235	7,952	1,115,086
West Point / Wilseyville / Vallecito							
15091	West Point/Wilseyville Consol Constr	10,000,000	5,000,000	3,151	3,762,288	2,168,424	7,831,576

CCWD - AP DISBURSEMENTS
JUNE 1-30, 2024

	Vendor	Description	Check Date	Check No	Amount
1	49er WATER SERVICES	Waste Water Lab Samples 03/24	06/05/24	144678	8,340.00
2	A T & T	Leased Acct#23584106903335 06/24	06/12/24	144733	63.15
3	A T & T	Acct#287318536357 IT Phone 06/24	06/12/24	144734	130.92
4	A T & T	Internet Service Acct#129469186 05/25	06/12/24	144735	95.59
5	A T & T	Acct#9391054579 Warehouse 06/24	06/26/24	144805	56.69
6	A T & T CALNET 3	Acct#9391067346 Camp Connell 05/24	06/12/24	144736	213.90
7	A T & T CALNET3	Acct#9391029200 Dorrington 06/24	06/26/24	144806	29.12
8	A T & T CALNET3	Acct#9391029201 District Wide 06/24	06/26/24	144807	1,536.79
9	A T & T CALNET3	Acct#9391032214 JLTC 06/24	06/26/24	144808	145.35
10	A T & T CALNET3	Acct#9391029194 OP HQ Long Distance	06/26/24	144809	406.18
11	A T & T CALNET3	Acct#939129198 Hunters 06/24	06/26/24	144810	29.12
12	A T & T CALNET3	Acct#9391032216 Azalea L/S 06/24	06/26/24	144811	27.56
13	A T & T CALNET3	Acct#9391029197 CC Whse 06/24	06/26/24	144812	0.58
14	A T & T CALNET3	Acct#9391032215 T Line 06/24	06/26/24	144813	155.55
15	A T & T CALNET3	Acct#9391029199 JLTC 06/24	06/26/24	144814	29.12
16	A T & T MOBILITY	Internet Service SR 05/24	06/05/24	144679	267.33
17	A TEEM ELECTRICAL ENG INC	SCADA - SRWTP	06/05/24	144680	1,800.00
18	A TEEM ELECTRICAL ENG INC	Electrical Engineering Services, CC WW L/S 6,8 & Force Main, CIP 15076	06/26/24	144815	590.00
19	A TEEM ELECTRICAL ENG INC	Electrical Engineering Services, CC WW L/S 15 & 18 Rehab, CIP 15080	06/26/24	144815	3,220.00
20	A TEEM ELECTRICAL ENG INC	SCADA - SRWTP	06/26/24	144815	18,136.00
21	A-1 SHARPENING & SMALL ENGINE REPAIR, LLC	Chain Saw & Chain - V 737	06/05/24	144681	507.28
22	A-1 SHARPENING & SMALL ENGINE REPAIR, LLC	Parts, Tools - Cal Fire	06/05/24	144681	1,693.29
23	A-1 SHARPENING & SMALL ENGINE REPAIR, LLC	Repaired Weed Trimmer	06/05/24	144681	97.31
24	A-1 SHARPENING & SMALL ENGINE REPAIR, LLC	Weed Trimmer String and Chain Saw Chain	06/05/24	144681	70.86
25	ACWA/JPIA	Dental 07/24	06/12/24	144737	6,768.24
26	ACWA/JPIA	EAP 07/24	06/12/24	144737	176.08
27	ACWA/JPIA	Retiree Dental 07/24	06/12/24	144737	3,432.20
28	ACWA/JPIA	Retiree Vision 07/24	06/12/24	144737	946.56
29	ACWA/JPIA	Vision 07/24	06/12/24	144737	1,410.56
30	AFLAC	Acct#JJ325 05/24	06/12/24	144738	1,336.86
31	AMERICAN AVK COMPANY	Hydrants - Distribution	06/26/24	144816	10,343.31
32	ANGELS HEATING AND AIR CONDITIONING	HVAC Repair - OP HQ	06/05/24	144682	127.51
33	ANGELS HEATING AND AIR CONDITIONING	New HVAC Unit - CC Raw Water PS	06/12/24	144739	9,400.00
34	ANGELS HEATING AND AIR CONDITIONING	Flushing and Thermostat Repair - JL	06/26/24	144817	328.69
35	ARNOLD AUTO SUPPLY	Repair Parts EP 05/24	06/12/24	144740	124.31
36	BARRONS FLOORING & DESIGN	Flooring - JL Rental House	06/26/24	144819	8,997.17
37	BHI MANAGEMENT CONSULTING	Recruitment Services for Engineer	06/12/24	144741	2,437.50
38	BIG VALLEY FORD LINCOLN MERCURY	Catalytic Converter - V741	06/05/24	144684	3,300.80
39	BOBCAT CENTRAL, INC	Filters Service Kit - Skid Steer 770	06/12/24	144742	937.65
40	C/O M&T Bank NEW YORK LIFE	Life Insurance 07/24	06/26/24	144853	1,800.24
41	CALAVERAS CNTY INTEGRATED WASTE MANAGEMENT	April 2024 Gate Fees - Rock Creek	06/05/24	144685	72.00
42	CALAVERAS CNTY INTEGRATED WASTE MANAGEMENT	May 2024 Gate Fees - Rock Creek	06/12/24	144743	72.00
43	CALAVERAS COUNTY ENVIRONMENTAL HEALTH	Haz Mat Response/CUPA AR0000548 DF Vallecito L/S	06/05/24	144686	272.00

	Vendor	Description	Check Date	Check No	Amount
44	CALAVERAS COUNTY ENVIRONMENTAL HEALTH	Haz Mat Response/CUPA AR0000549 White Pines Barn	06/05/24	144686	272.00
45	CALAVERAS COUNTY ENVIRONMENTAL HEALTH	Haz Mat Response/CUPA AR0000550 FM WWTP	06/05/24	144686	272.00
46	CALAVERAS COUNTY ENVIRONMENTAL HEALTH	Haz Mat Response/CUPA AR0000551 JL WTP	06/05/24	144686	403.00
47	CALAVERAS COUNTY ENVIRONMENTAL HEALTH	Haz Mat Response/CUPA AR0000552 CC WTP/CC WWTP	06/05/24	144686	85.59
48	CALAVERAS COUNTY ENVIRONMENTAL HEALTH	Haz Mat Response/CUPA AR0000552 CC WTP/CC WWTP	06/05/24	144686	231.41
49	CALAVERAS COUNTY ENVIRONMENTAL HEALTH	Haz Mat Response/CUPA AR0000553 Sawmill	06/05/24	144686	272.00
50	CALAVERAS COUNTY ENVIRONMENTAL HEALTH	Haz Mat Response/CUPA AR0000554 DF VCTO	06/05/24	144686	441.00
51	CALAVERAS COUNTY ENVIRONMENTAL HEALTH	Haz Mat Response/CUPA AR0000555 LCWWP	06/05/24	144686	441.00
52	CALAVERAS COUNTY ENVIRONMENTAL HEALTH	Haz Mat Response/CUPA AR0000557 AWWTP	06/05/24	144686	272.00
53	CALAVERAS COUNTY ENVIRONMENTAL HEALTH	Haz Mat Response/CUPA AR0000558 Hunters	06/05/24	144686	272.00
54	CALAVERAS COUNTY ENVIRONMENTAL HEALTH	Haz Mat Response/CUPA AR0000839 JL Tank A	06/05/24	144686	272.00
55	CALAVERAS COUNTY PUBLIC WORKS	Encroachment Permit -28-UE-23 Jenny Lind A & B Transmission Line, CIP 11088	06/17/24	144804	15,000.00
56	CALAVERAS COUNTY PUBLIC WORKS	Permits JL Tank 04/24-05/24	06/26/24	144821	233.57
57	CALAVERAS COUNTY PUBLIC WORKS	Permits Various Sites 04/24-05/24	06/26/24	144821	356.33
58	CALAVERAS COUNTY ROCK CREEK LANDFILL	Dump Services	06/05/24	144687	72.00
59	CALAVERAS ENTERPRISE	Recruitment Ad - Collections	06/05/24	144688	83.72
60	CALAVERAS ENTERPRISE	Recruitment Ad - Customer Service Rep	06/26/24	144822	51.84
61	CALAVERAS LUMBER CO INC	Material & Supplies - DF VCTO	06/12/24	144744	301.91
62	CALAVERAS LUMBER CO INC	Restock Service Truck - V730	06/12/24	144744	291.12
63	CALAVERAS LUMBER CO INC	Supplies - FM WWTP	06/12/24	144744	115.08
64	CALAVERAS LUMBER CO INC	Tools - DF VCTO, FMWWTP, AWWTP	06/12/24	144744	558.75
65	CALAVERAS MINI-STORAGE	Tenant 197673 Storage Rental 06/24	06/05/24	144689	200.00
66	CALPERS - RETIREMENT	CalPERS Retirement 05/31/2024 Payroll	06/13/24	EFT	55,895.66
67	CALPERS - RETIREMENT	CalPERS Retirement 06/15/2024 Payroll	06/19/24	EFT	56,825.49
68	CALPERS (Def Comp)	Def Comp Disbursement 05/31/2024 Payroll	06/13/24	EFT	9,116.16
69	CALPERS (Def Comp)	Def Comp Disbursement 06/15/2024 Payroll	06/19/24	EFT	8,516.16
70	CALPERS (Health Ins)	Health Insurance 06/24	06/01/24	EFT	169,924.63
71	CAMPORA	Acct#5075516 2.756 Gallons Propane WP WWTP	06/12/24	144745	9.70
72	CARBON COPY INC	Copies 05/24	06/05/24	144690	243.71
73	CARDNO INC	Environmental Services, Biological/Cultural, Hunters Raw Water Reno, CIP 11103	06/05/24	144691	8,230.24
74	CHECK PROCESSING INC	Lock Box Processing 04/25	06/05/24	144692	1,279.28
75	CHECK PROCESSING INC	Lock Box Processing 05/25	06/12/24	144746	1,070.66
76	CITY OF ANGELS	Six Mile Village 05/24	06/05/24	144693	3,689.76
77	CLARK PEST CONTROL INC	Pest Control #190086855 FM WWTP	06/05/24	144694	110.00
78	CLARK PEST CONTROL INC	Pest Control #807360 La Contenta	06/05/24	144694	106.00
79	CLARK PEST CONTROL INC	Pest Control Acct#2120969 Wallace	06/12/24	144747	151.00
80	CLARK PEST CONTROL INC	Pest Control Acct#807549 JLWTP	06/12/24	144747	81.00
81	CLARK PEST CONTROL INC	Pest Control Acct#9328727 OP HQ	06/26/24	144823	194.00
82	CLARK PEST CONTROL INC	Pest Control #807402 JL WWTP	06/26/24	144823	166.00
83	COLEMAN ENGINEERING, INC.	Engineering/Design Jenny Lind A-B Transmission, CIP 11088	06/12/24	144748	11,720.30
84	COLUMBIA COMMUNICATIONS	Vehicle Cloud Service 05/24	06/12/24	144749	780.00
85	CONDOR EARTH TECHNOLOGIES INC	Material Testing/Special Inspections, JL A-B Transmission, CIP 11088	06/26/24	144824	296.00
86	CONFIDENTIAL	Retiree Medical Reimbursement 07/24	06/26/24	144818	1,527.86

	Vendor	Description	Check Date	Check No	Amount
87	CONFIDENTIAL	Retiree Medical Reimbursement 07/24	06/26/24	144825	739.30
88	CONFIDENTIAL	Retiree Medical Reimbursement 07/24	06/26/24	144837	291.15
89	CPPA	Power District Wide 05/24	06/12/24	144750	139,403.51
90	CPPA	Power OP HQ 05/24	06/12/24	144750	1,264.00
91	CPUD	Water Service Corp Yard 05/24	06/05/24	144695	125.56
92	CPUD	Water Service OP HQ 05/24	06/05/24	144695	383.57
93	CROSNO CONSTRUCTION INC	Construction/Services - JL, Tank Management Plan, CIP 11083	06/26/24	144826	76,190.00
94	CRUMPACKER, BRIAN	Safety Boot Reimbursement FY 23/24 Crumpacker	06/12/24	144751	200.00
95	CWEA	Membership Renewal - Reece	06/05/24	144696	221.00
96	CWEA	Membership Renewal - Scott	06/05/24	144696	221.00
97	CWEA	Collections Grade 1 Renewal - Sage	06/12/24	144752	98.00
98	CWEA	CSM Grade 1 Renewal - Gravette	06/12/24	144752	98.00
99	CWEA	CWEA Membership Renewal - Duburg	06/12/24	144752	221.00
100	CWEA	CWEA Membership Renewal - Sage	06/12/24	144752	221.00
101	CWEA	CWEA Membership Renewal - Turner	06/12/24	144752	221.00
102	CWEA	CWEA Membership Renewal - Gravette	06/12/24	144752	221.00
103	CWEA	CSM 1 Renewal - Heinle	06/26/24	144827	98.00
104	CYR, JOSEPH	Safety Boot Reimbursement FY 23/24	06/05/24	144697	200.00
105	DATAPROSE	UB Statement Processing 03/24	06/12/24	144753	9,923.96
106	DATAPROSE	UB Statement Processing 04/24	06/12/24	144753	4,293.76
107	DATAPROSE	UB Statement Processing 05/24	06/12/24	144753	5,091.76
108	DAVIDSON, JEFF	Travel 05/24 Davidson	06/12/24	144754	56.28
109	DE LAGE LANDEN FINANCIAL SRVC INC	Copier Lease	06/30/24	EFT	294.71
110	DEVINE, JOHN	FERC Relicensing Consulting Services	06/26/24	144828	14,601.30
111	DOUBLE U ENTERPRISES	Road Base - LC Whse	06/05/24	144698	4,277.61
112	DOWNEY BRAND ATTORNEYS LLP	Legal Services 31348.00000 04/24	06/05/24	144699	4,571.00
113	EBBETTS PASS GAS SERVICE	Fuel EP 05/24	06/12/24	144755	961.63
114	EBBETTS PASS LUMBER	Supplies - EP Barn	06/12/24	144756	63.59
115	EKI ENVIRONMANT & WATER INC	Water Resources Services 01/24-04/24	06/12/24	144757	501.28
116	ENTERPRISE FM TRUST	Vehicle Lease Acct#441657B 06/24	06/12/24	144758	67,904.25
117	ERS INDUSTRIAL SERVICES, INC.	Media Exchange - SRWTP	06/12/24	144759	13,610.00
118	FANUCCHI, STEPHEN	UB Refund 188 Bridle Point Circle	06/26/24	144829	2,055.03
119	FASTENAL	Hydrant Paint	06/26/24	144830	297.30
120	FASTENAL	Safety Supplies	06/26/24	144830	57.59
121	FASTENAL	Supplies - LC Dist/JLWTP	06/26/24	144830	1,173.08
122	FEDERAL EXPRESS	Acct#1192-2924-3 Delivery Charges 05/15/24	06/05/24	144700	26.72
123	FEDERAL EXPRESS	Acct#119229243 Ryan Herco Return	06/26/24	144831	21.74
124	FINQUERY LLC	GASB 87 Lease Software	06/26/24	144832	5,440.00
125	FOOTHILL MATERIALS	Base Rock - Utility Crew	06/12/24	144760	1,145.27
126	FOOTHILL PORTABLE TOILETS	Rental Portable Toilet 04/24/24-05/21/24 Sheep Ranch	06/05/24	144701	154.50
127	FOOTHILL PORTABLE TOILETS	Rental Portable Toilet 04/24/24-05/21/24 Wallace	06/05/24	144701	154.50
128	FOOTHILL PORTABLE TOILETS	Rental Portable Toilet 05/22/24-06/18/24 Sheep Ranch	06/26/24	144833	154.50
129	FOOTHILL PORTABLE TOILETS	Rental Portable Toilet 05/22/24-06/18/24 Wallace	06/26/24	144833	154.50

	Vendor	Description	Check Date	Check No	Amount
130	FOOTHILL SIERRA PEST CONTROL	Pest/Weed Control (Leslie Ct) Wallace #28091	06/12/24	144761	200.00
131	FREEDOM INFORMATION TECHNOLOGY SOLUTIONS IN	Computer Accessories	06/12/24	144762	10,234.03
132	FROGGY'S AUTO WASH & LUBE	Service - V531	06/05/24	144702	144.10
133	FROGGY'S AUTO WASH & LUBE	Car Wash - Engineering V725	06/26/24	144834	29.95
134	GABA	Independence Day Parade 2024	06/26/24	144835	25.00
135	GAMBI DISPOSAL INC.	Bio-Solids Removal - May 2024	06/12/24	144763	3,406.25
136	GATEWAY PRESS, INC	Decals - District	06/26/24	144836	370.01
137	GEMINI GROUP L.L.C.	Annual Water Quality Report 2023	06/12/24	144764	2,993.00
138	GENERAL PLUMBING SUPPLY CO INC	Fittings - District	06/05/24	144703	9,388.39
139	GENERAL PLUMBING SUPPLY CO INC	Fittings - Collections	06/12/24	144765	5,191.56
140	GENERAL PLUMBING SUPPLY CO INC	Fittings - District	06/26/24	144838	5,191.56
141	GENERAL SUPPLY COMPANY	Electrical Parts - LCWWTP	06/12/24	144766	1,349.28
142	GENERAL SUPPLY COMPANY	Materials for District Corp Yard, CIP 11101	06/26/24	144839	2,429.90
143	GENERAL SUPPLY COMPANY	Electrical Parts - CCWTP Ozone Project	06/26/24	144839	3,492.30
144	GENERAL SUPPLY COMPANY	Pipe - Collections	06/26/24	144839	1,468.81
145	GEORGE REED INC	Cutback - Utility Crew	06/05/24	144704	445.93
146	GERKENSMEYER, KELLY	Mileage Reimbursement April/Early May - Gerkensmeyer	06/12/24	144767	267.33
147	GERKENSMEYER, KELLY	Mileage Reimbursement Frog Jump - Gerkensmeyer	06/12/24	144767	140.57
148	GERKENSMEYER, KELLY	Mileage Reimbursement High Schools Right Track - Gerkensmeyer	06/12/24	144767	102.51
149	GLOBAL PAY	Third Party Payment Processing	06/30/24	EFT	25,076.62
150	GOVINVEST INC	OPEB Costing Module Annual Subscription Fee	06/26/24	144840	11,500.00
151	GRAPHIC PRODUCTS INC	DuraLabel Kodiak Max Printer	06/05/24	144705	3,899.21
152	HACH COMPANY	Lab Supplies - CCRCP	06/05/24	144706	4,570.30
153	HERD'S MACHINE & WELD SHOP	Welding Gas - SA Shop	06/12/24	144768	58.99
154	HERD'S MACHINE & WELD SHOP	300 AMP Ground Clamp	06/26/24	144841	30.83
155	HOLT OF CALIFORNIA	Gasket Housing	06/26/24	144842	11.85
156	HOLT OF CALIFORNIA	Gaskets	06/26/24	144842	207.97
157	HOLT OF CALIFORNIA	Seal Kit, Snap Ring	06/26/24	144842	314.42
158	HOLT OF CALIFORNIA	Seal, O Ring, Hose Kit	06/26/24	144842	94.15
159	HUNT & SONS, INC	DEF - District	06/12/24	144769	1,045.35
160	HUNT & SONS, INC	Fuel - CC	06/12/24	144769	2,121.73
161	HUNT & SONS, INC	Diesel - LC WHSE	06/26/24	144843	2,123.11
162	HYDROSCIENCE ENGINEERS INC	Engineering/Design Services Arnold WWTP, Arnold Secondary Clarifier, CIP 15095	06/26/24	144844	27,101.28
163	HYDROSCIENCE ENGINEERS INC	Engineering/Design Services CC WWTP, CC Sec/Tertiary & UV Imprv, CIP 15094	06/26/24	144844	105,319.56
164	INDUSTRIAL ELECTRICAL CO	Aerator Pump - Forest Meadows	06/12/24	144770	4,403.94
165	INKS, KEVIN	Set Pump - JL A Tank	06/12/24	144771	665.00
166	INSTRUMENT TECHNOLOGY CORP.	Inspection Camera and Locator - Capital Outlay	06/05/24	144707	24,353.34
167	IRON MOUNTAIN	Documentation Destruction 06/24	06/12/24	144772	179.46
168	JACK HENRY & ASSOCIATES, INC	Annual Maintenance 07/01/2024 - 06/20/2025 Check Processing	06/26/24	144845	2,884.45
169	JACKSON GLASS	Window Repair - JL Rental House	06/26/24	144846	786.30
170	JACKSON TIRE SERVICE, INC	Trailer Tires - T 04	06/05/24	144708	672.25
171	JACKSON TIRE SERVICE, INC	Tires - V 714	06/12/24	144773	881.71
172	JACKSON TIRE SERVICE, INC	Tires - V 749	06/12/24	144773	2,563.35

	Vendor	Description	Check Date	Check No	Amount
173	JACKSON TIRE SERVICE, INC	Tires - V 131	06/26/24	144847	886.02
174	JORDAN, MANFORD	UB Refund 890 St Andrews Drive	06/05/24	144709	299.26
175	KENNEDY, MICHAEL	D2 Certificate Renewal - Kennedy	06/26/24	144848	61.87
176	KENNEDY, MICHAEL	Safety Boot Reimbursement - Kennedy	06/26/24	144848	200.00
177	LANDSTEDT, DENISE	Grant Administration Services 05/24	06/12/24	144774	3,281.28
178	LEDGER DISPATCH	Recruitment Ad Water/Waste Water Operator	06/05/24	144710	63.25
179	LIEBERT CASSIDY WHITMORE	Legal Services CA045-00001 04/24	06/12/24	144775	2,856.50
180	LUNSFORD, SCOTT	Water Operator (T3) Renewal Reimbursement - Lunsford	06/12/24	144776	110.00
181	LUNSFORD, SCOTT	Winter Weather Gear Reimbursement FY 23/24 - Lunsford	06/26/24	144849	193.04
182	MALLORY SAFETY AND SUPPLY, LLC	Confined Space Entry Equipment Inspection & Repairs - Collection	06/12/24	144777	1,573.79
183	MARTINEZ, ERIK	Safety Boot Reimbursement FY23/24 Martinez	06/26/24	144850	187.31
184	MID VALLEY AGRICULTURAL INC	Weed Spray - District	06/26/24	144851	2,913.89
185	Mission Square	Retiree Health 05/31/2024 Payroll	06/13/24	EFT	2,230.00
186	Mission Square	Retiree Health 06/15/2024 Payroll	06/19/24	EFT	2,310.00
187	MODESTO AIRCO GAS & GEAR	Cylinder Rental 05/24	06/12/24	144778	104.00
188	MOTHER LODE ANSWERING SERVICE	Answering Service 05/24	06/12/24	144779	887.00
189	MOUNTAIN OASIS PURIFIED WATER	Water Cooler & Supplies 05/24	06/05/24	144711	240.25
190	MOZINGO CONSTRUCTION, INC.	Construction Services, CC WW L/S, CIP 15076	06/12/24	144780	282,625.00
191	MUNICIPAL MAINTENANCE EQUIP	Water Gaskets - V746	06/05/24	144712	95.49
192	MUNICIPAL MAINTENANCE EQUIP	Vac Trailer - WP Distribution	06/12/24	144781	127,447.62
193	MUNICIPAL MAINTENANCE EQUIP	VacCon Parts - V126	06/12/24	144781	2,892.90
194	MUNICIPAL MAINTENANCE EQUIP	Reservoir Kit - V746 VacCon Parts	06/26/24	144852	468.20
195	MUTUAL OF OMAHA	Life, AD&D Acct#GAWXB 06/24	06/05/24	144713	6,538.46
196	NOLTE ASSOCIATES INC. DBA NV5	Ground Water Monitoring 05/24	06/26/24	144854	950.00
197	NORTHSTAR CHEMICAL	Sodium Hypochlorite - CCWTP	06/12/24	144782	2,756.21
198	NORTHSTAR CHEMICAL	Sodium Hypochlorite - JLWTP	06/12/24	144782	4,730.23
199	NORTHSTAR CHEMICAL	Sodium Hypochlorite - CCWTP	06/26/24	144855	2,469.08
200	NTU TECHNOLOGIES INC	Pro Pac 9890 - CCRCP	06/05/24	144714	15,510.00
201	NTU TECHNOLOGIES INC	Zeta Floc 20 - CCRCP	06/05/24	144714	14,169.60
202	NTU TECHNOLOGIES INC	ProPac 926 - CCWTP	06/26/24	144856	12,904.20
203	NTU TECHNOLOGIES INC	Protek 301 - CCWTP	06/26/24	144856	6,660.00
204	OCCU-MED, LTD	Pre Employment Screening	06/26/24	144857	1,045.80
205	P G & E	Power-District Wide	06/30/24	EFT	2,709.30
206	P G & E	Power-George Reed Dr/OP HQ	06/30/24	EFT	48.88
207	P G & E	Power-Main St Water Tank	06/30/24	EFT	54.93
208	P G & E	Power-N/S Wallace Lake Dr/ Spray Fields	06/30/24	EFT	18.75
209	P G & E	Power-Silver Rapids Rd/JLTC	06/30/24	EFT	144.33
210	P G & E	Power-Warmwood Pl/ L/S	06/30/24	EFT	23.21
211	P G & E	Power-Woodgate Rd/ L/S	06/30/24	EFT	39.56
212	PACE SUPPLY CORP	Fittings - AWWTP	06/05/24	144715	7,131.93
213	PACE SUPPLY CORP	Fittings - Distribution	06/26/24	144858	3,158.30
214	PAN-PACIFIC SUPPLY CO., INC	Seal - A Tank VS	06/26/24	144859	1,822.78
215	PETERSON BRUSTAD INC	Electrical Engineering Services, WP Backup Water Filter, CIP 11106	06/05/24	144716	2,242.50

	Vendor	Description	Check Date	Check No	Amount
216	POTRERO HILLS LANDFILL	Bio-Solids Disposal - LCWWTP	06/05/24	144717	1,054.12
217	POTRERO HILLS LANDFILL	Bio-Solids Disposal - AWWTP	06/12/24	144783	626.31
218	POTRERO HILLS LANDFILL	Bio-Solids Disposal - FMWWTP	06/12/24	144783	701.55
219	POTRERO HILLS LANDFILL	Bio-Solids Disposal - AWWTP	06/26/24	144860	530.28
220	POTRERO HILLS LANDFILL	Bio-Solids Disposal - LCWWTP	06/26/24	144860	683.64
221	QUADIENT LEASING INC	Mail Equip Lease Mar-June	06/30/24	EFT	2,252.93
222	R L RIGHETTI ENTERPRISES INC	Water Pump	06/26/24	144861	171.89
223	RATTERMAN, SCOTT	Mountain Counties Travel Reimbursement - Ratterman	06/05/24	144718	457.49
224	RATTERMAN, SCOTT	Travel 05/24 - Ratterman	06/12/24	144784	100.50
225	RICCARDI, CHRISTOPHER	ICS 100 Course for All Employees	06/26/24	144862	4,055.40
226	RICHARDSON & COMPANY	Audit Services 2023	06/26/24	144863	10,000.00
227	ROBERTS, CASEY	Safety Boot Reimbursement FY 23/24 - Roberts	06/26/24	144864	200.00
228	RUTLEDGE SECURITY SYSTEMS LLC	Fire System Monitoring	06/12/24	144785	225.00
229	RYAN HERCO PRODUCTS CORP.	Actuator - AWWTP	06/05/24	144719	5,712.21
230	SAM BERRI TOWING	Tow V621 La Contenta Water	06/26/24	144865	250.00
231	SECADA, CINDY	Travel 05/24 Secada	06/12/24	144786	231.02
232	SEIU LOCAL 1021	COPE 05/24	06/12/24	144787	40.00
233	SEIU LOCAL 1021	SEIU 05/24	06/12/24	144787	2,850.00
234	SENDERS MARKET INC	Concrete - Hydrants	06/26/24	144866	88.32
235	SENDERS MARKET INC	Concrete for Hydrant Replacement - La Contenta	06/26/24	144866	142.34
236	SENDERS MARKET INC	Hwy 26 Valve Repair Supplies	06/26/24	144866	75.20
237	SENDERS MARKET INC	Repair Water Leak - JL Rental House	06/26/24	144866	9.03
238	SENDERS MARKET INC	Supplies - JL Distribution Crew	06/26/24	144866	120.24
239	SENDERS MARKET INC	Supplies - SRWTP	06/26/24	144866	76.54
240	SENDERS MARKET INC	Tool - JL Distribution Crew	06/26/24	144866	43.43
241	SENDERS MARKET INC	Valve Replacement - La Contenta (St Andrews Rd)	06/26/24	144866	85.68
242	SIGNAL SERVICE	Alarm Service OP HQ 7/1/24-09/30/24	06/26/24	144867	5,229.00
243	SKRBINA, CHRISTOPHER	Safety Boot Reimbursement FY 23/24 Skrbina	06/26/24	144868	148.43
244	SMITH, QUENTIN	ICS Agent Training - Smith	06/05/24	144720	93.80
245	SOCHACKI-WITTRUP FAMILY TRUST	UB Refund 6340 Bergsma Lane	06/26/24	144869	29.72
246	SPRINGBROOK HOLDING CO LLC	Springbrook Annual Maintenance Fee 7/1/24-6/30/25	06/12/24	144788	19,670.55
247	STOCKTON EAST WATER DISTRICT	New Hogan Contract 2024	06/26/24	144870	53,749.78
248	STOCKTON EAST WATER DISTRICT	New Hogan Contract 2023	06/26/24	144870	53,943.41
249	SUPER MICRO COMPUTER INC	District Office Services	06/12/24	144789	30,810.95
250	SWRCB	Distribution Grade 2 Exam Application - Duncan	06/12/24	144790	65.00
251	SWRCB	Water Distribution Grade 1 Exam Application - McCray	06/26/24	144871	50.00
252	SWRCB Storm Water Section	PRD's Jenny Lind A-B Transmission Line, CIP 11088	06/05/24	144721	808.00
253	SYSCO CENTRAL CALIFORNIA INC	Materials - Cal-Fire	06/12/24	144791	2,943.18
254	T & S INTERMODAL MAINTENANCE INC	Construction Services, CC Phase 1 & 2 Tanks, CIP 11083C	06/05/24	144722	466,714.58
255	THOMAS, RUSS	ACWA Travel Reimbursement - Thomas	06/05/24	144723	654.94
256	THOMAS, RUSS	Travel 05/24 Thomas	06/12/24	144792	217.08
257	TIFCO INDUSTRIES	Tools - SA Shop	06/12/24	144793	75.02
258	TOP OF THE LINE ROOFING	Roof Repair - JL House Rental	06/26/24	144872	2,500.00

	Vendor	Description	Check Date	Check No	Amount
259	TREATS GENERAL STORE INC	Hardware - SA Shop	06/12/24	144794	10.62
260	TROJAN TECHNOLOGIES C/O FIFTH THIRD BANK	UV Parts & Supplies - LCWWTP	06/26/24	144873	29,972.26
261	TYLER TECHNOLOGIES, INC.	Annual SAAS Fees 04/01/24-03/31/25	06/12/24	144795	74,871.00
262	TYLER TECHNOLOGIES, INC.	Insite Transaction Fees	06/12/24	144795	17,134.00
263	TYLER TECHNOLOGIES, INC.	Notification Calls (24)	06/12/24	144795	2.60
264	TYLER TECHNOLOGIES, INC.	Finance Session Prerequisite Alignment Meeting	06/26/24	144874	130.00
265	U.S. BANK	ACWA Hotel & Parking - Gerkensmeyer	06/26/24	EFT	588.68
266	U.S. BANK	ACWA Hotel and Parking - Minkler	06/26/24	EFT	645.62
267	U.S. BANK	Algae Chemical - DF VCTO	06/26/24	EFT	198.95
268	U.S. BANK	Amazon - Band Aids & Ice Bags	06/26/24	EFT	38.00
269	U.S. BANK	Amazon - Jigsaw	06/26/24	EFT	175.64
270	U.S. BANK	Amazon Ink Cartridges - JL Water Plant	06/26/24	EFT	92.00
271	U.S. BANK	Aramark 05/24	06/26/24	EFT	3,675.84
272	U.S. BANK	Battery & Trash Can - Shop	06/26/24	EFT	240.83
273	U.S. BANK	BOD Supplies & County Annual Dinner (Underhill)	06/26/24	EFT	97.85
274	U.S. BANK	Business Cards	06/26/24	EFT	16.00
275	U.S. BANK	Cal Net 05/24	06/26/24	EFT	62.04
276	U.S. BANK	Cal Tel 05/24	06/26/24	EFT	1,343.47
277	U.S. BANK	Cal Waste 05/24	06/26/24	EFT	1,878.21
278	U.S. BANK	CCWD Board Brochure - Mountain Counties	06/26/24	EFT	99.26
279	U.S. BANK	CESSEI Annual Renewal	06/26/24	EFT	300.16
280	U.S. BANK	CEU Class Hotel - Knick	06/26/24	EFT	298.26
281	U.S. BANK	Collections Training Guide - Sage	06/26/24	EFT	114.88
282	U.S. BANK	Comcast 05/24	06/26/24	EFT	477.64
283	U.S. BANK	Compressor Dryer - JLWTP	06/26/24	EFT	1,545.21
284	U.S. BANK	Control Switches - Electricians	06/26/24	EFT	2,025.19
285	U.S. BANK	Credit DVIR Books	06/26/24	EFT	(482.00)
286	U.S. BANK	CRWA Hotel - Burkhardt & Darby	06/26/24	EFT	542.72
287	U.S. BANK	CRWA Hotel - Tindell	06/26/24	EFT	211.36
288	U.S. BANK	Customer Service Supplies	06/26/24	EFT	47.41
289	U.S. BANK	CWEA E&I Cert Prep Class	06/26/24	EFT	195.00
290	U.S. BANK	CWEA Membership - Crumpacker	06/26/24	EFT	221.00
291	U.S. BANK	CWEA PMI Cert - Crumpacker	06/26/24	EFT	98.00
292	U.S. BANK	Fence - Hunters WTP	06/26/24	EFT	501.32
293	U.S. BANK	FERC Lunch (7) Lunch Meeting County (8)	06/26/24	EFT	149.56
294	U.S. BANK	Harveys Hotel - Gravette	06/26/24	EFT	238.26
295	U.S. BANK	Hose Valve, Nipple, Elbow, Light	06/26/24	EFT	67.18
296	U.S. BANK	HR Conference Hotel	06/26/24	EFT	927.60
297	U.S. BANK	Hydroranger Programmer - Electricians	06/26/24	EFT	1,322.51
298	U.S. BANK	Ice Machine - Shop	06/26/24	EFT	3,782.60
299	U.S. BANK	ICS Training Snacks - Wyckoff	06/26/24	EFT	131.18
300	U.S. BANK	ICS Training Supplies	06/26/24	EFT	62.85
301	U.S. BANK	Internet Service FM, Hunters Arnold & Fowler	06/26/24	EFT	600.00

