CARMEL AREA WASTEWATER DISTRICT

Regular Board Meeting

3945 Rio Road, Carmel, CA 93923

May 26, 2022
Thursday
9:00AM

Carmel Area Wastewater District

P.O. Box 221428 Carmel California 93922 ❖ (831) 624-1248 ❖ FAX (831) 624-0811

Barbara Buikema
General Manager
Ed Waggoner
Operations Superintendent
Robert R. Wellington
Legal Counsel

Board of Directors
Gregory D'Ambrosio
Michael K. Rachel
Robert Siegfried
Charlotte F. Townsend
Ken White

COVID-19 Public Meeting Procedures

As per the Governor's Executive Order #N-08-21 (June 11, 2021) the following will be in effect until September 30, 2021.

- CAWD will not make a physical location available from which members of the public may observe and offer public comment.
- All CAWD public meetings shall take place via teleconferencing and shall be posted on the District website (www.cawd.org) and allow members of the public to attend and address the meeting electronically.
- The District will give advance notice of all teleconference meeting as prescribed by the Brown Act
- The public may listen to the meeting by logging on to the District website and clicking on the Virtual Webinar.
- Public comment may be submitted 24 hours prior to the meeting by clicking on the "Public Comment Form" listed directly beneath the Virtual Webinar on our website. If received within 24 hours of the meeting we will ensure that a response is given at the meeting. All participants have access during the meeting to be recognized and utilize the platform to speak. Please use the virtual "raised hand" to be acknowledged.
- The District is requesting that the public submit comments at least 24 hours in advance of the scheduled meeting to enable staff to post all comment on the District web site. Any comment received after this time will be posted after the Board meeting.
- The teleconference Board meeting will require that all voting is done by roll call
- The teleconference Board meeting will require that speakers identify themselves prior to addressing other attendees in order to facilitate the flow of the meeting and minimize confusion.
- The District advises that the public refer to our website periodically for updates regarding the District and Board activity.

CARMEL AREA WASTEWATER DISTRICT
REGULAR BOARD MEETING MINUTES
Thursday, 9:00 a.m., April 28, 2022
Via Teleconference Webinar

CALL TO ORDER - ROLL CALL - The meeting was called to order at 8:59 a.m.

Present: Directors: Mike Rachel, Charlotte Townsend and President Ken White, President Pro-Tem Robert Siegfried
Absent: Director Greg D'Ambrosio
A quorum was present.

Others: Barbara Buikema, General Manager, Carmel Area Wastewater District (CAWD or District)
Rachél Lather, Principal Engineer, CAWD
Patrick Treanor, Plant Engineer, CAWD
Ed Waggoner, Plant Superintendent, CAWD
Chris Foley, Maintenance Superintendent, CAWD
Daryl Lauer, Collections Superintendent, CAWD
Domine Barringer, Board Secretary, CAWD
Kristina Pacheco, Board Secretary Pro-Tem, CAWD
Robert Wellington, Wellington Law Offices, CAWD Legal Counsel
Jeffrey Froke, Board Member of Pebble Beach Community Services District (PBCSD)
Mike Niccum, General Manager, PBCSD
Zander Ford, Corona Road Assessment District Resident
Kate Daniels, Corona Road Assessment District Resident
Lillian Hull, Corona Road Assessment District Resident
Hunter Leighton, District member

1. ***Public Comments:*** No public comments

2. ***Agenda Changes:***

A. Item 24 of the Agenda was moved forward by the Board for discussion/action prior to any other items.

(Agenda Item No. 24) Corona Road Assessment District Project #18-21 – Report by Rachél Lather

The report was presented to the Board for Resolution 2022-22 & Resolution 2022-23. Zander Ford, Kate Daniels and Lillian Hull addressed the Board requesting the District advance funds in the amount of $4,500 in order to advance the formation of an assessment district without their group having to go door to door to obtain that amount from residents of the proposed assessment district. The Board discussed the item and took action.

Board Action

Director Siegfried made a motion to advance the funds and Director Rachel seconded that motion. The remaining attending directors accepted the choice to advance the $4,500 amount necessary to move the Corona Road Assessment District Project forward.

Director Siegfried made a motion to approve an amended Resolution 2022-22 and Resolution 2022-23 as presented. Director Rachel seconded the motion and following a roll call vote, the Board, with one absence, approved both Resolutions. Amended Resolution 2022-22 authorizes the General Manager to use District funds to pay for an amendment to the engineering contract for the formation of a sewer assessment district. Resolution 2022-23 authorizes the General Manager to amend the contract with Monterey Bay Engineers for services for the Corona Road Assessment District Project #18-21 for $4,500 additional funds.

B. Insertion of the District's vote for an Alternate Special District Representative to the Local Agency Formation Commission (LAFCO) of Monterey County – Report by Barbara Buikema

Board Action

Director Siegfried made a motion to vote for Gail Morton to the seat as Alternate Representative to LAFCO and President White seconded the motion. Following a roll call vote, with one absence, the Board approved the vote for Gail Morton.

3. ***Employee Award:***

Ed Waggoner, District Plant Superintendent, detailed the award that was given to District Laboratory Analyst, Fanny Mui, as Lab Person of the Year from the California Water Environment Association (CWEA) Monterey Bay Section.

4. ***Employee Award:***

Daryl Lauer, District Collections Superintendent, detailed the award that was given to District Collections' workers Barry Blevins and Robert Bowman, for Collection System Gimmicks & Gadgets given by the CWEA Monterey Bay Section for their gadget "The Bridal". Barry and Robert also demonstrated the use of The Bridal for the Board.

CONSENT CALENDAR: APPROVAL OF MINUTES, FINANCIAL STATEMENTS AND MONTHLY REPORTS

Consists of routine items for which Board approval can be taken with a single motion and vote.

Board Action

A motion to receive and approve the consent agenda was made by Director Rachel and seconded by Director Siegfried. After a Roll Call vote, the Board, with one absence, received and approved the following Consent Calendar/Agenda items:

5. Regular Board Meeting Minutes of March 31, 2022; Ad Hoc Construction Committee Meeting Minutes of April 6, 2022; and the Special Board Retreat Meeting Minutes of April 20, 2022.

6. Bank Statement Review by Hayashi & Wayland

7. Schedule of Cash Receipts & Disbursements

8. Register of Disbursements - Carmel Area Wastewater District
9. Register of Disbursements – CAWD/PBCSD Reclamation Project
10. Financial Statements and Supplementary Schedules
11. Collection System Superintendent's Report
12. Safety and Regulatory Compliance Report
13. Treatment Facility Operations Report
14. Laboratory/Environmental Compliance Report
15. Capital and Non-Capital Projects Report/Implementation Plan
16. Project Summaries
17. Plant Operations Report
18. Maintenance Projects Report
19. General Engineering Monthly Report

ACTION ITEMS BEFORE THE BOARD

These items are acted upon in the following sequence: (1) Staff Report (2) Board Questions to Staff (3) Public Comments, and (4) Board Discussion, Vote and Action.

RESOLUTIONS

20. **Resolution No. 2022-18**; Report by Rachél Lather

Board Action

A motion to approve the resolution was made by Director Rachel and seconded by Director Siegfried. Following a Roll Call vote, the Board, with one absence, passed Resolution 2022-18, accepting the lowest responsible bid for the "2022 Manhole Frame & Lid Replacement Project" #22-02 and awarding the contract to Coastal Paving and Excavating for $55,700 with change order amounts not to exceed 5% of the contract amount.

21. **Resolution No. 2022-19**; Report by Rachél Lather

Board Action

A motion to approve the resolution was made by Director Rachel and seconded by Director Siegfried. Following a Roll Call vote, the Board, with one absence, passed Resolution 2022-19, accepting the completed project and directing the General Manager to file a Notice of Completion for the 2021 Pipeline Spot Repairs Project #21-02.

22. **Resolution No. 2022-20**; Report by Barbara Buikema

Board Action

A motion to approve the resolution was made by Director Siegfried and seconded by Director Rachel. Following a Roll Call vote, the Board, with one absence, passed Resolution 2022-20, proclaiming a local emergency, ratifying the Proclamation of a State of Emergency by Governor's Order #N-25-20, and authorizing remote teleconference meetings of the legislative bodies of CAWD for the period of May 1, 2022, through May 30, 2022.

23. **Resolution No. 2022-21**; Report by Barbara Buikema

Board Action

A motion to approve the resolution was made by Director Rachel and seconded by President White. Following a Roll Call vote, the Board, with one absence, passed Resolution 2022-21, ordering an election, requesting the County Elections Department conduct the election, and requesting consolidation of the election.

COMMUNICATIONS

24. General Manager Report - oral report

The report included an update on the CRFREE project. During the discussion, Director Siegfried requested a legal opinion from District Counsel regarding Public Records Act requests for Worker Comp experience mod data.

OTHER ITEMS BEFORE THE BOARD

25. Accessory Dwelling Units and CAWD Policy for Connection Fees and User Rate Fees – Report by Barbara Buikema

The report was presented to the Board.