	Vendor	Description	Check Date	Check No	Amount
302	U.S. BANK	IT Phone Charger, IT Work Order System, Battery Replacement	06/26/24	EFT	1,450.12
303	U.S. BANK	Jumper Cables - JL WTP	06/26/24	EFT	18.22
304	U.S. BANK	Laptop Bag	06/26/24	EFT	164.93
305	U.S. BANK	Leaf Blower - JL WTP	06/26/24	EFT	36.03
306	U.S. BANK	Lunch Meeting Justin Caporusso - Minkler	06/26/24	EFT	44.03
307	U.S. BANK	NCPA Meeting - Minkler	06/26/24	EFT	595.60
308	U.S. BANK	Nitrogen Filter	06/26/24	EFT	42.75
309	U.S. BANK	Office Supplies	06/26/24	EFT	1,306.09
310	U.S. BANK	Ozone - Charts	06/26/24	EFT	296.78
311	U.S. BANK	Ozone Bulbs	06/26/24	EFT	351.95
312	U.S. BANK	Parking - Mountain Counties Gerkensmeyer	06/26/24	EFT	25.00
313	U.S. BANK	Parking ACWA - Wyckoff	06/26/24	EFT	60.00
314	U.S. BANK	Parking Sac-Lollar	06/26/24	EFT	39.00
315	U.S. BANK	Personal Charge on CalCard Reimbursed to CCWD- Lollar	06/26/24	EFT	52.20
316	U.S. BANK	Privacy Fence - WP	06/26/24	EFT	228.35
317	U.S. BANK	Privacy Fence - WPWTP	06/26/24	EFT	560.21
318	U.S. BANK	Public Speaking Webinar - Lollar & Williams	06/26/24	EFT	295.00
319	U.S. BANK	Ring Central & Internet Service	06/26/24	EFT	2,122.83
320	U.S. BANK	Safety Supplies	06/26/24	EFT	393.90
321	U.S. BANK	Server Virtualization Software	06/26/24	EFT	1,658.42
322	U.S. BANK	Sprayer - Maintenance	06/26/24	EFT	1,061.90
323	U.S. BANK	Travel ACWA - Richards	06/26/24	EFT	1,155.71
324	U.S. BANK	UPUD 05/24	06/26/24	EFT	245.59
325	U.S. BANK	Verizon 04/24	06/26/24	EFT	3,163.34
326	U.S. BANK	Verizon 05/24	06/26/24	EFT	3,139.98
327	U.S. BANK	Vise, Grease Gun - DF VCTO	06/26/24	EFT	412.78
328	U.S. BANK	Volcano 05/24	06/26/24	EFT	599.36
329	U.S. BANK	Waste Water Study Guide - Roberts	06/26/24	EFT	96.49
330	U.S. BANK	Water Code Updates	06/26/24	EFT	13.63
331	U.S. BANK	Water Hose, Blade for Weed Eater, String	06/26/24	EFT	431.07
332	U.S. BANK	Water Study Guide Grade 1-2 - Byous	06/26/24	EFT	450.00
333	U.S. BANK	Web Hosting, Adobe, M365 Lic, IT Security	06/26/24	EFT	2,618.69
334	U.S. BANK	Young - Waste Water Class	06/26/24	EFT	625.00
335	UC DAVIS	Project Management Certificate - Williams	06/26/24	144875	1,100.00
336	UMPQUA BANK-ACH	CTO Payout Bank ACH 06/18/2024 CONFIDENTIAL	06/18/24	EFT	1,466.91
337	UMPQUA BANK-ACH	CTO Payout Bank ACH 06/21/2024 CONFIDENTIAL	06/21/24	EFT	1,732.41
338	UMPQUA BANK-ACH	CTO Payout Bank ACH 06/24/2024 CONFIDENTIAL	06/24/24	EFT	1,744.77
339	UMPQUA BANK-ACH	Umpqua Bank Fees May	06/24/24	EFT	606.13
340	UMPQUA BANK-ACH	Retiree Health Reimbursement 07/24	06/27/24	EFT	58,198.99
341	UNDERGROUND REPUBLIC WATER WORKS INC	3/4 Meters (6) - District	06/26/24	144876	1,931.20
342	UNDERHILL, BERTHA	Travel 05/24 Underhilll	06/12/24	144796	111.22
343	UNION DEMOCRAT	Recruitment Ads Water Operator & Collections	06/26/24	144877	1,484.78
344	UNITED PARCEL SERVICE	Shipping Week End 04/23 Acct#9X5040	06/05/24	144724	9.90

CCWD - AP DISBURSEMENTS
JUNE 1-30, 2024

	Vendor	Description	Check Date	Check No	Amount
345	UNITED PARCEL SERVICE	Shipping Week End 05/11 Acct#9X5040	06/05/24	144724	9.90
346	UNITED PARCEL SERVICE	Shipping Week End 05/18 Acct#9X5040	06/12/24	144797	9.90
347	UNITED PARCEL SERVICE	Shipping Week End 06/01 Acct# 9X5040	06/26/24	144878	26.34
348	UNITED PARCEL SERVICE	Shipping Week End 06/08 Acct# 9X5040	06/26/24	144878	9.90
349	UNITED PARCEL SERVICE	Shipping Week End 06/15 Acct# 9X5040	06/26/24	144878	9.90
350	USA BLUE BOOK	CorePRO - DF VCTO	06/05/24	144725	140.45
351	USA BLUE BOOK	Debris Catchers - Collections	06/05/24	144725	632.66
352	USA BLUE BOOK	Sample Stations - WP Dist	06/05/24	144725	4,273.16
353	USA BLUE BOOK	Lab Supplies - JLWTP & Wallace WTP	06/12/24	144798	791.29
354	USA BLUE BOOK	Lab Supplies - Wallace WWTP	06/26/24	144879	964.64
355	UTICA WATER & POWER AUTHORITY	Calaveras County Fair Booth Shared Cost 2024	06/12/24	144799	170.00
356	VALIC	Def Comp Disbursement 05/31/2024 Payroll	06/13/24	EFT	500.00
357	VALIC	Def Comp Disbursement 06/15/2024 Payroll	06/19/24	EFT	500.00
358	VALLEY SPRINGS NEWS	Public Notice, Hunters Raw Water Pump Station Mitigation Phase 2, CIP 11103	06/05/24	144726	126.75
359	VALLEY SPRINGS NEWS	Recruitment Ad - Collections and Water Operator	06/12/24	144800	270.00
360	VALLEY SPRINGS TIRE & AUTO	Tire Replacement V762	06/05/24	144727	120.00
361	VALLEY SPRINGS TIRE & AUTO	Tires - V139	06/05/24	144727	450.72
362	VAN, CHERYL	Claim Settlement 150 Palisades Place	06/05/24	144728	250.00
363	VERIFIED FIRST, LLC	New Hire Background Investigation	06/12/24	144801	78.52
364	VOYA FINANCIAL	Def Comp Disbursement 05/31/2024 Payroll	06/13/24	EFT	818.00
365	VOYA FINANCIAL	Def Comp Disbursement 06/15/2024 Payroll	06/19/24	EFT	1,318.00
366	WAGEWORKS	FSA Admin 05/24	06/05/24	144729	200.00
367	WEBSOFT DEVELOPERS, INC.	Mobile MMS Annual Subscription 09/15/2023 - 09/14/2024	06/26/24	144881	35,000.00
368	WECO INDUSTRIES	Repair Kits - Hydro Excavator	06/26/24	144882	543.52
369	WEST POINT LUMBER INC	Flex Tape, Ratchet Straps - WPWTP	06/12/24	144803	60.03
370	WESTERN HYDROLOGICS	Stream Gaging Water Rights Services 05/24	06/05/24	144730	1,896.11
371	WEX BANK	Fuel 05/24	06/30/24	EFT	20,731.12
372	WILSON, NORBY	UB Refund 739 Sugarbush Lane	06/05/24	144731	196.17
373	WOOLAM, AARON	UB Refund 5662 Rippon Road	06/05/24	144732	1,058.37
374	YOUNG'S COPPER ACE HARDWARE	Materials & Supplies - CC	06/12/24	144802	187.45
					##########

RESOLUTION NO. 2024-

A RESOLUTION OF THE BOARD OF DIRECTORS OF THE CALAVERAS COUNTY WATER DISTRICT

RATIFYING CLAIM SUMMARY NO. 628

WHEREAS, the Board of Directors of the CALAVERAS COUNTY WATER DISTRICT has reviewed and considered Claim Summary Number 628 at the Regular Meeting held on July 10, 2024; and

WHEREAS, Board Members have resolved questions, issues, or concerns by consultation with District staff during said meeting.

NOW, THEREFORE, BE IT RESOLVED that the CALAVERAS COUNTY WATER DISTRICT Board of Directors hereby ratifies Claim Summary Number 628 in the amount of $3,165,604.73 for the month of June 2024.

PASSED AND ADOPTED this 10th day of July 2024 by the following vote:

AYES:
NOES:
ABSTAIN:
ABSENT:

CALAVERAS COUNTY WATER DISTRICT

_____
Russ Thomas, President
Board of Directors

ATTEST:

_____
Rebecca Hitchcock
Clerk to the Board

4a

AGENDA ITEM

4a

Agenda Item

DATE: July 10, 2024

TO: Michael Minkler, General Manager

FROM: Jeffrey Meyer, Director of Administrative Services

SUBJECT: Presentation of District's Retiree Health Trust Fund and Investment Strategies

RECOMMENDED ACTION:

Presentation of District's Retiree Health Trust Fund and Investment Strategies.

SUMMARY:

The District sponsors a single employer defined Other Postemployment Benefit Plan (OPEB) that provides retiree health benefits, such as medical, prescription drug, dental and vision coverage at retirement. Under this program the District maintains an IRS Section 115 trust with Public Agency Retirement Services (PARS). U.S. Bank is the trustee and PFM Asset Management (PFM) manages our investments.

Andrew Brown of PFM and Ryan Nicasio of PARS will report on our OPEB Trust and the District's investment strategy, including capital market assumptions and asset allocation modeling. The District utilizes a Moderate asset allocation, which has 50% invested in equities, 45% in fixed income and 5% in cash. PARS also offers a Balanced asset allocation (60/35/5) and a Capital Appreciation asset allocation (75/20/5).

On June 26, 2024, GovInvest presented the GASB 75 Disclosures for Fiscal Year Ending June 30, 2024. Among the findings of the valuation, the District's Net OPEB Liability decreased from $8,175,039 in 2022, to $5,946,368 in 2023. Although the Net OPEB Liability experienced a decrease, it is higher than the 2021 amount of $2,008,651.

A key component of the Net OPEB Liability is the anticipated rate of return on our investments, or discount rate. The District moved to a 6.0% discount rate in 2021, which is in line with the 'Moderate' asset allocation. As noted by GovInvest during their presentation, lowering the discount rate from 7.0% was one of the key factors the Net OPEB Liability increased from $2.0 million in 2021 to $8.2 million in 2022.

Andrew Brown and Ryan Nicasio will discuss asset allocations options and will be available to answer questions regarding the trust and investment strategies.

FINANCIAL CONSIDERATIONS:

None at this time.

Attachments: PARS Diversified Portfolios

HIGHMARK® CAPITAL MANAGEMENT

PARS DIVERSIFIED PORTFOLIOS
MODERATE

Q4 2023

WHY THE PARS DIVERSIFIED MODERATE PORTFOLIO?

Comprehensive Investment Solution

HighMark® Capital Management, Inc.'s (HighMark) diversified investment portfolios are designed to balance return expectations with risk tolerance. Key features include: sophisticated asset allocation and optimization techniques, four layers of diversification (asset class, style, manager, and security), access to rigorously screened, top tier money managers, flexible investment options, and experienced investment management.

Rigorous Manager Due Diligence

Our manager review committee utilizes a rigorous screening process that searches for investment managers and styles that have not only produced above-average returns within acceptable risk parameters, but have the resources and commitment to continue to deliver these results. We have set high standards for our investment managers and funds. This is a highly specialized, time consuming approach dedicated to one goal: competitive and consistent performance.

Flexible Investment Options

In order to meet the unique needs of our clients, we offer access to flexible implementation strategies: HighMark Plus utilizes actively managed mutual funds while Index Plus utilizes index-based securities, including exchange-traded funds. Both investment options leverage HighMark's active asset allocation approach.

Risk Management

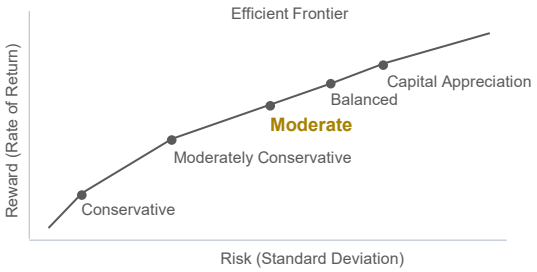
The portfolio is constructed to control risk through four layers of diversification – asset classes (cash, fixed income, equity), investment styles (large cap, small cap, international, value, growth), managers and securities. Disciplined mutual fund selection and monitoring process helps to drive return potential while reducing portfolio risk.

PORTFOLIO FACTS

HighMark Plus (Active)	
Composite Inception Date	10/2004
No of Holdings in Portfolio	19
Index Plus (Passive)	
Composite Inception Date	05/2006
No of Holdings in Portfolio	12

INVESTMENT OBJECTIVE

To provide current income and moderate capital appreciation. It is expected that dividend and interest income will comprise a significant portion of total return, although growth through capital appreciation is equally important.



ASSET ALLOCATION — MODERATE PORTFOLIO

	Strategic Range	Policy	Tactical
Equity	40 - 60%	50%	49%
Fixed Income	40 - 60%	45%	48%
Cash	0 - 20%	5%	3%

ANNUALIZED TOTAL RETURNS

(Gross of Investment Management Fees, but Net of Embedded Fund Fees)

HighMark Plus Composite (Active)	Gross	Net
Current Quarter*	9.28%	9.18%
Blended Benchmark,**	*8.72%*	
Year To Date*	13.98%	13.57%
Blended Benchmark,**	*13.56%*	
1 Year	13.98%	13.57%
*Blended Benchmark***	*13.56%*	
3 Year	2.08%	1.71%
*Blended Benchmark***	*2.58%*	
5 Year	7.17%	6.79%
*Blended Benchmark***	*7.31%*	
10 Year	5.55%	5.17%
*Blended Benchmark***	*5.82%*	

Index Plus Composite (Passive)	Gross	Net
Current Quarter*	9.01%	8.91%
Blended Benchmark,**	*8.72%*	
Year To Date*	12.74%	12.33%
Blended Benchmark,**	*13.56%*	
1 Year	12.74%	12.33%
*Blended Benchmark***	*13.56%*	
3 Year	2.14%	1.77%
*Blended Benchmark***	*2.58%*	
5 Year	6.85%	6.47%
*Blended Benchmark***	*7.31%*	
10 Year	5.34%	4.96%
*Blended Benchmark***	*5.82%*	

* Returns less than one year are not annualized. **Breakdown for Blended Benchmark: From 10/1/2012 – Present: 26.5% S&P500, 5% Russell Mid Cap, 7.5% Russell 2000, 3.25% MSCI EM (net), 6% MSCI EAFE (net), 33.50% Bloomberg US Agg, 10% ICE BofA 1-3 Yr US Corp/Gov't, 1.50% ICE BofA US High Yield Master II, 1.75% Wilshire REIT, and 5% FTSE 1 Mth US T-Bill. From 4/1/2007 – 9/30/2012: the blended benchmark was 43% S&P 500; 2% Russell 2000, 5% MSCI EAFE (net), 15% ICE BofA 1-3 Year Corp./Govt, 30% Bloomberg US Agg, 5% FTSE 1 Mth US T-Bill. Prior to April 2007: the blended benchmark was 50% S&P 500, 15% ICE BofA 1-3Yr Corp/Gov, 30% Bloomberg US Agg, and 5% FTSE 1 Mth US T-Bill.

ANNUAL RETURNS

(Gross of Investment Management Fees, but Net of Embedded Fund Fees)

HighMark Plus Composite (Active)	
2008	-22.88%
2009	21.47%
2010	12.42%
2011	0.55%
2012	12.25%
2013	13.06%
2014	4.84%
2015	0.14%
2016	6.45%
2017	13.19%
2018	-4.03%
2019	17.71%
2020	12.92%
2021	9.31%
2022	-14.63%
2023	13.98%

Index Plus Composite (Passive)	
2008	-18.14%
2009	16.05%
2010	11.77%
2011	2.29%
2012	10.91%
2013	12.79%
2014	5.72%
2015	-0.52%
2016	7.23%
2017	11.59%
2018	-4.03%
2019	17.52%
2020	11.23%
2021	10.18%
2022	-14.21%
2023	12.74%

HOLDINGS

HighMark Plus (Active)

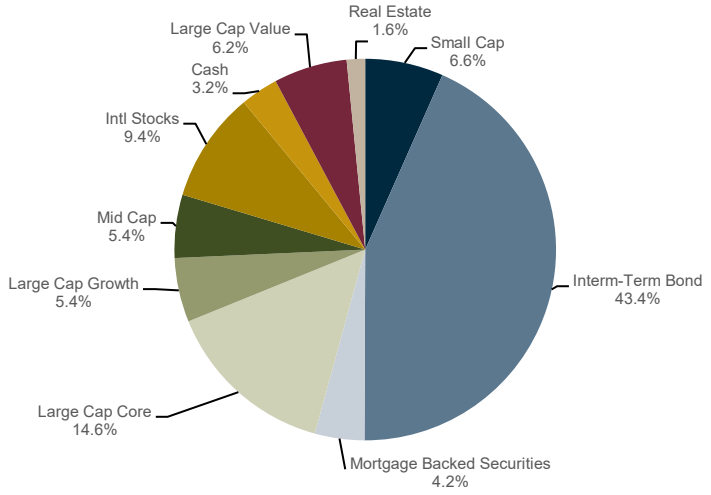
Columbia Contrarian Core I3
Vanguard Growth & Income Adm
Dodge & Cox Stock Fund
iShares S&P 500 Value ETF
Harbor Capital Appreciation - Retirement
iShares S&P 500 Growth ETF
iShares Russell Mid-Cap ETF
Vanguard Real Estate ETF
Undiscovered Managers Behavioral Value-R6
Emerald Growth Fund-I
DFA Large Cap International Portfolio
Dodge & Cox International Stock
MFS International Growth - R6
Hartford Schroders Emerging Markets Eq
iShares MBS ETF
Dodge & Cox Income-I
PGIM Total Return Bond - R6
DoubleLine Core Fixed Income - I
First American Government Obligations Z

Index Plus (Passive)

iShares Core S&P 500 ETF
iShares S&P 500 Value ETF
iShares S&P 500 Growth ETF
iShares Russell Mid-Cap ETF
Vanguard Real Estate ETF
iShares Russell 2000 Value ETF
iShares Russell 2000 Growth ETF
iShares Core MSCI EAFE ETF
Vanguard FTSE Emerging Markets ETF
iShares MBS ETF
iShares Core U.S. Aggregate
First American Government Obligations Z

Holdings are subject to change at the discretion of the investment manager.

STYLE



The performance records shown represent size-weighted composites of tax exempt accounts that meet the following criteria: Accounts are managed by HighMark with full investment authority according to the PARS Moderate active and passive objectives.

The adviser to the PARS portfolios is U.S. Bank, and HighMark serves as sub-adviser to U.S. Bank to manage these portfolios. U.S. Bank may charge clients as much as 0.60% annual management fee based on a sliding scale. U.S. Bank pays HighMark 60% of the annual management fee for assets sub-advised by HighMark under its sub-advisory agreement with U.S. Bank. The 0.36% paid to HighMark, as well as other expenses that may be incurred in the management of the portfolio, will reduce the portfolio's returns. Assuming an investment for five years, a 5% annual total return, and an annual sub-advisory fee rate of 0.36% deducted from the assets at market at the end of each year, a $10 million initial value would grow to $12.53 million after fees (Net-of-Fees) and $12.76 million before fees (Gross-of-Fees). Gross returns are presented before management and custodial fees but after all trading expenses and reflect the reinvestment of dividends and other income. A client's return will be reduced by the advisory fees and other expenses it may incur as a client. Additional information regarding the firm's policies and procedures for calculating and reporting performance results is available upon request. Performance results are calculated and presented in U.S. dollars and do not reflect the deduction of investment advisory fees, custody fees, or taxes but do reflect the deduction of trading expenses. Returns are calculated based on trade-date accounting.

Blended benchmarks represent HighMark's strategic allocations between equity, fixed income, and cash and are rebalanced monthly. Benchmark returns do not reflect the deduction of advisory fees or other expenses of investing but assumes the reinvestment of dividends and other earnings. An investor cannot invest directly in an index. The unmanaged S&P 500 Index is representative of the performance of large companies in the U.S. stock market. The MSCI EAFE Index is a free float-adjusted market capitalization index designed to measure developed market equity performance, excluding the U.S. and Canada. The MSCI Emerging Markets Index is a free float-adjusted market capitalization index that is designed to measure equity market performance in the global emerging markets. The Russell Midcap Index measures the performance of the mid-cap segment of the U.S. equity universe. The Russell 2000 Index measures the performance of the small-cap segment of the U.S. equity universe. The ICE BofA U.S. High Yield Master II Index tracks the performance of below investment grade U.S. dollar-denominated corporate bonds publicly issued in the U.S. domestic market. Wilshire REIT index measures U.S. publicly traded Real Estate Investment Trusts. The unmanaged Bloomberg U.S. Aggregate Bond Index is generally representative of the U.S. taxable bond market as a whole. The ICE BofA 1-3 Year U.S. Corporate & Government Index tracks the bond performance of the ICE BofA U.S. Corporate & Government Index, with a remaining term to final maturity less than 3 years. The unmanaged FTSE 1-Month U.S. Treasury Bill Index tracks the yield of the 1-month U.S. Treasury Bill.

HighMark Capital Management, Inc. (HighMark) is an investment adviser registered with the U.S. Securities and Exchange Commission and a subsidiary of U.S. Bank National Association ("U.S. Bank"). U.S. Bank is a separate entity and subsidiary of U.S. Bancorp. U.S. Bank is not responsible for and does not guarantee the products, services or performance of HighMark. HighMark manages institutional separate account portfolios for a wide variety of for-profit and nonprofit organizations, public agencies, and public and private retirement plans. Individual account management and construction will vary depending on each client's investment needs and objectives. U.S. Bank provides certain services to HighMark and is compensated for these services. **Investments employing HighMark strategies are NOT insured by the FDIC or by any other Federal Government Agency, are NOT Bank deposits, are NOT guaranteed by the Bank or any Bank affiliate, and MAY lose value, including possible loss of principal.**

HIGHMARK CAPITAL MANAGEMENT

350 California Street
Suite 1600
San Francisco, CA 94104
800-582-4734

ABOUT THE ADVISER

HighMark® Capital Management, Inc. (HighMark) has over 100 years (including predecessor organizations) of institutional money management experience with $9.2 billion in assets under management*. HighMark has a long term disciplined approach to money management and currently manages assets for a wide array of clients.

ABOUT THE PORTFOLIO MANAGEMENT TEAM

Andrew Brown, CFA®
Senior Portfolio Manager
Investment Experience: since 1994
HighMark Tenure: since 1997
Education: MBA, University of Southern California; BA, University of Southern California

Salvatore "Tory" Milazzo III, CFA®
Senior Portfolio Manager
Investment Experience: since 2004
HighMark Tenure: since 2014
Education: BA, Colgate University

J. Keith Stribling, CFA®
Senior Portfolio Manager
Investment Experience: since 1985
HighMark Tenure: since 1995
Education: BA, Stetson University

Christiane Tsuda
Senior Portfolio Manager
Investment Experience: since 1987
HighMark Tenure: since 2010
Education: BA, International Christian University, Tokyo

Anne Wimmer, CFA®
Senior Portfolio Manager
Investment Experience: since 1987
HighMark Tenure: since 2007
Education: BA, University of California, Santa Barbara

Asset Allocation Committee
Number of Members: 10
Average Years of Experience: 29
Average Tenure (Years): 18

Manager Review Group
Number of Members: 3
Average Years of Experience: 29
Average Tenure (Years): 13

*Assets under management ("AUM") include assets for which HighMark provides continuous and regular supervisory and management services. As of 6/1/2023 HighMark previously listed Assets under Advisement ("AUA") are no longer advised by HighMark.

HIGHMARK® CAPITAL MANAGEMENT

PARS DIVERSIFIED PORTFOLIOS
BALANCED

Q4 2023

WHY THE PARS DIVERSIFIED BALANCED PORTFOLIO?

Comprehensive Investment Solution

HighMark® Capital Management, Inc.'s (HighMark) diversified investment portfolios are designed to balance return expectations with risk tolerance. Key features include: sophisticated asset allocation and optimization techniques, four layers of diversification (asset class, style, manager, and security), access to rigorously screened, top tier money managers, flexible investment options, and experienced investment management.

Rigorous Manager Due Diligence

Our manager review committee utilizes a rigorous screening process that searches for investment managers and styles that have not only produced above-average returns within acceptable risk parameters, but have the resources and commitment to continue to deliver these results. We have set high standards for our investment managers and funds. This is a highly specialized, time consuming approach dedicated to one goal: competitive and consistent performance.

Flexible Investment Options

In order to meet the unique needs of our clients, we offer access to flexible implementation strategies: HighMark Plus utilizes actively managed mutual funds while Index Plus utilizes index-based securities, including exchange-traded funds. Both investment options leverage HighMark's active asset allocation approach.

Risk Management

The portfolio is constructed to control risk through four layers of diversification – asset classes (cash, fixed income, equity), investment styles (large cap, small cap, international, value, growth), managers and securities. Disciplined mutual fund selection and monitoring process helps to drive return potential while reducing portfolio risk.

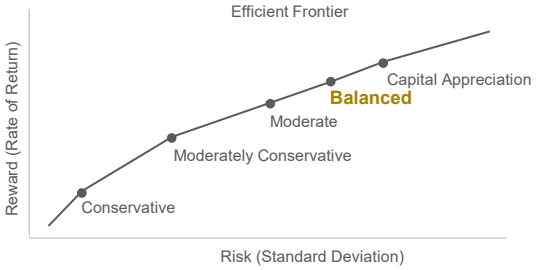
PORTFOLIO FACTS

HighMark Plus (Active)	
Composite Inception Date	10/2006
No of Holdings in Portfolio	19

Index Plus (Passive)	
Composite Inception Date	10/2007
No of Holdings in Portfolio	12

INVESTMENT OBJECTIVE

To provide growth of principal and income. While dividend and interest income are an important component of the objective's total return, it is expected that capital appreciation will comprise a larger portion of the total return.



ASSET ALLOCATION — BALANCED PORTFOLIO

	Strategic Range	Policy	Tactical
Equity	50 – 70%	60%	59%
Fixed Income	30 – 50%	35%	38%
Cash	0 – 20%	5%	3%

ANNUALIZED TOTAL RETURNS

(Gross of Investment Management Fees, but Net of Embedded Fund Fees)

HighMark Plus Composite (Active)	Gross	Net
Current Quarter*	9.84%	9.75%
Blended Benchmark, ***	*9.36%*	
Year To Date*	15.39%	14.98%
Blended Benchmark, ***	*15.19%*	
1 Year	15.39%	14.98%
*Blended Benchmark***	*15.19%*	
3 Year	2.89%	2.53%
*Blended Benchmark***	*3.46%*	
5 Year	8.25%	7.86%
*Blended Benchmark***	*8.45%*	
10 Year	6.21%	5.83%
*Blended Benchmark***	*6.61%*	

Index Plus Composite (Passive)	Gross	Net
Current Quarter*	9.60%	9.50%
Blended Benchmark, ***	*9.36%*	
Year To Date*	14.31%	13.91%
Blended Benchmark, ***	*15.19%*	
1 Year	14.31%	13.91%
*Blended Benchmark***	*15.19%*	
3 Year	3.06%	2.69%
*Blended Benchmark***	*3.46%*	
5 Year	7.97%	7.58%
*Blended Benchmark***	*8.45%*	
10 Year	6.05%	5.67%
*Blended Benchmark***	*6.61%*	

* Returns less than one year are not annualized. **Breakdown for Blended Benchmark: From 10/1/2012 – Present: 32% S&P500, 6% Russell Mid Cap, 9% Russell 2000, 4% MSCI EM (net), 7% MSCI EAFE (net), 27% Bloomberg US Agg, 6.75% ICE BofA 1-3 Yr US Corp/Gov't, 1.25% ICE BofA US High Yield Master II, 2% Wilshire REIT, and 5% FTSE 1 Mth US T-Bill. From 4/1/2007 – 9/30/2012: the blended benchmark was 51% S&P 500; 3% Russell 2000, 6% MSCI EAFE (net), 5% ICE BofA 1-3 Year Corp./Govt, 30% Bloomberg US Agg, 5% FTSE 1 Mth US T-Bill. Prior to April 2007: the blended benchmark was 60% S&P 500, 5% ICE BofA 1-3Yr Corp/Gov, 30% Bloomberg US Agg, and 5% FTSE 1 Mth US T-Bill.

ANNUAL RETURNS

(Gross of Investment Management Fees, but Net of Embedded Fund Fees)

HighMark Plus Composite (Active)	
2008	-25.72%
2009	21.36%
2010	14.11%
2011	-0.46%
2012	13.25%
2013	16.61%
2014	4.70%
2015	0.04%
2016	6.81%
2017	15.46%
2018	-4.88%
2019	19.85%
2020	13.85%
2021	11.44%
2022	-15.28%
2023	15.39%

Index Plus Composite (Passive)	
2008	-23.22%
2009	17.62%
2010	12.76%
2011	1.60%
2012	11.93%
2013	15.63%
2014	6.08%
2015	-0.81%
2016	8.26%
2017	13.39%
2018	-5.05%
2019	19.59%
2020	12.07%
2021	12.63%
2022	-14.97%
2023	14.31%

HOLDINGS

HighMark Plus (Active)

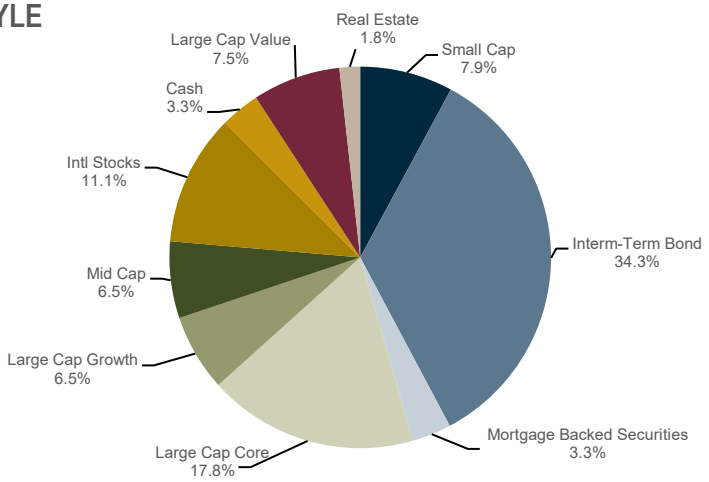
Columbia Contrarian Core I3
Vanguard Growth & Income Adm
Dodge & Cox Stock Fund
iShares S&P 500 Value ETF
Harbor Capital Appreciation - Retirement
iShares S&P 500 Growth ETF
iShares Russell Mid-Cap ETF
Vanguard Real Estate ETF
Undiscovered Managers Behavioral Value-R6
Emerald Growth Fund-I
DFA Large Cap International Portfolio
Dodge & Cox International Stock
MFS International Growth - R6
Hartford Schroders Emerging Markets Eq
iShares MBS ETF
Dodge & Cox Income-I
PGIM Total Return Bond - R6
DoubleLine Core Fixed Income - I
First American Government Obligations Z

Index Plus (Passive)

iShares Core S&P 500 ETF
iShares S&P 500 Value ETF
iShares S&P 500 Growth ETF
iShares Russell Mid-Cap ETF
Vanguard Real Estate ETF
iShares Russell 2000 Value ETF
iShares Russell 2000 Growth ETF
iShares Core MSCI EAFE ETF
Vanguard FTSE Emerging Markets ETF
iShares MBS ETF
iShares Core U.S. Aggregate
First American Government Obligations Z

Holdings are subject to change at the discretion of the investment manager.

STYLE



The performance records shown represent size-weighted composites of tax exempt accounts that meet the following criteria: Accounts are managed by HighMark with full investment authority according to the PARS Balanced active and passive objectives.

The composite name has been changed from PARS Balanced/Moderately Aggressive to PARS Balanced on 5/1/2013. The adviser to the PARS portfolios is U.S. Bank, and HighMark serves as sub-adviser to U.S. Bank to manage these portfolios. U.S. Bank may charge clients as much as 0.60% annual management fee based on a sliding scale. U.S. Bank pays HighMark 60% of the annual management fee for assets sub-advised by HighMark under its sub-advisory agreement with U.S. Bank. The 0.36% paid to HighMark, as well as other expenses that may be incurred in the management of the portfolio, will reduce the portfolio's returns. Assuming an investment for five years, a 5% annual total return, and an annual sub-advisory fee rate of 0.36% deducted from the assets at market at the end of each year, a $10 million initial value would grow to $12.53 million after fees (Net-of-Fees) and $12.76 million before fees (Gross-of-Fees). Gross returns are presented before management and custodial fees but after all trading expenses and reflect the reinvestment of dividends and other income. A client's return will be reduced by the advisory fees and other expenses it may incur as a client. Additional information regarding the firm's policies and procedures for calculating and reporting performance results is available upon request. Performance results are calculated and presented in U.S. dollars and do not reflect the deduction of investment advisory fees, custody fees, or taxes but do reflect the deduction of trading expenses. Returns are calculated based on trade-date accounting.

Blended benchmarks represent HighMark's strategic allocations between equity, fixed income, and cash and are rebalanced monthly. Benchmark returns do not reflect the deduction of advisory fees or other expenses of investing but assumes the reinvestment of dividends and other earnings. An investor cannot invest directly in an index. The unmanaged S&P 500 Index is representative of the performance of large companies in the U.S. stock market. The MSCI EAFE Index is a free float-adjusted market capitalization index designed to measure developed market equity performance, excluding the U.S. and Canada. The MSCI Emerging Markets Index is a free float-adjusted market capitalization index that is designed to measure equity market performance in the global emerging markets. The Russell Midcap Index measures the performance of the mid-cap segment of the U.S. equity universe. The Russell 2000 Index measures the performance of the small-cap segment of the U.S. equity universe. The ICE BofA U.S. High Yield Master II Index tracks the performance of below investment grade U.S. dollar-denominated corporate bonds publicly issued in the U.S. domestic market. Wilshire REIT index measures U.S. publicly traded Real Estate Investment Trusts. The unmanaged Bloomberg U.S. Aggregate Bond Index is generally representative of the U.S. taxable bond market as a whole. The ICE BofA 1-3 Year U.S. Corporate & Government Index tracks the bond performance of the ICE BofA U.S. Corporate & Government Index, with a remaining term to final maturity less than 3 years. The unmanaged FTSE 1-Month U.S. Treasury Bill Index tracks the yield of the 1-month U.S. Treasury Bill.

HighMark Capital Management, Inc. (HighMark) is an investment adviser registered with the U.S. Securities and Exchange Commission and a subsidiary of U.S. Bank National Association ("U.S. Bank"). U.S. Bank is a separate entity and subsidiary of U.S. Bancorp. U.S. Bank is not responsible for and does not guarantee the products, services or performance of HighMark. HighMark manages institutional separate account portfolios for a wide variety of for-profit and nonprofit organizations, public agencies, and public and private retirement plans. Individual account management and construction will vary depending on each client's investment needs and objectives. U.S. Bank provides certain services to HighMark and is compensated for these services. **Investments employing HighMark strategies are NOT insured by the FDIC or by any other Federal Government Agency, are NOT Bank deposits, are NOT guaranteed by the Bank or any Bank affiliate, and MAY lose value, including possible loss of principal.**

HIGHMARK CAPITAL MANAGEMENT

350 California Street
Suite 1600
San Francisco, CA 94104
800-582-4734

ABOUT THE ADVISER

HighMark® Capital Management, Inc. (HighMark) has over 100 years (including predecessor organizations) of institutional money management experience with $9.2 billion in assets under management*. HighMark has a long term disciplined approach to money management and currently manages assets for a wide array of clients.

ABOUT THE PORTFOLIO MANAGEMENT TEAM

Andrew Brown, CFA®
Senior Portfolio Manager
Investment Experience: since 1994
HighMark Tenure: since 1997
Education: MBA, University of Southern California; BA, University of Southern California

Salvatore "Tory" Milazzo III, CFA®
Senior Portfolio Manager
Investment Experience: since 2004
HighMark Tenure: since 2014
Education: BA, Colgate University

J. Keith Stribling, CFA®
Senior Portfolio Manager
Investment Experience: since 1985
HighMark Tenure: since 1995
Education: BA, Stetson University

Christiane Tsuda
Senior Portfolio Manager
Investment Experience: since 1987
HighMark Tenure: since 2010
Education: BA, International Christian University, Tokyo

Anne Wimmer, CFA®
Senior Portfolio Manager
Investment Experience: since 1987
HighMark Tenure: since 2007
Education: BA, University of California, Santa Barbara

Asset Allocation Committee
Number of Members: 10
Average Years of Experience: 29
Average Tenure (Years): 18

Manager Review Group
Number of Members: 3
Average Years of Experience: 29
Average Tenure (Years): 13

*Assets under management ("AUM") include assets for which HighMark provides continuous and regular supervisory and management services. As of 6/1/2023 HighMark previously listed Assets under Advisement ("AUA") are no longer advised by HighMark.

HIGHMARK®
CAPITAL MANAGEMENT

PARS DIVERSIFIED PORTFOLIOS
CAPITAL APPRECIATION

Q4 2023

WHY THE PARS DIVERSIFIED CAPITAL APPRECIATION PORTFOLIO?

Comprehensive Investment Solution

HighMark® Capital Management, Inc.'s (HighMark) diversified investment portfolios are designed to balance return expectations with risk tolerance. Key features include: sophisticated asset allocation and optimization techniques, four layers of diversification (asset class, style, manager, and security), access to rigorously screened, top tier money managers, flexible investment options, and experienced investment management.

Rigorous Manager Due Diligence

Our manager review committee utilizes a rigorous screening process that searches for investment managers and styles that have not only produced above-average returns within acceptable risk parameters, but have the resources and commitment to continue to deliver these results. We have set high standards for our investment managers and funds. This is a highly specialized, time consuming approach dedicated to one goal: competitive and consistent performance.

Flexible Investment Options

In order to meet the unique needs of our clients, we offer access to flexible implementation strategies: HighMark Plus utilizes actively managed mutual funds while Index Plus utilizes index-based securities, including exchange-traded funds. Both investment options leverage HighMark's active asset allocation approach.

Risk Management

The portfolio is constructed to control risk through four layers of diversification – asset classes (cash, fixed income, equity), investment styles (large cap, small cap, international, value, growth), managers and securities. Disciplined mutual fund selection and monitoring process helps to drive return potential while reducing portfolio risk.

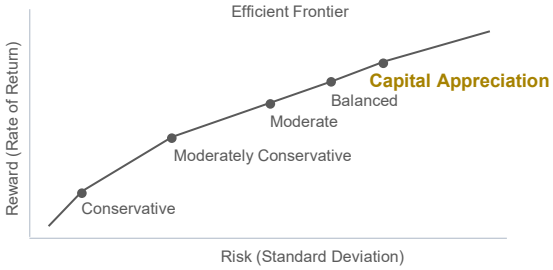
PORTFOLIO FACTS

Consolidated Composite

Composite Inception Date	01/2009
No of Holdings in Portfolio	19

INVESTMENT OBJECTIVE

To provide growth of principal. The major portion of the assets are invested in equity securities and market fluctuations are expected.



ASSET ALLOCATION — CAPITAL APPRECIATION PORTFOLIO

	Strategic Range	Policy	Tactical
Equity	65 - 85%	75%	74%
Fixed Income	10 - 30%	20%	22%
Cash	0 - 20%	5%	4%

ANNUALIZED TOTAL RETURNS

(Gross of Investment Management Fees, but Net of Embedded Fund Fees)

Consolidated Composite

	Gross	Net
Current Quarter*	10.40%	10.30%
Blended Benchmark,***	*10.22%*	
Year To Date*	17.32%	16.91%
Blended Benchmark,***	*17.62%*	
1 Year	17.32%	16.91%
*Blended Benchmark***	*17.62%*	
3 Year	4.22%	3.84%
*Blended Benchmark***	*4.74%*	
5 Year	9.71%	9.32%
*Blended Benchmark***	*10.05%*	
10 Year	7.23%	6.85%
*Blended Benchmark***	*7.64%*	

* Returns less than one year are not annualized. **Breakdown for Blended Benchmark: 39.5% S&P500, 7.5% Russell Mid Cap, 10.5% Russell 2000, 5.25% MSCI EM (net), 10.25% MSCI EAFE (net), 16% Bloomberg US Agg, 3% ICE BofA 1-3 Yr US Corp/Gov't, 1% ICE BofA US High Yield Master II, 2% Wilshire REIT, and 5% FTSE 1 Mth US T-Bill.

ANNUAL RETURNS

(Gross of Investment Management Fees, but Net of Embedded Fund Fees)

Consolidated Composite

2008	N/A
2009	23.77%
2010	12.95%
2011	-1.35%
2012	13.87%
2013	20.33%
2014	6.05%
2015	-0.26%
2016	8.79%
2017	16.72%
2018	-5.82%
2019	22.62%
2020	14.50%
2021	14.96%
2022	-16.08%
2023	17.32%

HOLDINGS

HighMark Plus (Active)

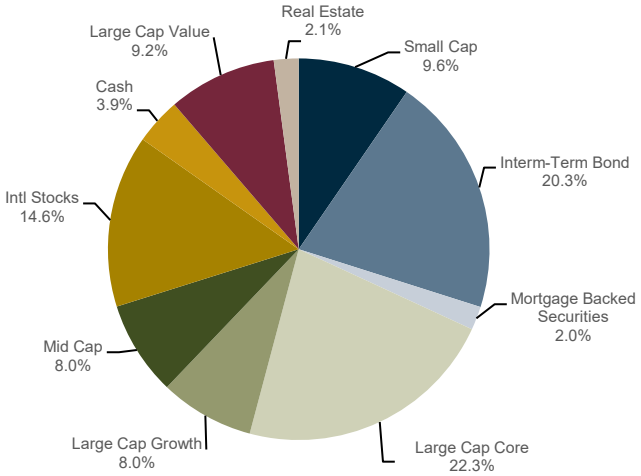
Columbia Contrarian Core I3
Vanguard Growth & Income Adm
Dodge & Cox Stock Fund
iShares S&P 500 Value ETF
Harbor Capital Appreciation - Retirement
iShares S&P 500 Growth ETF
iShares Russell Mid-Cap ETF
Vanguard Real Estate ETF
Undiscovered Managers Behavioral Value-R6
Emerald Growth Fund-I
DFA Large Cap International Portfolio
Dodge & Cox International Stock
MFS International Growth - R6
Hartford Schroders Emerging Markets Eq
iShares MBS ETF
Dodge & Cox Income-I
PGIM Total Return Bond - R6
DoubleLine Core Fixed Income - I
First American Government Obligations Z

Index Plus (Passive)

iShares Core S&P 500 ETF
iShares S&P 500 Value ETF
iShares S&P 500 Growth ETF
iShares Russell Mid-Cap ETF
Vanguard Real Estate ETF
iShares Russell 2000 Value ETF
iShares Russell 2000 Growth ETF
iShares Core MSCI EAFE ETF
Vanguard FTSE Emerging Markets ETF
iShares MBS ETF
iShares Core U.S. Aggregate
First American Government Obligations Z

Holdings are subject to change at the discretion of the investment manager.

STYLE



The performance records shown represent a size-weighted composite of tax exempt accounts that meet the following criteria: Accounts are managed by HighMark with full investment authority according to the PARS Capital Appreciation active and passive objectives.

The adviser to the PARS portfolios is U.S. Bank, and HighMark serves as sub-adviser to U.S. Bank to manage these portfolios. U.S. Bank may charge clients as much as 0.60% annual management fee based on a sliding scale. U.S. Bank pays HighMark 60% of the annual management fee for assets sub-advised by HighMark under its sub-advisory agreement with U.S. Bank. The 0.36% paid to HighMark, as well as other expenses that may be incurred in the management of the portfolio, will reduce the portfolio's returns. Assuming an investment for five years, a 5% annual total return, and an annual sub-advisory fee rate of 0.36% deducted from the assets at market at the end of each year, a $10 million initial value would grow to $12.53 million after fees (Net-of-Fees) and $12.76 million before fees (Gross-of-Fees). Gross returns are presented before management and custodial fees but after all trading expenses and reflect the reinvestment of dividends and other income. A client's return will be reduced by the advisory fees and other expenses it may incur as a client. Additional information regarding the firm's policies and procedures for calculating and reporting performance results is available upon request. Performance results are calculated and presented in U.S. dollars and do not reflect the deduction of investment advisory fees, custody fees, or taxes but do reflect the deduction of trading expenses. Returns are calculated based on trade-date accounting.

Blended benchmarks represent HighMark's strategic allocations between equity, fixed income, and cash and are rebalanced monthly. Benchmark returns do not reflect the deduction of advisory fees or other expenses of investing but assumes the reinvestment of dividends and other earnings. An investor cannot invest directly in an index. The unmanaged S&P 500 Index is representative of the performance of large companies in the U.S. stock market. The MSCI EAFE Index is a free float-adjusted market capitalization index designed to measure developed market equity performance, excluding the U.S. and Canada. The MSCI Emerging Markets Index is a free float-adjusted market capitalization index that is designed to measure equity market performance in the global emerging markets. The Russell Midcap Index measures the performance of the mid-cap segment of the U.S. equity universe. The Russell 2000 Index measures the performance of the small-cap segment of the U.S. equity universe. The ICE BofA U.S. High Yield Master II Index tracks the performance of below investment grade U.S. dollar-denominated corporate bonds publicly issued in the U.S. domestic market. Wilshire REIT index measures U.S. publicly traded Real Estate Investment Trusts. The unmanaged Bloomberg U.S. Aggregate Bond Index is generally representative of the U.S. taxable bond market as a whole. The ICE BofA 1-3 Year U.S. Corporate & Government Index tracks the bond performance of the ICE BofA U.S. Corporate & Government Index, with a remaining term to final maturity less than 3 years. The unmanaged FTSE 1-Month U.S. Treasury Bill Index tracks the yield of the 1-month U.S. Treasury Bill.

HighMark Capital Management, Inc. (HighMark) is an investment adviser registered with the U.S. Securities and Exchange Commission and a subsidiary of U.S. Bank National Association ("U.S. Bank"). U.S. Bank is a separate entity and subsidiary of U.S. Bancorp. U.S. Bank is not responsible for and does not guarantee the products, services or performance of HighMark. HighMark manages institutional separate account portfolios for a wide variety of for-profit and nonprofit organizations, public agencies, and public and private retirement plans. Individual account management and construction will vary depending on each client's investment needs and objectives. U.S. Bank provides certain services to HighMark and is compensated for these services. **Investments employing HighMark strategies are NOT insured by the FDIC or by any other Federal Government Agency, are NOT Bank deposits, are NOT guaranteed by the Bank or any Bank affiliate, and MAY lose value, including possible loss of principal.**

HIGHMARK CAPITAL MANAGEMENT

350 California Street
Suite 1600
San Francisco, CA 94104
800-582-4734

ABOUT THE ADVISER

HighMark® Capital Management, Inc. (HighMark) has over 100 years (including predecessor organizations) of institutional money management experience with $9.2 billion in assets under management*. HighMark has a long term disciplined approach to money management and currently manages assets for a wide array of clients.

ABOUT THE PORTFOLIO MANAGEMENT TEAM

Andrew Brown, CFA®
Senior Portfolio Manager
Investment Experience: since 1994
HighMark Tenure: since 1997
Education: MBA, University of Southern California; BA, University of Southern California

Salvatore "Tory" Milazzo III, CFA®
Senior Portfolio Manager
Investment Experience: since 2004
HighMark Tenure: since 2014
Education: BA, Colgate University

J. Keith Stribling, CFA®
Senior Portfolio Manager
Investment Experience: since 1985
HighMark Tenure: since 1995
Education: BA, Stetson University

Christiane Tsuda
Senior Portfolio Manager
Investment Experience: since 1987
HighMark Tenure: since 2010
Education: BA, International Christian University, Tokyo

Anne Wimmer, CFA®
Senior Portfolio Manager
Investment Experience: since 1987
HighMark Tenure: since 2007
Education: BA, University of California, Santa Barbara

Asset Allocation Committee
Number of Members: 10
Average Years of Experience: 29
Average Tenure (Years): 18

Manager Review Group
Number of Members: 3
Average Years of Experience: 29
Average Tenure (Years): 13

*Assets under management ("AUM") include assets for which HighMark provides continuous and regular supervisory and management services. As of 6/1/2023 HighMark previously listed Assets under Advisement ("AUA") are no longer advised by HighMark.

4b

AGENDA ITEM

4b

Agenda Item

DATE: July 10, 2024

TO: Michael Minkler, General Manager

FROM: Kevin Williams, Senior Civil Engineer

RE: Discussion/Action regarding a Budget Adjustment PBI Engineering Consultants Copper Cove Clearwell and B Tank CIP #11083C

SUMMARY

PBI Engineering Consultants is requesting a Budget Amendment Increase of $145,000 for completion of the Construction Management and Special Inspection (welding and geotechnical) for the Copper Cove Clearwell and B Tank Project. The original budget for PBI was not sufficient to perform the Construction Management and the Special Inspection task.

The Project has had numerous changes, but PBI has been doing a very good job at controlling the costs and staying ahead of the Contractor. The Construction Project is currently under the budget, and we have a net credit of approximately $157K in Change Orders. The Project is also scheduled to be completed before the contractual completion date.

FINANCIAL CONSIDERATIONS

The estimated cost of additional services (in excess of the remaining budget) is $145,000. There is sufficient budget in the Project for this Budget Amendment. Services are being provided by PBI on a time and materials basis. There is a sufficient budget in FY24-25 for this Contract Amendment.

Attachments:

1) *PBI Budget request*
2) *Resolution No. 2024-__ Approving a Budget Adjustment PBI Engineering Consultants Copper Cove Clearwell and B Tank CIP #11083C*

80 Blue Ravine Road, Suite 280
Folsom, CA 95630
916-608-2212

June 18, 2024

Kevin Williams
Calaveras County Water District
120 Toma Court, San Andreas, CA 95249
kevinw@ccwd.org

Subject: **Request for Budget Amendment for Copper Cove Water System Improvements – Phases 1 and 2 Tanks Project Engineering Services During Construction (Task 14)**

Dear Kevin,

We are submitting to you our budget amendment request to support the Copper Cove Water System Improvements Phases 1 and 2 Tanks Project (Project) Engineering Services During Construction (Task 14). In November 2023, Amendment 2 was executed, which created Task 14. At that time, the scope of Task 14 was expected to be limited to typical engineering tasks during construction. However, per the District's request, we have performed additional construction management services in lieu of having a dedicated Construction Manager. Thus, we have performed additional coordination with the Contractor and District to facilitate construction, as follows:

- In lieu of having a dedicated Construction Manager, PBI has coordinated with the District and the Contractor and performed construction management services to facilitate submittal responses. The original scope in Amendment 2 included technical review of submittals for conformance with the specification requirements and returning them to the District or Construction Manager.
- PBI has coordinated with the Contractor and performed construction management services to facilitate RFI responses. Additionally, PBI prepared detailed variance requests and coordinated with the District to obtain DDW approval for five pipe crossings at the Clearwell site. The original scope in Amendment 2 included reviewing and providing RFI responses to the District or Construction Manager only.
- PBI has prepared change proposal requests in response to pothole data and District requests, and has initiated potential change orders. Revisions to the design drawings have included: tie-in modifications, pipe elevations adjustments to resolve conflicts, piping elimination to simplify operations, and the existing B Tank height revision. The original scope in Amendment 2 included PBI review and recommendations in response to Contractor change order requests only.
- PBI has facilitated weekly construction meetings, with one meeting per month conducted in-person. The original scope in Amendment 2 specified bi-weekly construction meetings.

As of the most recent billing period (through April 26, 2024), the total remaining amount in the Task 14 budget is $163,150, including $100,170 for special materials testing/inspection services. The average monthly billing for Engineering Services During Construction services performed by PBI (not including special materials testing/inspection services) has been approximately $23,000/month during the period from October 2023 through April 2024. Based on the work that has been completed through April 2024, the PBI billing is expected to be reduced to approximately 65% of that amount going forward ($15,000/month).

The environmental surveys and inspection work (Task 14.7) is complete so the remaining funds of $23,200 will be reallocated to support the other subtasks. The requested amendment will supplement the budget to allow for approximately $15,000/month on average for PBI services in Task 14 going forward for the Project. In addition, electrical engineering services will be provided at an average cost of $1,000/month and special materials testing/inspection services will be provided at an average cost of $7,700/month (through May 2025).

The estimated cost of additional services (in excess of the remaining budget) is $145,000. This estimate assumes the construction work will be completed as scheduled in May 2025. Services will be provided on a time and materials basis. We look forward to providing continued support for the Project. If you have any questions or desire any additional information, please do not hesitate to contact us at (916) 608-2212.

Karl Brustad, PE, MBA
President

Hannah Dunrud
Project Manager

RESOLUTION NO. 2024-

A RESOLUTION OF THE BOARD OF DIRECTORS OF THE CALAVERAS COUNTY WATER DISTRICT

APPROVING AMENDMENT TO PROFESSIONAL SERVICES AGREEMENT FOR ENGINEERING SERVICES DURING CONSTRUCTION FOR THE COPPER COVE PHASE 1 & 2 TANK B AND CLEARWELL PROJECT CCWD CIP #11083C

WHEREAS, on September 19, 2023, the Calaveras County Water District (CCWD) approved a construction contract with T&S Construction Co., Inc. for the Copper Cove Phase 1 & 2 Tank B and Clearwell Project. A Notice to Proceed was issued to T&S on October 13, 2023 and construction of the project has begun. Staff has retained Peterson Brustad, Inc (PBI) for Engineering Services and Special Inspection; and

WHEREAS, the Project has had numerous changes and PBI Engineering is Requesting a Budget Amendment Increase to complete the Engineering Services and Special Inspection for the duration of the Project; and

WHEREAS, PBI prepared a detailed Request for Budget Amendment for additional $145,000; and

BE IT RESOLVED, the CALAVERAS COUNTY WATER DISTRICT Board of Directors hereby approves an amendment to the Professional Services Agreement with PBI and authorizes the General Manager to execute said amendment and contract adjustments not to exceed $145,00 as proposed in the attached budget reallocation.

PASSED AND ADOPTED this 10th day of July, 2024 by the following vote:

AYES:
NOES:
ABSTAIN:
ABSENT:

CALAVERAS COUNTY WATER DISTRICT

_____
Russ Thomas, President
Board of Directors

ATTEST:

_____
Rebecca Hitchcock
Clerk to the Board

4c

AGENDA ITEM

4c

Agenda Item

DATE: July 10, 2024

TO: Michael Minkler, General Manager

FROM: Kevin Williams, Senior Civil Engineer

RE: Discussion/Action regarding La Contenta WWTP Improvements Engineering Design Consultant Selection for the Biolac and Clarifier Improvements CIP#15097

RECOMMENDED ACTION:

Motion:_____/_____ to adopt Resolution No. 2024-____ Accepting the Proposal and Authorizing the General Manager to enter into a Agreement with Hydroscience for Design and Engineering Services related to the La Contenta WWTP Biolac and Clarifier Improvements. CIP#15097

SUMMARY:

The District issued a Request for Proposals (RFP) on March 11, 2024 for design services for the La Contenta WWTP Phase 3 Improvements (Phase 1-Intial Construction, Phase 2-Completed UV Disinfection). A copy of the RFP is attached, including a project description and scope of work. Staff would like the design completed by April 2025 and the Project publicly bid as early as July 2025 pending construction funding.

Phase 3 Project will improve treatment reliability and performance, add biological treatment capacity, implement nutrient removal, fully renew the outdated electrical and controls, upgrade pond pumping system and address effluent hydraulic bottleneck. The Phase 3 improvements will increase the flow and treatment capacity of the WWTP from Current Capacity of 1,110 Equivalent Dwelling Units (EDUs) to 1,577 EDUs to meet our current commitments, while allowing for future expansion and reducing the effluent nitrogen level to eliminate the risk of future more stringent regulations. The District plans to solicit proposals for environmental documentation separately once the Pre-Design report is completed.

This Project was identified in the January 2018 Master Plan completed Kennedy/Jenks Consultants, identifying phased improvements to meet planned growth, comply with current and future regulations and improve current plant operations. Service to infill and/or future developments may be limited unless these capacity upgrades are implemented relatively soon.

On the proposal due date May 30, 2024, the District received proposals from two (2) different engineering firms as tabulated below. Staff members including the District Engineer, Director of Operations and Senior Engineer reviewed and evaluated the proposals for considering various criteria such as qualifications and experience, content and presentation of the proposal and approach to work, completeness/variances in the proposed scope of work, allocation of staff hours to each task, general sense of value, subconsultant scope, potential scheduling issues and ability to deliver work within allowed timeframe, team organization and focus on key project issues, local representation and proximity to the project and prior performance on other District projects.

RANK	FIRM	FEE
1	Hydro Science	$749,448
2	Stantec	$1,800,000

The proposal from HydroScience included $100,731 in construction assistance (to be budgeted during construction phase) and there is $114,686 identified as optional task that is the preferred alternative. The proposal from Stantec includes $464,000 in construction assistance.

For professional services, the District is not obligated to make an award based on the lowest cost and can consider other criteria in the selection. Both Proposals were very close in the rankings with Hydro Science ranking slightly higher than Stantec. The cost was revealed after the ranking of the Proposals was completed, and the higher ranked consultant HydroScience, also had a significantly lower cost.

The recommendation to the Board is to award a design contract to Hydroscience according to the submitted proposal and authorize the General Manager to enter into a Professional Services Agreement with Hydroscience in the amount of $749,448 for engineering and design services for the La Contenta WWTP Biolac and Clairifier improvements, CIP#15097.

FINANCIAL CONSIDERATIONS

The approved FY 24-25 CIP Budget includes $750,000 for the La Contenta WWTP Biolac and Clarifier Improvements, CIP#15097, with funding from the Sewer Captal Renovation and Replacement Fund (Fund 135). This funding is sufficient for the base Project Proposal from Hydroscience of $749,448 with the consideration that $100,731 would not be spent on the construction assistance until Project goes into Construction which is currently in CIP for FY 26-27. The overall Project cost including construction is estimated at $15,000,000. Construction cost estimates will be provided as part of this Proposal, which will provide refined cost.

Operations has identified the optional design task ($114,686) including the non-integrated clarifier as the desired Project. The District will also need to hire an Environmental Firm to complete the CEQA Environmental Studies. Project Budget could be moved forward to FY 24-25.

Attachments:

1) *Request for Proposals*
2) *HydroScience Proposal*
3) *Resolution No. 2024-__ Accepting the Proposal and Authorizing the General Manager to enter into a Agreement with Hydroscience for Design and Engineering Services related to the La Contenta WWTP Biolac and Clarifier Improvements. CIP#15097*

REQUEST FOR PROPOSALS

FOR DESIGN AND ENGINEERING SERVICES
FOR THE

LA CONTENTA WASTEWATER TREATMENT FACILITY
PHASE 3 IMPROVEMENT PROJECT

CIP 15097

Receipt of Proposals due before: 4:00 p.m. PST on May 14, 2024

CALAVERAS COUNTY WATER DISTRICT
120 Toma Court
San Andreas, California 95249
(209) 754-3543 • ccwd.org

March 11, 2024

TABLE OF CONTENTS

EXHIBITS

The **Exhibits** (proposal reference documents) have been assembled in separate Adobe pdf files. Reference documents listed in table below.

Proposal Reference Exhibits	
1.	Professional Service Agreement (PSA).
2.	La Contenta Wastewater Collection System and Wastewater Treatment Facility Phase 3 Improvement Project Predesign Report, February 11, 2024.
3.	La Contenta Wastewater Master Plan, 2017.
4.	La Contenta Wastewater Pumping, Treatment, & Storage Improvements As-Built Drawings, 1991.
5.	La Contenta Dam (LESP) As-Built Drawings, 2004.
6.	La Contenta Phase 2 Schedule 1 Disinfection, Electrical and Site Piping Improvements Record Drawings, 2007.
7.	WDR Order R5-2013-0133.

I. PROJECT BACKGROUND

Calaveras County Water District provides wastewater collection and treatment service to the community of La Contenta located in Calaveras County. District wastewater treatment service for the community is provided by the La Contenta wastewater treatment facility (facility). Facility improvements are required for continued service reliability and permit to approved planned community development. The District is seeking Consultant design services for the proposed Phase 3 Improvement Project, to be constructed at the La Contena facility.

The La Contenta facility was constructed in 1991 with the initial construction referred to as Phase 1. In 2007, Phase 2, was constructed. The Phase 2 improvement project primarily consisted of adding tertiary filter treatment capacity and the replacement of the chlorine disinfection system with an ultraviolet disinfection system. The facility is located at 1525 Campbell Court, Valley Springs, California and the site location is shown in Figure 1, attached to the end of the RFP.

II. PHASE 3 PROJECT IMPROVEMENTS

Initial details concerning the proposed improvements are described in the attached exhibit: *La Contenta Wastewater Collection and Treatment Facility Phase 3 Improvement Project Predesign Report, February 11, 2024.* Due to financial limitations, the District seeks to limit the Phase 3 improvement scope of work to the four components described below.

Secondary Treatment Improvements. A second, redundant, activated sludge treatment system similar to the existing treatment system with an average daily capacity of 0.225 *MGD*, and peak hourly capacity of 0.900 *MGD*. This system is to be comprised of the following:

1. A Parkson™ Biolac® activated sludge aeration basin, or similar.
2. Secondary effluent clarifier system.
3. RAS/WAS pump station.
4. Aeration system, or modification of existing system, required for the second d aeration basin.
5. Process piping and systems for splitting of influent, flow measurement, and piping for aeration air, influent, secondary effluent, and RAS/WAS flows.

Electrical and Instrumentation Improvements. Facility electrical and instrumentation improvements shall comprise of the following:

1. Electrical building housing the electrical service entrance, ATS, main MCC, etc. sized for facility build-out requirements.
2. Electrical improvements associated with Phase 3 equipment and operational requirements.

3. Replacement and/or relocation of existing electrical equipment located in the existing facility's Operation Room.
4. Replacement of existing SCADA system.
5. Identification and replacement, as required, of electrical equipment and/or equipment installation, not meeting current NFPA 70E, *National Electric Code* and NFPA 820, *Fire Protection in Wastewater Treatment and Collection Systems*.

Recycled Water Pipe System Improvements. A gravity flow effluent pipeline from the facility to the Lower Effluent Storage Pond (LESP). The pipeline alignment shall parallel the existing effluent pipeline alignment. Combined capacity of the two pipelines shall be a minimum of 2.0 *MGD*.

Storage Pond Drainage Improvements. Replacement of existing drain system for the Upper Effluent Storage Pond (UESP) to the existing Area (Return) pump station. The existing drain system is comprised of PVC pipe temporarily installed aboveground on the UESP west levee.

III. PROPOSED PROJECT SCHEDULE

The District anticipates the following project schedule by milestone. Significant construction at the La Contenta facility should be scheduled for a time starting in late April and ending in early November due to flowrate conditions related to rainfall.

PROJECT SCHEDULE MILESTONES

Milestone	Date
Design and Engineering Services Selection	
Project RFP	March 11, 2024
Job Walk Appointments	March 25 thru May 3, 2024
Proposal Deadline	May 14, 2024
District Review, Selection, and Staff Recommendation	June 13, 2024
Board Approval and Contract Award (FY 2024-25)	July 10, 2024
Design and Construction	
Final Design Report	October-November 2024
Final Design and Construction Documents	May 2025
Construction Bid and Award (FY 2025-26, FY 2026-27)	July 2025
Completion of Construction	September 2026
Start-up and Testing	October 2026
Record Drawings	November 2026

IV. PROJECT APPROACH AND SCOPE OF SERVICES

This Section describes the nature and scope of the engineering services to be provided and tasks to accomplish those services. The District expects the Consultant to work closely with District staff throughout the project by correspondence and regular meetings to accomplish their scope of work.

A. PROJECT MANAGEMENT

Consultant will ensure continuous control of the project in terms of staffing, budget, schedule and scope; promote communication within the project team and document key decisions. Items covered under this task include:

1. Consultant project management of project including communication, scope, schedule, deliverables, and budget.
2. Submittal of progress reports with Consultant invoices.
3. Quality assurance and quality control Implementation
4. Create and maintain Decision Log of key project decisions.

It is the responsibility of the Consultant's project manager to immediately notify the District Engineer of any District directed task/assignment/request the Consultant believes is beyond contract scope of service. Approval of additional work by the District Engineer is required prior to execution of the work. Costs related to the performance of additional work will not be paid unless first approved by the District Engineer.

Deliverables: Project progress reports and Decision Log throughout length of contract.

B. PROJECT DESIGN REPORT

The project design report will describe the project and project improvements elements/components. This report will be a refinement of the *La Contenta Wastewater Collection and Treatment Facility Phase 3 Improvement Project Predesign Report, February 11, 2024,* and shall address the following:

1. Evaluation of improvement elements and recommendations regarding proposed clarifier and RAS/WAS pump station design.
2. Estimated construction probable construction cost.
3. Recommendations concerning methods for reducing costs and/or alternative improvement solutions.
4. Recommend construction phasing to minimize impact to facility operation.
5. Preliminary hydraulic and process calculations.
6. Design criteria and preliminary equipment and material selection.
7. Preliminary scaled design concept drawings.

8. Proposed electrical and instrumentation improvements including electrical improvements associated with the existing facilities to meet NFPA 70E and NFPA 820.
9. Anticipated additional electrical loads.

Deliverables: Draft and final design report and attendance of a draft design report review meeting. The final design report shall address District comments, questions, changes, or decisions regarding draft report. Subsequent direction by District concerning the project design shall be tracked by Decision Log.

C. TOPOGRAPHIC SURVEY

Design services are to include a topographic site survey of the La Contenta facility at the location of proposed improvements. Survey shall conform to the North American Datum (NAD83), California Zone 3 and North American Vertical Datum of 1988 (NAVD88). All survey work shall be conducted under the direction of a California licensed land surveyor, or civil engineer licensed in California before January 1, 1982 (license number C33965 or below).

Survey shall include utility easements, roads, edge of paving, structures, buildings, manholes, vaults, pads, panels, walls, trees, utilities, poles, signs, fences, slopes, curbs, drop inlets, culverts, and other similar structures located at the La Contenta facility.

D. GEOTECHNICAL INVESTIGATION

Proposals shall include design and engineering services by a California licensed geotechnical engineer to prepare a project geotechnical study. Study shall include recommended methods of site excavation, allowable temporary and permanent slope design, foundation design, compaction requirements, and passive soil loads.

E. PERMIT AND ENVIRONMENTAL ASSISTANCE

The District plans to address environmental related project impacts with a California Environmental Quality Act (CEQA) mitigated negative declaration (MND). Preparation of the MND will be done by the District, or under a separate consultant contract. Project MND environmental requirements will be incorporated by the Consultant in the final bid ready construction and bid documents. The District does not anticipate the project will require an Environmental Impact Report.

F. PROJECT DESIGN

Drawings. The Consultant shall provide all necessary civil, mechanical, process, electrical, and instrumentation drawings for execution of project construction. This includes standard drawings such as: cover sheet, index of drawings, vicinity and location map, general notes, project notes, standard details, description of symbols, and abbreviations.

Deliverables: Fifty (50) percent, 90 percent 100 percent, and Bid-Ready drawings for incorporation with Project Manual. Drawing submittals shall be furnished to the District in Adobe® Acrobat™ Public Document Format (Adobe pdf) file format for reproduction as both 11"x17" (ANSI C) and 22"x34" (ANSI D) paper size. Bid-Ready drawings shall be furnished in Autodesk® AutoCAD™ format.

The 90 percent and 100 percent deliverables shall identify and detail all infrastructure to be constructed. The 100 percent drawings shall represent the final project design. The Consultant shall anticipate revisions to the 100 percent drawing based upon final District comments prior to production of final Bid-Ready set.

Project Manual. The Consultant shall prepare a project manual including front end document, technical specifications, and appendices. The manual's front-end documents shall be based on the 2018 edition of the *Engineers Joint Contract Documents Committee Standards* (EJCDC®). A copy of the standards will be furnished to the Consultant by the District. The Consultant shall edit the EJCDC® documents adding any project specific and State of California contract requirements. Consultant shall provide a bid schedule, detailed descriptions for each bid item, alternative bid items, if any, and description of sequence of work.

The technical specifications shall be based upon the Consultant's standards, or if applicable, adapted from District standards. Project Manual appendices shall include CEQA documents, geotechnical study, and other such reports.

Deliverables: Ninety (90) percent 100 percent, and Bid-Ready Project Manual.

G. CONSTRUCTION ASSISTANCE

Construction Bid Services, Addendum, and Conformed Documents. The District shall advertise and conduct the public bid. Distribution of project manual and drawings to bidders and plan holder rooms will be electronic. All correspondence with potential project bidders will be solely conducted by the District including issuing all project addendum and responds to bidder Requests for Information (RFI).

The Consultant shall attend pre-bid job walk and as requested the Consultant shall assist the District prepare addendum and answer RFIs. Addendum may be the result of errors in preparing bid ready drawings and project manual or result of bidders' questions and comments.

Upon award of construction contract and but prior to subsequent notice to proceed, the Consultant shall furnish the confirmed contract documents.

Construction Engineering. Consultant scope of services during construction shall include review of project shop drawings and submittals, answer of construction RFIs,

assistance with engineering aspects of potential construction contract change orders, site and construction meeting upon request.

Record Drawings. The Consultant shall furnish record drawings and deliver them in AutoCAD® 2018 format. Record drawings shall be based upon the contractor and District inspector marked-up drawings.

H. BASIS OF COMPENSATION

The Consultant shall be required to enter into the Professional Services Agreement (PSA) provided as **Exhibit 1**. Agreement to the PSA contract terms and conditions, including adjustment in hourly rates, per diem or incidental costs, is required for the term of the contract. Acknowledgement to the PSA contract terms shall be included in a cover letter.

V. ORGANIZATION AND CONTENT OF PROPOSAL

A. SUBMITTAL INSTRUCTIONS

Proposals shall be submitted electronically to Calaveras County Water District no later than 4:00 p.m., May 14, 2024. The Proposal shall assemble as a single Adobe® pdf file. Paginate proposal for two-sided printing at the District office. Paper size limited to 8-°1/2”x11” (ANSI B) with figures, drawing, etc. no greater than 11”x17” (ANSI C).

Proposals attached to email are limited to 50 megabytes in size. Proposal delivery using a file “cloud” sharing site, or similar, is acceptable provided the District receives a HTTP or FTP link and download instructions. The District will notify the Consultant upon receipt and successful download. No hard “printed” copy of the proposal is required.

Email proposal, or link for file download to the attention of:

Kevin Williams, P.E.
Senior Civil Engineer
kevinw@ccwd.org
office: (209) 754-3184
cell: (209) 419-3979

B. ORGANIZATION AND CONTENT

Contents of proposal shall be organized in the sections listed in the table below.

PROPOSAL ORGANIZATION

Section	Content	Page Length
Cover Letter	Statement of interest and qualifications including agreement to PSA requirements.	1 to 2
A	Project Overview	1 to 3
B	Understanding and Approach	1 to 4
C	Team Organization	1 to 2
D	Project Schedule	1 to 2
E	Representative Project Experience	1 to 5
F	Labor Estimate	1 to 2
G	Project Team Resumes	as required

Cover Letter. Cover letter shall include both a state of interest and statement of qualification. Acknowledgement and acceptance of the terms and requirements of the District Professional Service Agreement shall be included.

Project Overview. Provide a narrative description of the project based on the scope of services and proposed schedule presented in this Request for Proposal (RFP). The District will assess your understanding of all aspects of the project based on the overview.

Understanding and Approach. Provide a detailed description of the proposed approach to the project as described in the RFP. The description shall include details to implement the tasks described in the scope of service and any recommended revisions to the list of tasks. The approach should recognize, address, and provide for resolution of all aspects of the project.

Team Organization. The proposed consultant team shall be identified including project manager, and project engineer. Key tasks and the associated personnel shall be identified. The percentage of time devoted to this project for these key personnel shall be stated and guaranteed. A consultant team organization diagram shall be included.

The geographic location of the firm and key personnel shall be identified. Any proposed subcontractors shall be identified; tasks assigned, and experience included similarly to the firm's own project personnel. The successful Consultant should be comfortable working in a structured team setting with District Staff.

Project Schedule. A project schedule for the project shall be submitted with the proposal. All major outputs and meetings shall be included in the schedule. Time shall be allocated for District review, typically three weeks for each deliverable.

Representative Project Experience. Provide a summary of experience of similar projects that the firm and the proposed team have completed. The description of each project should include the year(s) during which the work was performed and a description of process design components. The firm's role in the project should also be described (predesign, design construction management, etc.). Include the name, title, and phone number of the primary contact person at each facility or project location listed.