Board Action

After extensive discussion, Director Siegfried made a motion to accept the amended District Accessory Dwelling Unit (ADU) Policy and President White seconded the motion. Following a Roll Call vote, the Board, with one absence, approved the policy with the addition that the District create and maintain a listing/record of all ADU structures within the District.

INFORMATION/DISCUSSION ITEMS

26. April update of the WWTP Elec/Mech Rehab and Sludge Holding Tank Replacement Project #18-01– Report by Patrick Treanor

This report is for information only and no action was taken.

27. Summary of the March 25, 2022, PBCSD Board Meeting – Report by Barbara Buikema

This report is for information only and no action was taken.

28. Summary of the April 19, 2022, Special District Association of Monterey County Meeting – Report by Barbara Buikema

This report is for information only and no action was taken.

29. Announcements on subjects of interest to the Board made by members of the Board or Staff

- Director Siegfried is scheduled to attend the April 29, 2022, PBCSD Regular Board meeting and Director Townsend is scheduled to attend the May 27, 2022, meeting.
- Director Rachel is scheduled to attend the July 19, 2022, meeting of the Special Districts Association (SDA) of Monterey County meeting in place of Director D'Ambrosio.
- President White and Director Townsend are scheduled to attend the Reclamation Management Committee meeting on May 10, 2022.

30. ADJOURNMENT

There being no further business to come before the Board, the President adjourned the meeting at 10:13 a.m. The next Regular Meeting will be held at 9:00 a.m., Thursday, May 26, 2022, or an alternate acceptable date, via teleconference webinar.

As Reported To:

_____

Domine Barringer, Secretary to the Board

APPROVED:

_____

Ken White, President

CARMEL AREA WASTEWATER DISTRICT (*CAWD*)

PENSION COMMITTEE MEETING MINUTES

May 17, 2022, Tuesday, 2:30 p.m.

Via teleconference webinar

CALL TO ORDER - ROLL CALL:

The meeting was called to order at 2:35 p.m.

Present: President Pro Tem Robert Siegfried, Committee member
Barbara Buikema, General Manager
Robert Wellington, Legal Counsel
Bill Hastie, Hastie Financial Group
Haley Hitchman, Hastie Financial Group

Absent: Director Michael Rachel, Committee member

Appearances/Public Comments: None

Agenda Changes: **None**

AGENDA ITEMS:

The committee discussed the following agenda items:

1. 1st Quarter Review
2. Section 115 Review

ADJOURNMENT: *There being no further business to come before the Committee, the meeting concluded at 3:20 p.m. The next Regular Board Meeting will be held at 9:00 a.m., Thursday, May 26, 2022, or an alternate acceptable date, via teleconference webinar. The teleconference webinar is hosted through Zoom, and you may receive access by visiting our website homepage, www.cawd.org, calling the District office at 831-624-1248 or via email at downstream@cawd.org.*

As Reported To:

_____

Barbara Buikema, General Manager

APPROVED:

_____

Ken White, President

HAYASHI | WAYLAND

INDEPENDENT ACCOUNTANTS' REPORT

May 17, 2022

To the Board of Directors
Carmel Area Wastewater District

We have performed the procedures enumerated below, which were agreed to by Carmel Area Wastewater District (CAWD), solely to assist you in connection with a determination as to whether there were differences in the Company's recorded cash disbursements and recorded cash receipts for the month of April 2022. CAWD is responsible for its cash disbursements and cash receipts records. This agreed-upon procedures engagement was conducted in accordance with attestation standards established by the American Institute of Certified Public Accountants. The sufficiency of these procedures is solely the responsibility of those parties specified in this report. Consequently, we make no representation regarding the sufficiency of the procedures described below either for the purpose for which this report has been requested or for any other purpose.

We have completed our review of your bank reconciliations for the Monterey County checking account, the Chase Bank O&M account and the Chase Bank payroll account. This service is limited in scope and is neither designed nor intended to deter or discover fraud, embezzlements or any other irregularities.

The procedures we performed and the associated findings are as follows:

(1) We reviewed individual checks (or electronic images of individual checks or substitute checks). This procedure did not reveal any significant differences.
(2) We examined the signatures on each check and compared them to a copy of the signature card on file with your bank to determine if the correct authorized people have signed the checks (we are not handwriting or forgery experts). This procedure revealed a missing second signature for check 2826.
(3) We examined the payee on the check and matched it to the payee name appearing in your cash disbursements journal. This procedure did not reveal any differences.
(4) We matched interbank account transfers. This procedure did not reveal any differences.

We were not engaged to and did not conduct an audit, the objective of which would be the expression of an opinion on the cash disbursements records or cash receipts records, accordingly, we do not express such an opinion. Had we performed additional procedures, other matters might have come to our attention that would have been reported to you.

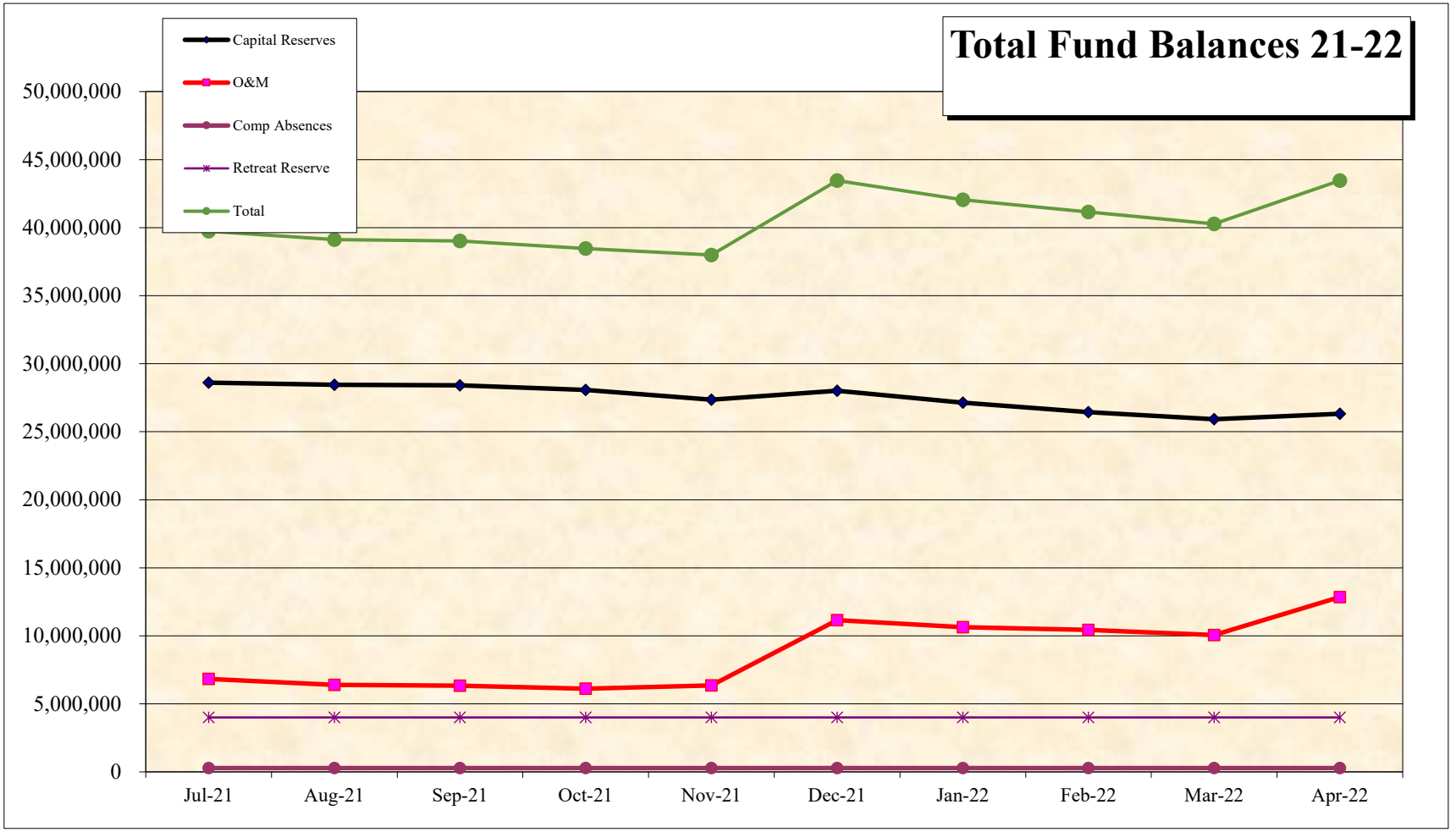
This report is intended solely for the information and use of the Board of Directors of Carmel Area Wastewater District, and is not intended to be and should not be used by anyone other than these specified parties.