Staff Labor Estimate. Provide a staff estimate of time for each task to permit the District to determine the level of detail and the number of management, engineering, technical, drafting and support personnel hours envisioned for each task. Estimates of hours for each staff classification shall be provided for each task.

Project Team Resumes. A resume of key team members shall be included. Each resume should include a description of projects in related areas. At minimum, resumes of the Consultant's project manager and those of the engineering staff shall be included.

VI. EVALUATION AND SELECTION CRITERIA

Consultant proposals will be evaluated by District staff members including the District Engineer, Director of Operations, Operations Manager, General Manager, and Senior Engineer. Proposals will be evaluated by each reviewer with each proposal receiving a weighted score. Each evaluator's weighted score will be tabulated and the firm with the highest combined score will be selected and recommended to the District Board. If two or more proposals are similarly ranked, and no clear decision can be made, the District will request interviews before final selection.

PROPOSAL EVALUATION WEIGHTED CRITERIA TABLE.

Criteria	Evaluator's Score (0 to 5)	Score Weight (Multiplier)	Evaluator's Weighted Score
Project Understanding and Approach		5 *(25%)*	
Project Management		3 *(15%)*	
Project Team and Staff Qualifications		4 *(20%)*	
Related Project Experience		3 *(15%)*	
Schedule and Production Capability		5 *(25%)*	

Maximum weighted score = 100.

*** END OF RFP ***

FIGURE 1

LOCATION MAP

La Contenta Wastewater Treatment Facility

Calaveras County Water District / La Contenta Request for Proposals
February 2024

FIGURE 1

Design and Engineering Services for the

La Contenta Wastewater Treatment Facility Phase 3 Improvement Project

PROPOSAL | MAY 30, 2024

Prepared for:
Calaveras County Water District

Prepared by:
HydroScience Engineers

HydroScience

HydroScience
Strategic Water Solutions

HydroScience Engineers, Inc.
10569 Old Placerville Road
Sacramento, CA 95827
916.364.1490

May 30, 2024

Kevin Williams, P.E.
Senior Civil Engineer
Calaveras County Water District
120 Toma Ct.
San Andreas, CA 95249

Subject: Proposal for Design and Engineering Services for the La Contenta Wastewater Treatment Facility (WWTF) Phase 3 Improvement Project

Dear Mr. Williams:

HydroScience is pleased to submit this proposal to develop a design and support the bidding and construction of process, electrical, and controls improvements at the La Contenta WWTF. The upgraded facility will add biological treatment and secondary clarification capacity, improve nutrient removal, add effluent conveyance capacity, and comprehensively replace and upgrade the electrical power supply and distribution, master control panel, and SCADA system.

Our proposed team will be led by Project Manager Bill Slenter, PE, who you are already working with on the Arnold and Copper Cove wastewater facility improvements. He has demonstrated an ability to collaborate effectively with the District to implement complex treatment projects. Bill will be supported by a comprehensive multi-disciplinary team who will work cohesively to develop a well-coordinated set of bid documents that will result in a predictable construction phase resulting improvements that provide high long-term value.

Our in-house team of civil, process, mechanical, electrical, instrumentation, and controls engineers will be supplemented by specialty subconsultants providing structural engineering, surveying, and geotechnical services. These are firms we have worked effectively with on countless prior projects. Additionally, we have included PCSG to perform independent third-party cost estimating and optional constructability review services. We collaborated with PCSG in a similar fashion on the Arnold project and look forward to leveraging their construction industry knowledge to provide detailed and accurate estimates on this project.

The enclosed proposal details our team, extensive related wastewater treatment experience, our proposed approach and work plan, our schedule, and our labor estimate for completing the project. We have also presented our “early and often” approach for effective collaboration with the District to streamline reviews and arrive at a completed project that is well-tailored to your goals, objectives, and long-term needs.

HydroScience will execute the District’s standard professional services agreement that was attached to the RFP. HydroScience is the right-sized firm with the people, experience, and client-focused work culture needed to exceed your goals. Should you have any questions about our proposal, please contact me at bslenter@hydroscience.com or (916) 273-6035.

Sincerely yours,
HYDROSCIENCE ENGINEERS

Bill Slenter, PE
Vice President

Section A

PROJECT OVERVIEW

This Section presents HydroScience's overview of the project goals, upgrade elements, key driving issues, and schedule objectives. This overview is based on our thorough review of the Request for Proposals (RFP) and supporting materials, discussions at the March 6, 2024 Engineering Committee Meeting, a visit to the facility and discussion with engineering and operations & maintenance (O&M) staff, our experience with similar projects, and our understanding of Calaveras County Water District (District) priorities.

HydroScience and our key proposed project team have been working with the District since 2021 on two similar wastewater upgrade projects: the Arnold and Copper Cove Wastewater Treatment Facility (WWTF) improvement projects. These projects have many similarities to La Contenta, which are highlighted in Section E. This experience enhances our understanding of District priorities and procedures and will provide significant efficiencies on this project.

The La Contenta WWTF, constructed in 1991 and subsequently upgraded in 2007 (Phase 2 project) treats wastewater from the community of La Contenta to disinfected tertiary recycled water standards. This effluent is held in two seasonal storage reservoirs and delivered to the La Contenta Golf Club for irrigation use. The facility is permitted under Order R5-2013-0133 as amended by R5-2018-0062. The treatment train consists of a mechanical bar screen, Biolac activated sludge treatment basin with an integral secondary clarifier, continuous backwash sand filtration, ultraviolet (UV) disinfection, sludge lagoon and belt press, two unlined storage ponds, conveyance piping, and supporting systems.

The District issued a design report (La Contenta Wastewater Collection System Improvement Project and Wastewater Treatment Facility Phase 3 Improvement Project Predesign Report, February 11, 2024) which updated certain assumptions and findings of the prior 2018 Master Plan and presented a recommended Phase 3 Project including design criteria and preliminary layout drawings. The RFP seeks engineering services to implement a subset of these. The planned improvements are summarized as follows:

Element	Purpose	Notes
Second Parkson Biolac or similar activated sludge aeration basin	Provide process redundancy, increase treatment capacity, implement nutrient removal capability, allow for future improvement of existing basin, improve performance	If integral clarifier selected for cost reasons, implement latest Parkson design for improved clarification and scum removal performance versus existing
Secondary clarifier	If funding allows, construct an independent circular clarifier to serve new Biolac and potentially both	Recommend evaluating option to size clarifier to serve both Biolacs
RAS/WAS pump station	If funding allows, construct a separate RAS/WAS pump station to serve the new circular clarifier	Recommend evaluating option to size RAS/WAS pump station to serve both Biolacs
Aeration blowers	Increase capacity of existing aeration blower system, or construct a new system	Two available spaces in existing blower room can be used
Process piping and flow splitting	Construct required buried yard piping and flow splitting structure to serve a two-train biological process	Consider approach taken on similar Arnold WWTF project
New electrical building with service entrance, ATS, MCC. New diesel standby generator. Upgraded utility power service and transformer.	Full replacement of existing obsolete components and relocation to a dedicated building.	Size room, pads, and main bus for buildout expansion. Preliminary sizing of buildout loads required. Sequenced construction required.

This Phase 3 Improvement Project will improve treatment reliability and performance, add biological treatment capacity, implement nutrient removal, fully renew the electrical power and PLC/SCADA control systems, upgrade a pond pumping system, and address an effluent hydraulic bottleneck. The upgrades will address the capacity needed to satisfy current development commitments and make allowance for future expansion to buildout conditions. They will also improve effluent quality to position the facility for future regulations.

The Phase 3 Improvement Project will increase the flow capacity and treatment capabilities of the WWTP, and allow for future expansion to Buildout, as follows:

Parameter	Current	Phase 3 (This Project)	Buildout
Service Area (EDU)	1,110	1,577	2,250
Influent Flow (MGD)	ADWF: 0.2 AAF: 0.24 MDF: 1.0	ADWF: 0.338 AAF: 0.45 MDF: 1.25	ADWF: 0.45 AAF: 0.625 MDF: 1.78
Influent Strength (mg/L)	BOD: 225 TSS: 225	BOD: 200/300 TSS: 200/300 TKN: 50	BOD: 200/300 TSS: 200/300 TKN: 50

Values are approximate and based on existing WWTF drawings, discharge permit, March 6, 2024 presentation to Engineering Committee, and District's Predesign Report. The effluent storage capacity currently limits ADWF to 0.20 MGD and AAF to 0.24 MGD (89 MG/365 d). HydroScience will confirm design flows at an early stage of the Project.

ADWF = Average Dry Weather Flow; AAF = Annual Average Flow; MDF = Peak Day Flow; BOD & TSS values are presented as Average/Max Month

Current and anticipated effluent limitations driving the project design are as follows:

Parameter	Current	Anticipated
Effluent BOD (mg/L)	40/80	40/80
Total Nitrogen as N (mg/L)	22	10
Turbidity (NTU)	2/5/10 (Title 22)	2/5/10 (Title 22)

Parkson's proposal indicates an effluent BOD of 10 mg/L is achievable.

The District anticipates that future permits will reduce the effluent nitrogen limitation from 22 to 10 mg/L. This is based on a 10 mg/L groundwater quality limit. Monitoring wells below the unlined storage basins do not currently show impairment, but positioning the WWTF for better nutrient removal will eliminate a risk of future more stringent regulations. This will also position the facility better for a potential future surface water discharge to Cosgrove Creek, should this be pursued to resolve seasonal storage limitations for future flow increases.

The Project will examine options for both an integral clarifier as part of the new Biolac unit (least expensive option) or a separate circular clarifier (more costly but better performing). The District prefers a circular clarifier if it is deemed affordable, given that it has experienced inadequate performance from

the existing integral clarifier including solids resuspension, poor scum control, poor RAS flow control with the airlift pump, and lack of clarifier isolation and drain features.

Effluent is primarily stored in the 172 acre-foot (AF) Lower Effluent Storage Pond (LESP) and supplemented by the 49 AF Upper Effluent Storage Pond (UESP) which serves as backup storage and provides retention time for any effluent not meeting Title 22 recycled water standards. All effluent in the UESP is pumped back to headworks for retreatment via a temporary pump station using conveyance piping routed on the surface to the headworks return (drain) pump station.

A 3,700-foot 8" gravity pipe conveys flow from the effluent side of the WWTP around the UESP to the LESP. The District calculated the capacity of this line at 0.69-1.04 MGD depending on LESP water level. The Project will increase the capacity of this pipeline to a minimum of 2.0 MGD. A portion of the pipeline is located in an existing 15-ft wide easement, part of which is off-road. Generally the pipeline is shallow buried but a segment of it passes through a ridge at depths of up to 20-ft. Hard rock may be present in the area.

There is not adequate funding in the 5-year CIP to complete construction. The District intends to fund the completion of design resulting in shovel-ready contract documents that can be publicly bid when developer fees associated with committed projects become available. There are currently 100 EDUs of capacity left in the existing system, and development commitments comprise an additional 600 EDUs.

Our approach, proposed scope of work, and schedule for planning and implementing best-value improvements to the La Contenta WWTF through a collaborative process are described in the next section.

Section B

UNDERSTANDING AND APPROACH

HydroScience will implement the same collaborative approach successfully used on the Arnold and Copper Cove projects to tailor project improvements to District needs, standards, and budgetary constraints: (1) regular meetings and communications with District management, engineering, operations, and maintenance staff; (2) comprehensive data collection and evaluation; (3) validation of key design criteria; (4) inform confident decision-making; (5) identify creative solutions to maximize long-term value and system reliability.

The District will be a key part of the collaborative process. The best value project approach will conform to your operating strategies and standards, maximize and extend the value of existing assets, facilitate operational simplicity and flexibility, provide robust long-term service, and balance robustness with affordability. Our design approach will consider future expansion to address buildout flows and possible changes to recycled water storage and discharge strategies. By involving District staff early and often, we will facilitate design consensus, streamline your milestone reviews, adhere to the schedule, and deliver a best-value final product.

HydroScience's in-house civil, mechanical, process, electrical, instrumentation and controls engineers, working in concert with our trusted structural subconsultant, VE Solutions, and informed by the work of our investigative subconsultants O'Dell (surveying) and Blackburn (Geotechnical), will efficiently advance a cohesive and well-coordinated design.

Our approach implements continuous project cost management informed by timely and accurate estimating. A lesson we learned on the Arnold project is that the District finds benefit to involving a third party cost estimating consultant on complex treatment facility improvement projects. This maximizes the accuracy of estimates and incorporates the very latest construction cost trends. Given the recent volatility in bid pricing, we have decided to delegate cost estimating to PSCG as a subconsultant to HydroScience and optionally have them provide constructability reviews. We previously worked with PSCG (contracted with the District) on the Arnold project and have a solid working relationship.

Unit Process Upgrades Approach

This section describes our understanding and potential design approaches to key unit process upgrades, building upon our understanding of existing facilities and District goals, and our prior successes and lessons learned on similar projects including Arnold and Copper Cove.

Activated Sludge Basin and Blowers

A new Parkson Biolac or equivalent activated sludge treatment system will operate in parallel with the existing unit, creating a two-train biological and clarification process. A new splitter box and flow metering facility will be constructed to intercept raw wastewater from the headworks and split the flow between the existing and new basins. Our flow splitting and metering design for the Arnold facility will serve as a template for this item.

HydroScience has reviewed Parkson's proposal (District Predesign Report Appendix P) and met with Parkson. Our approach to configuring and specifying this system will build upon District lessons learned, utilize the latest Parkson or equivalent product design, maximize flexibility and reliability, and evaluate a stand-alone clarifier option.

An earthen basin lined with shotcrete (matching existing) will maximize service life and simplify cleaning and maintenance. A biological nutrient removal (BNR) configuration will be specified to achieve enhanced denitrification for an effluent

HydroScience will achieve a predictable outcome that provides high long-term value by approaching this project as follows:

Minimizing Unexpected Costs	Maximizing Long-Term Project Value
• Strategic geotechnical and potholing exploration locations and extent • Well defined rock clause and hard rock line item in bid schedule • Emphasize plans and specs that are clear, concise, accurate, and coordinated • Independent internal QA/QC of all deliverables • Utilize independent third party construction estimator for estimates and reviews	• Name multiple manufacturers and materials to increase pricing competition • Minimize complexity of concrete structures • Minimize the area and depth of excavations where shallow hard rock exists • Choose equipment with a history of successful installation, District familiarity, and a robust and responsive support network • Choose construction materials that will provide a long service life

Total Nitrogen of less than 10 mg/L to address anticipated discharge requirements. This will consist of alternating aerobic and anoxic zones and advanced dissolved oxygen (DO) controls.

Given that this will be a public bid, Biolac alternates will be considered. Bioworks offers a similar extended aeration product. A key difference is that the diffusers float on top of the liquid. HydroScience will contact the product vendor, solicit a budgetary proposal, and carefully vet this offering in comparison to the Biolac to determine if it is a true equal. We will also contact recent operating installations for both products to better understand operating experience, benefits, pitfalls, and technical/feature considerations for the specifications. We will draft a technical specification laying out performance requirements/guarantees, materials, technologies, features, and minimum qualifications and make a recommendation to District regarding which products to allow.

The original 1991 KASL as-builts and the District Predesign Report place this second basin west of the existing. This site is currently functioning as a water treatment sludge drying basin. The District intends to decommission and relocate this pond prior to Project construction. The site topography is similar to the existing basin, facilitating flow split hydraulics. The hill to the north will need to be laid back at presumably a 3:1 slope to create a flat area for construction and perimeter access paths.

The new activated sludge system will require an expansion of blower capacity. These can be supplied by Parkson or separately procured by the Contractor. The existing blowers, likely supplied by Parkson, are located in a blower room in the existing treatment plant building. Space and connection points for two additional blowers is available, and a 12" Air stubout is located outside of the building to supply the second basin. We will validate the ability of these provisions to accommodate the additional air supply required, and the air control requirements for operating the new basin in BNR mode in conjunction with the existing non-BNR basin. If space in this room is insufficient, we will evaluate the adjacent unused chemical room to house blowers.

Clarifier and RAS/WAS Pumping

Figure 1 (next page) illustrates the clarification options that will be considered in our preliminary design report. Our base scope includes design of an integral clarifier to maximize cost-effectiveness. It will utilize Parkson's latest generation "EZClear" clarifier design which includes improvements that help address some of District's difficulties with the existing unit, including improved inflow hydraulics. HydroScience will carefully review and, where feasible and appropriate, enhance the clarifier specification to address the District's lessons learned with the existing one. Both the existing clarifier design and the EZClear system utilize airlift pumps; however, Parkson does offer a mechanical RAS pumping option. The District has had difficulty managing turndown with the existing airlift system. HydroScience will review the newest Parkson airlift design versus their mechanical pump option across the desired flow range, compare costs, and make a recommendation in consideration of past challenges and product improvements.

Optionally, HydroScience will specify the activated sludge basin without an integral clarifier and instead design a new separate circular clarifier to clarify mixed liquor from this process train. The new clarifier would be expected to use a similar configuration to the design used on Arnold. During preliminary design, we will evaluate the costs and merits of upsizing the clarifier diameter to provide the flexibility to also treat flow from the existing Biolac, at least dry weather flow. This may be achievable with a modest additional construction cost to upsize the clarifier and hydraulically link the activated sludge basins. The final decision on clarification approach will depend on cost. We will present the comparative costs of both options in our Project Design Report. Optionally, we can set up a tour with Parkson and District staff to visit operating EZClear installations to enhance our understanding and comfort level with that option.

If a separate clarifier is designed, then HydroScience will also design a separate RAS/WAS pump station for this clarifier. A single pump station with a motorized 3-way valve for periodic wasting is anticipated. At Arnold, we evaluated submersible chopper pumps, progressing cavity, and self-priming double-disc pumps. Double-disc pumps were selected due to staff familiarity, reduced installation costs (requires no wet well), better turndown, and ability to pass solids and grit that may have bypassed the headworks. We will conduct the same evaluation for this facility, considering site-specific conditions, flow ranges, and input from operations and engineering.

The activated sludge basin and clarifier designs will include, to the extent feasible, efficient means to drain process tanks for maintenance. The ability to gravity drain tanks to the existing return pump station will be explored, and other possible approaches will be identified and vetted with District staff. A design goal will be to allow operators to transition from one process train to the other or both as efficiently as possible, and to maximize the ability to take tanks offline for heavy maintenance.

Effluent Pipeline Improvements

Increasing the capacity of effluent conveyance from the WWTP to the LESP is anticipated to involve construction of a new pipeline running parallel to the existing 8" TE pipe. The combined capacity shall be 2.0 MGD. The District calculated the existing pipe capacity at 1.04 MGD. A new 8 or 10 inch pipe is anticipated to provide this capacity. The new pipe will be intertied to the buried manifold downstream of the Parshall flume and fitted with a motorized control valve similar to existing. The new pipe will be installed adjacent to the existing in the UESP levee, then cross-country to the access road intersection, then within or adjacent to the road until it reaches the LESP. We anticipate the new pipe

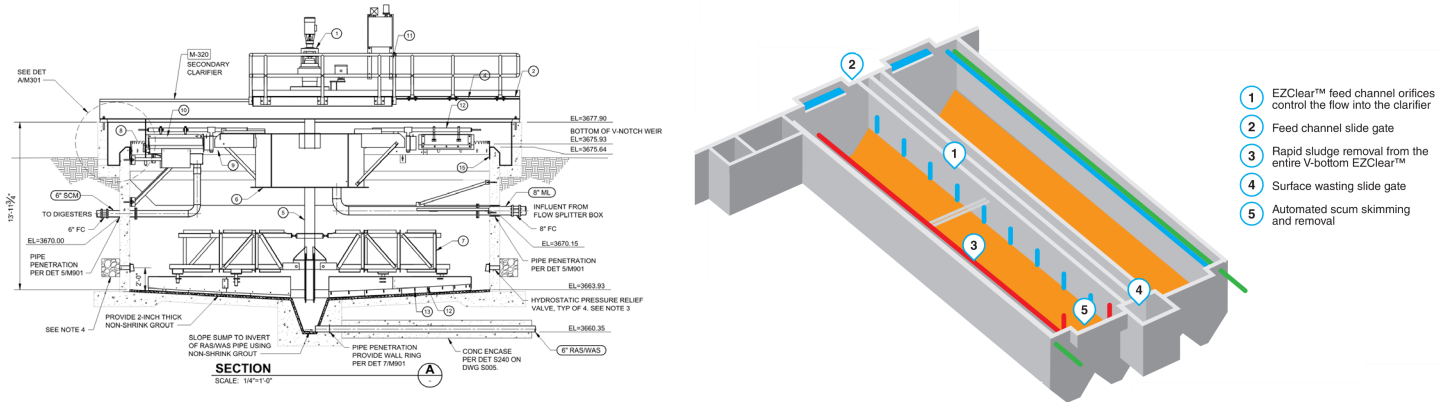


Figure 1. *HydroScience will evaluate two options for secondary clarification: a stand-alone circular clarifier (similar to our Arnold WWTF design) or an integral clarifier (Parkson Biolac EZClear or equal). The EZClear can be configured as a redundant pair or a single clarifier per basin. The clarifier can be oriented as shown or rotated 90 degrees, similar to the existing. We will recommend a path forward based on budgetary and operational priorities.*

would discharge on the inner bank at a high elevation that can be installed without draining the LESP. We will evaluate hydraulics and operating strategies for the two pipes during design.

A portion of the 8" TE alignment is within what appears to be a 15' easement. Our base survey scope does not resolve the boundary but includes a conceptual boundary. Should the clearances required for new pipe installation be marginal, we may recommend a fully resolved boundary survey at additional cost.

Hard rock is believed to exist in this alignment. The minimum cover on the pipeline is 36" although the deepest section is approximately 20' deep. At these depths, presence of hard rock becomes a significant risk to cost. Our geotechnical investigation scope described below seeks to address that risk with sufficient exploration followed by careful crafting of the project specifications and bidding requirements.

UESP Drainage Improvements

This project element will replace the existing portable pump and hose arrangement with a permanent pumping facility and piping to convey UESP water back to the treatment process. HydroScience will evaluate two approaches: a submersible pump wet well configuration, or self-priming pumps sitting on or adjacent to the levee on a concrete pad. Similar alternatives can also be considered, such as horizontal centrifugal pumps at the levee toe with a flooded suction pipe. We will meet with the District early to understand the options and timing for lowering the water level in UESP. If this is very limited or infeasible, we will carefully consider this factor in comparing suitable approaches. The self-priming pump option does not require embedding a deep suction pipe in the levee, while the others do. We have successfully used self-priming pumps on other pond facility projects.

Electrical & Controls Upgrades

The electrical upgrades design is expected to involve similar elements to the Arnold project. We will coordinate service size and transformer location with PG&E in consideration of Phase 3 loads and allowances for Buildout. A new masonry electrical building will be designed to house new MCC equipment that will power existing and new facilities with space for future. This building will be located near the transformer. New ductbanks and junction boxes will be located at existing and new process units.

Construction Phasing Strategy

A carefully crafted construction staging strategy will be specified to make process interties and complete functional and performance testing, and to transition processes from the old MCC and control panel to the new, with temporary power backfeed provisions to facilitate the transition with minimal interruption. We will interview plant staff to understand maximum outage durations and incorporate these limitations in the specifications. When complete, the existing MCC will be demolished and this will create a safer and more spacious working environment in the existing operations and lab room.

We worked through all the same issues on the Arnold project, and will use that knowledge as a starting roadmap for developing the La Contenta phasing strategy, carefully customized to the specific needs, risks, and constraints at this facility. We fully appreciate the attention to detail needed to properly guide a general contractor through this process while avoiding undue risks or change orders.

Project Management

HydroScience will manage the project with an emphasis on diligence, tracking and verification, efficiency, effective communication, and delay avoidance. Project Manager Bill Slenter will leverage his long history of managing complex wastewater projects to foresee and collaboratively address

challenges before they impact the schedule or budget.

Bill and the team will maintain regular phone, email, and written communication. At all times the District will be well informed of the status of the project and the questions and issues that are coming. We will visit the site and collaborate through in-person and screen-share calls. In respect of staff time, we will boil down all communications to the key issues by doing our homework first and communicating in a concise and focused manner.

The workshop format will be used to communicate with the District at key milestones and solicit input. Every workshop will include handouts and visual aids in order to move quickly through the presentation portion, fully inform District staff, and encourage productive discussion. Agendas will be prepared for all meetings and distributed one week in advance, and summary minutes will be distributed within three days of every meeting. Monthly budget, schedule, and work progress status reports will be prepared and included with every invoice.

A log will be developed to prioritize issues and document decisions, and this will be distributed to the District at meetings and monthly. The decision log will be referenced during every design decision to ensure that District comments are addressed.

The District will be informed at all times as to the status of the project, decisions that need to be made, the input needed to make those decisions, and the anticipated final product.

Scope Clarifications

HydroScience will implement the scope of work described in the RFP, as modified and enhanced below. If selected for this Project, we will prepare a consolidated formal scope of work melding the requirements of the RFP with these modifications for inclusion in the contract.

Meetings and Collaboration: HydroScience has included an on-site kickoff meeting, 5 design milestone workshops, and bi-weekly meetings over a 39-week period in our budget.

Project Design Report (PDR): HydroScience will prepare a report that validates and details the recommendations of the District Predesign Report, and attach 30% drawings. Format and level of detail will be similar to the Arnold PDR (November 2021). Our sizing calculations will rely on the flow and load projections made by the District, though we will complete a cursory check of the design criteria based on the data presented. Since that report looked at data up to end of 2023, it is very recent and should not need further updating. Any process data or additional sampling required to support the project will be collected by the District at their expense. Allowances will be made in the load calculation and pipe sizing for the Buildout condition as defined in the District Predesign Report and based on discussions with District staff. Both the integral clarifier and separate clarifier plus RAS/WAS pump station will be evaluated. The integral clarifier is assumed for the design base scope.

Survey: Limits of survey capture the entire WWTP site including the UESP and the proposed location of the new process units and electrical building, and a 100-ft wide strip along the 8" TE pipeline alignment from the WWTP to the LESP. Cross section surveys of the alignment will be made at 100-ft intervals. Conceptual (non-resolved) boundary mapping will be included. This is conditional upon finding sufficient corners set by previous surveys.

Geotechnical: Subsurface exploration consists of two 15-ft borings and two 30-ft borings covering the WWTP improvements, subject to presence of competent rock, utilizing a truck mounted drilling rig. For the pipeline alignment, four 12-ft deep test pits will be excavated with a rubber-tired backhoe. A seismic refraction survey consisting of four lines along the pipeline alignment will be used to supplement the test pits.

Design: HydroScience will develop the design for the improvements described in the RFP and our overview (Section A) and submit review sets at 50%, 90%, and 100% milestones. The bid-ready set will incorporate final bidding requirements and signatures. All submittals will be electronic (PDF and native file formats). Changes in the design are expected to be minimal at the 90% submittal stage. District review is mainly to capture minor edits or changes in the notes.

The electrical upgrades design for existing process units will be limited to connecting new conductors at the existing field motor disconnects. Our scope excludes modifications to existing process equipment (panels, motors, etc.) to meet current codes or for other reasons.

Permit and Environmental Assistance: The District will prepare any required CEQA and RWB permitting documentation. HydroScience will provide project-specific descriptions, data, and figures to support this effort.

Bidding and Construction Assistance: HydroScience's scope will be in accordance with the RFP scope description. HydroScience has based our effort for this phase on the following quantities: 3 addenda, 35 RFI reviews, 75 submittals plus resubmittal responses, virtual attendance at 8 construction meetings, and 4 site visits. Construction management, inspection, and materials testing will be by others.

Optional Services: The fee includes the following optional items which can be added to the base scope if desired or required:

- Resolved boundary survey
- Optional three additional geotechnical borings for a separate clarifier, RAS/WAS wet well, and UESP wet well style pump station. It is assumed the UESP is not under DSOD jurisdiction.
- Optional structural design of separate secondary clarifier.

Section C

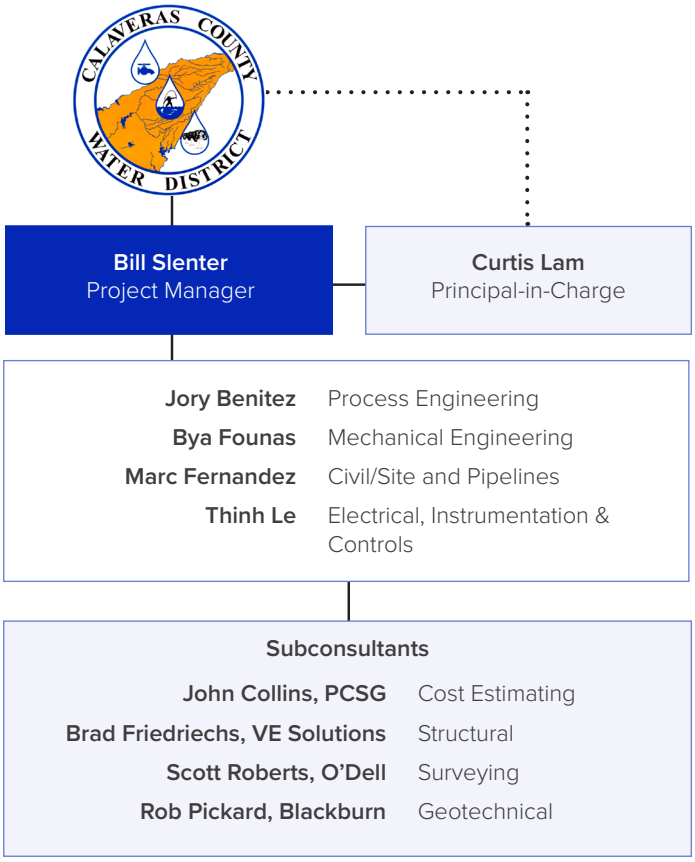
TEAM ORGANIZATION

Proposed Project Staffing

HydroScience has committed a comprehensive team of engineers with extensive experience in wastewater treatment infrastructure, including two recent treatment plant upgrades for Calaveras County Water District. These team members have successfully worked together on many wastewater facility upgrade projects throughout Northern California, and they bring their experience and lessons learned to the District. The team brings the following benefits:

- **Local Presence.** Our proposed project manager and most team members are based in Sacramento, including our in-house electrical engineers. Our subconsultants are also local. Many of the core team members are familiar to the District, having worked together on the Arnold WWTF project and the Copper Cove WWTF project. Our proximity and familiarity will enhance data collection, coordination, and project optimization to best fit District needs.
- **Experience Tailored to Your Needs.** Our focused and versatile team gives the District the needed expertise, while remaining responsive and flexible to the project's unique requirements. As a firm devoted entirely to water and wastewater projects, we take the time to listen to our clients and deliver highly personalized service that will meet your specific needs and expectations.
- **Single Point of Contact.** Our proposed project manager, Bill Slenter, PE, is a principal with HydroScience and will be your dedicated point of contact throughout the entire project. Bill is a wastewater infrastructure expert based in our Sacramento office, less than an hour's drive from the District offices. He served as HydroScience's lead on both the Arnold and Copper Cove projects. He will be available when you need him.

Project Team Organization



The structure and reporting relationships of our team are shown in the organization chart. Brief qualifications and role descriptions for each of the team members can be found below and on the following page. Resumes for all proposed staff, including subconsultants, are included in the final section.

Bill Slenter, PE – Project Manager

Our proposed project manager, Bill Slenter, PE, managed both the District's Arnold WWTF Improvements and the Copper Cove WWTF Tertiary and Pond 6 Utilities Upgrades projects. Bill's strengths include strong leadership, client focus, flexibility, creativity, and commitment to a successful outcome.

Bill is a civil engineer and principal of HydroScience with 32 years of experience, including complex upgrades to wastewater treatment and collection infrastructure. He served as project manager for the District's recent Arnold and Copper Cove WWTF improvement projects.

Project Commitment: 20% **Location:** Sacramento

Key Tasks: Overall project delivery, scope, and project management. Bill will be the District's main point of contact and will be involved in day-to-day project activities, providing the vision the project requires and working with key personnel to ensure the project's overall success.

Curtis Lam, PE – Principal-in-Charge and QA/QC

As Principal of the Berkeley office, Curtis has 30 years of experience in the areas of wastewater treatment plant process optimization, water recycling, and water resources.

Project Commitment: 2% **Location:** Berkeley

Key Tasks: Dedicate and commit staffing resources, monitor project progress and conformance to the agreement, and will provide backup support to Bill as needed. He will also provide QA/QC services for the project. Curtis will be a secondary point of contact for the District.

Jory Benitez, Grade T2 – Process Engineering

Jory has five years of experience in the planning and design of water, recycled water, and wastewater conveyance and treatment systems. Jory is designing the tertiary treatment and pumping facilities for Copper Cove and worked with Bill on several other recent tertiary wastewater treatment design projects. She has an M.S. in Water Engineering from Cal Poly San Luis Obispo and is a Grade T2 Water Treatment Operator.

Project Commitment: 30% **Location:** Sacramento

Key Tasks: Develop calculations, equipment selections, and design for biological and clarification processes. Prepare plans and specifications.

Bya Founas – Mechanical Engineering

Bya has 15 years of experience in planning, design, and construction of water and wastewater treatment plants, pipelines, and pump stations, including both the Copper Cove and Arnold WWTFs for the District. She brings international experience and expertise in a wide variety of wastewater process designs.

Project Commitment: 30% **Location:** Berkeley

Key Tasks: Develop calculations, equipment and piping selections, and design for pumping, flow splitting, and yard piping. Perform mechanical piping layouts and the hydraulic profile. Prepare plans and specifications.

Marc Fernandez – Civil/Site and Pipelines

Marc has 19 years of experience in planning, design, agency coordination, and field support for pipelines, pump stations, and related water/wastewater infrastructure. He also has experise in roadway design including grading, street improvement, drainage, and related permitting. He is assisting with civil grading design on the Copper Cove WWTF.

Project Commitment: 25% **Location:** Sacramento

Key Tasks: Develop civil grading and paving sheets and the design of the recycled water pipeline to the LESP.

Thinh Le – Electrical, Instrumentation & Controls

Thinh has 21 years of experience as EI&C engineer on complex WWTP improvements. He has an extensive working knowledge of electrical project development including analysis, SCADA systems, network and communication security, industrial automation controls, emergency and standby power, and electrical power systems. He worked on both the Arnold and Copper Cove projects.

Project Commitment: 15% **Location:** Sacramento

Key Tasks: Oversee preparation of electrical, instrumentation & controls (EIC) plans and specifications and develop a construction sequencing plan to perform upgrades around existing operations.

Note: Electrical and drafting support staff represent an additional 55% labor commitment.

Subconsultants

HydroScience has supplemented the project team with four subconsultant firms, all of which have worked with HydroScience recently. We know these firms to be dependable and perform high-quality work. Resumes for subconsultant team leads can be found in the appendix.

PCSG – Cost Estimating

Pre-Construction Services Group, LLC (PCSG) is an Estimating, Consulting and Construction Management firm located in Northern Nevada and serving the western United States. PCSG is a licensed contractor with the knowledge of cost estimation, construction management, design evolution, permitting, public relations, and construction expertise to provide immediate value and cost savings on projects both large and small. PCSG's President, John Collins, has been in the construction industry for over 28 years. PCSG has worked directly with the District to perform an independent estimate for the Arnold project.

VE Solutions – Structural Engineering

VE Solutions is a full service structural engineering firm that designs cost-effective engineering solutions for steel, concrete, prestressed concrete, masonry and wood buildings and structures, as well as rehabilitation of existing damaged structures. Brad Friederichs has 38 years of experience as a structural enigneer and regularly provides subconsultant services to HydroScience on wastewater treatment projects.

O'Dell Engineering – Surveying

O'Dell Engineering will provide surveying services for the project. Founded in 1994, O'Dell offers civil engineering, land surveying, landscape architecture, and land use entitlement & land planning divisions. The firm is a California Certified Small Business and has offices in Modesto, Fresno, Merced, Pleasanton, and Palo Alto. Scott Roberts has 13 years of exprience in land surveying.

Blackburn Consulting – Geotechnical Engineering

Blackburn Consulting provides geotechnical and geo-environmental consulting, materials testing, construction inspection, and forensic engineering services. Blackburn is a certified small business with offices in West Sacramento, Auburn, and Fresno. Robert Pickard is a senior engineering geologist with 22 years of experience.

Section D

PROJECT SCHEDULE

HydroScience has developed this preliminary detailed project schedule based on RFP requirements, the District's schedule objectives, and our recent experience with similar projects.

The RFP indicates notice to proceed on July 10, 2024. HydroScience will conduct an all-hands project kickoff meeting and facility visit at the project site and District offices. Field investigations will be initiated alongside of the PDR development and alternatives evaluation activities. Two workshops are planned during PDR development to vet preliminary results with District staff and ask questions. This will be supplemented by bi-weekly coordination meetings as required.

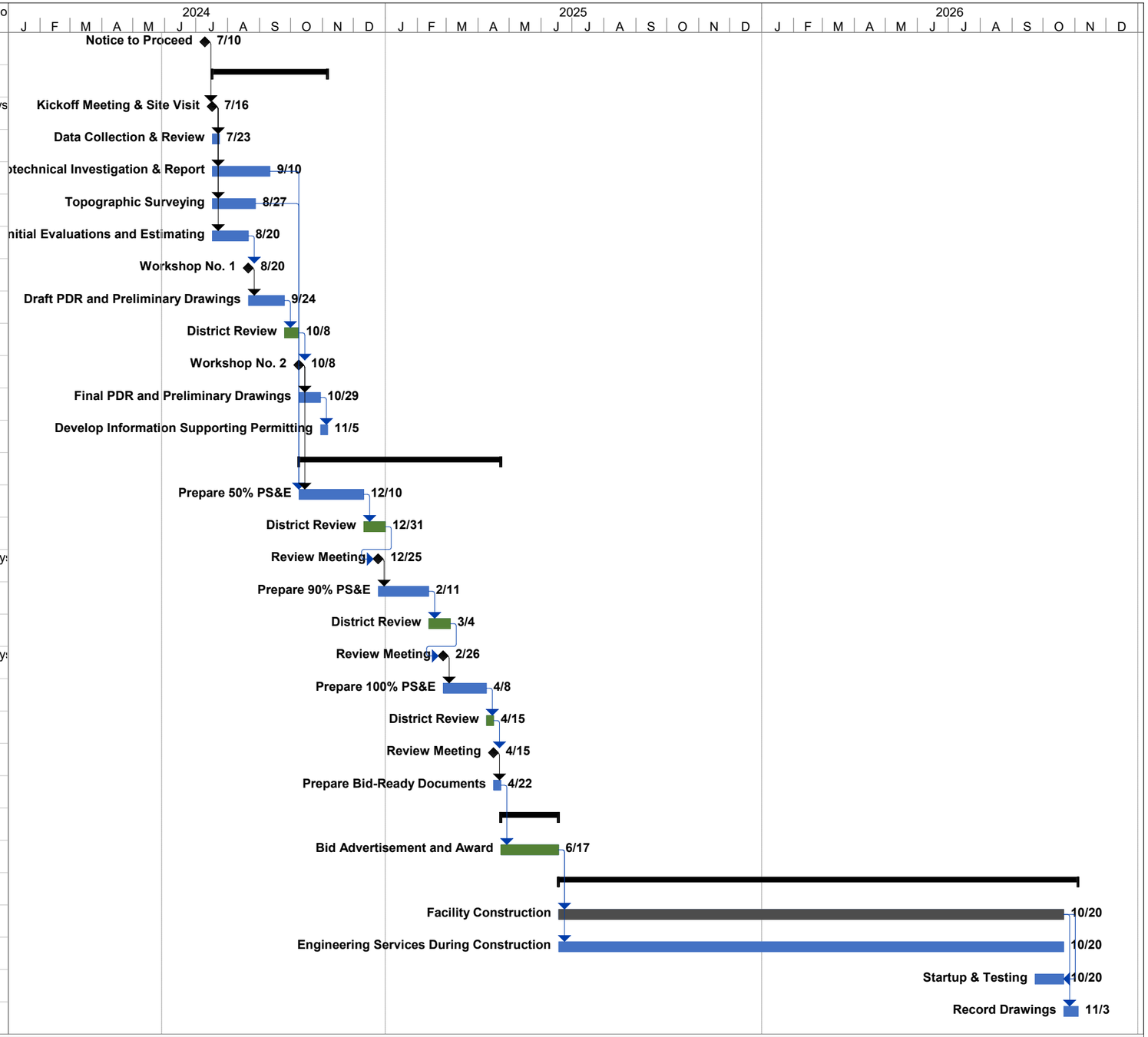
The 50% design can begin while the PDR is being finalized incorporating District comments. Each design milestone will include a review meeting/workshop to discuss District comments and confirm the path forward. We anticipate completing bid-ready documents by April 2025, one month earlier than shown in the RFP schedule.

Project bidding would occur between May and June 2025. Long lead items such as electrical panels, the standby generator, and the control panel are anticipated to take around 60 weeks for submittals, fabrication, and shipping. We have allotted 72 weeks in this schedule for construction, encompassing the 2026 dry season.

Not shown in the schedule are Regional Water Board permitting and CEQA clearance. We understand these are being handled by others but have included hours to supply technical project definition information to both activities and review drafts. We antipcate these will progress in parallel with our work, and we will set the project definition early in the 50% design timeline. We can add these outside activities to our master schedule once they are defined.

Project Schedule

ID	Task Name	Duration	Start	Finish	Predecesso
1	Notice to Proceed	0 days	Wed 7/10/24	Wed 7/10/24	
2	**Preliminary Design Phase**	**80 days**	**Tue 7/16/24**	**Tue 11/5/24**	
3	Kickoff Meeting & Site Visit	0 days	Tue 7/16/24	Tue 7/16/24	1FS+5 days
4	Data Collection & Review	5 days	Wed 7/17/24	Tue 7/23/24	3
5	Geotechnical Investigation & Report	40 days	Wed 7/17/24	Tue 9/10/24	3
6	Topographic Surveying	30 days	Wed 7/17/24	Tue 8/27/24	3
7	Initial Evaluations and Estimating	25 days	Wed 7/17/24	Tue 8/20/24	3
8	Workshop No. 1	0 days	Tue 8/20/24	Tue 8/20/24	7
9	Draft PDR and Preliminary Drawings	25 days	Wed 8/21/24	Tue 9/24/24	8
10	District Review	10 days	Wed 9/25/24	Tue 10/8/24	9
11	Workshop No. 2	0 days	Tue 10/8/24	Tue 10/8/24	10
12	Final PDR and Preliminary Drawings	15 days	Wed 10/9/24	Tue 10/29/24	11
13	Develop Information Supporting Permitting	5 days	Wed 10/30/24	Tue 11/5/24	12
14	**Detailed Design Phase**	**140 days**	**Wed 10/9/24**	**Tue 4/22/25**	
15	Prepare 50% PS&E	45 days	Wed 10/9/24	Tue 12/10/24	11,5,6
16	District Review	15 days	Wed 12/11/24	Tue 12/31/24	15
17	Review Meeting	0 days	Wed 12/25/24	Wed 12/25/24	16FS-5 days
18	Prepare 90% PS&E	35 days	Wed 12/25/24	Tue 2/11/25	17
19	District Review	15 days	Wed 2/12/25	Tue 3/4/25	18
20	Review Meeting	0 days	Wed 2/26/25	Wed 2/26/25	19FS-5 days
21	Prepare 100% PS&E	30 days	Wed 2/26/25	Tue 4/8/25	20
22	District Review	5 days	Wed 4/9/25	Tue 4/15/25	21
23	Review Meeting	0 days	Tue 4/15/25	Tue 4/15/25	22
24	Prepare Bid-Ready Documents	5 days	Wed 4/16/25	Tue 4/22/25	23
25	**Bid Phase**	**40 days**	**Wed 4/23/25**	**Tue 6/17/25**	
26	Bid Advertisement and Award	40 days	Wed 4/23/25	Tue 6/17/25	24
27	**Construction Phase**	**360 days**	**Wed 6/18/25**	**Tue 11/3/26**	
28	Facility Construction	70 wks	Wed 6/18/25	Tue 10/20/26	26
29	Engineering Services During Construction	70 wks	Wed 6/18/25	Tue 10/20/26	26
30	Startup & Testing	20 days	Wed 9/23/26	Tue 10/20/26	28FF
31	Record Drawings	10 days	Wed 10/21/26	Tue 11/3/26	28



CCWD La Contenta WWTF Improvem
Proposed Project Schedule
5/30/2024

Task | Milestone | Summary | District Task | Contractor Task

Section E

REPRESENTATIVE PROJECT EXPERIENCE

Experience Overview

This section includes descriptions of recent, related projects designed by HydroScience. We show the process design elements, HydroScience's role, a client reference, and the overlapping team members. We encourage the District to reach out to our references about their experiences with HydroScience, as they can attest to the ability of these team members to apply expertise and creativity to deliver optimized infrastructure solutions that meet our clients' long-term objectives.

Similarities among the projects featured in this section include:

- **Local knowledge and understanding.** HydroScience is based in Northern California and has worked on several recent projects in this region including the District's Arnold Wastewater Treatment Facility and Copper Cove Wastewater Treatment Facility. We understand District standards and priorities, which means we will be able to start work immediately, collaborate effectively, and navigate the challenges of this project without a learning curve, ultimately saving the District time and money.
- **Experience with complex WWTP process design improvements.** Wastewater treatment infrastructure design is one of HydroScience's core services. We have designed treatment process upgrades to large and small wastewater treatment facilities across California. We work closely with our client's project managers and O&M staff to optimize project cost, incorporate O&M flexibility, strategically sequence construction activities, and avoid unexpected changes or delays.
- **Key staff participation.** Every project featured in this section was completed by key members of our proposed team. Our team works together very effectively and has developed the knowledge and experience needed to find creative solutions to efficiently execute this project.

Copper Cove WWTF Tertiary and Pond 6 Utilities Upgrades

Calaveras County Water District, Calaveras County

YEARS THE WORK WAS PERFORMED
2022 – ongoing

PROCESS DESIGN COMPONENTS
- Filtration pre-treatment (suspended air flotation)
- Continuous backwash sand filtration
- Belt press sludge dewatering
- Horizontal centrifugal pump station
- Submersible centrifugal pump station
- New utility power service and power distribution equipment
- New diesel standby generator
- PLC and SCADA controls

FIRM'S ROLE
Preliminary and Final Design, Construction Support, Funding Assistance, CEQA

PRIMARY CONTACT
Mark Rincon-Ibarra, *District Engineer*
Calaveras County Water District
(209) 754-3175
markr@ccwd.org

TEAM MEMBERS
Bill Slenter, *Project Manager*
Curtis Lam, *Principal-in-Charge & QA/QC*
Jory Benitez, *Project Engineer*
Bya Founas, *Project Engineer*
Marc Fernandez, *Civil/Site and Pipelines*
Thinh Le, *Electrical Engineer*
VE Solutions, *Structural*

The Calaveras County Water District (CCWD) Copper Cove Wastewater Treatment Facility serves approximately 2,000 sewer connections in the communities of Copper Cove, Conner Estates, Copper Meadows, Saddle Creek, and Lake Tulloch. The facility treats mostly domestic wastewater in a series of aerated ponds and storage ponds. Secondary effluent is stored in a large effluent storage pond, Pond 6. Water from this pond is treated to Title 22 tertiary recycled water standards using a Trident Microfloc filter, disinfected in a single-channel UV disinfection process, and delivered to the Saddle Creek Golf Course for irrigation reuse with a portion discharged to wetlands. These discharges are regulated by WDR and NPDES discharge permits.

The filter is approaching the end of its useful life, and typically performs well under design capacity due to high algae load from the pond which requires high chemical doses and frequent backwashing and reduces the UV transmittance (UVT) of filter effluent. Pond 6 also does not have sufficient storage to provide adequate seasonal storage for proposed future development in the area.

HydroScience is preparing a final design to replace the existing filter unit with a continuous backwash sand filtration process, add algae removal pretreatment utilizing suspended air floatation, add a belt press for dewatering tertiary sludge, and relocate pumps and piping at the base of the dam to allow for dam enlargement under a separate construction contract. HydroScience's electrical design team is designing electrical upgrades to support the new facilities including an upgraded power utility service and diesel standby generator. CEQA documentation is also being completed under HydroScience's oversight.

HydroScience is developing the design in close collaboration with CCWD engineering, operations, and maintenance staff. Onsite bench scale testing was performed to validate treatment technology options under very challenging algae load conditions. Expandability provisions for future buildout conditions are being incorporated into the design where appropriate. The construction sequencing strategy to implement the upgrades around ongoing facility operations is a key project element. The project is being funded by the US Army Corps of Engineers under Section 219 of the Water Resource Development Act (WRDA). HydroScience is assisting with this coordination.

Arnold Wastewater Treatment Facility Improvements

Calaveras County Water District, Calaveras County

YEARS THE WORK WAS PERFORMED
2021 – ongoing

PROCESS DESIGN COMPONENTS
- Mixed liquor flow measurement and flow splitting structure
- Circular secondary clarifier
- Double disc WAS/RAS pump station
- Vertical turbine effluent pump
- Aerobic digesters with mechanical mixers and diffusers
- Positive displacement blowers
- New utility power service and power distribution equipment
- New diesel standby generator
- PLC and SCADA controls

FIRM'S ROLE
Preliminary and Final Design, Funding Support, Bidding and Construction Support

PRIMARY CONTACT
Mark Rincon-Ibarra, *District Engineer*
Calaveras County Water District
(209) 754-3175
markr@ccwd.org

TEAM MEMBERS
Bill Slenter, *Project Manager*
Curtis Lam, *Principal-in-Charge, QA/QC*
Bya Founas, *Design Support/Estimating*
Thinh Le, *Electrical Instrumentation and Controls*
VE Solutions, *Structural*

HydroScience provided preliminary and final design of improvements to the Arnold Wastewater Treatment Facility (WWTF) for the Calaveras County Water District (CCWD). The Arnold WWTF is a 175,000 gallons per day (gpd) facility that uses an oxidation ditch, secondary clarifier, pressure filter, and chlorine disinfection to treat to secondary standards. Effluent is discharged to land via both spray irrigation and subsurface infiltration. Sludge is processed in two aerobic digesters and dewatered using a belt press, followed by solar drying. The facility serves 835 equivalent single-family units (ESFUs) and is covered under the General Order for Small Domestic Treatment Systems (WQ-2014-153-DWQ-R5190). The facility lacked unit process redundancy and had insufficient capacity to reliably treat peak wet weather flows. The electrical power distribution was over 35 years old and did not have sufficient capacity to serve an expanded facility.

HydroScience developed the design in close collaboration with CCWD engineering, operations, and maintenance staff. Project improvements include a new 30-ft circular secondary clarifier, a new cast-in-place flow measurement and splitter box with provisions for a future second oxidation ditch, two new aerobic digesters with mechanical mixers and diffusers, a new bank of positive-displacement blowers to feed air to digestion, a new Return Activated Sludge/Waste Activated Sludge (RAS/WAS) pump station using double-disc pumps and control valves, and a new effluent pump station to serve the new clarifier. CCWD decided to expand the project scope by adding complete replacement of the utility power feed, motor control center, SCADA system, and PLC control panel which was completed as a collaborative effort with District staff and their preferred controls engineer.

A new masonry utility building will be constructed to house all new electrical gear including service entrance and MCC. Existing loads will be carefully transitioned to the new MCC through a detailed set of sequencing steps. An upgraded power utility service will be installed to serve the increased loads. A new diesel standby generator will be installed and the existing will be decommissioned.

Following completion of design, CCWD determined that the project could be eligible for State Revolving Fund (SRF) grant funding. As an additional service, HydroScience is preparing the SRF Technical Report and overseeing CEQA documentation development to support funding eligibility.

Memorial Park Wastewater Treatment and Infrastructure Replacement

San Mateo County, California

YEARS THE WORK WAS PERFORMED
2017 – 2021

PROCESS DESIGN COMPONENTS
- Influent lift station with submersible cutter pumps and flow metering
- Influent screening (mechanically cleaned 2mm bar screen)
- 50,000 gpd Sequencing Batch Reactor (SBR) secondary treatment system providing 30 mg/L BOD and TSS effluent with 50% reduction of Total Nitrogen
- Effluent pump station with submersible grinder pumps
- Disinfection using sodium hypochlorite
- New utility power service and power distribution equipment
- New diesel standby generator
- PLC and SCADA controls

FIRM'S ROLE
Planning, Preliminary and Final Design, Engineering Services During Construction, Construction Management and Inspection

PRIMARY CONTACT
Anthony Lum, PE, *Associate Civil Engineer*
County of San Mateo
(650) 599-1491
alum@smcgov.org

TEAM MEMBERS
Bill Slenter, *Project Manager*
Curtis Lam, *Principal-in-Charge*
Thinh Le, *Electrical Instrumentation and Controls*
VE Solutions, *Structural*

Memorial County Park is a family and group campground facility operated by the County of San Mateo and located in the Santa Cruz Mountains. The 500-acre site features dense redwoods, Pescadero Creek, hiking trails, and hosts up to 2,000 visitors per day. The campground is equipped with plumbed restrooms, showers, and limited staff housing.

Wastewater generated within the park is collected in two separate collection systems, with total length of approximately 1.8 miles of 4- to 8-inch gravity sewer. Most of the wastewater flowed to a 30,000 gallon per day (gpd) extended aeration Wastewater Treatment Plant (WWTP). Wastewater was treated to secondary standards, disinfected, and discharged to a dedicated spray field with an unlined retention lagoon to handle larger flows. The remainder of the wastewater flowed to a septic tank and leach field system. The collection system and WWTP were over 50 years old. Due to age, poor performance, reliability concerns, and high maintenance requirements, HydroScience was retained to plan, design, and oversee construction for a new, modern WWTP, rehabilitation of the collection systems, and a new sewer force main and pump station to connect the two collection systems, so that all of the wastewater will be treated by the new WWTP.

HydroScience provided engineering services during construction as well as full time onsite construction management and construction inspection and acted as the Owner's representative on site. Engineering services included submittal, RFIs, and contract change order review. Onsite construction management and inspection included coordination with the Contractor on schedule and construction progress. Construction inspection included quality control of work performed by the contractor, inspection of the work site to maintain environmental compliance, and coordination with HydroScience's subcontractors to perform special inspections such as material inspection of concrete and rebar and earthwork compaction testing. HydroScience helped facilitate the inclusion of a new SCADA system into the design and construction of the wastewater treatment plant at the behest of the Owner after construction had commenced. HydroScience helped the Owner through a two-phase startup of the new wastewater treatment plant: for operations without the SCADA system and then integrated in the SCADA system once installed. Due to the remote nature of the project site and limited real time communications available, emphasis was placed on regularly schedule project meetings to review progress, schedule, and other construction issues.

HydroScience developed a collaborative, forward-looking project approach that provides reliable operation and permit compliance in a small, low-impact footprint, and that reduces the cost and staff time to operate and maintain.

Wastewater Treatment Plant Reliability Improvements

Silicon Valley Clean Water, Redwood City, California

YEARS THE WORK WAS PERFORMED
2018 – 2021

PROCESS DESIGN COMPONENTS
- Aeration turbo blowers, piping, and control valves
- Horizontal centrifugal high flow backwash pumps
- Fan press solids dewatering units with conveyor system
- Electrical, instrumentation, and control panels

FIRM'S ROLE
Design engineer on a design-build team

PRIMARY CONTACT
Arvind Akela, *Engineering Director*
(650) 832-6485
aakela@svcw.org

HydroScience served as engineer-of-record on a design-build team for this project which provided plant reliability improvements for Silicon Valley Clean Water's 24 MGD WWTP in Redwood Shores, California. Work included upgrading the aeration basin blower system to high-speed turbo blowers with all new distribution piping and control valves, correcting basin flow split issues starting with a hydraulic profile study, installing a fan press solids dewatering system and conveyors, adding backup water for generators, and replacing their granular media filter backwash pumps.

Replacement of the backwash pumps was particularly challenging given the large size of the pumps (8,000 gpm), limited shutdown window available, their location in a below-grade gallery, and the custom large-diameter discharge manifold that needed to be replaced to accommodate new pumps.

The D/B project included a highly collaborative process with plant staff. One of the key features of our approach was the partnering atmosphere, which we established at the project kickoff. Client collaboration included a series of all-hands workshops to review findings, select preferred design alternatives, gather feedback on design deliverables, and coordinate construction activities. Installation and testing of improvements were performed in close coordination with plant operations and maintenance staff to sequence the work around ongoing operations while facilitating completion of the contract requirements.

Davis Secondary and Tertiary Improvements

City of Davis, California

YEARS THE WORK WAS PERFORMED
2014 – 2017

PROCESS DESIGN COMPONENTS
- Chlorine contact basin
- Utility water pump station
- Effluent reaeration system
- Commissioning engineering for all facilities including secondary, tertiary, solids handling

FIRM'S ROLE
Design engineer on a design-build team

PRIMARY CONTACT
Art O'Brien, *Advisor for City of Davis*
(916) 714-1801
aobrien@robertson-bryan.com

HydroScience provided process design, coordination, and commissioning assistance as part of a design-build (DB) team for the construction of secondary and tertiary wastewater treatment improvements at the City of Davis WWTP. The peak treatment capacity was increased to 18 MGD by the project. This $70M comprehensive upgrade of this existing WWTP modernized the facility and brought it into compliance with current discharge regulations. Having recently served as the lead engineer on the City's Rehabilitation and Replacement (R&R) project, which upgraded the influent pumping, headworks, grit handling, and primary clarification unit processes, HydroScience contributed a deep working knowledge of existing plant systems and O&M requirements to the DB team.

HydroScience developed a preliminary design, which was subsequently optimized in a team effort with the City, their Owner's Representative, and outside expert peer reviewers. The resulting project definition was then executed in the detailed design phase. The project includes design and construction of activated sludge secondary treatment facilities (aeration and clarification), tertiary disc filters, chlorine disinfection, post-aeration, effluent pumping, flood control facilities, and a new administration building.

The project successfully achieved the City's goal of obtaining a cost-effectively and reliable WWTP upgrade that meets new discharge regulations and is flexible for future regulations while remaining operator-friendly, operationally efficient, and environmentally sustainable.

Section F

LABOR ESTIMATE

Task	Description	Curtis Lam PIC and QA/QC	Bill Slenter Project Manager	Jory Benitez Process Engineering	Marc Fernandez Civil/Site and Pipelines	Bya Founas Mecanical Engineering	Thinh Le Electrical/EIC Lead	Electrical EIC Support	Drafting	Hours	PCSG Cost Estimating	VE Solutions Structural	Blackburn Geotechnical	O'Dell Surveying	Total Project Hours
	Labor Classification	Prin	Prin	E-II	E-III	E-III	E-IX	E-III	CAD						
A	**Project Management/QAQC**	**18**	**40**	**18**	**0**	**5**	**5**	**0**	**0**	**86**	**0**		**0**	**0**	**86**
	General Project Management/Tracking	2	20	8						**30**					**30**
	Bi-Weekly Status Calls		20	10		5	5			**40**					**40**
	QA/QC	16								**16**					**16**
B	**Project Design Report**	**0**	**44**	**71**	**105**	**23**	**62**	**103**	**49**	**457**	**14**		**0**	**0**	**485**
	Kickoff meeting/Comprehensive Site Visit		8	8			8			**24**					**24**
	Data request, review, and collection		1	2	14		20	32		**69**					**69**
	Evaluation and Alternatives		10	20	30					**60**					**60**
	PDR Cost Estimating		1	2	1	1	1	2		**8**	14				**22**
	Workshop 1		4	3		2	1	3		**13**					**13**
	Prepare Preliminary Drawings		2	8	24		12	32	45	**123**					**123**
	Prepare Draft PDR		10	16	24	20	10	26		**106**					**106**
	Workshop 2		4	4			4			**12**					**12**
	Prepare Final PDR		4	8	12		6	8	4	**42**					**42**
	Structural Engineering - Predesign Phase									**0**		14			**14**
C	**Topographic Surveying**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**		**0**	**174**	**174**
	Prepare Topographic Survey									**0**				174	**174**
D	**Geotechnical Investigation**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**		**130**	**0**	**130**
	Field Investigation and Geotechnical Report									**0**			130		**130**
E	**Permit and Environmental Assistance**	**0**	**6**	**0**	**12**	**0**	**0**	**0**	**0**	**18**	**0**		**0**	**0**	**18**
	Develop Project Description and Data Tables		6		12					**18**					**18**
F	**Project Design**	**0**	**119**	**339**	**173**	**397**	**70**	**333**	**266**	**1697**	**91**		**0**	**0**	**1471**
	Prepare 50% Plans and Draft Technical Specifications		40	140	80	160	12	100	110	**642**					
	Design Review Meeting		4	3		2	1	3		**13**					**13**
	Prepare 90% Plans and Specifications		40	100	60	130	30	160	90	**610**					**610**
	Design Review Meeting		4	3		2	1	3		**13**					**13**
	Prepare 100% Plans and Specifications		24	80	24	100	20	60	40	**348**					**348**
	Design Phase Cost Estimating		1	3	1	1	3	1	2	**12**	91				**103**
	Design Review Meeting		2	2		2	1	2		**9**					**9**
	Prepare Bid-Ready Plans and Specifications		4	8	8		2	4	24	**50**					**50**
	Structural Engineering - Design Phase									**0**		325			**325**
G	**Construction Assistance**	**0**	**36**	**67**	**48**	**72**	**36**	**124**	**24**	**407**	**0**		**0**	**0**	**464**
	Site Visits (4)		8	8			4	8		**28**					**28**
	Construction Meetings (8)		6	4		4	2	4		**20**					**20**
	RFI Responses (35)/General Support		16	16	30	4	10	50		**126**					**126**
	Submittal Responses (75)		4	35	16	60	16	60		**191**					**191**
	Change Order Assistance		2	2		4	4	2		**14**					**14**
	Record Drawings			2	2				24	**28**					**28**
	Structural Engineering Support									**0**		57			**57**
OVERALL BASE SERVICES		**18**	**245**	**495**	**338**	**497**	**173**	**560**	**339**	**2665**	**105**	**396**	**130**	**174**	**2828**
OPTIONAL SERVICES															
	Separate secondary clarifier, RAS/WAS PS		8	24	16	40	4	8	28	**128**		280	7		**415**
	Headwall for UESP suction		2		12				4	**18**		43	3		**64**
	Record of Survey									**0**				105	**105**
	PCSG constructability review		1	2		2	1	2		**8**	29				**37**

Section G

PROJECT TEAM RESUMES

TEAM MEMBER	ROLE	PAGE
Bill Slenter, PE	Project Manager	
Curtis Lam, PE	Principal-in-Charge / QA/QC	
Jory Benitez, EIT, Grade T2	Process Engineering	
Bya Founas, CEng MICE	Mechanical Engineering	
Marc Fernandez	Civil/Site and Pipelines	
Thinh Le, PE	Electrical, Instrumentation & Controls	
John Collins, PCSG	Cost Estimating	
Brad Friedriechs, VE Solutions	Structural Engineering	
Scott Roberts, O'Dell Engineering	Surveying	
Rob Pickard, Blackburn Consulting	Geotechnical Engineering	

Bill Slenter, PE

Project Manager

HydroScience

Bill is a civil engineer with 32 years of experience. His areas of expertise include permitting, funding, planning, design, and construction support of wastewater, water, and recycled water systems, including wastewater treatment facilities producing tertiary effluent. A principal with HydroScience, he has served as principal, project manager and project engineer on a wide range of water-related projects.

EDUCATION
B.S., Civil Engineering, San Francisco State University

REGISTRATION
Civil Engineer, California, Registration No. 57640

AFFILIATIONS
California Water Environment Association (CWEA)

Central Valley Clean Water Association – Outreach Committee Chairperson

Former Chairperson, CWEA San Francisco Bay Section Communications Committee

CWEA Sacramento Area Section

SELECT PROJECT EXPERIENCE

Copper Cove WWTF Tertiary and Pond 6 Utilities Upgrades

Calaveras County Water District, California

Project Manager. The Copper Cove Wastewater Treatment Facility treats mostly domestic wastewater in a series of aerated ponds and storage ponds. Secondary effluent is stored in a large effluent storage pond, Pond 6. Water from this pond is treated to Title 22 tertiary recycled water standards using a Trident Microfloc filter, disinfected in a single-channel UV disinfection process, and delivered to the Saddle Creek Golf Course for irrigation reuse with a portion discharged to wetlands. HydroScience is preparing the design to replace the aging and poorly performing existing filter unit with a continuous backwash sand filtration process, add algae removal pretreatment utilizing suspended air floatation, add solids dewatering for treating tertiary sludge, and relocate pumps and piping. CEQA documentation is also being completed under HydroScience's oversight. Expandability provisions for future buildout conditions are incorporated into the design, and the construction sequencing will implement the upgrades around ongoing facility operations. A separate design package also being prepared by HydroScience will relocate buried piping and two pump stations to make room for enlargement of the Pond 6 dam. HydroScience is also assisting with US Army Corps of Engineers (USACE) grant funding coordination.

Arnold WWTF Improvements

Calaveras County Water District, California

Project Manager. HydroScience provided preliminary and final design of improvements to the Arnold Wastewater Treatment Facility (WWTF) for the Calaveras County Water District (CCWD). The Arnold WWTF is a 175,000 gpd facility that uses an oxidation ditch, secondary clarifier, pressure filter, and chlorine disinfection to treat to secondary standards. The facility currently serves 835 equivalent single-family units (ESFUs) and is covered under the General Order for Small Domestic Treatment Systems (WQ-2014-153-DWQ-R5190). The facility lacked unit process redundancy and experiences reduced clarification performance under peak wet weather flows. The existing electrical power distribution equipment was over 35 years old and did not have sufficient capacity to serve an expanded facility. HydroScience developed the design in close collaboration with CCWD engineering, operations, and maintenance staff. The project added a second secondary clarifier, improved mixed liquor flow control with provisions for a future second oxidation ditch, increased aerobic digestion capacity, replaced the return and waste activated sludge pump station, and upgraded effluent pumping. CCWD decided to expand the project scope by adding complete replacement of the utility power feed, motor control center, SCADA system, and PLC control panel, which was completed as a collaborative effort with District staff and their preferred controls engineer. The design is complete and HydroScience is assisting CCWD with securing State Revolving Fund (SRF) grant funding by preparing a technical report and overseeing completion of CEQA.

Memorial Park Wastewater Treatment Facilities Improvements

County of San Mateo, California

Project Manager. Memorial County Park is a family and group campground facility. Wastewater generated within the park is collected in two separate collection systems, with a total length of approximately 1.8 miles of 4- to 8-inch gravity sewer. Most of the wastewater flowed to a 30,000 gallon per day (gpd)

Bill Slenter, PE

HydroScience

extended aeration WWTP. Wastewater is treated to secondary standards, disinfected, and discharged to a dedicated spray field with an unlined retention lagoon to handle larger flows. The remainder of the wastewater flows to a septic tank and leach field system. The collection system and WWTP were over 50 years old. Due to age, poor performance, reliability concerns, and high maintenance requirements, the County retained HydroScience to plan, design, and oversee construction for a new, modern 50,000 gpd sequencing batch reactor WWTP. The design also included new yard piping and modifications to the existing WWTP, to repurpose it as a new sewer lift station. Site drainage improvements included in the design help to mitigate ponding issues. HydroScience developed a collaborative, forward-looking project approach that provides reliable operation and permit compliance in a small, low-impact footprint, and that reduces the cost and staff time to operate and maintain.

Wastewater Treatment Plant Reliability Improvements

Silicon Valley Clean Water, Redwood City, California

Principal-in-Charge and QA/QC. HydroScience was the engineer-of-record for the Overaa/HydroScience design-build team for this design-build project to provide plant reliability improvements for Silicon Valley Clean Water's 24 MGD WWTP in Redwood Shores, California. Work included upgrading the aeration basin blower system to high speed turbo blowers with all new distribution piping and control valves, correcting basin flow split issues, installing a fan press solids dewatering system and conveyors, and replacing their granular media filter backwash pumps. Electrical improvements included installing new VFDs and turbo blower, enhancing the aeration control, installing new rotary presses with an integrated control scheme that allowed for redundant control/ power systems, replacing 125 HP Dual Media Filter Backwash Pump with more efficient pump while maintaining the existing power draw and updating the process control narratives.

Wastewater Treatment Plant Rehabilitation and Replacement

City of Davis, California

Principal-in-Charge. HydroScience provided design and construction support services for the City's WWTP Rehabilitation and Replacement Project. The project included significant upgrades to the existing dry pit influent pumps, which were oversized for current flows and had significant O&M challenges. The improvements included revised suction piping, new pumps, and a revised discharge piping arrangement. The improved facility operates at a higher efficiency with flow turndown and reduced incidence of clogging. Headworks improvements include new bar screens and washer/compactors, as well as modifications to existing influent channels to improve scour velocity to reduce maintenance and corrosion. Primary clarifier improvements include new chain and flight scrapers equipment.

Davis WWTP Secondary and Tertiary Improvements

City of Davis, California

Principal-in-Charge. HydroScience provided process design, coordination, and commissioning assistance as part of a design-build team for the construction of secondary and tertiary improvements at the City's WWTP. The peak treatment capacity is 18 MGD. This $70M upgrade modernized the facility and brought it into compliance with current discharge regulations. The project included design and construction of activated sludge secondary treatment facilities (aeration and clarification), tertiary disc filters, chlorine disinfection, post-aeration, effluent pumping, flood control facilities, and a new administration building. HydroScience's core areas of responsibility on this project included the chlorine contact basin, chemical mixers, chlorine residual monitors, utility water systems, effluent reaeration system, field instrumentation, leading roles on commissioning and process transitioning, and support for plant tie-ins and owner coordination.

St. Helena WWTRP Upgrades

City of St. Helena, California

QA/QC. The City of St. Helena was issued a CDO containing effluent limitations the City could not reliably obtain with their existing pond treatment plant. The City commissioned HydroScience Engineers to develop a Conceptual Design Report (CDR) to analyze treatment alternatives that would comply with the new NPDES effluent discharge limitations, while also modernizing the facility's treatment process. HydroScience identified a packaged MBR treatment system as the preferred WWTRP upgrade alternative, and developed the design around this approach. The WWTRP will maintain its permitted capacity of 0.5 MGD with the flexibility to operate the plant at a peak day hydraulic capacity of 1.33 MGD. This new system will result in tens of millions of dollars in cost savings when combined with repurposing four of the existing WWTRP ponds for use as flow equalization. The design is modular so that the City can cost-effectively expand the new system to meet anticipated build-out flows, if necessary. The RWQCB accepted the CDR findings without comment. Construction is nearly completed.

Wastewater Treatment and Effluent Management Facilities

Lytton Rancheria, Sonoma County, California

Design Manager. As part of a design/build team, HydroScience completed design of a Membrane Bioreactor (MBR) Wastewater Treatment Facility to serve a new tribal residential development in Sonoma County. The design includes an administration building, UV disinfection, solids dewatering system, effluent storage pond, and recycled water pump station. The design was developed through a collaborative progressive design build process. Construction is completed and the facility is being commissioned.

Curtis Lam, PE

Principal-in-Charge and QA/QC

HydroScience

Curtis Lam has 30 years of experience in the design of recycled water and potable water distribution system infrastructure, wastewater treatment and collection system design, and the master planning of water, wastewater, and recycled water infrastructure. A Principal with HydroScience, Curtis has served as Principal-in-Charge, Project Manager and Project Engineer on a wide range of water, wastewater, and recycled water projects.