Robert Lee, CPA
Partner
Hayashi Wayland

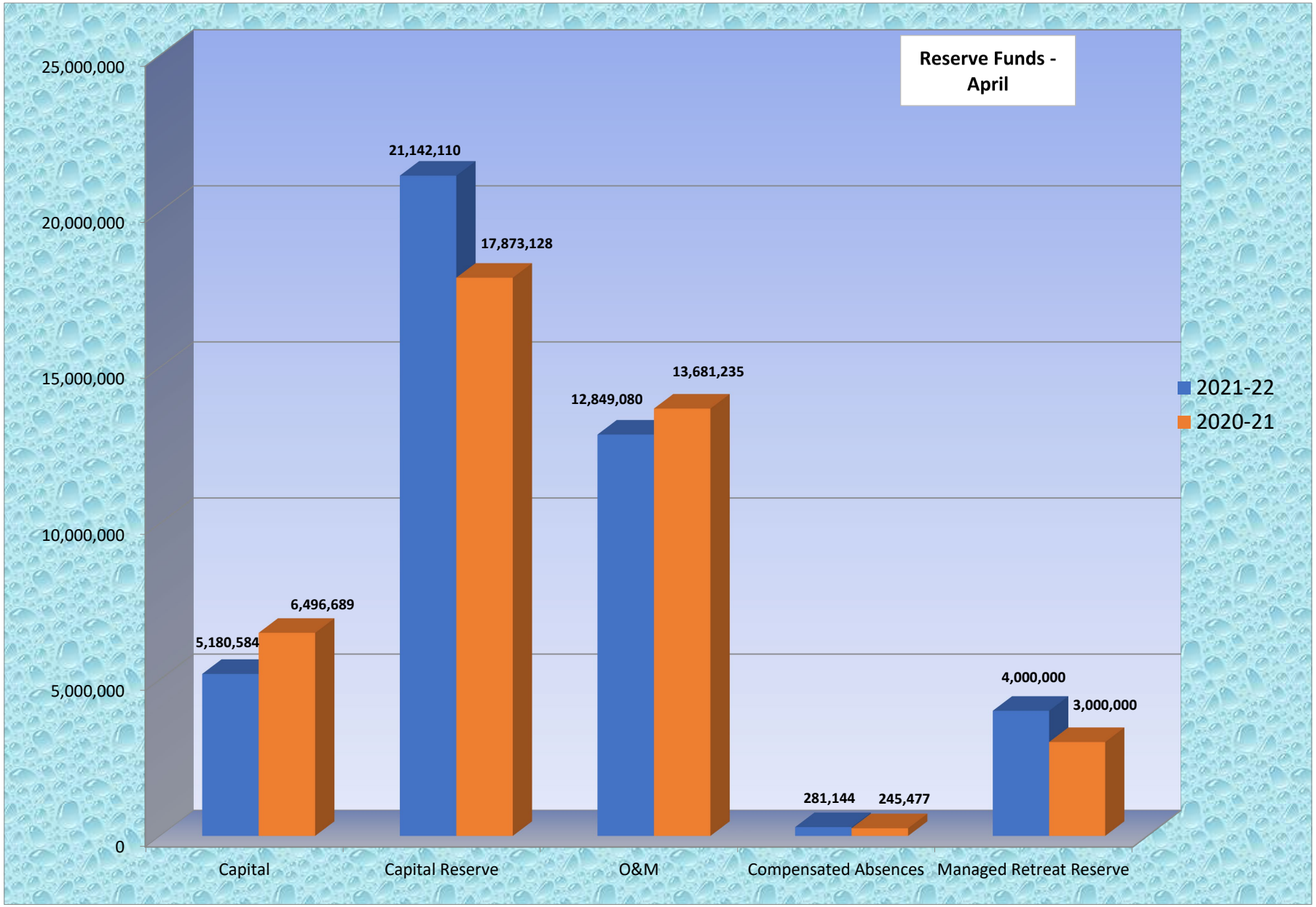
Cc: Mr. Ken White, President

Carmel Area Wastewater District
Schedule of Cash Receipts and Disbursements - APRIL 2022

	Capital Fund	Capital Improvement Reserve	General O & M Fund	Compensated Accruals Reserve	Defend or Managed Retreat Reserve	COUNTY Total Fund Balance	Chase Bank O & M Balance	Chase Bank PR Balance	L.A.I.F. Balance
BALANCE BEGINNING OF MONTH	$5,589,641	$20,329,367	$10,066,609	$281,144	$4,000,000	$40,266,761	$427,958	$6,022	$1,197,285
Receipts:									
User Fees			2,965,846						
Property Taxes		812,744							
PBCSD Treatment Fees							115,000		
Reclamation O & M reimbursement							73,281		
Reclamation capital billing									
Permits							5,100		
PBCSD capital billing									
Other misc. revenue							16,681		
Interest income			33,043						943
Connection Fees							7,533		
CCLEAN receipts							7,500		
CRFree Project grant funds									
Sale of dump truck									
Hatton Canyon Grant Funds									
Void checks-replace lost check							1,400		
Total Receipts	0	812,744	2,998,889	0	0	3,811,633	226,495	0	943
Fund Transfers:									
Transfers to Chase Bank O&M	(409,058)		(190,942)				600,000		
Transfers to Chase Bank PR							(235,000)	235,000	
Transfer to Defend or Managed Retreat Fund									
Intra-fund transfers for capital expenditures									
Rebalance Capital and O&M Reserves									
Total Transfers	(409,058)	0	(190,942)	0	0	(600,000)	365,000	235,000	0
Disbursements:									
Operations and capital							616,116		
Payroll & payroll taxes								234,595	
Employee Dental reimbursements							154		
CALPERS EFT							36,079		
CAWD SAM pension EFT							0		
CAWD pension loans EFT							587		
Home Depot EFT							300		
US Bank EFT							3,275		
Deferred comp contributions EFT							14,065	0	
PEHP contributions EFT							3,251	0	
Bank/ADP fees							0	537	
Highlands Bond Debt Service Payment									
Annual County admin billing fee			25,476						
Wage garnishment payment									
GASB 68 report fee & SSA 218 fee									
Total Disbursements	0	0	25,476	0	0	25,476	673,827	235,132	0
BALANCE END OF MONTH	5,180,584	21,142,110	12,849,080	281,144	4,000,000	**43,452,918**	**345,626**	**5,890**	**1,198,228**



Capital Reserve + O&M + O&M Reserve + Compensated Absences Reserve = Total Fund held in County


Reserve Funds - April
25,000,000
20,000,000
15,000,000
10,000,000
5,000,000
0
5,180,584
6,496,689
21,142,110
17,873,128
12,849,080
13,681,235
281,144
245,477
4,000,000
3,000,000
Capital
Capital Reserve
O&M
Compensated Absences
Managed Retreat Reserve
2021-22
2020-21

Carmel Area Wastewater District
Disbursements
Apr-22

Date	Check	Vendor	Description	Amount
04/01/22	2860	American Fidelity Assurance	Employee insurance premiums	586.16
04/01/22	2861	Equitable Financial Life Insurance	Life insurance, long-term and short-term disability premiums	2,461.68
04/01/22	2862	First Alarm	Quarterly alarm billing for admin and Plant	578.25
04/01/22	2863	Fisher Scientific	Lab supplies	875.14
04/01/22	2864	MSDSonline DBA VelocityEHS	Annual subscription for MSDS sheets	1,697.40
04/01/22	2865	Patelco Credit Union	Health savings accounts contributions	6,247.88
04/01/22	2866	Pacific Gas & Electric	Monthly service	3,927.97
04/01/22	2867	Scarborough Lumber & Building	Operating supplies	109.47
04/01/22	2868	Smitty's Janitorial	Monthly service	1,110.00
04/01/22	2869	Vision Service Plan	Vision insurance premium	595.35
04/01/22	2870	Chris Davis	New golf cart for Plant	5,800.00
04/14/22	2871	Matthews Mechanical	Finish drive unit replaced, install dewatering eyewash station, remove trip hazards, rebuild influent pump and new headworks valves	19,194.38
04/18/22	2872	Amazon Capital Services	Small tools	229.83
04/18/22	2873	American Fidelity Assurance Company	Flex accounts	163.55
04/18/22	2874	AT&T Mobility	Cell service	668.86
04/18/22	2875	AT&T CALNET 3	Plant fiber	592.06
04/18/22	2876	AT&T	Voice routing	48.98
04/18/22	2877	Bay Area Barricade Service	Traffic cones	3,112.05
04/18/22	2878	Beth Ingram	Reimbursement for job postings and training registrations	1,386.50
04/18/22	2879	Biobot Analytics	Influent sample testing	1,400.00
04/18/22	2880	Cal-Am Water	Monthly service	1,270.39
04/18/22	2881	Carmel Marina Corporation	Plant rolloffs and admin garbage	984.13
04/18/22	2882	Carmel Pine Cone	Carmel Meadows Gravity Sewer Project #19-03 **(CAPITAL $180.00)** and other legal notices	513.00
04/18/22	2883	CAWD\PBSCD Reclamation Project	Reimbursement for tertiary lab PG&E	521.99
04/18/22	2884	Cintas Corporation #63D	Laundry service	758.43
04/18/22	2885	Clark Bros., Inc.	Elec/Mech Rehab and Holding Tank Project #18-01 **(CAPITAL),** Progress payment #6	242,280.00
04/18/22	2886	Coastal Paving & Excavating	Dougherty Place emergency line repair **(CAPITAL)**	2,670.40
04/18/22	2887	Comcast	Pump station internet	537.35
04/18/22	2888	Currie Engineers	Elec/Mech Rehab and Holding Tank Project #18-01 **(CAPITAL)**	57,135.00
04/18/22	2889	Datco Services	Quarterly service fees	195.00
04/18/22	2890	Del Monte Gardeners	Easement clearings	5,000.00
04/18/22	2891	Fastenal Company	Operating supplies	1,693.21
04/18/22	2892	FGL Environmental	Sample analysis	2,082.00
04/18/22	2893	Gavilan/Salinas Crane & Rigging	Crane used to pull conveyor	675.00