EDUCATION

M.S., Civil and Environmental Engineering, University of California, Berkeley (1996)

B.S., Civil Engineering, University of California, Berkeley (1995)

REGISTRATION

Civil Engineer, California, Registration No. 59049 (1999)

AFFILIATIONS

WateReuse Association, Representative to the Board of Trustees, 2017 - 2020

WateReuse Association, President, 2015 - 2016

WateReuse Association, Vice-President, 2013 - 2014

WateReuse Association, Program Chair, 2011 - 2013

WateReuse, Chair, 2013 California Annual Conference

California Water Environment Association

Water Environment Federation

SELECT PROJECT EXPERIENCE

Copper Cove WWTF Tertiary and Pond 6 Utilities Upgrades

Calaveras County Water District, California

Principal-in-Charge & QA/QC. The Copper Cove Wastewater Treatment Facility treats mostly domestic wastewater in a series of aerated ponds and storage ponds. Secondary effluent is stored in a large effluent storage pond, Pond 6. Water from this pond is treated to Title 22 tertiary recycled water standards using a Trident Microfloc filter, disinfected in a single-channel UV disinfection process, and delivered to the Saddle Creek Golf Course for irrigation reuse with a portion discharged to wetlands. HydroScience prepared a preliminary and final design to replace the existing filter unit with a continuous backwash sand filtration process, add algae removal pretreatment utilizing dissolved air floatation, add solids dewatering for treating tertiary sludge, and relocate pumps and piping. CEQA documentation was also completed under HydroScience's oversight. Expandability provisions for future buildout conditions were incorporated into the design, and the construction sequencing implemented the upgrades around ongoing facility operations.

Arnold WWTF Improvements

Calaveras County Water District, California

Principal-in-Charge & QA/QC. HydroScience provided preliminary and final design of improvements to the Arnold Wastewater Treatment Facility (WWTF) for the Calaveras County Water District (CCWD). The Arnold WWTF is a 175,000 gpd facility that uses an oxidation ditch, secondary clarifier, pressure filter, and chlorine disinfection to treat to secondary standards. The facility currently serves 835 equivalent single-family units (ESFUs) and is covered under the General Order for Small Domestic Treatment Systems (WQ-2014-153-DWQ-R5190). The facility lacked unit process redundancy and experiences reduced clarification performance under peak wet weather flows. The existing electrical power distribution equipment was over 35 years old and did not have sufficient capacity to serve an expanded facility. HydroScience developed the design in close collaboration with CCWD engineering, operations, and maintenance staff. The project added a second secondary clarifier, improved mixed liquor flow control with provisions for a future second oxidation ditch, increased aerobic digestion capacity, replaced the return and waste activated sludge pump station, and upgraded effluent pumping. CCWD decided to expand the project scope by adding complete replacement of the utility power feed, motor control center, SCADA system, and PLC control panel, which was completed as a collaborative effort with District staff and their preferred controls engineer. The design is complete and HydroScience is assisting CCWD with securing State Revolving Fund (SRF) grant funding by preparing a technical report and overseeing completion of CEQA.

Memorial Park Wastewater Treatment Facilities Improvements

County of San Mateo, California

Principal-in-Charge. Memorial County Park is a family and group campground facility. Wastewater generated within the park is collected in two separate collection systems, with a total length of approximately 1.8 miles of 4- to 8-inch gravity sewer. Most of the wastewater flows to a 30,000 gallon per day (gpd) extended aeration WWTP. Wastewater is treated to secondary standards, disinfected, and discharged to a dedicated spray field with an unlined retention lagoon to handle larger flows. The remainder of the

Curtis Lam, PE

HydroScience

wastewater flows to a septic tank and leach field system. The collection system and WWTP are over 50 years old. Due to age, poor performance, reliability concerns, and high maintenance requirements, HydroScience planned, designed, and oversaw construction for a new, modern 50,000 gpd sequencing batch reactor WWTP. The design included new yard piping and modifications to the existing WWTP, to repurpose it as a new sewer lift station. HydroScience developed a collaborative, forward-looking project approach that provides reliable operation and permit compliance in a small, low-impact footprint, and that reduces the cost and staff time to operate and maintain.

St. Helena WWTRP Upgrades

City of St. Helena, California

Project Manager. The City of St. Helena was issued a CDO containing effluent limitations the City could not reliably obtain with their existing pond treatment plant. The City commissioned HydroScience Engineers to develop a Conceptual Design Report (CDR) to analyze treatment alternatives that would comply with the new NPDES effluent discharge limitations, while also modernizing the facility's treatment process. HydroScience identified a packaged MBR treatment system as the preferred WWTRP upgrade alternative, and developed the design around this approach. The WWTRP will maintain its permitted capacity of 0.5 MGD with the flexibility to operate the plant at a peak day hydraulic capacity of 1.33 MGD. This new system will result in tens of millions of dollars in cost savings when combined with repurposing four of the existing WWTRP ponds for use as flow equalization. The design is modular so that the City can cost-effectively expand the new system to meet anticipated build-out flows, if necessary. The RWQCB accepted the CDR findings without comment.

Wastewater Treatment Plant Upgrades

City of Greenfield, California

Project Manager. The City of Greenfield WWTP provides wastewater services to 3,800 connections. In order to meet RWQCB's recently adopted waste discharge requirements, the aging plant requires a new wastewater treatment process. Recent studies recommended a prepackaged 2.0 MGD MBR system that would replace the existing secondary treatment process. The City retained HydroScience to perform the planning, design, obtain $60M in CWSRF external funding, and construction phase services for this groundbreaking project on the Central Coast. Design of this project will be completed during 2024, with constructed scheduled for 2026.

Wastewater Treatment and Effluent Management Facilities

Lytton Rancheria, Sonoma County, California

Design Quality Manager/Design Principal. As part of a design/build team, HydroScience completed design and is in the process of completing construction of wastewater and recycled water facilities serving a new tribal residential development in Sonoma County. The Lytton Rancheria project consists of construction of new homes, a community center, and a retreat center. HydroScience designed a complete Membrane Bioreactor (MBR) Wastewater Treatment Facility utilizing shop-fabricated treatment units to treat 250,000 gpd of peak dry weather flow. The design includes an administration building, UV disinfection, solids dewatering system, effluent storage pond, and recycled water pump station. The design was developed through a collaborative progressive design build process.

Package MBR Wastewater Treatment Plant

Chicken Ranch Rancheria of Me-Wuk Indians, Tuolumne County

Project Manager. HydroScience was recently retained by Chicken Ranch Rancheria to design a new MBR WWTP capable of producing disinfected tertiary recycled water suitable for unrestricted reuse. Dry weather flows into the plant are expected to increase from 104,000 gpd during Phase 1 to 165,000 gpd at buildout. Components of the new WWTP will include an influent pump station a Cloacina M300-200 membrane bioreactor wastewater treatment plant, a Drypac sludge dewatering press, UV disinfection reactors, an effluent pump station, and a SCADA control system. This project was implemented by a design build team with Fluid Resource Management as the Contractor and HydroScience as the Engineer-of-Record.

Tule River Tertiary Wastewater System Facilities

Tule River Tribe, Porterville, California

Project Manager. HydroScience has been retained by the Tule River Tribe to design and provide permitting and funding support for a new Water Recycling Treatment Plant, recycled water storage and conveyance infrastructure, and offsite wastewater collection system improvements in the City of Porterville, California. The project objective is to offset the potable water demand associated with the Tribe's proposed Eagle Mountain Casino and Resort Relocation Project in accordance with mandated CEQA requirements. The City of Porterville currently does not treat wastewater to tertiary standards therefore; an agreement between the Tribe and City will permit the production of recycled water using the City's existing WWTP outfall. The project includes the design and construction of a new 0.308 MGD ultrafiltration plant, 0.5 MG steel storage tank, 900 gpm vertical turbine pump station, 7,000 linear feet of 12 inch PVC recycled water distribution piping, electrical and SCADA improvements, civil site improvements including a new access road, and the irrigation retrofit of the City's existing sports complex for permitted reuse of recycled water. Offsite improvements include the replacement of two existing sanitary sewer lift stations and collection system improvements. Challenges include a fast-track schedule and the need to streamline the permitting process.

Jory Benitez, EIT, Grade T2

Process Engineering

HydroScience

EDUCATION

M.S., Engineering with a Specialization in Water Engineering, California Polytechnic State University, San Luis Obispo

B.S., Environmental Engineering, California Polytechnic State University, San Luis Obispo

REGISTRATION

Engineer-in-Training, California, Registration No. 151168

Grade T2 Water Treatment Operator, No. 40518, California

AFFILIATIONS

American Water Works Association since 2019
Member No. 03560224

National Association of Lambda Alumnae

Jory is a support engineer with five years of experience in the planning and design of water, recycled water, and wastewater conveyance and treatment systems. Her educational experience includes planning and design of water wells and pump stations as well as agricultural irrigation systems. Jory has had key roles in chlorine disinfection system tracer studies, regulatory compliance, wastewater feasibility studies, and recycled water pipeline planning and design. Her software experience includes AutoCAD and ArcGIS.

SELECT PROJECT EXPERIENCE

Copper Cove WWTF Tertiary and Pond 6 Utilities Upgrades

Calaveras County Water District, California

Project Engineer. The Copper Cove Wastewater Treatment Facility treats mostly domestic wastewater in a series of aerated ponds and storage ponds. Secondary effluent is stored in a large effluent storage pond, Pond 6. Water from this pond is treated to Title 22 tertiary recycled water standards using a Trident Microfloc filter, disinfected in a single-channel UV disinfection process, and delivered to the Saddle Creek Golf Course for irrigation reuse with a portion discharged to wetlands. HydroScience is preparing the design to replace the aging and poorly performing existing filter unit with a continuous backwash sand filtration process, add algae removal pretreatment utilizing suspended air floatation, add solids dewatering for treating tertiary sludge, and relocate pumps and piping. CEQA documentation is also being completed under HydroScience's oversight. Expandability provisions for future buildout conditions are incorporated into the design, and the construction sequencing will implement the upgrades around ongoing facility operations. A separate design package also being prepared by HydroScience will relocate buried piping and two pump stations to make room for enlargement of the Pond 6 dam. HydroScience is also assisting with US Army Corps of Engineers (USACE) grant funding coordination.

St. Helena WWTRP Upgrades

City of St. Helena, California

Project Engineer. The City of St. Helena was issued a CDO containing effluent limitations the City could not reliably obtain with their existing pond treatment plant. The City commissioned HydroScience Engineers to develop a Conceptual Design Report (CDR) to analyze treatment alternatives that would comply with the new NPDES effluent discharge limitations, while also modernizing the facility's treatment process. HydroScience identified a packaged MBR treatment system as the preferred WWTRP upgrade alternative, and developed the design around this approach. The WWTRP will maintain its permitted capacity of 0.5 MGD with the flexibility to operate the plant at a peak day hydraulic capacity of 1.33 MGD. This new system will result in tens of millions of dollars in cost savings when combined with repurposing four of the existing WWTRP ponds for use as flow equalization. The design is modular so that the City can cost-effectively expand the new system to meet anticipated buildout flows, if necessary. The RWQCB accepted the CDR findings without comment. Construction is nearly completed.

Wastewater Treatment and Effluent Management Facilities

Lytton Rancheria, Sonoma County, California

Support Engineer. As part of a design/build team, HydroScience completed design of wastewater and recycled water facilities serving a new tribal residential development in Sonoma County. The Lytton Rancheria project consists of construction of new homes, a community center, and a retreat center. HydroScience designed a complete Membrane Bioreactor (MBR) Wastewater Treatment Facility utilizing shop-fabricated treatment units to treat 250,000 gpd of peak dry weather flow. The design includes an administration building, UV disinfection, solids dewatering system, effluent storage pond, and recycled water pump station. The design was developed through a collaborative progressive design build process.

Jory Benitez, EIT, Grade T2

HydroScience

Water Treatment and Storage Facility

Lytton Rancheria, Sonoma County, California

Support Engineer. HydroScience is providing design engineering and engineering support of construction for new groundwater wells, groundwater treatment, treated water storage, and booster pumping facility to serve the Lytton Rancheria Project, a tribal residential development located near Windsor, CA. HydroScience's role is design engineer-of-record as part of a design/build project team. The facility will produce an average day flow of approximately 120K gpd at buildout. New wells will deliver raw water to a water treatment system to reduce concentrations of arsenic and manganese in the groundwater to below primary maximum contaminant levels. The treatment process will include pH adjustment, oxidation, coagulation/filtration, post-filtration adsorption, and backwash thickening. Dosing of sodium hypochlorite followed by storage in on-site welded steel storage tanks will follow. A booster pump station consisting of banks of low and high flow pumps followed by a hydropneumatic tank will deliver water to the distribution system for residential demands and fire flows. The treatment and pumping equipment will be housed in a new CMU building, which will also contain an operations office, lab, power distribution, and control systems. The design phase has been completed and HydroScience will provide construction phase support including review of RFIs and submittals, field visits, and commissioning support.

Red Hawk Casino Wastewater Treatment Plant Expansion Project Wastewater Feasibility Study

Shingle Springs Rancheria, El Dorado County, California

Project Engineer. Jory developed the wastewater feasibility study which included: researching existing site and operational conditions and design parameters of facilities; estimating additional flows from expansion project; developing a water balance to determine the existing capacity of the recycled water and wastewater treatment plant distribution system; analyzing the existing demands of the disposal sites for recycled water; and, developing a report and providing a summary of findings and recommendations.

Tule River Tertiary Wastewater System Facilities

Tule River Tribe, City of Porterville, California

Project Engineer. HydroScience has been retained by the Tule River Tribe to design and provide permitting and funding support for a new Water Recycling Treatment Plant, recycled water storage and conveyance infrastructure, and offsite wastewater collection system improvements in the City of Porterville, California. The project objective is to offset the potable water demand associated with the Tribe's proposed Eagle Mountain Casino and Resort Relocation Project in accordance with mandated CEQA requirements. The City of Porterville currently does not treat wastewater to tertiary standards therefore; an agreement between the Tribe and City will permit the production of recycled water using the City's existing WWTP outfall. The project includes the design and construction of a new 0.308 MGD ultrafiltration plant, 0.5 MG steel storage tank, 900 gpm vertical turbine pump station, 7,000 linear feet of 12 inch PVC recycled water distribution piping, electrical and SCADA improvements, civil site improvements including a new access road, and the irrigation retrofit of the City's existing sports complex for permitted reuse of recycled water. Offsite improvements include the replacement of two existing sanitary sewer lift stations and collection system improvements. Challenges include a fast-track schedule and the need to streamline the permitting process.

Recycled Water Packaged Membrane Treatment System

City of Hayward, California

Project Engineer. HydroScience provided detailed design, bid, and construction phase support for a new microfiltration and chlorine disinfection tertiary treatment plant, which supplies up to 0.5 MGD of disinfected tertiary treated water to the City's recycled water distribution system. The facilities consist of a feed pump station, microfiltration system, sodium hypochlorite storage and feed system, recycled water disinfection and storage, and electrical and control systems.

Water Supply Assessment

City of Foster City/Estero Municipal Improvement District, California

Project Engineer. The City of Foster City received a proposal for construction of a new, four-story life sciences office building and associated site improvements at the former El Torito restaurant at the intersection of Vintage Park Drive and Chess Drive at the municipal boundary between Foster City and San Mateo. The proposed project will need to comply with the requirements of the California Environmental Quality Act (CEQA) and the City has elected to also conduct a Water Supply Assessment (WSA) in accordance with the requirements of Senate Bill 610 (SB 610).

2020 Urban Water Management Plan

City of Santa Clara, California

Project Engineer. HydroScience prepared the 2020 Urban Water Management Plan (UWMP) Update for the City of Santa Clara. HydroScience worked with the City to examine its current and projected water supplies, demands, and sources; coordinate with BAWSCA; outline the City's conservation efforts; and comprehensive update of the water shortage contingency plan for compliance with new, more prescriptive legislative requirements. HydroScience prepared the announcements for public notification, documentation necessary for submittal to the Department of Water Resources (DWR) and completed online submittal of data through DWR's online submittal tool.

Bya Founas, CEng MICE

Mechanical Engineering

HydroScience

Bya is a project engineer with 15 years of experience in planning, design and construction of water and wastewater treatment plants, pipelines, pump stations and storage tanks as well as pipeline hydraulic studies. She also has worked on major international water and conveyance projects and has a wide experience on different water and wastewater process designs. Bya has experience leading multidisciplinary teams to overcome design and construction challenges and meet tight deadlines and budgets.

EDUCATION
MSc Civil Engineering for Development, University of Southampton, United Kingdom

BEng Civil Engineering, University of Brighton, United Kingdom

BEng Civil Engineering, University of Joseph Fourier, France

REGISTRATION
CEng MICE, 61482771, Chartered Member of the ICE

AFFILIATION
North California Pipe User Group (PUG)

SELECT PROJECT EXPERIENCE

Copper Cove WWTF Tertiary and Pond 6 Utilities Upgrades

Calaveras County Water District, California

Project Engineer. The Copper Cove Wastewater Treatment Facility treats mostly domestic wastewater in a series of aerated ponds and storage ponds. Secondary effluent is stored in a large effluent storage pond, Pond 6. Water from this pond is treated to Title 22 tertiary recycled water standards using a Trident Microfloc filter, disinfected in a single-channel UV disinfection process, and delivered to the Saddle Creek Golf Course for irrigation reuse with a portion discharged to wetlands. HydroScience is preparing the design to replace the aging and poorly performing existing filter unit with a continuous backwash sand filtration process, add algae removal pretreatment utilizing suspended air floatation, add solids dewatering for treating tertiary sludge, and relocate pumps and piping. CEQA documentation is also being completed under HydroScience's oversight. Expandability provisions for future buildout conditions are incorporated into the design, and the construction sequencing will implement the upgrades around ongoing facility operations. A separate design package also being prepared by HydroScience will relocate buried piping and two pump stations to make room for enlargement of the Pond 6 dam. HydroScience is also assisting with US Army Corps of Engineers (USACE) grant funding coordination.

Arnold WWTF Improvements

Calaveras County Water District, California

Design Support / Estimating. HydroScience provided preliminary and final design of improvements to the Arnold Wastewater Treatment Facility (WWTF) for the Calaveras County Water District (CCWD). The Arnold WWTF is a 175,000 gpd facility that uses an oxidation ditch, secondary clarifier, pressure filter, and chlorine disinfection to treat to secondary standards. The facility currently serves 835 equivalent single-family units (ESFUs) and is covered under the General Order for Small Domestic Treatment Systems (WQ-2014-153-DWQ-R5190). The facility lacked unit process redundancy and experiences reduced clarification performance under peak wet weather flows. The existing electrical power distribution equipment was over 35 years old and did not have sufficient capacity to serve an expanded facility. HydroScience developed the design in close collaboration with CCWD engineering, operations, and maintenance staff. The project added a second secondary clarifier, improved mixed liquor flow control with provisions for a future second oxidation ditch, increased aerobic digestion capacity, replaced the return and waste activated sludge pump station, and upgraded effluent pumping. CCWD decided to expand the project scope by adding complete replacement of the utility power feed, motor control center, SCADA system, and PLC control panel, which was completed as a collaborative effort with District staff and their preferred controls engineer. The design is complete and HydroScience is assisting CCWD with securing State Revolving Fund (SRF) grant funding by preparing a technical report and overseeing completion of CEQA.

Wastewater Treatment Plant Upgrades

City of Greenfield, California

Civil/Mechanical Design. The City of Greenfield WWTP provides wastewater services to 3,800 connections. In order to meet RWQCB's recently adopted waste discharge requirements, the aging plant requires a new

Bya Founas, CEng MICE

HydroScience

wastewater treatment process. Recent studies recommended a prepackaged 2.0 MGD MBR system that would replace the existing secondary treatment process. The City retained HydroScience to perform the planning, design, obtain $60M in CWSRF external funding, and construction phase services for this groundbreaking project on the Central Coast. Design of this project will be completed during 2024 and , with constructed scheduled for 2026.

Package MBR Wastewater Treatment Plant

Chicken Ranch Rancheria of Me-Wuk Indians, Tuolumne County

Project Engineer. HydroScience was recently retained by Chicken Ranch Rancheria to design a new MBR WWTP capable of producing disinfected tertiary recycled water suitable for unrestricted reuse. Dry weather flows into the plant are expected to increase from 104,000 gpd during Phase 1 to 165,000 gpd at buildout. Components of the new WWTP will include an influent pump station a Cloacina M300-200 membrane bioreactor wastewater treatment plant, a Drypac sludge dewatering press, UV disinfection reactors, an effluent pump station, and a SCADA control system. This project was implemented by a design build team with Fluid Resource Management as the Contractor and HydroScience as the Engineer-of-Record.

St. Helena WWTRP Upgrades

City of St. Helena, California

Design Engineer. The City of St. Helena was issued a CDO containing effluent limitations the City could not reliably obtain with their existing pond treatment plant. The City commissioned HydroScience Engineers to develop a Conceptual Design Report (CDR) to analyze treatment alternatives that would comply with the new NPDES effluent discharge limitations, while also modernizing the facility's treatment process. HydroScience identified a packaged MBR treatment system as the preferred WWTRP upgrade alternative, and developed the design around this approach. The WWTRP will maintain its permitted capacity of 0.5 MGD with the flexibility to operate the plant at a peak day hydraulic capacity of 1.33 MGD. This new system will result in tens of millions of dollars in cost savings when combined with repurposing four of the existing WWTRP ponds for use as flow equalization. The design is modular so that the City can cost-effectively expand the new system to meet anticipated buildout flows, if necessary. The RWQCB accepted the CDR findings without comment.

Tule River Tertiary Wastewater System Facilities

Tule River Tribe, City of Porterville, California

Process Design Lead Engineer. HydroScience has been retained by the Tule River Tribe to design and provide permitting and funding support for a new Water Recycling Treatment Plant, recycled water storage and conveyance infrastructure, and offsite wastewater collection system improvements in the City of Porterville, California. The project objective is to offset the potable water demand associated with the Tribe's proposed Eagle Mountain Casino and Resort Relocation Project in accordance with mandated CEQA requirements. The City of Porterville currently does not treat wastewater to tertiary standards therefore; an agreement between the Tribe and City will permit the production of recycled water using the City's existing WWTP outfall. The project includes the design and construction of a new 0.308 MGD ultrafiltration plant, 0.5 MG steel storage tank, 900 gpm vertical turbine pump station, 7,000 linear feet of 12 inch PVC recycled water distribution piping, electrical and SCADA improvements, civil site improvements including a new access road, and the irrigation retrofit of the City's existing sports complex for permitted reuse of recycled water. Offsite improvements include the replacement of two existing sanitary sewer lift stations and collection system improvements. Challenges include a fast-track schedule and the need to streamline the permitting process.

Facility Master Agreement, San José-Santa Clara Regional Wastewater Facility

City of San José, California

Civil Support. HydroScience is providing on-call planning, evaluation, detailed design, and construction support services under a multi-year Master Services Agreement (MSA) with the City of San José. The Regional Wastewater Facility (RWF) is a 167 MGD secondary and tertiary wastewater treatment plant. HydroScience is working directly with the RWF's engineering, operations, and maintenance staff to implement studies and designs on an on-call basis throughout the facility. HydroScience has completed condition assessments and evaluations for the outfall bridge, major pond gates, and HVAC systems. HydroScience also completed designs of nitrification clarifier exterior lighting to improve safety during night-time operations, and designed the replacement of the existing process water (3W) pumps which deliver up to 14,000 gpm to unit processes throughout the plant.

Sutter Trunk Sewer Rehabilitation

City of Modesto, California (O'Dell Prime)

Support Project Engineer. HydroScience provided pipeline condition assessment, trenchless rehabilitation and new installation alternatives analysis/feasibility study, and design services for approximately 5,600 feet of sewer pipeline improvements associated with the City of Modesto's Sutter Trunk Sewer Project. The project included rehabilitation of existing and installation of new sewer pipeline crossing beneath Highway 99 and State Route 132. The project was broken into two phases in order to expedite construction beneath Highway 99, with significant Caltrans coordination needed to secure encroachment permit exceptions.

Marc Fernandez

Civil/Site and Pipelines

HydroScience

Marc is a project manager and project engineer with 19 years of experience. His focus is on planning, design, permitting, agency coordination, and field support for pipelines, pump stations, and related water/wastewater infrastructure. Marc has experience in pipeline/wet utilities design, plans and profiles in Civil 3D, project coordination with local, county, and state agencies and related permitting, construction oversight and owner's representation, development plan reviews, capital improvement plan development, grant funding assistance, client staff augmentation, and roadway design including grading, street improvement, drainage, and related permitting.

EDUCATION
B.S., Civil Engineering, California State University Fullerton

REGISTRATION
Engineer-in-Training, California

AFFILIATIONS
American Society of Civil Engineers (ASCE), member

SELECT PROJECT EXPERIENCE

Copper Cove WWTF Tertiary and Pond 6 Utilities Upgrades

Calaveras County Water District, California

Civil/Site and Pipelines. The Copper Cove Wastewater Treatment Facility treats mostly domestic wastewater in a series of aerated ponds and storage ponds. Secondary effluent is stored in a large effluent storage pond, Pond 6. Water from this pond is treated to Title 22 tertiary recycled water standards using a Trident Microfloc filter, disinfected in a single-channel UV disinfection process, and delivered to the Saddle Creek Golf Course for irrigation reuse with a portion discharged to wetlands. HydroScience is preparing the design to replace the aging and poorly performing existing filter unit with a continuous backwash sand filtration process, add algae removal pretreatment utilizing suspended air floatation, add solids dewatering for treating tertiary sludge, and relocate pumps and piping. CEQA documentation is also being completed under HydroScience's oversight. Expandability provisions for future buildout conditions are incorporated into the design, and the construction sequencing will implement the upgrades around ongoing facility operations. A separate design package also being prepared by HydroScience will relocate buried piping and two pump stations to make room for enlargement of the Pond 6 dam. HydroScience is also assisting with US Army Corps of Engineers (USACE) grant funding coordination.

Wastewater Treatment Plant Upgrades

City of Greenfield, California

Site Grading. The City of Greenfield WWTP provides wastewater services to 3,800 connections. In order to meet RWQCB's recently adopted waste discharge requirements, the aging plant requires a new wastewater treatment process. Recent studies recommended a prepackaged 2.0 MGD MBR system that would replace the existing secondary treatment process. The City retained HydroScience to perform the planning, design, obtain $60M in CWSRF external funding, and construction phase services for this groundbreaking project on the Central Coast. Design of this project will be completed during 2024, with constructed scheduled for 2026.

Tule River Tertiary Wastewater System Facilities

Tule River Tribe, Porterville, California

Project Engineer. HydroScience has been retained by the Tule River Tribe to design and provide permitting and funding support for a new Water Recycling Treatment Plant, recycled water storage and conveyance infrastructure, and offsite wastewater collection system improvements in the City of Porterville, California. The project objective is to offset the potable water demand associated with the Tribe's proposed Eagle Mountain Casino and Resort Relocation Project in accordance with mandated CEQA requirements. The City of Porterville currently does not treat wastewater to tertiary standards therefore; an agreement between the Tribe and City will permit the production of recycled water using the City's existing WWTP outfall. The project includes the design and construction of a new 0.308 MGD ultrafiltration plant, 0.5 MG steel storage tank, 900 gpm vertical turbine pump station, 7,000 linear feet of 12 inch PVC recycled water distribution piping, electrical

Marc Fernandez

HydroScience

and SCADA improvements, civil site improvements including a new access road, and the irrigation retrofit of the City's existing sports complex for permitted reuse of recycled water. Offsite improvements include the replacement of two existing sanitary sewer lift stations and collection system improvements. Challenges include a fast-track schedule and the need to streamline the permitting process. The project is currently in design. Marc's duties include plan and profile design, site grading design for two sewage pump stations, access roadway, and tertiary wastewater system site.

Mission Trunk Rehabilitation

Sacramento Area Sewer District, California

Project Engineer. HydroScience provided engineering services to Sacramento Area Sewer District (SASD) to rehabilitate the Mission Trunk Sewer, a 34,000 lineal foot unlined reinforced concrete pipe (RCP) ranging in diameter from 36 to 75 inches. This critical trunk sewer carries flows from Citrus Heights, Orangevale, Fair Oaks, and Carmichael to the Regional San Northeast Siphon and Interceptor. SASD performed CCTV inspections of the trunk sewer and determined that 62% of inspected pipes had medium to severe corrosion with exposed aggregate and exposed rebar. HydroScience prepared a preliminary evaluation report that reviewed and recommended rehabilitation alternatives for both pipeline and manholes, as well as sewer bypass options. Following approval of the recommendations, contract documents were prepared based on CIPP of the pipeline, polymer concrete repairs of manholes, replacement of a junction structure, new manholes, sewer bypass plans, and traffic control plans. SASD also opted to include rehabilitation of downstream facilities as part of the project, which included replacement of existing T-lock liners another junction structure, among other pertinent work. HydroScience also provided bid phase assistance and engineering services during construction.

Water and Sewer Line Improvements

City of Hayward, California

Engineering Support. HydroScience is providing engineering design, bidding, and construction support services for this important city-wide project encompassing 17,847 feet of sewer and 26,229 feet of water pipelines ranging in pipe diameter from 8- to 15-inches. Pipeline replacement projects were selected for a variety of factors, including increasing O&M capabilities (installing new manholes), replacing sewer/water mains (due to pipe deterioration and high maintenance segments), improving maintenance access, alleviating capacity constraints, and replacing pipelines that have reached the end of their useful life. HydroScience looked at some of the more challenging aspects and identified potential solutions to each, including easements, Caltrans, UPRR, and BART permitting, and pavement moratoriums. This approach anticipates potential challenges and fast tracks a process to develop solutions that will minimize surprises and keep the project on schedule. The project also includes four trenchless construction crossings. Three of the trenchless crossings utilize the bore and jack method and run underneath railroad tracks, and one also crosses a 24-inch gas transmission main. The sanitary sewer trenchless section will be constructed via guided boring and crosses under three sets of railroad tracks that are owned and operated by two different railroads. Due to poor soil conditions, the water main replacement along Main Street will utilize microtunneling to cross underneath a large storm drain box culvert.

Freedom Blvd Water and Sewer Improvements

City of Watsonville, California

Engineering Support. HydroScience provided planning, design, and ESDC for the replacement of 3,900 feet, of 8-inches to 18-inches of DIP and PVC water mains and 4,500 feet of sewer pipeline by open-cut and trenchless methods. The sewer work includes reconnection of 62 laterals, plus replacement or rehabilitation of 22 manholes. Freedom Boulevard is a congested utility corridor that required extensive utility research to minimize issues during construction. Slip-lining and CIPP methods are being employed to minimize disruption to nearby residents, businesses, and a high school.

Franklin & Hood Septic-to-Sewer Conversion

Sacramento Area Sewer District (SacSewer), California

Permitting & Traffic Control. HydroScience is working with SacSewer to implement this septic-to-sewer conversion project to the communities of Franklin and Hood which are currently served by private onsite septic tank systems. Many of these have exceeded their useful life, are not up to current codes, and may be posing a risk to the local delta environment. This project will abandon existing septic tanks and install a new low pressure sewer system in each community. A small grinder pump unit will be installed at each property being served, and these will pump the sewage out into the public force mains in the streets. The public force main for Hood will extend approximately 4.2 miles to a new discharge manhole located at the edge of the City of Elk Grove. The project includes five trenchless crossings: three HDD under streams, one HDD under highway I-5, one bore-and-jack under UPRR. A substantial hydraulic analysis exercise was conducted to evaluate different system configurations, time horizons, force main routes, and pipe sizing, while maintaining acceptable pumping heads. The permitting effort includes Caltrans, UPRR, CA Fish & Wildlife, CA State Parks, County of Sacramento, and the City of Elk Grove. HydroScience identified an alternative pipeline route that avoids longitudinal Caltrans encroachment. It is anticipated that this modification will shorten the schedule by approximately 6 months.

Thinh Le, PE

Electrical, Instrumentation & Controls

HydroScience

Thinh Le has 21 years of experience serving as Project Manager, Lead E&IC Engineer on a variety of water, wastewater, and recycled water projects. He has knowledge of ISA, IEEE, NEC, NFPA, and codes applicable to electrical and I&C system design and construction. He has worked in both electrical and I&C roles on design and construction management projects and has an extensive working knowledge of electrical project development from analysis, SCADA systems, network & communication security, industrial automation controls, emergency and standby power, and electrical power systems including low and medium voltage electrical systems.

EDUCATION

M.S., Electrical Engineering, California State University, Sacramento

B.S., Electrical Engineering, California State University, Sacramento

REGISTRATION

Electrical Engineer, California, Registration No. E18362

SELECT PROJECT EXPERIENCE

Copper Cove WWTF Tertiary and Pond 6 Utilities Upgrades

Calaveras County Water District, California

Electrical Engineer. The Copper Cove Wastewater Treatment Facility treats mostly domestic wastewater in a series of aerated ponds and storage ponds. Secondary effluent is stored in a large effluent storage pond, Pond 6. Water from this pond is treated to Title 22 tertiary recycled water standards using a Trident Microfloc filter, disinfected in a single-channel UV disinfection process, and delivered to the Saddle Creek Golf Course for irrigation reuse with a portion discharged to wetlands. HydroScience is preparing the design to replace the aging and poorly performing existing filter unit with a continuous backwash sand filtration process, add algae removal pretreatment utilizing suspended air floatation, add solids dewatering for treating tertiary sludge, and relocate pumps and piping. CEQA documentation is also being completed under HydroScience's oversight. Expandability provisions for future buildout conditions are incorporated into the design, and the construction sequencing will implement the upgrades around ongoing facility operations. A separate design package also being prepared by HydroScience will relocate buried piping and two pump stations to make room for enlargement of the Pond 6 dam. HydroScience is also assisting with US Army Corps of Engineers (USACE) grant funding coordination.

Arnold WWTF Improvements

Calaveras County Water District, California

Electrical and I&C Lead. HydroScience provided preliminary and final design of improvements to the Arnold Wastewater Treatment Facility (WWTF) for the Calaveras County Water District (CCWD). The Arnold WWTF is a 175,000 gpd facility that uses an oxidation ditch, secondary clarifier, pressure filter, and chlorine disinfection to treat to secondary standards. The facility currently serves 835 equivalent single-family units (ESFUs) and is covered under the General Order for Small Domestic Treatment Systems (WQ-2014-153-DWQ-R5190). The facility lacked unit process redundancy and experiences reduced clarification performance under peak wet weather flows. The existing electrical power distribution equipment was over 35 years old and did not have sufficient capacity to serve an expanded facility. HydroScience developed the design in close collaboration with CCWD engineering, operations, and maintenance staff. The project added a second secondary clarifier, improved mixed liquor flow control with provisions for a future second oxidation ditch, increased aerobic digestion capacity, replaced the return and waste activated sludge pump station, and upgraded effluent pumping. CCWD decided to expand the project scope by adding complete replacement of the utility power feed, motor control center, SCADA system, and PLC control panel, which was completed as a collaborative effort with District staff and their preferred controls engineer. The design is complete and HydroScience is assisting CCWD with securing State Revolving Fund (SRF) grant funding by preparing a technical report and overseeing completion of CEQA.

Memorial Park Wastewater Treatment Facilities Improvements

County of San Mateo, California

Lead I&C. Memorial County Park is a family and group campground facility. Wastewater generated within the park is collected

Thinh Le, PE

HydroScience

in two separate collection systems, with a total length of approximately 1.8 miles of 4- to 8-inch gravity sewer. Most of the wastewater flowed to a 30,000 gallon per day (gpd) extended aeration WWTP. Wastewater is treated to secondary standards, disinfected, and discharged to a dedicated spray field with an unlined retention lagoon to handle larger flows. The remainder of the wastewater flows to a septic tank and leach field system. The collection system and WWTP were over 50 years old. Due to age, poor performance, reliability concerns, and high maintenance requirements, the County retained HydroScience to plan, design, and oversee construction for a new, modern 50,000 gpd sequencing batch reactor WWTP. The design also included new yard piping and modifications to the existing WWTP, to repurpose it as a new sewer lift station. Site drainage improvements included in the design help to mitigate ponding issues. HydroScience developed a collaborative, forward-looking project approach that provides reliable operation and permit compliance in a small, low-impact footprint, and that reduces the cost and staff time to operate and maintain.