Carmel Area Wastewater District
Disbursements
Apr-22

Date	Check	Vendor	Description	Amount
04/18/22	2894	Grainger	Document boxes	344.69
04/18/22	2895	Granite Rock Company	Plaster sand	221.01
04/18/22	2896	Green Infrastructure Design	Web GIS mapping for CAWD GIS	960.00
04/18/22	2897	Hayashi & Wayland Accounting	Bank reconciliation oversight	450.00
04/18/22	2898	ICON Cloud Solutions	Telephone service	587.50
04/18/22	2899	Idexx Laboratories	Lab supplies	2,013.11
04/18/22	2900	Karla Cristi-**VOID**	Retroactive pay and dental **($200.00)-VOID**	0.00
04/18/22	2901	Kennedy/Jenks Consultants	CRFREE Mitigation Pipeline Undergrounding project #19-21 and Elec/Mech Rehab and Holding Tank Project #18-01 **(CAPITAL $22,052.50)**	24,987.50
04/18/22	2902	Liberty Composting	Sludge hauling	7,879.11
04/18/22	2903	MBS Business Systems	Admin copier billing	367.58
04/18/22	2904	McMaster-Carr	Operating supplies	25.99
04/18/22	2905	Mocon Corporation	Dougherty Place emergency line repair **(CAPITAL)**	84,740.00
04/18/22	2906	Monterey Regional Waste Mgmt.	Disposal of flammable liquids and epoxies	269.00
04/18/22	2907	Motion Industries	Pneumatic parts and rebuild kits	1,312.91
04/18/22	2908	Murphy Austin Adams Schoenfeld LLP	Legal services-Monterey County option agreement-CRFREE Mitigation Pipeline Undergrounding project #19-21	5,000.00
04/18/22	2909	Peninsula Welding & Medical Supply	Non-liquid cylinder rentals	77.40
04/18/22	2910	Pacific Gas & Electric	Monthly service	29,916.15
04/18/22	2911	Pure Water	Monthly service	176.50
04/18/22	2912	Quill LLC	Office supplies	110.77
04/18/22	2913	Raymond De Ocampo	Dental	154.00
04/18/22	2914	Streamline	Website maintenance	400.00
04/18/22	2915	Toro Petroleum	Gas tank hose	840.81
04/18/22	2916	Town & Country Gardening	Monthly service	650.00
04/18/22	2917	Trowbridge Enterprises	Office chair	431.43
04/18/22	2918	Univar Solutions USA Inc.	Sodium bisulfate and hypochlorite	11,919.32
04/18/22	2919	Vision Communications	New radio	1,041.88
04/18/22	2920	Weco Industries	Rod guide hose with couplings	1,173.24
04/26/22	2921	Culligan Water Conditioning	C&I exchange service for the lab	18.35
04/26/22	2922	Image Source	Plant copier	69.73
04/26/22	2923	Public Agency Coalition Enterprise	Health insurance premium	35,520.09
04/28/22	2924	Ann Muraski	Spring/Summer newsletter	13,367.50
04/28/22	2925	Applied Marine Sciences	March CCLEAN and Evaluating Ag. Management Practices	24,141.28
04/28/22	2926	Monterey County Clerk	Notice of Completion fee for Pipeline Spot Repair Project	2.00
				616,270.26

CAWD/PBCSD Reclamation Project
Disbursements
Apr-22

Date	Check	Vendor	Description	Amount
04/01/22	586	Fisher Scientific	Lab supplies	291.71
04/01/22	587	Frisch Engineering	CIP-SCADA Migration Project #21-09 **(CAPITAL)**	1,280.00
04/01/22	588	Harrington Industrial Plastics	Sulfuric Acid Tank Project #18-26 **(CAPITAL)**	1,965.82
04/01/22	589	Pebble Beach Company	Reimbursement for COP interest expense	717.31
04/01/22	590	Pacific Gas & Electric	Tertiary billing	16,666.66
04/01/22	591	Thermo Electron North America	Lab supplies	2,851.35
04/14/22	592	Matthews Mechanical	Eyewash station, annual service on pumps, SCADA Migration Project #21-09 and Sulfuric Acid Tank Project #18-26 **(CAPITAL $4,545.00)**	8,256.40
04/18/22	593	Borges & Mahoney	Preventative maintenance kits, valve kits and belt joints	1,398.41
04/18/22	594	Brenntag Pacific	Ammonium hydroxide	3,828.85
04/18/22	595	Cal-Am Water	Hydrant Meter K monthly service	2,785.53
04/18/22	596	Carmel Area Wastewater District	Reimbursement for Plant O&M	73,281.04
04/18/22	597	FLW, Inc.	Pressure gauges	961.27
04/18/22	598	Grainger	Document boxes	147.73
04/18/22	599	Harrington Industrial Plastics	Ball valve and saddle clamp	163.91
04/18/22	600	Idexx Laboratories	Lab supplies	2,013.10
04/18/22	601	Pebble Beach Company	Bond principal and interest, letter of credit fees current and past and project rep costs	263,397.12
04/18/22	602	Pebble Beach Community Services District	Reimbursement for O&M	45,765.57
04/18/22	603	Pacific Gas & Electric	MF/RO billing	19,014.22
04/18/22	604	Professional Water Technologies	Opticlean-S-45 clean-in-place chemical and Spectraguard360-275G	11,516.64
04/18/22	605	Stifel Nicolaus & Company	Quarterly remarketing fee	1,951.78
04/18/22	606	Thatcher Company of California	Citric acid	14,671.46
04/18/22	607	Trussell Technologies	MF/RO Ops Support project NPDES permit renewal	3,145.00
				476,070.88

Financial Statements and Supplementary Schedules

April 2022

May 26, 2022

Carmel Area Wastewater District
Balance Sheet

April 2022

	ASSETS		
Current Assets			
Cash			
Cash	45,002,662.85		
TOTAL Cash		45,002,662.85	
Other Current Assets			
Other Current Assets	328,765.35		
TOTAL Other Current Assets		328,765.35	
TOTAL Current Assets			45,331,428.20
Fixed Assets			
Land			
Land	308,059.76		
TOTAL Land		308,059.76	
Treatment Structures			
Treatment Structures	70,358,452.24		
TOTAL Treatment Structures		70,358,452.24	
Treatment Equipment			
Treatment Equipment	8,730,143.38		
TOTAL Treatment Equipment		8,730,143.38	
Collection Structures			
Collection Structures	1,238,843.71		
TOTAL Collection Structures		1,238,843.71	
Collection Equipment			
Collection Equipment	1,509,600.36		
TOTAL Collection Equipment		1,509,600.36	
Sewers		13,423,088.18	
Disposal Facilities			
Disposal Facilities	1,643,890.85		
TOTAL Disposal Facilities		1,643,890.85	
Other Fixed Assets			
Other Fixed Assets	4,504,051.96		
TOTAL Other Fixed Assets		4,504,051.96	
Capital Improvement Projects			
Capital Improvement Projects	6,506,203.79		
TOTAL Capital Improvement Projects		6,506,203.79	
Accumulated depreciation		(53,892,952.22)	
TOTAL Fixed Assets			54,329,382.01
Other Assets			
Other Assets		2,501,563.50	
TOTAL Other Assets			2,501,563.50
TOTAL ASSETS			102,162,373.71

Carmel Area Wastewater District
Balance Sheet

April 2022

LIABILITIES		
Current Liabilities		
Current Liabilities	680,324.64	
TOTAL Current Liabilities		680,324.64
Long-Term Liabilities		
Long Term Liabilities	616,536.94	
TOTAL Long-Term Liabilities		616,536.94
TOTAL LIABILITIES		1,296,861.58
NET POSITION		
Net Assets	93,156,112.81	
Year-to-Date Earnings	7,709,399.32	
TOTAL NET POSITION		100,865,512.13
TOTAL LIABILITIES & NET POSITION		102,162,373.71

Carmel Area Wastewater District
Budgeted Income Statement
Year-to-Date Variance, April 2022 - current month, Consolidated by account