St. Helena WWTRP Upgrades

City of St. Helena, California

Electrical Engineer. The City of St. Helena was issued a CDO containing effluent limitations the City could not reliably obtain with their existing pond treatment plant. The City commissioned HydroScience Engineers to develop a Conceptual Design Report (CDR) to analyze treatment alternatives that would comply with the new NPDES effluent discharge limitations, while also modernizing the facility's treatment process. HydroScience identified a packaged MBR treatment system as the preferred WWTRP upgrade alternative, and developed the design around this approach. The WWTRP will maintain its permitted capacity of 0.5 MGD with the flexibility to operate the plant at a peak day hydraulic capacity of 1.33 MGD. This new system will result in tens of millions of dollars in cost savings when combined with repurposing four of the existing WWTRP ponds for use as flow equalization. The design is modular so that the City can cost-effectively expand the new system to meet anticipated build-out flows, if necessary. The RWQCB accepted the CDR findings without comment. Construction is nearly completed.

Wastewater Treatment and Effluent Management Facilities

Lytton Rancheria, Sonoma County, California

Lead EI&C. As part of a design/build team, HydroScience completed design and is in the process of completing construction of wastewater and recycled water facilities serving a new tribal residential development in Sonoma County. The Lytton Rancheria project consists of construction of new homes, a community center, and a retreat center. HydroScience designed a complete Membrane Bioreactor (MBR) Wastewater Treatment Facility utilizing shop-fabricated treatment units to treat 250,000 gpd of peak dry weather flow. The design includes an administration building, UV disinfection, solids dewatering system, effluent storage pond, and recycled water pump station. The design was developed through a collaborative progressive design build process.

Wastewater Treatment Plant Upgrades

City of Greenfield, California

Lead EI&C. The City of Greenfield WWTP provides wastewater services to 3,800 connections. In order to meet RWQCB's recently adopted waste discharge requirements, the aging plant requires a new wastewater treatment process. Recent studies recommended a prepackaged 2.0 MGD MBR system that would replace the existing secondary treatment process. The City retained HydroScience to perform the planning, design, obtain $60M in CWSRF external funding, and construction phase services for this groundbreaking project on the Central Coast. Design of this project will be completed during 2024, with constructed scheduled for 2026.

Package MBR Wastewater Treatment Plant

Chicken Ranch Rancheria of Me-Wuk Indians, Tuolumne County

Lead EI&C. HydroScience was recently retained by Chicken Ranch Rancheria to design a new MBR WWTP capable of producing disinfected tertiary recycled water suitable for unrestricted reuse. Dry weather flows into the plant are expected to increase from 104,000 gpd during Phase 1 to 165,000 gpd at buildout. Components of the new WWTP will include an influent pump station a Cloacina M300-200 membrane bioreactor wastewater treatment plant, a Drypac sludge dewatering press, UV disinfection reactors, an effluent pump station, and a SCADA control system. This project was implemented by a design build team with Fluid Resource Management as the Contractor and HydroScience as the Engineer-of-Record.

Regional Wastewater Control Facilities

Stockton, San Joaquin County, California

Lead EI&C. HydroScience played a lead role on the rehabilitation of the primary clarifiers and sludge and scum pumping systems as part of this Progressive Design-Build project. The existing clarifiers consisted of three discrete banks constructed at different times (as far back as the 1940s) and configured differently. Two of the clarifiers were "squircular" (circular mechanisms in square tanks) while the remaining ones are rectangular. HydroScience performed a mechanical condition assessment, utilized a facility mass balance to determine anticipated future sludge removal rates and flows for pumping, developed proposed rehabilitation approaches for the clarifiers, worked with the contractor to refine construction approach and develop cost estimates for the improvements, and presented our findings in a workshop to City staff.

PCSG

JOHN COLLINS, MBA

EDUCATION

B.S., Construction Management, Northern Arizona University, 1998

Masters Degree, Business Administration, University of Phoenix, 2006

REGISTRATIONS

Licensed Contractor–
NV A-85243, B-2/B-5-85244
AZ – KA-333539

CERTIFICATIONS

Occupational Safety and Health Administration – 30 Hour, Competent Person – Excavation, Confined Spaced Entry

Occupational Safety and Health Administration – Confined Space Entry Trainer

YEARS OF EXPERIENCE

Years with PCSG - 7
Total Years - 26

PROFESSIONAL AFFILIATIONS

Nevada Associated General Contractors, Member since 2002
Public Works Committee President, 2009 and 2011, Education Committee VP, 2020

American Society of Civil Engineers, Member since 2018

EXPERIENCE PROFILE

John is a true professional builder with an incredible history of bidding and building successful projects. Delivering projects on time and budget is a direct result of the detailed planning and analysis process. With experience from laborer and carpenter all the way to Operations Manager with one of the Nation's largest general contractors, John has the technical know-how, hands-on experience, and communication skills to successfully plan, cost, and coordinate even the most complex estimates, projects, and schedules. With over 25 years of experience across multiple markets and regions, he has developed the ability to communicate with Owners and Engineers as well as talk with craftsman and subcontractors to find constructability solutions and best value options that deliver the most accurate and current probable cost data.

REPRESENTATIVE PROJECT EXPERIENCE

COPPER COVE POND 6 REHBILITATION PROJECT – Calaveras County Water District, San Andreas, CA ($9.5M)
PCSG provided Budgetary Independent Cost Estimating for a storage reservoir improvement that included clearing, structural fill, intake and outlet structures, overflow channels, and grading

- Prepared cost estimates using HCSS Heavy-Bid
- Analyzed plans and scope of work for production, labor and equipment usage, means and methods, and assessment of risk and the cost of risk mitigation.

ARNOLD WWTP IMPROVEMENT PROJECT – Calaveras County Water District, San Andreas, CA ($6.5M)
PCSG provided budgetary project estimating and scheduling for the rehabilitation

- Prepared cost estimates using HCSS Heavy-Bid
- Analyzed plans and scope of work for production, labor and equipment usage, means and methods, and assessment of risk and the cost of risk mitigation.

ADVANCED WATER PURIFICATION FACILITY – Truckee Meadows Water Authority, Washoe County, NV ($160M)
PCSG is providing Independent Cost Estimating and constructability consulting for a retrofit of an existing wastewater facility including headworks, process capacity expansion, and effluent reservoir storage.

- Developed cost estimate using HCSS Heavy-Bid, analyzed CMAR estimates prepared in Timberline and Excel
- Member of the Project Risk Committee and developing the risk register
- Assembled and provided bid comparisons in excel. Provided analysis of quantity, manhours, unit cost, equipment cost, and labor cost
- Created wage tables for all craft labor rates to ensure compliance with State Prevailing Wage as well as Davis-Bacon wage requirements.
- Utilized the project plans and specifications to assemble detailed cost estimates. Participated in design review and constructability workshops through multiple phases and design stages.
- Provided VE analysis of design options for various structures

STMWRF CMAR - Washoe County, Washoe County, NV ($100M)
PCSG is providing Independent Cost Estimating and constructability consulting for a retrofit of an existing wastewater facility including headworks, process capacity expansion, and effluent reservoir storage.

- Developed cost estimate using HCSS Heavy-Bid, analyzed CMAR estimates prepared in Timberline and Hard Dollar
- Developed risk matrix and analyzed CMAR risk register
- Assembled and provided bid comparisons in excel. Provided analysis of quantity, manhours, unit cost, equipment cost, and labor cost

PCSG

JOHN COLLINS, MBA

- Created wage tables for all craft labor rates to ensure compliance with State Prevailing Wage as well as Davis-Bacon wage requirements.
- Utilized the project plans and specifications to assemble detailed cost estimates. Participated in design review and constructability workshops through multiple phases and design stages.
- Provided VE analysis of design options for various structures

RENO-STEAD WRF – City of Reno, Stead, NV ($55M)

PCSG provided Independent Cost Estimating and cost control consulting for a retrofit of an existing wastewater facility including headworks, aeration basins, clarifiers, and process capacity expansion.

- Prepared cost estimates using HCSS Heavy-Bid
- Analyzed contractor estimates for production, labor and equipment usage, means and methods, and assessment of risk and the cost of risk mitigation
- Provided cost comparison excel spreadsheet for review of quantities, unit cost, and approach
- Reviewed RFI's, plans, specifications, and construction documents to evaluate cost impacts
- Evaluated craft labor rates to ensure compliance with project requirements for state and federal wages

DCLTSA WWTP CMAR – DCLTSA, Stateline, NV (8M)

PCSG provided Independent Cost Estimating and constructability consulting for a retrofit of an existing wastewater facility including aeration basin rehabilitation, replacing primary treatment systems, and discharge pump station retrofit and surge suppression.

- Prepared cost estimate using HCSS Heavy-Bid and analyzed CMAR estimate in Hard Dollar format
- Provided cost comparison excel spreadsheet for review of quantities, unit cost, and approach
- Assembled and provided bid comparisons in excel. Provided analysis of quantity, manhours, unit cost, equipment cost, and labor cost
- Created wage tables for all craft labor rates to ensure compliance with Nevada State Prevailing Wage as well as Davis-Bacon wage requirements.
- Utilized the project plans and specifications to assemble detailed cost estimates. Participated in design review and constructability workshops through multiple phases and design stages.

Quill Water Treatment Plant – Carson City, Carson City, NV ($12M)

PCSG is providing Independent Cost Estimating and schedule review services for the Quill Water Treatment Plant upgrade project including building modifications, sitework, new treatment basins, UV disinfection and packaged water treatment installation.

- Prepared cost estimates using HCSS Heavy-Bid
- Analyzed scope of work for production, labor and equipment usage, means and methods, and assessment of risk and the cost of risk mitigation
- Evaluated craft labor rates to ensure compliance with project requirements for state and federal wages

Brad Friederichs, SE Structural Engineer

VE Solutions

VE SOLUTIONS, INC.

Brad Friederichs has 38 years of experience as a structural engineer for wastewater, water treatment, commercial, industrial, agricultural, retail and residential structures. His expertise is in cast-in-place concrete, prestressed concrete, steel, wood and masonry construction. His specialty is in producing completely detailed, contractor friendly, value-oriented construction documents resulting in projects that bid well with few change orders.

EDUCATION

B.S., Civil Engineering with honors, California State University, Sacramento

REGISTRATION

Structural Engineer, California, Registration No. S2780

AFFILIATIONS

Structural Engineers Association of Central California, president 1989-90

American Society of Civil Engineers

American Concrete Institute

American Institute of Steel Construction

PROJECTS AS SUBCONSULTANT TO HYDROSCIENCE

Copper Cove WWTF Tertiary and Pond 6 Utilities Upgrades

Calaveras County Water District, California

Structural Engineer. The Copper Cove Wastewater Treatment Facility treats mostly domestic wastewater in a series of aerated ponds and storage ponds. Secondary effluent is stored in a large effluent storage pond, Pond 6. Water from this pond is treated to Title 22 tertiary recycled water standards using a Trident Microfloc filter, disinfected in a single-channel UV disinfection process, and delivered to the Saddle Creek Golf Course for irrigation reuse with a portion discharged to wetlands. HydroScience is preparing the design to replace the aging and poorly performing existing filter unit with a continuous backwash sand filtration process, add algae removal pretreatment utilizing suspended air floatation, add solids dewatering for treating tertiary sludge, and relocate pumps and piping. CEQA documentation is also being completed under HydroScience's oversight. Expandability provisions for future buildout conditions are incorporated into the design, and the construction sequencing will implement the upgrades around ongoing facility operations. A separate design package also being prepared by HydroScience will relocate buried piping and two pump stations to make room for enlargement of the Pond 6 dam. HydroScience is also assisting with US Army Corps of Engineers (USACE) grant funding coordination.

Arnold WWTF Improvements

Calaveras County Water District, California

Structural Engineer. HydroScience provided preliminary and final design of improvements to the Arnold Wastewater Treatment Facility (WWTF) for the Calaveras County Water District (CCWD). The Arnold WWTF is a 175,000 gpd facility that uses an oxidation ditch, secondary clarifier, pressure filter, and chlorine disinfection to treat to secondary standards. The facility currently serves 835 equivalent single-family units (ESFUs) and is covered under the General Order for Small Domestic Treatment Systems (WQ-2014-153-DWQ-R5190). The facility lacked unit process redundancy and experiences reduced clarification performance under peak wet weather flows. The existing electrical power distribution equipment was over 35 years old and did not have sufficient capacity to serve an expanded facility. HydroScience developed the design in close collaboration with CCWD engineering, operations, and maintenance staff. The project added a second secondary clarifier, improved mixed liquor flow control with provisions for a future second oxidation ditch, increased aerobic digestion capacity, replaced the return and waste activated sludge pump station, and upgraded effluent pumping. CCWD decided to expand the project scope by adding complete replacement of the utility power feed, motor control center, SCADA system, and PLC control panel, which was completed as a collaborative effort with District staff and their preferred controls engineer. The design is complete and HydroScience is assisting CCWD with securing State Revolving Fund (SRF) grant funding by preparing a technical report and overseeing completion of CEQA.

Memorial Park Wastewater Treatment Facilities Improvements

County of San Mateo, California

Structural Engineer. Memorial County Park is a family and group campground facility. Wastewater generated within the park is collected in two separate collection systems, with a total length of approximately 1.8 miles of 4- to 8-inch gravity sewer. Most of the wastewater flowed to a 30,000 gallon per day (gpd) extended aeration WWTP. Wastewater is treated to secondary standards, disinfected, and discharged to a dedicated spray field with an unlined retention lagoon to handle larger flows. The remainder of

Brad Friederichs, SE

VE Solutions

the wastewater flows to a septic tank and leach field system. The collection system and WWTP were over 50 years old. Due to age, poor performance, reliability concerns, and high maintenance requirements, the County retained HydroScience to plan, design, and oversee construction for a new, modern 50,000 gpd sequencing batch reactor WWTP. The design also included new yard piping and modifications to the existing WWTP, to repurpose it as a new sewer lift station. Site drainage improvements included in the design help to mitigate ponding issues. HydroScience developed a collaborative, forward-looking project approach that provides reliable operation and permit compliance in a small, low-impact footprint, and that reduces the cost and staff time to operate and maintain.

Wastewater Treatment Plant Reliability Improvements Project

Silicon Valley Clean Water, Redwood City, California

Structural Engineer. HydroScience is the engineer-of-record for the Overaa/HydroScience design-build team for this design-build project to provide plant reliability improvements for Silicon Valley Clean Water's 24 MGD WWTP in Redwood Shores, California. Work includes upgrading the aeration basin blower system to high speed turbo blowers with all new distribution piping and control valves, correcting basin flow split issues starting with a hydraulic profile study, installing a fan press solids dewatering system and conveyors, adding backup water for generators, and replacing their granular media filter backwash pumps.

St. Helena WWTRP Upgrades

City of St. Helena, California

Structural Engineer. The City of St. Helena was issued a CDO containing effluent limitations the City could not reliably obtain with their existing pond treatment plant. The City commissioned HydroScience Engineers to develop a Conceptual Design Report (CDR) to analyze treatment alternatives that would comply with the new NPDES effluent discharge limitations, while also modernizing the facility's treatment process. HydroScience identified a packaged MBR treatment system as the preferred WWTRP upgrade alternative, and developed the design around this approach. The WWTRP will maintain its permitted capacity of 0.5 MGD with the flexibility to operate the plant at a peak day hydraulic capacity of 1.33 MGD. This new system will result in tens of millions of dollars in cost savings when combined with repurposing four of the existing WWTRP ponds for use as flow equalization. The design is modular so that the City can cost-effectively expand the new system to meet anticipated buildout flows, if necessary. The RWQCB accepted the CDR findings without comment. Construction is nearly completed.

Buena Vue Casino Water and Wastewater Facilities

Buena Vue Rancheria, Amador County, California

Structural Engineer. HydroScience provided detailed design for wells, potable water supply, and wastewater treatment systems for this casino project. Wastewater treatment utilizes a 100,000 gpd membrane bioreactor (MBR) providing tertiary-treated Title-22 compliant effluent for discharge and onsite irrigation use in accordance with an NPDES permit. The wastewater treatment system includes influent pumps, fine screens, nitrification/denitrification, equalization, emergency storage, hollow fiber membrane modules, ultraviolet disinfection, and solids screw press. Water supply components include three wells, sodium hypochlorite injection, greensand filtration for iron and manganese removal, 1.25 MG storage tank, booster pumps for fire and domestic demands, and backwash/solids handling systems. The project was constructed via the design-build delivery method.

Regional Wastewater Control Facilities

City of Stockton, California

Structural Engineer. HydroScience played a lead role on the rehabilitation of the primary clarifiers and sludge and scum pumping systems as part of this Progressive Design-Build project. The existing clarifiers consisted of three discrete banks constructed at different times (as far back as the 1940s) and configured differently. Two of the clarifiers were "squircular" (circular mechanisms in square tanks) while the remaining ones are rectangular. HydroScience performed a mechanical condition assessment, utilized a facility mass balance to determine anticipated future sludge removal rates and flows for pumping, developed proposed rehabilitation approaches for the clarifiers, worked with the contractor to refine construction approach and develop cost estimates for the improvements, and presented our findings in a workshop to City staff. HydroScience helped develop the process control narratives and finalized the construction plans and specifications and is currently providing review of construction submittals. Once construction is complete, the clarifiers will have a total capacity of 80 MGD.

WWTP Gravity Thickener Rehabilitation

City of San Mateo, California

Structural Engineer. HydroScience performed a condition assessment on the existing gravity thickener system at the City of San Mateo's 12 MGD WWTP. HydroScience coordinated the confined space entry into the drained tank to examine the exposed thickener mechanism, and prepared recommendations to rehabilitate the entire gravity thickener system. The design includes replacement of the thickener mechanism; replacing the existing sludge withdrawal line; modifications to the existing pump room layout; modifications to change the configuration of the tanks from square to circular; piping and splitter box modifications; recoating the effluent well; miscellaneous repairs to concrete and grating; and electrical improvements.

O'DELL ENGINEERING a Westwood company

STAFF QUALIFICATIONS

Scott Roberts, PLS

Surveyor

CAREER EXPERIENCE
13 Years in the Land Surveying Industry

FIRM EXPERIENCE
8 Years at O'Dell Engineering, a Westwood company

EDUCATION
BS, Geomatics Engineering, California State University, Fresno

PROFESSIONAL REGISTRATIONS
Registered Land Surveyor No. 9235, CA

FAA Remote Pilot

SUMMARY – Mr. Roberts has professional surveying experience in both the public and private sectors with work on an array of design projects such as large-scale municipal efforts, private master planned communities, agricultural properties, and commercial developments. He is skilled in AutoCAD Civil 3D, Trimble GNSS & Robotic TS, Trimble Business Center, Trimble RealWorks, and Terrestrial LiDAR. His responsibilities have included project management, topographic surveying and mapping, boundary surveying and mapping, underground utility locating, construction staking, elevation certificates, laser scanning, legal descriptions, and GIS.

RELEVANT EXPERIENCE:

CALAVERAS CO. WATER DISTRICT COPPER COVER WASTEWATER LIFT STATIONS: COPPEROPOLIS, CA
O'Dell provided topographic mapping and boundary surveying to support the design of sanitary sewer lift station and force main improvements. Services included survey control, topographic surveying and mapping, and a record right-of-way survey. Mr. Roberts served as Lead Land Surveyor.

ACWD ALAMEDA AND DECOTO RESERVOIRS: ALAMEDA COUNTY, CA
Mr. Roberts served as Project Manager and supported Alameda County Water District for this project. O'Dell provided topographic surveying to support the renovations of the Alameda Reservoir and the Decoto Reservoir.

BASS LAKE WASTEWATER TREATMENT PLANT AND EFFLUENT DISPOSAL SYSTEM: MADERA COUNTY, CA
Mr. Roberts served as Project Surveyor and provided survey support services for this wastewater treatment plant and effluent disposal system improvement project at Bass Lake in Madera County. The goal of the project was to replace the deteriorating infrastructure at this County treatment and disposal facility to improve process operability, reduce annual operating and maintenance costs, accommodate peak flows, and maintain permit compliance. The work included topographic surveying and mapping to support the design of the improvements.

MEMORIAL PARK WASTEWATER TREATMENT AND INFRASTRUCTURE REPLACEMENT PROJECT: SAN MATEO COUNTY, CA
O'Dell Engineering provided land surveying services for this wastewater treatment and infrastructure replacement project. Mr. Roberts served as Project Surveyor. Services included topographic surveying and mapping. O'Dell performed a topographic survey and mapping of the sanitary sewer system and wastewater treatment plant.

ORCHARD RUN WATER TREATMENT PLANT IMPROVEMENT PROJECT: SCOTTS VALLEY, CA
Mr. Roberts served as Project Surveyor and provided survey support services for the Orchard Run Water Treatment Plant Improvement Project in Scotts Valley, CA. O'Dell Engineering provided surveying services including topographic and boundary surveys, mapping of underground utilities, and other survey work to support the design of utility and site improvements at the plant.

With Blackburn Since 2005

Office Location
Auburn, CA

Education
- M.S. Geological Engineering, University of Nevada, Reno, 2002
- B.S. Geology, California State University Sacramento, 2000

Registrations
- Professional Geologist, California #7997
- Certified Engineering Geologist, California, #2508

Affiliations
- AEG - Association of Engineering Geologists

Geotechnical
Geo-Environmental
Forensics
Construction Services

Robert C. Pickard, PG, CEG

Senior Engineering Geologist

BLACKBURN CONSULTING

Mr. Pickard graduated from the University of Nevada, Reno, with a Geological Engineering degree and has more than 22 years of experience in geotechnical/geologic engineering. He has worked on a wide variety of projects, including pipelines, dams, tanks, highways, and bridges throughout California. His experience includes subsurface investigation, soil, rock, groundwater analysis, excavatability, and slope stability studies.

Representative Experience

Lincoln Wastewater Treatment and Reclamation Facility Expansion, Placer County, CA
Rob was the Senior Engineering Geologist for this planned expansion of the Lincoln Wastewater Treatment and Reclamation Facility. The project includes the construction of a new oxidation ditch, clarifier, filters, and associated structures at the existing plant. The project also includes an effluent storage basin that will cover 45 acres and a new pump station constructed within an existing embankment. Rob performed analysis and prepared Geotechnical Design Reports for the treatment plant expansion, the storage basin, and the pump station.

Davis Water Treatment Plants, Well 32, Davis, CA
Rab completed a geotechnical evaluation and report for two new water treatment facilities, including backwash tanks, filters, generators, and related pumps and piping. The proposed tanks will be steel construction, 24 ft in diameter, and have a ring footing with an interior pad of compacted base rock. Filters will consist of two tanks, each approximately 8’ in diameter and 24’ long.

Folsom South Area Group Transmission Pipeline and Pump Station Project, Folsom, CA
Senior Engineering Geologist for designing about 19,000 linear feet of new 30-inch ductile iron water transmission pipeline to the existing water treatment plant west of Willow Creek Drive. A pump station with an approximately 15-foot-deep wet well will also be constructed at the treatment plant as part of the project. Rob assisted in managing subsurface explorations, reviewed existing geologic mapping and documentation, and analyzed and completed a Geotechnical Report.

NID Banner Cascade Pipeline, Nevada County, CA
Project Engineering Geologist for the Banner-Cascade project, which increases raw water delivery capacity and reliability for agricultural customers and local water treatment plants. The project consists of over 5.5 miles of 48-and 36-inch diameter raw water pipe, parallel 8- and 12-inch diameter treated water pipeline, new outlet control facility and flow control facility, and encasement of a portion of the Upper Grass Valley Canal.

Mid-Western Placer Regional Sewer Project, Placer County, CA
Project Engineering Geologist for this regional sewer project included decommissioning one wastewater treatment plant, expansion of another plant, and over 15 miles of new pipeline. The pipeline included two trenchless crossings of environmentally sensitive waterways. Assisted in preparing a Geotechnical Design Report and performed site investigation, including borings, test pits, geologic mapping, and seismic refraction surveys.

PCWA Ophir Gardens Pipeline Extension, Auburn, CA
Project Engineering Geologist for the Ophir Gardens Pipeline Extension (a PCWA pipeline) located near the City of Auburn. The new pipeline will be approximately 1,600 feet in length and tie-in to an existing pipeline near the City of Auburn Wastewater Treatment Plant and provide water to several homes near the intersection of Ophir Road and Wise Road. Blackburn completed a subsurface investigation that consisted of borings and laboratory testing. We prepared a Geotechnical Memorandum that summarized geotechnical/geologic conditions for design and construction of the new pipeline.

Hydroscience Engineers is a civil engineering firm that plans, designs, and manages the construction of water, wastewater, and recycled water projects. With offices in Sacramento, Berkeley, and San Jose, we understand and address the complex water and wastewater needs of Northern California.

HydroScience

PROPOSED FEE

Task	Description	Curtis Lam PIC and QA/QC	Bill Slenter Project Manager	Jory Benitez Process Engineering	Marc Fernandez Civil/Site and Pipelines	Bya Founas Mecanical Engineering	Thinh Le Electrical/EIC Lead	Electrical EIC Support	Drafting	Hours	Fee	PCSG Cost Estimating	VE Solutions Structural	Blackburn Geotechnical	O'Dell Surveying	OCDs	Expense Subtotal with Markup	Total Fee
	Labor Classification	Prin	Prin	E-II	E-III	E-III	E-IX	E-III	CAD									
	Hourly Rate	$305	$305	$204	$215	$215	$292	$215	$160									
A	**Project Management/QAQC**	**18**	**40**	**18**	**0**	**5**	**5**	**0**	**0**	**86**	**$23,897**	**$0**		**$0**	**$0**	**$0**	**$0**	**$23,897**
	General Project Management/Tracking	2	20	8						**30**	**$8,342**						**$0**	**$8,342**
	Bi-Weekly Status Calls		20	10		5	5			**40**	**$10,675**						**$0**	**$10,675**
	QA/QC	16								**16**	**$4,880**						**$0**	**$4,880**
B	**Project Design Report**	**0**	**44**	**71**	**105**	**23**	**62**	**103**	**49**	**457**	**$103,513**	**$2,000**		**$0**	**$0**	**$600**	**$4,830**	**$108,343**
	Kickoff meeting/Comprehensive Site Visit		8	8			8			**24**	**$6,408**					$300	**$315**	**$6,723**
	Data request, review, and collection		1	2	14		20	32		**69**	**$16,443**						**$0**	**$16,443**
	Evaluation and Alternatives		10	20	30					**60**	**$13,580**						**$0**	**$13,580**
	PDR Cost Estimating		1	2	1	1	1	2		**8**	**$1,865**	$2,000					**$2,100**	**$3,965**
	Workshop 1		4	3		2	1	3		**13**	**$3,199**					$150	**$158**	**$3,357**
	Prepare Preliminary Drawings		2	8	24		12	32	45	**123**	**$24,986**						**$0**	**$24,986**
	Prepare Draft PDR		10	16	24	20	10	26		**106**	**$24,284**						**$0**	**$24,284**
	Workshop 2		4	4			4			**12**	**$3,204**					$150	**$158**	**$3,362**
	Prepare Final PDR		4	8	12		6	8	4	**42**	**$9,544**						**$0**	**$9,544**
	Structural Engineering - Predesign Phase									**0**	**$0**		$2,000				**$2,100**	**$2,100**
C	**Topographic Surveying**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**$0**	**$0**		**$0**	**$29,600**	**$0**	**$31,080**	**$31,080**
	Prepare Topographic Survey									**0**	**$0**				$29,600		**$31,080**	**$31,080**
D	**Geotechnical Investigation**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**$0**	**$0**		**$54,293**	**$0**	**$0**	**$57,008**	**$57,008**
	Field Investigation and Geotechnical Report									**0**	**$0**			$54,293			**$57,008**	**$57,008**
E	**Permit and Environmental Assistance**	**0**	**6**	**0**	**12**	**0**	**0**	**0**	**0**	**18**	**$4,410**	**$0**		**$0**	**$0**	**$0**	**$0**	**$4,410**
	Develop Project Description and Data Tables		6		12					**18**	**$4,410**						**$0**	**$4,410**
F	**Project Design**	**0**	**119**	**339**	**173**	**397**	**70**	**333**	**266**	**1697**	**$362,596**	**$12,760**		**$0**	**$0**	**$200**	**$61,384**	**$423,980**
	Prepare 50% Plans and Draft Technical Specifications		40	140	80	160	12	100	110	**642**	**$134,964**						**$0**	**$134,964**
	Design Review Meeting		4	3		2	1	3		**13**	**$3,199**						**$0**	**$3,199**
	Prepare 90% Plans and Specifications		40	100	60	130	30	160	90	**610**	**$131,010**						**$0**	**$131,010**
	Design Review Meeting		4	3		2	1	3		**13**	**$3,199**						**$0**	**$3,199**
	Prepare 100% Plans and Specifications		24	80	24	100	20	60	40	**348**	**$75,440**						**$0**	**$75,440**
	Design Phase Cost Estimating		1	3	1	1	3	1	2	**12**	**$2,758**	$12,760					**$13,398**	**$16,156**
	Design Review Meeting		2	2		2	1	2		**9**	**$2,170**						**$0**	**$2,170**
	Prepare Bid-Ready Plans and Specifications		4	8	8		2	4	24	**50**	**$9,856**					$200	**$210**	**$10,066**
	Structural Engineering - Design Phase									**0**	**$0**		$45,501				**$47,776**	**$47,776**
G	**Construction Assistance**	**0**	**36**	**67**	**48**	**72**	**36**	**124**	**24**	**407**	**$91,460**	**$0**		**$0**	**$0**	**$800**	**$9,271**	**$100,731**
	Site Visits (4)		8	8			4	8		**28**	**$6,960**					$600	**$630**	**$7,590**
	Construction Meetings (8)		6	4		4	2	4		**20**	**$4,950**						**$0**	**$4,950**
	RFI Responses (35)/General Support		16	16	30	4	10	50		**126**	**$29,124**						**$0**	**$29,124**
	Submittal Responses (75)		4	35	16	60	16	60		**191**	**$42,272**						**$0**	**$42,272**
	Change Order Assistance		2	2		4	4	2		**14**	**$3,476**						**$0**	**$3,476**
	Record Drawings			2	2				24	**28**	**$4,678**					$200	**$210**	**$4,888**
	Structural Engineering Support									**0**	**$0**		$8,030				**$8,431**	**$8,431**
OVERALL BASE SERVICES		**18**	**245**	**495**	**338**	**497**	**173**	**560**	**339**	**2665**	**$585,876**	**$14,760**	**$55,530**	**$54,293**	**$29,600**	**$1,600**	**$163,572**	**$749,448**
OPTIONAL SERVICES																		
	Separate secondary clarifier, RAS/WAS PS		8	24	16	40	4	8	28	**128**	**$26,744**		$39,130	$7,830			**$49,308**	**$76,052**
	Wet Well UESP Pump Station		2		12				4	**18**	**$3,830**		$6,000	$3,510			**$9,986**	**$13,816**
	Record of Survey									**0**	**$0**				$17,800		**$18,690**	**$18,690**
	PCSG constructability review		1	2		2	1	2		**8**	**$1,865**	$4,060					**$4,263**	**$6,128**

HYDROSCIENCE ENGINEERS, INC.

Standard Schedule of Estimated Billing Rates

Effective January 1, 2024 through December 31, 2024

Labor Classification	2024 Hourly Rate
Principal	$305
Engineer IX	$292
Engineer VIII	$280
Engineer VII	$265
Engineer VI	$253
Engineer V	$242
Engineer IV	$231
Engineer III	$215
Engineer II	$204
Engineer I	$187
Engineering Aide	$110
Construction Professional VI	$200
Construction Professional V	$190
Construction Professional IV	$180
Construction Professional III	$170
Construction Professional II	$150
Construction Professional I	$140
Cross Connection Control Specialist	$135
CAD Manager	$160
CAD Designer	$140
Marketing Professional	$120
Administrative II	$110
Administrative	$95

Hourly billing rates include postage and telephone charges that are normal to the work authorized. Other direct costs for travel, reproduction, mail service, outside services, etc. will be invoiced at 110 percent of the actual cost. Rates for expert witness services shall be billed at the quoted rates plus $50/hour.

PCSG

April 11, 2024

Bill Slenter, PE
HydroScience Engineers
10569 Old Placerville Rd.
Sacramento, CA 95827-2504

Dear Bill,

Please see the following rate sheet for consulting services:

Activity	2024 Hourly Rate
Cost Estimating, Scheduling, On Call Project Consulting	$145
Construction Management (Depending on Availability)	$135
Travel (from Reno, NV)	$90 per hour
Air Travel/Lodging	Cost plus 10%
Daily Travel Perdiem	$85 per day
Alternate Delivery Pre-Construction Services – Project Specific	TBD

Should additional services or direct cost activities be requested, those services can be provided at the estimating billable rate. Any expenses incurred to be billed at cost plus 10%.

Cost estimate will include an open book copy of the estimate to include manhour, crew, and equipment analysis. Cost estimate will be in HCSS Heavy-Bid format and a PDF copy of the estimate will be provided.

Hourly rates are for the 2024 calendar year. Increases of approximately $5 per hour are expected for each calendar year, beginning January 1st of 2024 and escalating each year on January 1st.

Please contact me with any questions or comments. I can be reached at 775-309-3116.

Sincerely,

John Collins
Pre-Construction Services Group

Where Value and Engineering Come Together
VE SOLUTIONS, INC.

2023-2025 RATE SCHEDULE

Structural Engineer	$185 per hour
Drafter	$120 per hour

650 University Avenue, Suite 110 • Sacramento, CA 9 5 825 (916) 505.0519 • Fax (916) 514.9102 •
bradf@vesolutions.net

O'Dell Engineering
FEE SCHEDULE
August 2023

Classification:	Regular Hourly Rate:
Principal	$295
Senior Civil Engineer	$230
Senior Engineer 2	$210
Senior Engineer 1	$194
Engineer 2	$190
Engineer 1	$180
Assistant Engineer 2	$155
Assistant Engineer 1	$140
Senior Landscape Architect 2	$210
Senior Landscape Architect 1	$190
Landscape Architect 2	$180
Landscape Architect 1	$170
Landscape Designer 3	$165
Landscape Designer 2	$155
Landscape Designer 1	$145
Planner	$185
Assistant Planner	$150
Dry Utility Project Manager 2	$180
Dry Utility Project Manager 1	$160
Utility Engineer	$145
CADD Operator 2	$125
CADD Operator 1	$100
Surveyor Manager	$215
Senior Land Surveyor	$205
Senior Surveyor 2	$200
Senior Surveyor 1	$180
Surveyor 2	$160
Surveyor 1	$150
Assistant Surveyor 2	$140
Assistant Surveyor 1	$125
Survey Crew 2-man/1-man	$330/$190
Survey Crew 2-man/1-man (Prevailing Wage)	$416/$240
Administrative 3	$150
Administrative 2	$130
Administrative 1	$110
Outside Services & Reproduction: Cost of services and expenses charged to O'Dell Engineering by outside consultants, commercial printers, and professional or technical firms engaged in connection with the project.	Actual cost plus 10%
Travel: Mileage, per diem, and subsistence are not normally charged to the client unless specific prior authorization is negotiated between client and consultant.	Actual cost plus 10%

Auburn Main Office:
11521 Blocker Drive, Suite 110
Auburn, CA 95603
(530) 887-1494, Fax (530) 887-1495

West Sacramento Office:
2491 Boatman Avenue
West Sacramento, CA 95691
(916) 375-8706, Fax (916) 375-8709

Fresno Office:
4186 W. Swift Avenue, Suite 107
Fresno, CA 93722
(559) 438-8411, Alt. (559) 276-4246

BLACKBURN CONSULTING
www.blackburnconsulting.com

2024 SCHEDULE OF FEES & SERVICES

Geotechnical ▪ Geo-Environmental ▪ Construction Services ▪ Forensics ▪ Laboratory

PROFESSIONAL HOURLY RATES:

Project Engineer / Geologist I	$195	CAD/GIS	$190
Project Engineer / Geologist II	$210	Lab Aide	$130
Senior Engineer / Geologist	$230	Lab Manager	$195
Project Manager	$255	Field Services Manager	$220
Construction Manager	$260	Clerical	$115
Senior Project Manager	$285	Project Assistant	$145
Principal / Senior Consultant	$330	Administrative	$175
Senior Principal	$375	Senior Administrative	$195

SPECIAL INSPECTION PERSONNEL HOURLY RATES:

	Non-Prevailing Wage	Prevailing Wage
Group 1 *ASNT Level II-III, DSA Shotcrete, Lead Inspector, NICET Level IV*	$170	$225
Group 2 *AWS-CWI, ICC Certified Structural Inspector, NICET Level III, Building/Construction Inspector, Shear Wall/Floor System Inspector*	$170	$220
Group 3 *Soils/Asphalt, Earthwork Grading, Excavation and Backfill, NICET Level II*	$150	$205

MINIMUM BASIC CHARGES:

Outside Equipment & Services	Cost plus 20%
Vehicle Charge	$8.00 per hour or $1.00 per mile
Per Diem	Location specific, minimum $185 per night
Technician Services	Charge includes time from office and return to office, minimum charge - 4 hours
Overtime	Over 8 hours: 1.5 x Hourly Rate Before 7:00am or after 4:00pm: 1.5 x Hourly Rate Rush Charge (less than 24 hours notice): 1.5 x Hourly Rate Saturday: 1.5 x Hourly Rate (minimum: 4 hr. increments) Sunday & Holiday: 2.0 x Hourly Rate (minimum: 4 hr increments)

EQUIPMENT: *(personnel not included)*

Hand Sampling Equipment	$348 / Day	Double Ring Infiltrometer Equipment	$386 / Day
Nuclear Moisture/Density Testing	$23 / Test	Level Survey Equipment	$330 / Day
6" Sand Cone Testing	$60 / Test	Pachometer	$168 / Day
12" Sand Cone Testing	$242 / Test	Rock Point Load Test Equipment	$168 / Day
Coring Bit Charge	$60 / Core	Roto Hammer	$163 / Day
Coring Machine	$336 / Day	Schmidt Hammer	$138 / Day
Dynamic Cone Penetrometer	$348 / Day	Torque Wrench	$94 / Day
Electrical Resistivity Equipment	$318 / Day	Seismic Refraction: 12 / 24 Channel	$597 / Day
Generator	$94 / Day	MASW Survey Equipment	$597 / Day
Groundwater Level Indicator	$88 / Day	Traffic Control/Safety	$386 / Day
Inclinometer Survey Equipment	$809 / Day	Concrete Vapor Emission Test Kit	$50 / Ea
pH Test Strip Package	$74 / Ea	Pull Testing Equipment	$212 / Day
PID (MiniRAE)	$100 / Day or $300 / Week		

12/7/2023

RESOLUTION NO. 2024-

A RESOLUTION OF THE BOARD OF DIRECTORS OF THE CALAVERAS COUNTY WATER DISTRICT

APPROVING/AUTHORIZING DESIGN CONTRACT FOR IMPROVEMENTS OF THE LA CONTENTA WASTEWATER TREATMENT PLANT

WHEREAS, the District has identified a need to Improvements to the existing La Contenta Wastewater Treatment due to operational and capacity issues, and

WHEREAS, upon issuing a Request for Proposal (RFP) on March 11, 2024 for engineering and design services for the subject project and conducting job walk of the project area with numerous prospective consulting firms interested in submitting proposals, the District received two (2) proposals as of the due date of May 30, 2024, and

WHEREAS, the Engineering and Operations staff reviewed all proposals considering various criteria such as qualifications and experience, content and presentation of the proposal and approach to work, completeness/variances in the proposed scope of work, allocation of staff hours to each task, general sense of cost effectiveness and value, subconsultant scope and fees, potential scheduling issues and ability to deliver work within allowed timeframe, team organization and focus on key project issues, local representation and proximity to the project and prior performance on other District projects, and among the proposals staff recommends the Award of the contract for engineering and design services to HydroScience Engineers, and

WHEREAS, the total project cost is estimated to be $15 million. Funding for the design phase of the project is included in the FY 2024-25 Wastewater CIP Budget.

BE IT RESOLVED, the Calaveras County Water District Board of Directors hereby approves the Proposal submitted by HydroScience, for Engineering Services for, La Contenta Wastewater Treatment Facilities Phase 3 Improvement Project and authorizes the General Manager to execute said agreement not to exceed $749,448 as proposed in the attached Proposal.

PASSED AND ADOPTED this 10th day of July, 2024 by the following vote:

AYES:
NOES:
ABSTAIN:
ABSENT:

CALAVERAS COUNTY WATER DISTRICT

_____
Russ Thomas, President
Board of Directors

ATTEST:

_____
Rebecca Hitchcock
Clerk to the Board

5a

AGENDA ITEM

5a

Agenda Item

DATE: July 10, 2024

TO: Michael Minkler, General Manager

FROM: Damon Wyckoff, Director of Operations

RE: Report on the June 2024 Operations Department

RECOMMENDED ACTION:

Report on the Operations Departments Report for Districts 1 through 5.

SUMMARY:

Attached is the monthly Operations Department Report for June 2024. The report will review the operational status and work completed by departmental administration and each of the five Districts. The report will cover the following:

- Administration
- Water treatment plants
- Wastewater treatment plants
- Distribution
- Collections
- Construction
- Electrical
- Mechanical

Staff will be present to report to the Board of Directors and will be available for questions.

FINANCIAL CONSIDERATIONS:

None.

STRATEGIC PLAN INTIATIVES:

OI-01 Ensure our infrastructure is operated and maintained to fully realize its expected life span.

OI-02 Implement preventative, predictive, and corrective maintenance plans to ensure safe and reliable operations.

EO-10 Value the workforce that enables us to deliver on the Strategic Plan goals and objectives and upholds the District's core values.

Attachment: June 2024 Operations Department Reports for Districts 1 through 5

Operations Departments Report

June 1st thru June 30th, 2024

Director of Operations:

1. On-going coordination and management of multiple District Operations projects and work efforts.
2. Coordinated the District's work efforts related to the Aero Fire.
    a. Field Staff's field efforts
    b. Prioritized work focus
    c. Participated in Calaveras County EOC briefings
    d. Participated in Cal Fire's Cooperators, Law Enforcement, and Repopulation briefings at incident command at Frog Town.
    e. Worked to ensure effective communication between disciplines and convey District strengths, weaknesses, and issues.
3. Conducted the District's quarterly Utilities Coordination Meeting.
4. Participated in Calaveras OES's Water and Wastewater Utility Coordination meeting.
5. Site visits to multiple in-construction District projects.
6. Continued to work with District Staff and the consultant to ensure the effective implementation of the AMI Project.
7. Participated in The A to B Town Hall meeting at the Jenny Lind Fire Station.
8. Participated in multiple onsite project progress meetings.
9. On-going FEMA coordination related to DR-4683 and DR-4699. Received $14K for the restoration of a fence on a property in Valley Springs. The Construction of the fence continued in March. CCWD also received $184K for staff overtime, material expense, and equipment use as reimbursement for the District's efforts during the 2023 atmospheric river emergency (DR-4683). Received $143K to restore the road to the Indian Rock WWTF and to improve the road address future accessibility issues.
10. On-going work with KW Emerson related to the Shop building fire at the West Point WTP.
11. On-going CARB related work with the CARBs Clean Fleets Infrastructure TRIG, MCWRA, and ACWA.
12. On-going work with Staff and the District's Consultant to glean any additional operational options to improve Disinfection Byproduct reduction in the Ebbetts Pass Service Area.
13. On-going work with the Mobile MMS Team to optimize work orders, service requests, the District Dashboard, and Regulatory Compliance requirements.

Administrative Technician:

1. Maintained Field Calendar
2. Received/Tracked All USA North Line 811 Locates – Handled Associated Calls –294 Received District Wide
3. Facilitated with Employee Reimbursements
4. Facilitated with Employee Certification – Applications, Exams, Renewals, Trainings, Resources
5. Field Training Course Ordering/Registrations/Travel Arrangements
6. Process Operations Purchase Order Batches
7. On Call Reminders, Transfers, Logs
8. Electronic Lab Report Filing
9. Organizing and Archiving Operations Department Documents
10. Safety Tailgate Meetings: Create, Track, & Archive
11. Attended Various Meetings: PRT, Streamline Design & Review, All-employee
12. Participated in Kid's Day

13. Permit Renewals
14. 2024 CERS Program Work Efforts
15. 2024 Backflow Program Work Efforts
16. Cross Connection Survey Work Efforts
17. Updated Lead & Copper Customer Records
18. Miscellaneous Administrative Functions

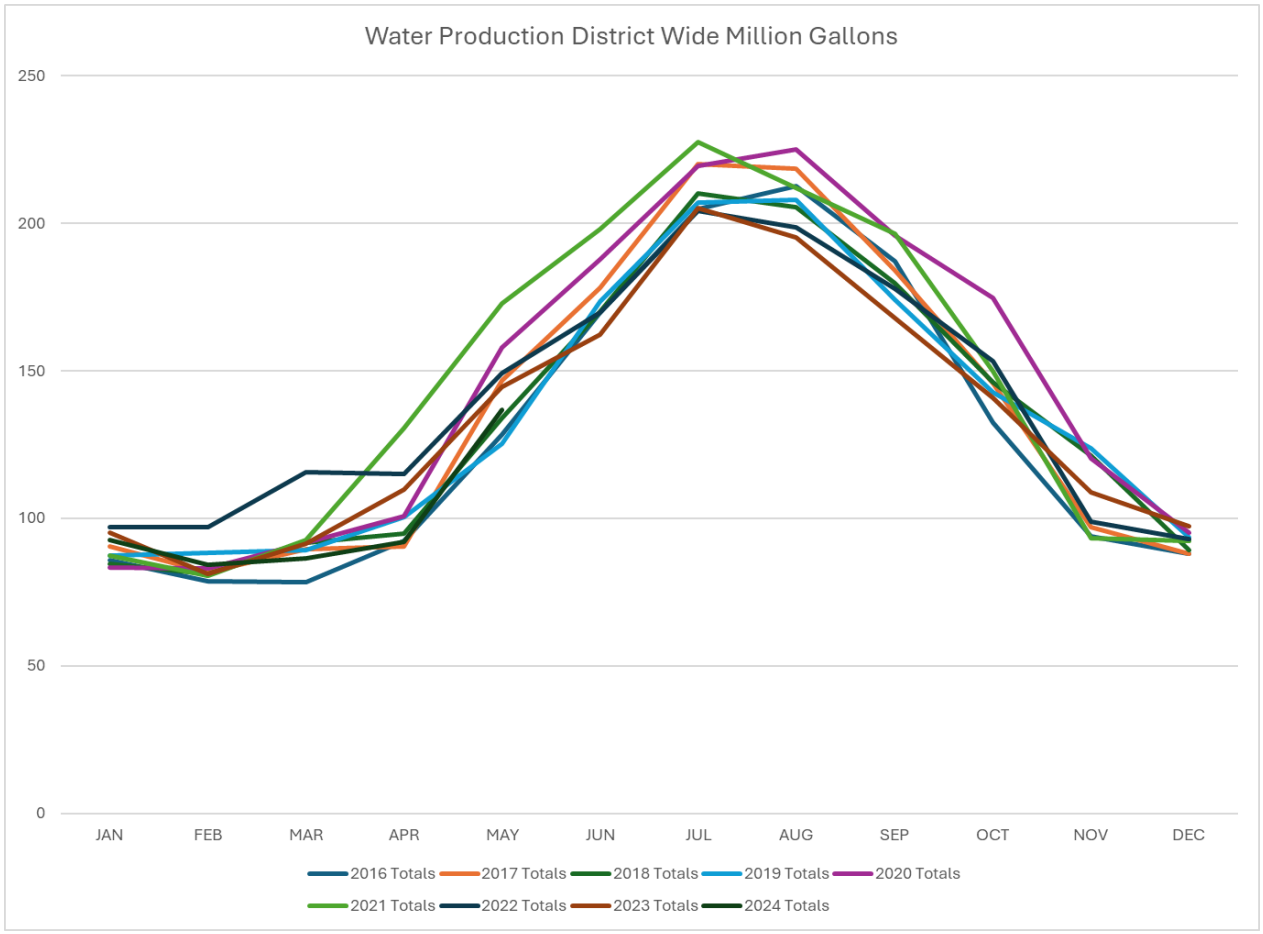
Plant Operations Manager:

1. Completed the review and acceptance of the monthly State Water Reports for all the Districts Water Systems and submitted them to the State
2. Completed the monthly Wastewater Reports for all the Districts Wastewater Systems and submitted them to the State.
3. Working very closely with the new operator in West Point to ensure that all system needs are met.
4. Working closely with our operators in Copperopolis water, wastewater, and reclaim plants.
5. On-going work associated with PO's and ordering supplies for different District facilities and projects
6. Continued work efforts on annual backflow testing
7. Ongoing work efforts associated with the Ebbetts Pass HAA5 violation for purposes of public notification and data collection.
8. Completed the SAFER Clearinghouse monthly reporting with our Water Resources Specialist.
9. Ongoing work efforts related to the District's Cross-Connection Control Surveys with the Operations Administrative Technician.
10. Met with our electricians on installing our new ozone generators at Copper Cove Water Treatment Plant.
11. On-going work efforts with the Districts CERS (California Environmental Reporting System) annual reporting.

April 2024 Water Production

a. Copper Cove – 40.050 MG
b. Ebbetts Pass – 34.869 MG
c. Jenny Lind – 56.397 MG
d. Sheep Ranch – 0.461 MG
e. Wallace – 1.87 MG
f. West Point – 3.177 MG

g.



Construction and Maintenance Manager:

1. Staff meetings.
2. Board meetings.
3. Weekly Copper Cove tanks project meeting.
4. Copper Lift Station and force main relocation project weekly meetings.
5. West Point/Wilseyville Consolidation on-site project meeting.
6. Attended Employee Wellness Committee meetings.
7. Attended the Jenny Lind A to B Transmission Pipeline Project Meetings and Town Hall Meeting kicking off the project.
8. Participated in a demo from DFK Solutions for Training Link Pro – Safety training software.
9. Attended the Quarterly Utilities Coordination Meeting.
10. Attended an onsite meeting with the Construction Team Supervisor to discuss the installation and location of a new Slurry line meter.
11. Met with Calaveras County Public works and our Senior Distribution Worker for Copper to discuss pavement restoration plans and a layout on Copper Cove Drive for 3 locations.
12. Attended the CWEA Training Group meeting.
13. Created a power point presentation and presented the monthly operations report to the Board while the Director of Operations was on vacation.
14. Reviewed applications and selected candidates for the two open Collections Crew positions.
15. Participated in the County OES Coordination Meeting with Calaveras OES and County water and wastewater purveyors.
16. Worked to address issues associated with the Aero Fire.
    a. Coordinated efforts with field staff
    b. Site visits
    c. County EOC Briefings

d. Cal-Fire re-population briefing at Frogtown
e. Coordinated damaged fire hydrant replacements.
f. Developed a Cost-To-Serve

17. Site visit to the City of Angels Camp's Collection System Odor Control unit to assess viability for a similar District application.
18. Participated in the annual Kids Day in Copperopolis. Planning, set up, tear down.
19. Site visit to a 6-inch mainline break on Cheyenne in Big Trees Village.
20. Coordinated a nighttime work effort to replace a broken hydrant off Copper Cove Drive in Copperopolis.
21. Coordination with staff to complete meter reads for billing.
22. Attended TUDs ribbon cutting ceremony for its new Wastewater Treatment Plant.
23. Met with the District's Senior Construction Worker to discuss the Indian Rock Road repair Project (FEMA funded).
24. Multiple field/site visits.
25. Multiple phone calls to customers to discuss issues/concerns.
26. Review and submit Right of Way notifications to County PW.
27. Review and approve timecards.
28. Filled in for the Director of Operations while he was on vacation.

Purchasing Agent:

1. Worked on inventory of new warehouse.
2. Completed invoicing for purchased material.
3. Met with various reps and received quotes for various items for purchase.
4. Ordered parts, tools, materials, and equipment for all departments.
5. Coordinated servicing of District Vehicles for Field Staff
6. Reconciled Credit Cards for Field Staff
7. Worked with new facilities maintenance worker on work order completion.
8. Worked on hydrant and valve order for hydrant replacements in La Contenta and other areas.
9. Worked on motor replacement for the Forest Meadows WWTP.
10. Worked on purchase request and inventory transfers in MMS
11. Delivered supplies, materials, and parts.
12. Worked on end of the year invoicing.
13. Worked on recall orders for lease vehicles.
14. Worked on capital outlay purchases for this year's fiscal.
15. Worked on hydrant repair costs and repair kits.
16. Worked on safety supplies purchase.
17. Reorganized the warehouse.
18. Worked on inventory stock replenishment order.

Water Treatment Plants:

Copper Cove Water Treatment Plant:

1. Operations as usual
2. B Tank/Clearwell rehabilitation and replacement project continues.
3. The only operational Ozone unit failed. Brought the prechlorination system online.
4. Electricians installed the new UPS units and prepared for the Ozone unit installations.
5. The Senior Supervisor continues to work closely with the shift operator to optimize system processes and overall facility operation.
6. Extensive time working to continue to convey water during the Aero Fire. Continued conversation with the C&M Manager, the Director of Ops, and Field Crew Supervisors on system status, tank volumes, and flows.

Hunter's (Ebbett's Pass) Water Treatment Plant:

1. Operations as normal
2. Started draining backwash return pond #2 for a mid-July cleanout effort.
3. Perchlorate samples collected.
4. Met with CCWD engineers at the Sawmill Tank to discuss a replacement effort.

5. Monthly White Pines Dam inspection completed.

Jenny Lind Water Treatment Plant:
1. Operations as usual

Sheep Ranch Water Treatment Plant:
1. Operations normal for the Month.

Wallace Lake Estates Well System:
1. Operations as usual

West Point Water Treatment Plant:
1. Operations as Usual.
2. The second filter is online and operating.

Wastewater Treatment Plants:

Arnold Wastewater Treatment Plant:
1. Operations as usual

Copper Cove Wastewater Treatment Plant:
1. Normal Operations

Copper Cove Wastewater Reclamation Plant:
1. The facility is online.
2. Worked with the mechanics to troubleshoot and repair pond 6 pumps.

Country House Wastewater Facility:
1. Operations as usual

Forest Meadows Wastewater Treatment Plant:
1. Operations as usual
2. Cal Fire Crews pulled weeds around the aeration ponds so that the District can spray herbicide for weed prevention. Weeds negatively impact the aerators.

Indian Rock Vineyards Wastewater Facility:
1. Operations as usual
2. Need to determine how to provide water service to the facilities to improve system and basket cleaning.

La Contenta Wastewater Treatment Plant:
1. Operations as usual

Mountain Retreat / Sequoia Woods Wastewater Facility:
1. Operations as usual

Six Mile Wastewater Collection System:
1. Monthly reads taken and report submitted to the City of Angels Camp

Southworth Wastewater Treatment Plant:
1. Operations as usual

Vallecito / Douglas Flat Wastewater Treatment Plant:
1. Operations as usual
2. Still dealing with cows daily. Working to keep them off CCWD property.

3. Ongoing replacement of broken irrigation heads (Cows).

West Point Wastewater Treatment Plant:

1. Operations as usual
2. Consolidation project in full swing.

Wilseyville Wastewater Facility:

1. Operations as usual

Distribution:

Copperopolis Distribution System:

SERVICE LINE WORK

1. 1960 Arrowhead
2. 277 Pheasant Run
3. 482 Bret Harte
4. 462 Sunrise
5. 60 Copper Cove
6. 4626 Little John

MAIN LINE WORK

None during this time

Additional Work

1. 15 Valves Turned
2. Service Requests
3. Flushed 164,250 gallons.
4. USA's
5. We did a nighttime shutdown on Copper Cove Dr. to replace a hydrant that was broken during the Aero Fire. The week of the Aero fire was spent fueling/fixing generators, checking tank levels and keeping in contact with PG&E to fix their power issues affecting B-Tank pump station.

Ebbett's Pass Distribution System:

SERVICE LINE WORK

1. 1" Poly – Lakemont Dr.
2. 1" Poly – McKenzie Ave.

MAIN LINE WORK

1. Pine Drive – 6" A.C. Main (approx. 250K gal leak)

Additional Work

1. SERVICE REQUESTS 13 Received 11 Resolved
2. WORK ORDERS 8 Received 8 Resolved
3. USA TICKETS 166 Received 166 Resolved
    a. 0 Renew
    b. 171 Normal
    c. 92 Rush
    d. 3 Emergency
4. PRV S
    a. 5 PRV Stations Inspected
    b. 2 PRV /CRD Repairs
5. Valves Exercised – 15
6. Ongoing system optimization adjustments and investigations in Big Trees #4 and Big trees #6 Zones.
7. Routine system maintenance and improvements
8. 3 Routine ARV repairs.
9. Found and raised multiple G-5 valve boxes.
10. Repaired unsafe PRV lid on Ben Thorn Drive.
11. On-going documenting and photo logging of PRV Stations.
12. Logging pressure readings into MMS mapping.

13. On-going potholing and locating to verify infrastructure locations and GIS updates to improve District mapping.
14. Attended anti-sexual harassment training.
15. Attended Sentryx (AMI system) training.
16. Attended ICS training
17. Daily and monthly vehicle inspection logs.
18. Still receiving multiple USA and field meet requests associated with the PG&E Underground Project.
19. Repaired the concrete sidewalk at the Solar Ridge condos that was cut out during a previous leak repair.

Jenny Lind Distribution System:

SERVICE LINE WORK

1. 8835 McAtee
2. 2591 Heinemann
3. 855 La Contenta Drive
4. 5816 Baldwin
5. 7589 Yost
6. 5038 Dunn
7. 4336 Dunn
8. 6405 Cane
9. 6675 Cane
10. 6371 Crail
11. 6025 Thornicroft
12. 5808 Thornicroft
13. 6156 Thornicroft
14. 5956 Thornicroft
15. 2605 Mittleman Ct
16. 176 North Branch Ct
17. 4487 Baldwin
18. 7522 Baldwin
19. 7488 Baldwin – Full line replacement
20. 6780 Baldwin
21. 5940 Davidson Ct
22. 3694 Laurent
23. 4259 Bartelink
24. 8175 O'Reilly
25. 8436 Jenny Lind Vista Ct
26. 2920 Heinemann
27. 7256 Westhill
28. 4755 Hwy 26
29. 6392 Bergsma – Full line replacement

MAIN LINE WORK

1. 2" bluebell at 3353 Lazer Ct
2. 6" AC at 8749 Stinson View

ADDITIONAL WORK

1. Vehicle inspections
2. Month end reads for hydrant meters, fill stations, Lancha Plana and raw water
3. Lower end flushing for water quality
4. Tank and pump station checks
5. Work orders for meter installations, hydrant meter installs, pressure problems, leak checks etc..
6. Line locates – including several large areas for PG&E underground crew and A to B project
7. Shutdowns for two fire hydrant replacements at 1938 Blake Rd and at the intersection of Cane Ln x Bartelink
8. Compaction testing with Condor for paving
9. ARV replumb/replacement that got hit by CalFire running a bulldozer on Hogan Dam Parkway
10. Greased and serviced GapVax and replaced upper kanaflex
11. Greased dump truck 743 at warehouse
12. Assisted West Point distribution with water leaks on Barney Way

13. Assisted West Point distribution with multiple node replacements on water meters
14. All hands meeting in San Andreas
15. 10 Leaks Pending Repair.

West Point Distribution System:

SERVICE LINE WORK

1. 3'' clay valve @ Willseyville pump station
2. 1'' cur stop @ 130 Main Street
3. 1'' wrap around @ 562 Barney Way
4. 1'' wrap around @ 701 Barney way

MAIN LINE WORK

None during this period

ADDITIONAL WORK

1. Greased Pumps
2. Found and dug up valve on Iris Way
3. Set new boxes @73 A&B Main st (got ran over) installed new Nodes
4. Set new boxes @ 130 &145 Mian st (got ran over)
5. Installed 4'' Ballard @ 130 & 145 Main st to prevent meter boxes getting ran over again
6. Commissioned meters and nodes with ethe help of Mike D
7. USA's throughout distribution system
8. Weekly tank checks
9. Weekly flow meter checks
10. Weekly lift station checks
11. Installed new Knox Boxes in a permanent place at WTP and at WWTP Fire Dept approved
12. Covered in Copper- helped pump LS on Lakeshore and did USAs

Electrical:

1. Troubleshot and repaired Copper Cove lift station #4 going into backup condition.
2. After hours emergency troubleshoot and repair of West Point WTP filter #2 wouldn't run, logic solving locked within the PLC, reprogrammed and added logic to make sure we don't get a high turbidity alarm and shutdown during a flush anymore.
3. Adjusted the new pressure gauge psi display for filter #2 per the plant operator. West Point WTP.
4. Troubleshot and repaired Southworth effluent pump controls, starter chattering, believed a float was hung up, moved float tree and tested auto function of pumps.
5. Troubleshot backwash return pump #2 tripping at Jenny Lind WTP, checked amp draw, within spec, added power monitor logger.
6. Troubleshot and repaired Southworth effluent pump control again after another report of starter chatter, replaced all floats, tested auto function of pumps.
7. Used remote SCADA access to add time delays for Copper Cove lift station #7 comm fail and WWTP power fail alarms, to prevent erroneous alarm notifications.
8. Performed multiple electrical system locates in the Copper Cove service area.
9. Troubleshot and repaired the Ewon Cosy remote SCADA security appliance at La Contenta WWTP.
10. Used remote SCADA access to reboot the SCADA 1&2 machines at La Contenta WWTP.
11. Ran the pumps at the base of the dam at Copper Cove WWTP pond #6 backwards per the plant operators to backwash debris out of the grizzly pump intake.
12. Troubleshot the level transducer at Copper Cove B-Tank, the feed water line to the unit was blown off, repaired line
13. Repaired remote SCADA access on the Ovevo computer at Vallecito WWTP, had the plant operator reboot the computer for me.
14. Ran new underground conduit for sample water, power and signal for the relocation of instrumentation due to the fire at West Point WTP.
15. Installed a new UVT controller at the Forest Meadows WWTP UV system.
16. Unwired an air compressor at FMWWTP, so mechanical staff can remove it and install a new unit.
17. Replaced failed ANR 120-90 mixed I/O base at Southworth WWTP.
18. Wired in/tested a new air compressor at Forest Meadows WWTP.
19. Worked with mechanical staff to adjust the pressure switches on new air compressor at Forest Meadows WWTP.

20. Wired in/tested new aerator at Forest Meadows WWTP.
21. Troubleshot and repaired the mag-meter at Lakemont pump station, totalizer stuck at 999999k gallons, totalizer was maxed out, reset totalizer and notified operations staff.
22. Troubleshot and repaired the compressor alternator controls at Forest Meadows WWTP, the on/off settings in the pressure switches were identical, changed the on/off of compressor #1 to a different value than compressor #2 which remedied the problem.
23. Installed 4' ballast bypass LED lamps in the bathroom at Jenny Lind WTP.
24. Wired in/tested new water heater in the rental house on Silver Rapids Road in Valley Springs
25. Worked on the West Point SCADA system, added John Brown to the call out list before Scott G's vacation
26. Performed a meter calibration and set the proper date and time in the automatic transfer switch at Copper Cove B-Tank.
27. Tested the incoming voltage at Copper Cove B-Tank with the pumps running and not running to determine voltage drawdown.
28. Adjusted the pressure transducer at Copper Cove B-Tank to read properly.
29. Hooked up trailer mounted generator at Reeds Turnpike pump station during a power outage due to the Aero fire.
30. Checked Copper Tank, had a telemetry radio communication failure due to the power outage caused by the Aero fire, conditions were too smokey, had to revisit later.
31. Checked numerous lift stations for level and proper function during the Aero fire power outage event.
32. After hours emergency troubleshoot and repair of Copper Cove lift station #8, pump fail to start alarm, had to adjust the generator voltage to the proper level.
33. Checked generator function of the tow-behind generator at Reeds Turnpike pump station during the prolonged Aero fire power outage.
34. Hooked up tow behind generator at the C-Tank master polling site in Copper Cove, after the existing standby generator failed completely.
35. Troubleshot and repaired the solar backup system during the Aero fire at Copper Tank, swapped batteries and restored telemetry radio communications.
36. Went back to C-Tank after the Aero fire power outage and hooked the automatic start function up on the tow behind generator to the automatic transfer switch.
37. Troubleshot Copper Cove lift station #12 pump fail to start during Aero fire power outage, only one pump runs while on generator power by design
38. Checked Copper Cove lift station #8, #9, #10, and #11 for proper function during the Aero fire power outage
39. After hours portable generator failure at Reeds Turnpike during the Aero fire power outage, generator was out of fuel.
40. Monitored fire hydrants during the Aero fire event per operations staff direction.
41. Relocated portable trailer mounted standby generator to Valley Springs during a fire event near the 602-Tank site
42. Unwired and removed trailer mounted portable generator from Reeds Turnpike pump station after PG&E power was restored at that location.
43. Troubleshot a pump failure alarm at Copper Cove B-Tank pump station during the Aero fire event, upon arrival pump working as it should.
44. Added new employees to the Copper Cove SCADA system and alarm call out lists.
45. Troubleshot a pump failure at Copper Cove B-Tank pump station again, replaced a failed micro switch on the stem of the Cla-Val.
46. Added employees to the M2web remote SCADA access system for the Copper Cove WTP.
47. Had another pump failure at Copper Cove B-Tank pump station after PG&E power was restored following the Aero fire event, found that PG&E had a major phase imbalance, PG&E replaced the pole mounted transformer.
48. Repaired the alarm call out pipeline within the new Ignition SCADA system at Copper Cove WTP.
49. Added time delays to Copper Cove WWTP headworks alarms in the SCADA system to prevent erroneous alarm notifications.
50. Installed 4' LED ballast bypassing lamps in the indoor fixtures at the Sawmill pump station in Ebbetts Pass.
51. Troubleshot the exhaust fans in the Sawmill pump station room, ordered a motor and thermostats to replace failed components. Ebbetts Pass.
52. Replaced a failed level transducer in the Meadowmont tank after failure of the old unit, tested new unit for accuracy. Arnold.
53. Troubleshot Jenny Lind WTP backwash return pump #2 after another failure, found a burnt overload unit on the starter, ordered replacement.
54. Attended factory testing at Tesco for the new control panels for Copper Cove lift station #6 and #15.
55. Worked with A-TEEM to complete the new SCADA system programming for the Sheep Ranch WTP.

56. Worked with Gold Electric staff at West Point WTP new filter project to determine conduit tag labels for project completion.
57. Worked on installing new ozone generators at Copper Cove WTP, installed and anchored units.
58. Troubleshot level transducer for Clearwell #1 at West Point WTP, suspect bad wire underground, set plant to run off of Clearwell #2 level.
59. Answered questions for electrical contractor at Copper Cover lift station #15 for the PG&E entrance.
60. Answered questions for the electrical contractor at Copper Cove lift station #6 about the PG&E transformer pad installation.

Collections:

1. SSO online reporting completed
2. Weekly lift station inspections completed
3. Monthly dry can inspections completed
4. Monthly vehicle inspections completed
5. Continued checking USA's district wide
6. Found and exposed manholes in the Copper Valley golf course for TV contractor, for Copper Valley - questions regarding possible force main connection.
7. Changed activated carbon in manhole filters along Lower Cross-Country force main easement (Copper).
8. Repaired wash out over main line on Moccasin Lane (copper) caused by seasonal creek.
9. Called out to 2285 Cedar Lane in Arnold due to underground electric hitting main line. 6-4-2024
10. Attended the All-hands meeting.
11. Helped the Ebbetts Pass Distribution Crew with leaks.
12. Potholed for LS 2 force main in Arnold for PGE replacement work.
13. Helped with LS monitoring for LS 6 bypass pump move for PGE transformer placement (Copper).
14. Met with West Point fire to show them force main easement for fire line clearing.
15. Pumped and cleaned LS's 19&20 in Copper.
16. Participated in Collections interviews. 6-13-24
17. Lowered the service at 39 Sanguinetti in Copper for finished grade.
18. Pumped and cleaned the head works at the Copper Cove WWTP.
19. Hydro'd from Blagen Rd. To LS 3 in Arnold. (Bi yearly maintenance).
20. Pumped septic tank at the White Pines Barn.
21. Called out to 7001 Elizabeth Ct. (La Contenta). The check valve had come apart.
22. Hydro'd the main below Fire Department in West Point.
23. Called out to 4087 Ponderosa Drive. Sanitary T was plugged.
24. Worked on issues caused by the Aero fire. 6-17 through 6-18-24
25. Called out to 491 Main Street in West Point for a backup at the tank. No issues were found with CCWD side.
26. Called out to 3528 Vallecito bypass due to a septic tank effluent line being broken. Had to dig the line up with an excavator and repair a 4' section of the line that had become separated.
27. Worked on catching up from Aero fire issues. 6-20-24
28. Prepped for the LS 15 shut down and tie-in in Copper.
29. Called out to 85 St. Andrew's in La Contenta for a back up into the house. The customer had a blockage on their side.
30. Pumped down LS 15 in Copper for the new bypass.
31. Called out to the Cal Fire station in West Point. The Septic tank was backing up. The center baffle was plugged with rags.
32. Called out to 1288 Skunk Ranch Rd. in Indian Rock. The Septic alarm was going off. Low level float was going bad.
33. Called to LS 2 in Copper. Pump 2 had tripped out. Reset.

Construction

1. Supported all Distribution Crews on leak repair efforts District-wide.
2. Supported the Collections Crew with the completion of work efforts District-wide.
3. On-going rehabilitation of the road to our Indian Rock Wastewater Treatment Plants. FEMA funded.
4. Replaced the hydrant at Blake & Berkesey and installed a guard valve.
5. Replaced the hydrant at Cane and Bartelink and installed a guard valve.

6. Washed and greased equipment in Vallecito.
7. Met with the C&M Manager and the property owner at the Slurry line to discuss the installation of the customer's new meter.
8. Tapped the Slurry line and installed the meter.
9. Dug up and repaired the sewer line on Vallecito Bypass Road. Worked with the Collections Crew.
10. Nighttime fire hydrant replacement on Copper Cove Drive with the Copper Cove Distribution Crew.
11. Fixed leak on Little John Road with the Copper Cove Distribution Crew.
12. Fixed a 6-inch main break in Big Trees Village with the Ebbetts Pass Distribution Crew.

Mechanical

1. District-wide generator checks.
2. Extensive work during the Aero Fire ensuring generator operations in Copperopolis and carrying out other issues as necessary.
3. Accompanied JPIAs inspection of our compressed-air tanks in the White Pines Barn. Positive inspection.
4. Mounted, tested, and scheduled the calibration of the District's new tire balancer.
5. Welcomed back our new (previous) mechanic, Benton Frye.
6. Troubleshot left-rear wheel bearing on Veh #717 (2016 F350) – repaired and placed back into service.
7. Participated in Cal-Val training.
8. Troubleshot leaks on Backhoe B-04. Worked to resolve fuel injection issues and repaired the engine front cover.
9. Patched holes in the roof of Jenny Lind's A-Tank.
10. Rebuilt the steering cylinder on Backhoe B-04
11. Mobile MMS Training and worked on adding assets to the software.
12. Repaired the engines of two compactors.
13. Facilitated recall repairs to Veh's #727 (2019 F350) and #759 (2023 Dodge 5500)
14. Troubleshot the B Tank Generator in Copperopolis. Continued over-temp. Found a small leak in the radiator. Scheduled for repair. Cleaned the radiator and was able to reduce overall temp to ensure operation.
15. Multiple pump 1 failures at the B Tank Pump Station. Worked with Copper Distribution and Electrical to diagnose poor power coming into the B Tank site.
16. Attached accessories to the new Jenny Lind Distribution Crew Truck. Crane, beacon, etc.
17. Replaced the DEF Tank on truck 592 (2011 F350).
18. Serviced and repaired Copper Distribution's trailer-mounted compressor and jackhammer.
19. Repaired the pony motor and corrected hydro-excavation system issues on VEH 135 (2013 VacCon).
20. Connor's Main Lift Station auxiliary fault. Cleaned the photo-eye and placed back into service.
21. Diagnosed high vibration on pump 1 at the Big Trees 1 Pump Station.

Utility:

1. Resumed Service lateral replacements on Baldwin in Rancho Calaveras.
2. Assisted Crews with leak repair.
3. Assisted the Jenny Lind Distribution Crew with valve installations.
4. On-going work with a Bad Elf GIS locating device.

Prepared By: Damon Wyckoff, Director of Operations