	10 Months Ended April 30, 2022	10 Months Ended April 30, 2022 Budget	Variance Fav/<Unf>	% Var
Income				
Revenue	10,937,719.57	10,409,606.30	528,113.27	5.1 %
TOTAL Income	10,937,719.57	10,409,606.30	528,113.27	5.1 %
Adjustments				
Discounts	446.71	0.00	446.71	
TOTAL Adjustments	446.71	0.00	446.71	
******	10,938,166.28	10,409,606.30	528,559.98	5.1 %
****** OPERATING INCOME	10,938,166.28	10,409,606.30	528,559.98	5.1 %
Operating Expenses				
Salaries and Payroll Taxes				
Salaries and Payroll Taxes	3,033,621.81	2,945,477.84	(88,143.97)	-3.0 %
TOTAL Salaries and Payroll Taxes	3,033,621.81	2,945,477.84	(88,143.97)	-3.0 %
Employee Benefits				
Employee Benefits	534,433.45	801,055.00	266,621.55	33.3 %
TOTAL Employee Benefits	534,433.45	801,055.00	266,621.55	33.3 %
Director's Expenses				
Director's Expenses	18,221.64	28,216.00	9,994.36	35.4 %
TOTAL Director's Expenses	18,221.64	28,216.00	9,994.36	35.4 %
Truck and Auto Expenses				
Truck and Auto Expenses	65,913.54	50,924.30	(14,989.24)	-29.4 %
TOTAL Truck and Auto Expenses	65,913.54	50,924.30	(14,989.24)	-29.4 %
General and Administrative				
General and Administrative	303,246.60	623,030.00	319,783.40	51.3 %
TOTAL General and Administrative	303,246.60	623,030.00	319,783.40	51.3 %
Office Expense				
Office Expense	42,841.00	46,112.40	3,271.40	7.1 %
TOTAL Office Expense	42,841.00	46,112.40	3,271.40	7.1 %
Operating Supplies				
Operating Supplies	367,398.69	408,660.20	41,261.51	10.1 %
TOTAL Operating Supplies	367,398.69	408,660.20	41,261.51	10.1 %
Contract Services				
Contract Services	771,348.54	1,102,694.20	331,345.66	30.0 %
TOTAL Contract Services	771,348.54	1,102,694.20	331,345.66	30.0 %

Carmel Area Wastewater District
Budgeted Income Statement
Year-to-Date Variance, April 2022 - current month, Consolidated by account

	10 Months Ended April 30, 2022	10 Months Ended April 30, 2022 Budget	Variance Fav/<Unf>	% Var
Repairs and Maintenance				
Repairs and Maintenance	325,350.78	631,625.00	306,274.22	48.5 %
TOTAL Repairs and Maintenance	325,350.78	631,625.00	306,274.22	48.5 %
Utilities				
Utilities	307,549.78	384,223.30	76,673.52	20.0 %
TOTAL Utilities	307,549.78	384,223.30	76,673.52	20.0 %
Travel and Meetings				
Travel and Meetings	15,339.88	45,779.10	30,439.22	66.5 %
TOTAL Travel and Meetings	15,339.88	45,779.10	30,439.22	66.5 %
Permits and Fees				
Permits and Fees	54,432.00	73,850.00	19,418.00	26.3 %
TOTAL Permits and Fees	54,432.00	73,850.00	19,418.00	26.3 %
Memberships and Subscriptions				
Memberships and Subscriptions	31,151.02	37,833.30	6,682.28	17.7 %
TOTAL Memberships and Subscriptions	31,151.02	37,833.30	6,682.28	17.7 %
Safety				
Safety	53,513.09	43,141.80	(10,371.29)	-24.0 %
TOTAL Safety	53,513.09	43,141.80	(10,371.29)	-24.0 %
Other Expenses				
Other Expense	44,799.87	37,750.10	(7,049.77)	-18.7 %
TOTAL Other Expenses	44,799.87	37,750.10	(7,049.77)	-18.7 %
TOTAL Operating Expenses	5,969,161.69	7,260,372.54	1,291,210.85	17.8 %
****** OPERATING INCOME (LOSS)	4,969,004.59	3,149,233.76	1,819,770.83	57.8 %
Non-op Income, Expense, Gain or Loss				
Other Income or Gain				
Other Income, Gain, Expense and Loss	2,740,394.73	2,406,475.00	333,919.73	13.9 %
TOTAL Other Income or Gain	2,740,394.73	2,406,475.00	333,919.73	13.9 %
TOTAL Non-op Income, Expense, Gain or Loss	2,740,394.73	2,406,475.00	333,919.73	13.9 %
****** NET INCOME (LOSS)	7,709,399.32	5,555,708.76	2,153,690.56	38.8 %
****** NET INCOME (LOSS)	7,709,399.32	5,555,708.76	2,153,690.56	38.8 %

Carmel Area Wastewater District
Budgeted Operating Exps.-Maintenance
Year-to-Date Variance, April 2022 - current month, Consolidated by account, Department 4

	10 Months Ended April 30, 2022	10 Months Ended April 30, 2022 Budget	Variance Fav/<Unf>	% Var
******	0.00	0.00	0.00	
****** OPERATING INCOME	0.00	0.00	0.00	
Operating Expenses				
Salaries and Payroll Taxes				
Salaries and Payroll Taxes	428,052.42	444,382.28	16,329.86	3.7 %
TOTAL Salaries and Payroll Taxes	428,052.42	444,382.28	16,329.86	3.7 %
Employee Benefits				
Employee Benefits	97,076.16	139,512.70	42,436.54	30.4 %
TOTAL Employee Benefits	97,076.16	139,512.70	42,436.54	30.4 %
Truck and Auto Expenses				
Truck and Auto Expenses	1,529.76	6,941.70	5,411.94	78.0 %
TOTAL Truck and Auto Expenses	1,529.76	6,941.70	5,411.94	78.0 %
General and Administrative				
General and Administrative	30,346.81	38,333.30	7,986.49	20.8 %
TOTAL General and Administrative	30,346.81	38,333.30	7,986.49	20.8 %
Office Expense				
Office Expense	3,831.44	1,875.00	(1,956.44)	-104.3 %
TOTAL Office Expense	3,831.44	1,875.00	(1,956.44)	-104.3 %
Operating Supplies				
Operating Supplies	46,621.20	47,750.20	1,129.00	2.4 %
TOTAL Operating Supplies	46,621.20	47,750.20	1,129.00	2.4 %
Contract Services				
Contract Services	338,811.86	523,283.40	184,471.54	35.3 %
TOTAL Contract Services	338,811.86	523,283.40	184,471.54	35.3 %
Repairs and Maintenance				
Repairs and Maintenance	121,014.40	189,166.60	68,152.20	36.0 %
TOTAL Repairs and Maintenance	121,014.40	189,166.60	68,152.20	36.0 %
Utilities				
Utilities	3,685.13	3,916.70	231.57	5.9 %
TOTAL Utilities	3,685.13	3,916.70	231.57	5.9 %
Travel and Meetings				
Travel and Meetings	1,089.34	5,333.30	4,243.96	79.6 %

Carmel Area Wastewater District
Budgeted Operating Exps.-Maintenance
Year-to-Date Variance, April 2022 - current month, Consolidated by account, Department 4

	10 Months Ended April 30, 2022	10 Months Ended April 30, 2022 Budget	Variance Fav/<Unf>	% Var
TOTAL Travel and Meetings	1,089.34	5,333.30	4,243.96	79.6 %
Permits and Fees				
Permits and Fees	4,531.00	3,500.00	(1,031.00)	-29.5 %
TOTAL Permits and Fees	4,531.00	3,500.00	(1,031.00)	-29.5 %
Memberships and Subscriptions				
Memberships and Subscriptions	2,391.50	4,400.00	2,008.50	45.6 %
TOTAL Memberships and Subscriptions	2,391.50	4,400.00	2,008.50	45.6 %
Safety				
Safety	36,802.27	27,600.10	(9,202.17)	-33.3 %
TOTAL Safety	36,802.27	27,600.10	(9,202.17)	-33.3 %
Other Expenses				
Other Expense	5,707.40	0.00	(5,707.40)	
TOTAL Other Expenses	5,707.40	0.00	(5,707.40)	
TOTAL Operating Expenses	1,121,490.69	1,435,995.28	314,504.59	21.9 %
****** OPERATING INCOME (LOSS)	(1,121,490.69)	(1,435,995.28)	314,504.59	21.9 %
****** NET INCOME (LOSS)	(1,121,490.69)	(1,435,995.28)	314,504.59	21.9 %
****** NET INCOME (LOSS)	(1,121,490.69)	(1,435,995.28)	314,504.59	21.9 %

Carmel Area Wastewater District
Budgeted Operating Exps.-Collections
Year-to-Date Variance, April 2022 - current month, Consolidated by account, Department 5

	10 Months Ended April 30, 2022	10 Months Ended April 30, 2022 Budget	Variance Fav/<Unf>	% Var
******	0.00	0.00	0.00	
****** OPERATING INCOME	0.00	0.00	0.00	
Operating Expenses				
Salaries and Payroll Taxes				
Salaries and Payroll Taxes	545,628.56	513,023.94	(32,604.62)	-6.4 %
TOTAL Salaries and Payroll Taxes	545,628.56	513,023.94	(32,604.62)	-6.4 %
Employee Benefits				
Employee Benefits	144,244.61	169,430.06	25,185.45	14.9 %
TOTAL Employee Benefits	144,244.61	169,430.06	25,185.45	14.9 %
Truck and Auto Expenses				
Truck and Auto Expenses	62,255.12	40,258.40	(21,996.72)	-54.6 %
TOTAL Truck and Auto Expenses	62,255.12	40,258.40	(21,996.72)	-54.6 %
General and Administrative				
General and Administrative	46,922.50	79,166.70	32,244.20	40.7 %
TOTAL General and Administrative	46,922.50	79,166.70	32,244.20	40.7 %
Office Expense				
Office Expense	9,704.52	7,833.30	(1,871.22)	-23.9 %
TOTAL Office Expense	9,704.52	7,833.30	(1,871.22)	-23.9 %
Operating Supplies				
Operating Supplies	31,164.94	32,666.60	1,501.66	4.6 %
TOTAL Operating Supplies	31,164.94	32,666.60	1,501.66	4.6 %
Contract Services				
Contract Services	142,483.34	162,975.00	20,491.66	12.6 %
TOTAL Contract Services	142,483.34	162,975.00	20,491.66	12.6 %
Repairs and Maintenance				
Repairs and Maintenance	177,833.60	370,583.40	192,749.80	52.0 %
TOTAL Repairs and Maintenance	177,833.60	370,583.40	192,749.80	52.0 %
Utilities				
Utilities	32,514.35	38,583.30	6,068.95	15.7 %
TOTAL Utilities	32,514.35	38,583.30	6,068.95	15.7 %
Travel and Meetings				
Travel and Meetings	4,526.30	13,670.80	9,144.50	66.9 %

Carmel Area Wastewater District
Budgeted Operating Exps.-Collections
Year-to-Date Variance, April 2022 - current month, Consolidated by account, Department 5

	10 Months Ended April 30, 2022	10 Months Ended April 30, 2022 Budget	Variance Fav/<Unf>	% Var
TOTAL Travel and Meetings	4,526.30	13,670.80	9,144.50	66.9 %
Permits and Fees				
Permits and Fees	6,950.00	6,150.00	(800.00)	-13.0 %
TOTAL Permits and Fees	6,950.00	6,150.00	(800.00)	-13.0 %
Memberships and Subscriptions				
Memberships and Subscriptions	2,861.34	3,666.70	805.36	22.0 %
TOTAL Memberships and Subscriptions	2,861.34	3,666.70	805.36	22.0 %
Safety				
Safety	15,290.25	12,841.70	(2,448.55)	-19.1 %
TOTAL Safety	15,290.25	12,841.70	(2,448.55)	-19.1 %
Other Expenses				
Other Expense	843.40	416.70	(426.70)	-102.4 %
TOTAL Other Expenses	843.40	416.70	(426.70)	-102.4 %
TOTAL Operating Expenses	1,223,222.83	1,451,266.60	228,043.77	15.7 %
****** OPERATING INCOME (LOSS)	(1,223,222.83)	(1,451,266.60)	228,043.77	15.7 %
****** NET INCOME (LOSS)	(1,223,222.83)	(1,451,266.60)	228,043.77	15.7 %
****** NET INCOME (LOSS)	(1,223,222.83)	(1,451,266.60)	228,043.77	15.7 %

Carmel Area Wastewater District
Budgeted Operating Exps.-Treatment
Year-to-Date Variance, April 2022 - current month, Consolidated by account, Department 6

	10 Months Ended April 30, 2022	10 Months Ended April 30, 2022 Budget	Variance Fav/<Unf>	% Var
******	0.00	0.00	0.00	
****** OPERATING INCOME	0.00	0.00	0.00	
Operating Expenses				
Salaries and Payroll Taxes				
Salaries and Payroll Taxes	970,737.44	965,288.12	(5,449.32)	-0.6 %
TOTAL Salaries and Payroll Taxes	970,737.44	965,288.12	(5,449.32)	-0.6 %
Employee Benefits				
Employee Benefits	197,004.05	369,795.60	172,791.55	46.7 %
TOTAL Employee Benefits	197,004.05	369,795.60	172,791.55	46.7 %
Truck and Auto Expenses				
Truck and Auto Expenses	1,667.52	1,600.00	(67.52)	-4.2 %
TOTAL Truck and Auto Expenses	1,667.52	1,600.00	(67.52)	-4.2 %
General and Administrative				
General and Administrative	119,360.04	383,666.70	264,306.66	68.9 %
TOTAL General and Administrative	119,360.04	383,666.70	264,306.66	68.9 %
Office Expense				
Office Expense	8,402.07	21,916.60	13,514.53	61.7 %
TOTAL Office Expense	8,402.07	21,916.60	13,514.53	61.7 %
Operating Supplies				
Operating Supplies	287,718.34	314,493.40	26,775.06	8.5 %
TOTAL Operating Supplies	287,718.34	314,493.40	26,775.06	8.5 %
Contract Services				
Contract Services	211,276.39	323,666.60	112,390.21	34.7 %
TOTAL Contract Services	211,276.39	323,666.60	112,390.21	34.7 %
Repairs and Maintenance				
Repairs and Maintenance	17,594.89	59,541.60	41,946.71	70.4 %
TOTAL Repairs and Maintenance	17,594.89	59,541.60	41,946.71	70.4 %
Utilities				
Utilities	251,065.24	322,499.90	71,434.66	22.2 %
TOTAL Utilities	251,065.24	322,499.90	71,434.66	22.2 %
Travel and Meetings				
Travel and Meetings	5,485.93	12,858.30	7,372.37	57.3 %

Carmel Area Wastewater District
Budgeted Operating Exps.-Treatment
Year-to-Date Variance, April 2022 - current month, Consolidated by account, Department 6

	10 Months Ended April 30, 2022	10 Months Ended April 30, 2022 Budget	Variance Fav/<Unf>	% Var
TOTAL Travel and Meetings	5,485.93	12,858.30	7,372.37	57.3 %
Permits and Fees				
Permits and Fees	23,733.00	35,000.00	11,267.00	32.2 %
TOTAL Permits and Fees	23,733.00	35,000.00	11,267.00	32.2 %
Memberships and Subscriptions				
Memberships and Subscriptions	2,343.13	5,641.60	3,298.47	58.5 %
TOTAL Memberships and Subscriptions	2,343.13	5,641.60	3,298.47	58.5 %
Safety				
Safety	185.00	0.00	(185.00)	
TOTAL Safety	185.00	0.00	(185.00)	
Other Expenses				
Other Expense	0.00	1,666.70	1,666.70	100.0 %
TOTAL Other Expenses	0.00	1,666.70	1,666.70	100.0 %
TOTAL Operating Expenses	2,096,573.04	2,817,635.12	721,062.08	25.6 %
****** OPERATING INCOME (LOSS)	(2,096,573.04)	(2,817,635.12)	721,062.08	25.6 %
****** NET INCOME (LOSS)	(2,096,573.04)	(2,817,635.12)	721,062.08	25.6 %
****** NET INCOME (LOSS)	(2,096,573.04)	(2,817,635.12)	721,062.08	25.6 %

Carmel Area Wastewater District
Budgeted Operating Exps.-Administration
Year-to-Date Variance, April 2022 - current month, Consolidated by account, Department 7

	10 Months Ended April 30, 2022	10 Months Ended April 30, 2022 Budget	Variance Fav/<Unf>	% Var
******	0.00	0.00	0.00	
****** OPERATING INCOME	0.00	0.00	0.00	
Operating Expenses				
Salaries and Payroll Taxes				
Salaries and Payroll Taxes	557,638.17	516,139.48	(41,498.69)	-8.0 %
TOTAL Salaries and Payroll Taxes	557,638.17	516,139.48	(41,498.69)	-8.0 %
Employee Benefits				
Employee Benefits	96,108.63	122,316.64	26,208.01	21.4 %
TOTAL Employee Benefits	96,108.63	122,316.64	26,208.01	21.4 %
Director's Expenses				
Director's Expenses	17,521.64	27,550.00	10,028.36	36.4 %
TOTAL Director's Expenses	17,521.64	27,550.00	10,028.36	36.4 %
Truck and Auto Expenses				
Truck and Auto Expenses	461.14	2,124.20	1,663.06	78.3 %
TOTAL Truck and Auto Expenses	461.14	2,124.20	1,663.06	78.3 %
General and Administrative				
General and Administrative	84,667.55	121,863.30	37,195.75	30.5 %
TOTAL General and Administrative	84,667.55	121,863.30	37,195.75	30.5 %
Office Expense				
Office Expense	20,879.18	14,466.70	(6,412.48)	-44.3 %
TOTAL Office Expense	20,879.18	14,466.70	(6,412.48)	-44.3 %
Operating Supplies				
Operating Supplies	1,191.57	1,500.00	308.43	20.6 %
TOTAL Operating Supplies	1,191.57	1,500.00	308.43	20.6 %
Contract Services				
Contract Services	77,809.49	92,769.20	14,959.71	16.1 %
TOTAL Contract Services	77,809.49	92,769.20	14,959.71	16.1 %
Repairs and Maintenance				
Repairs and Maintenance	1,369.77	4,166.70	2,796.93	67.1 %
TOTAL Repairs and Maintenance	1,369.77	4,166.70	2,796.93	67.1 %
Utilities				
Utilities	20,241.40	19,223.40	(1,018.00)	-5.3 %

Carmel Area Wastewater District
Budgeted Operating Exps.-Administration
Year-to-Date Variance, April 2022 - current month, Consolidated by account, Department 7

	10 Months Ended April 30, 2022	10 Months Ended April 30, 2022 Budget	Variance Fav/<Unf>	% Var
TOTAL Utilities	20,241.40	19,223.40	(1,018.00)	-5.3 %
Travel and Meetings				
Travel and Meetings	4,238.31	13,916.70	9,678.39	69.5 %
TOTAL Travel and Meetings	4,238.31	13,916.70	9,678.39	69.5 %
Permits and Fees				
Permits and Fees	19,218.00	22,000.00	2,782.00	12.6 %
TOTAL Permits and Fees	19,218.00	22,000.00	2,782.00	12.6 %
Memberships and Subscriptions				
Memberships and Subscriptions	23,555.05	24,125.00	569.95	2.4 %
TOTAL Memberships and Subscriptions	23,555.05	24,125.00	569.95	2.4 %
Safety				
Safety	861.83	1,450.00	588.17	40.6 %
TOTAL Safety	861.83	1,450.00	588.17	40.6 %
Other Expenses				
Other Expense	38,249.07	35,666.70	(2,582.37)	-7.2 %
TOTAL Other Expenses	38,249.07	35,666.70	(2,582.37)	-7.2 %
TOTAL Operating Expenses	964,010.80	1,019,278.02	55,267.22	5.4 %
****** OPERATING INCOME (LOSS)	(964,010.80)	(1,019,278.02)	55,267.22	5.4 %
****** NET INCOME (LOSS)	(964,010.80)	(1,019,278.02)	55,267.22	5.4 %
****** NET INCOME (LOSS)	(964,010.80)	(1,019,278.02)	55,267.22	5.4 %

Carmel Area Wastewater District
Budgeted Operating Exps.-Reclamation
Year-to-Date Variance, April 2022 - current month, Consolidated by account, Department 8

	10 Months Ended April 30, 2022	10 Months Ended April 30, 2022 Budget	Variance Fav/<Unf>	% Var
******	0.00	0.00	0.00	
****** OPERATING INCOME	0.00	0.00	0.00	
Operating Expenses				
Salaries and Payroll Taxes				
Salaries and Payroll Taxes	529,095.76	504,400.72	(24,695.04)	-4.9 %
TOTAL Salaries and Payroll Taxes	529,095.76	504,400.72	(24,695.04)	-4.9 %
Director's Expenses				
Director's Expenses	700.00	666.00	(34.00)	-5.1 %
TOTAL Director's Expenses	700.00	666.00	(34.00)	-5.1 %
General and Administrative				
General and Administrative	21,949.70	0.00	(21,949.70)	
TOTAL General and Administrative	21,949.70	0.00	(21,949.70)	
Office Expense				
Office Expense	23.79	0.00	(23.79)	
TOTAL Office Expense	23.79	0.00	(23.79)	
Operating Supplies				
Operating Supplies	702.64	7,083.30	6,380.66	90.1 %
TOTAL Operating Supplies	702.64	7,083.30	6,380.66	90.1 %
Contract Services				
Contract Services	967.46	0.00	(967.46)	
TOTAL Contract Services	967.46	0.00	(967.46)	
Repairs and Maintenance				
Repairs and Maintenance	5,783.35	3,583.30	(2,200.05)	-61.4 %
TOTAL Repairs and Maintenance	5,783.35	3,583.30	(2,200.05)	-61.4 %
Utilities				
Utilities	43.66	0.00	(43.66)	
TOTAL Utilities	43.66	0.00	(43.66)	
Safety				
Safety	373.74	1,250.00	876.26	70.1 %
TOTAL Safety	373.74	1,250.00	876.26	70.1 %
TOTAL Operating Expenses	559,640.10	516,983.32	(42,656.78)	-8.3 %

Carmel Area Wastewater District
Budgeted Operating Exps.-Reclamation
Year-to-Date Variance, April 2022 - current month, Consolidated by account, Department 8

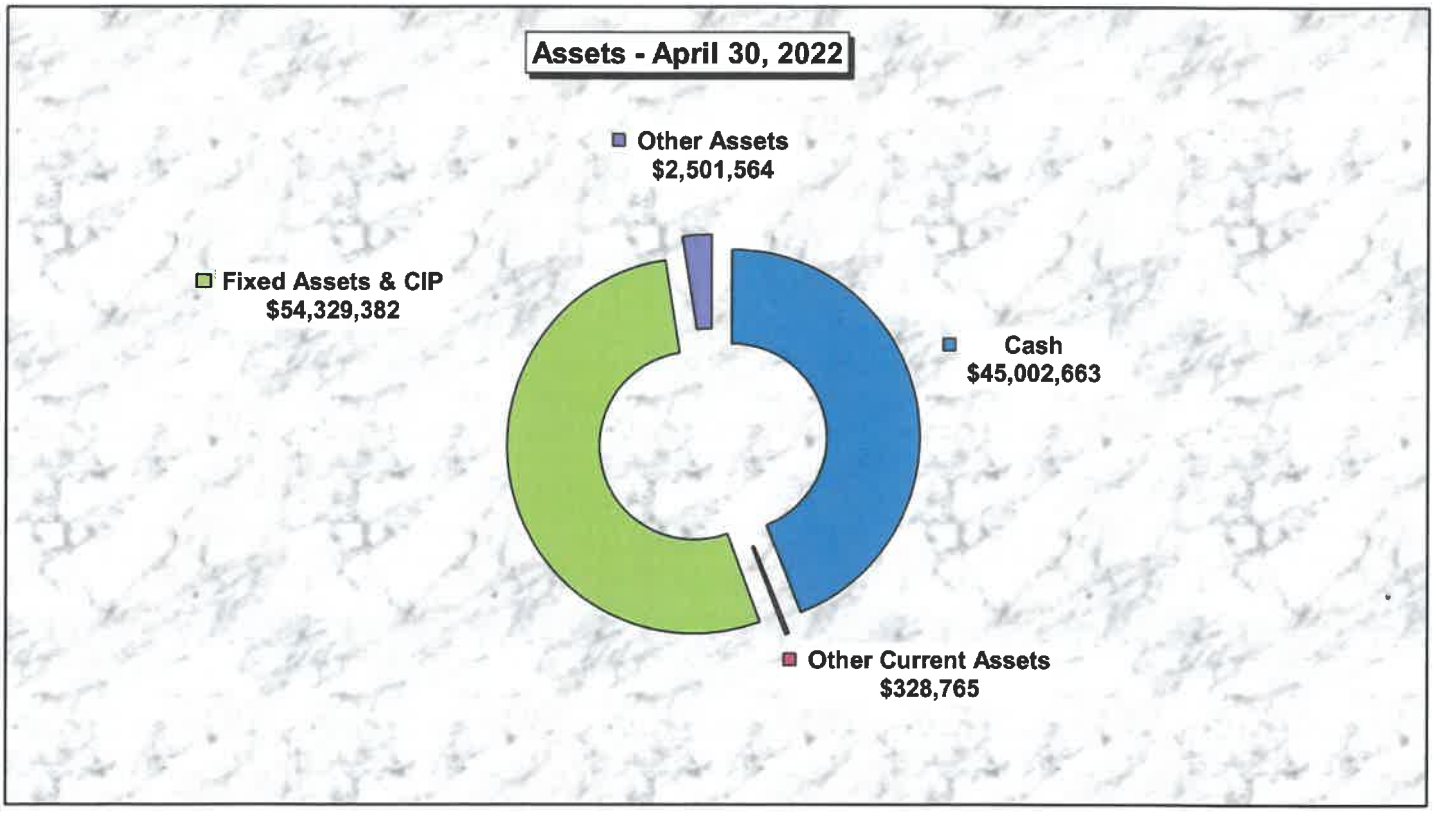
	10 Months Ended April 30, 2022	10 Months Ended April 30, 2022 Budget	Variance Fav/<Unf>	% Var
****** OPERATING INCOME (LOSS)	(559,640.10)	(516,983.32)	(42,656.78)	-8.3 %
****** NET INCOME (LOSS)	(559,640.10)	(516,983.32)	(42,656.78)	-8.3 %
****** NET INCOME (LOSS)	(559,640.10)	(516,983.32)	(42,656.78)	-8.3 %

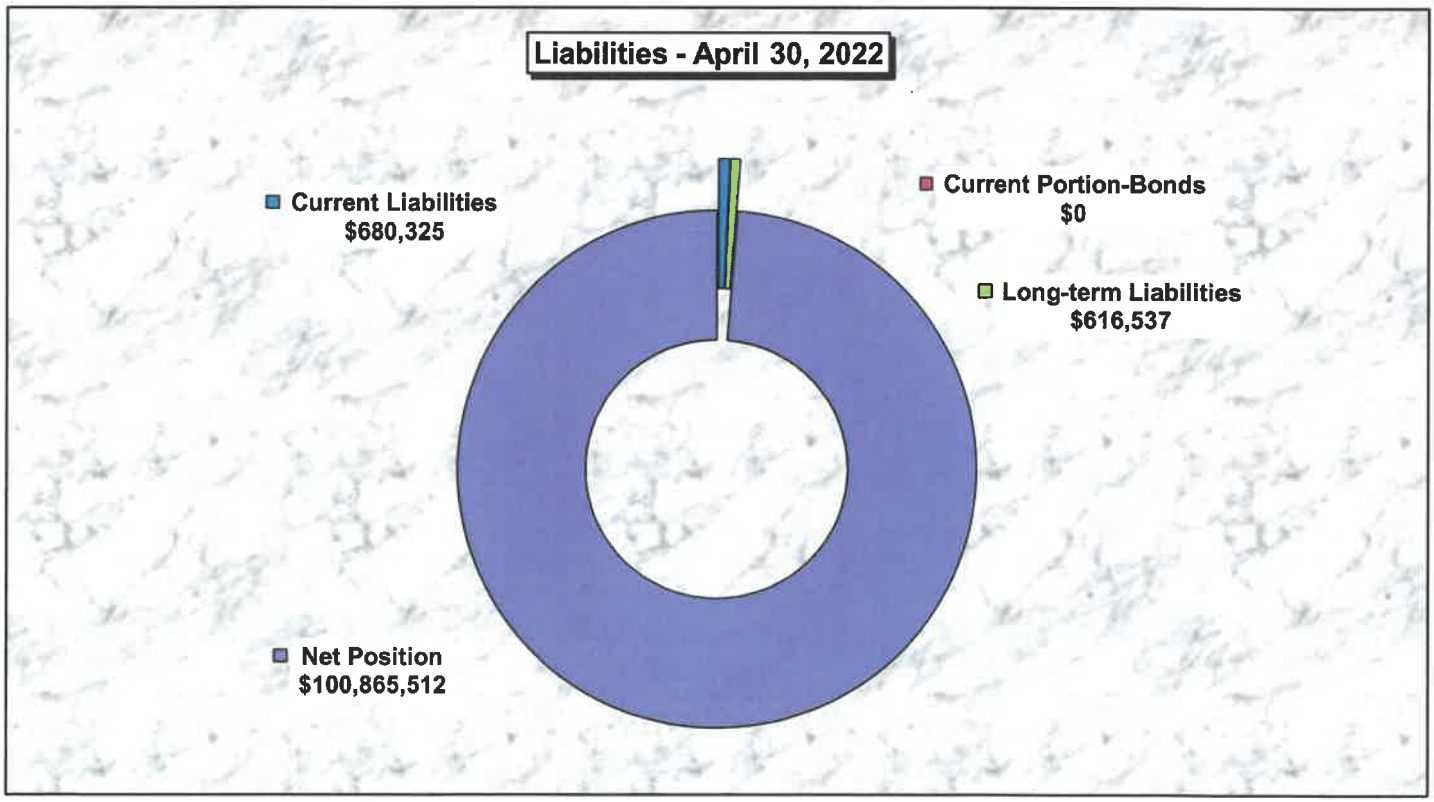
Carmel Area Wastewater District
Budgeted Income Stmt.-Waste to Energy
Year-to-Date Variance, April 2022 - current month, Consolidated by account, Department 9

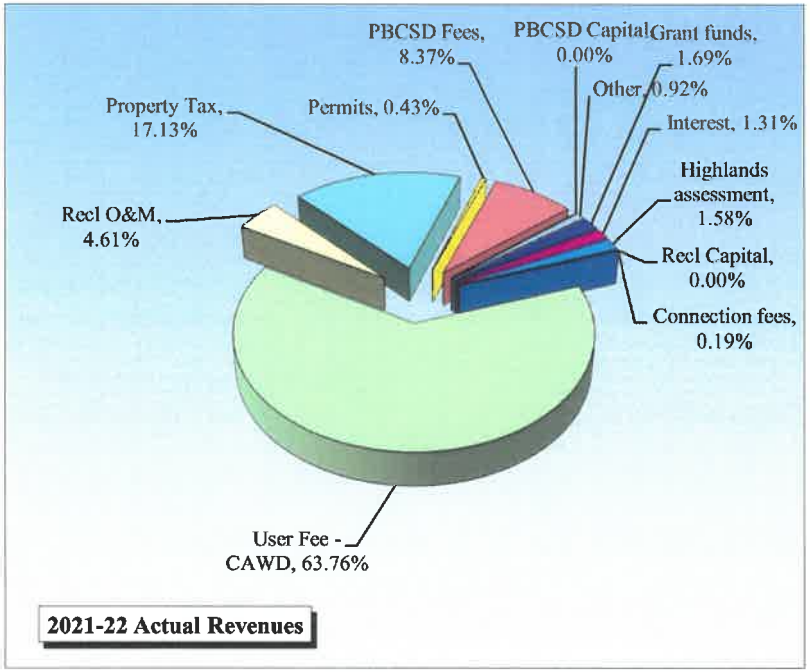
	10 Months Ended April 30, 2022	10 Months Ended April 30, 2022 Budget	Variance Fav/<Unf>	% Var
Income				
Revenue	2,211.20	4,166.70	(1,955.50)	-46.9 %
TOTAL Income	2,211.20	4,166.70	(1,955.50)	-46.9 %
******	2,211.20	4,166.70	(1,955.50)	-46.9 %
****** OPERATING INCOME	2,211.20	4,166.70	(1,955.50)	-46.9 %
Operating Expenses				
Salaries and Payroll Taxes				
Salaries and Payroll Taxes	1,089.60	897.50	(192.10)	-21.4 %
TOTAL Salaries and Payroll Taxes	1,089.60	897.50	(192.10)	-21.4 %
Operating Supplies				
Operating Supplies	0.00	4,166.70	4,166.70	100.0 %
TOTAL Operating Supplies	0.00	4,166.70	4,166.70	100.0 %
Repairs and Maintenance				
Repairs and Maintenance	840.00	2,500.00	1,660.00	66.4 %
TOTAL Repairs and Maintenance	840.00	2,500.00	1,660.00	66.4 %
Permits and Fees				
Permits and Fees	0.00	7,200.00	7,200.00	100.0 %
TOTAL Permits and Fees	0.00	7,200.00	7,200.00	100.0 %
TOTAL Operating Expenses	1,929.60	14,764.20	12,834.60	86.9 %
****** OPERATING INCOME (LOSS)	281.60	(10,597.50)	10,879.10	102.7 %
****** NET INCOME (LOSS)	281.60	(10,597.50)	10,879.10	102.7 %
****** NET INCOME (LOSS)	281.60	(10,597.50)	10,879.10	102.7 %

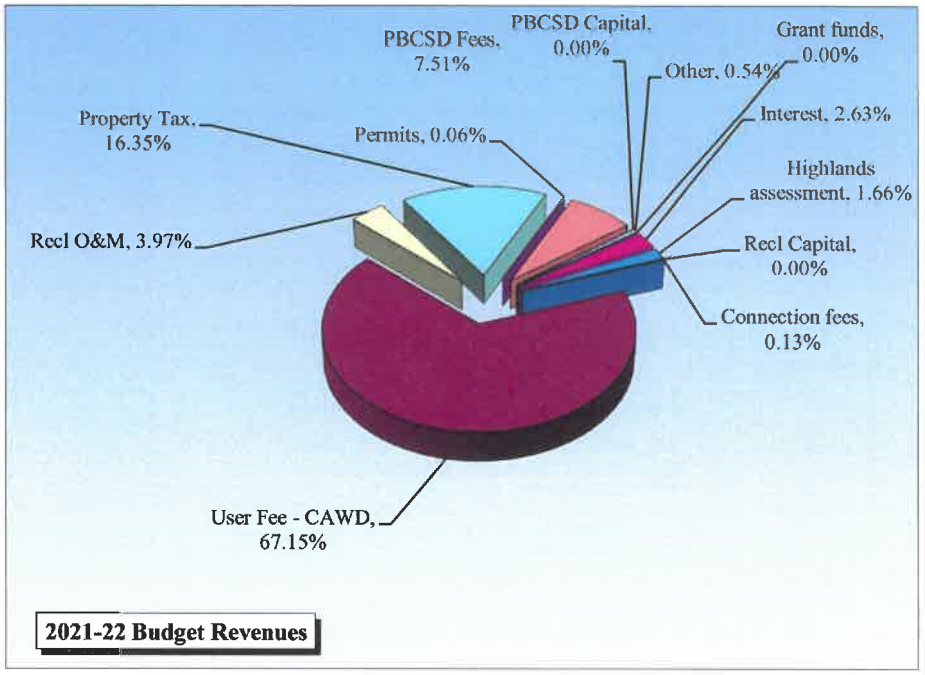
Carmel Area Wastewater District
Budgeted Income Stmt.-Brine Disposal
Year-to-Date Variance, April 2022 - current month, Consolidated by account, Department 10

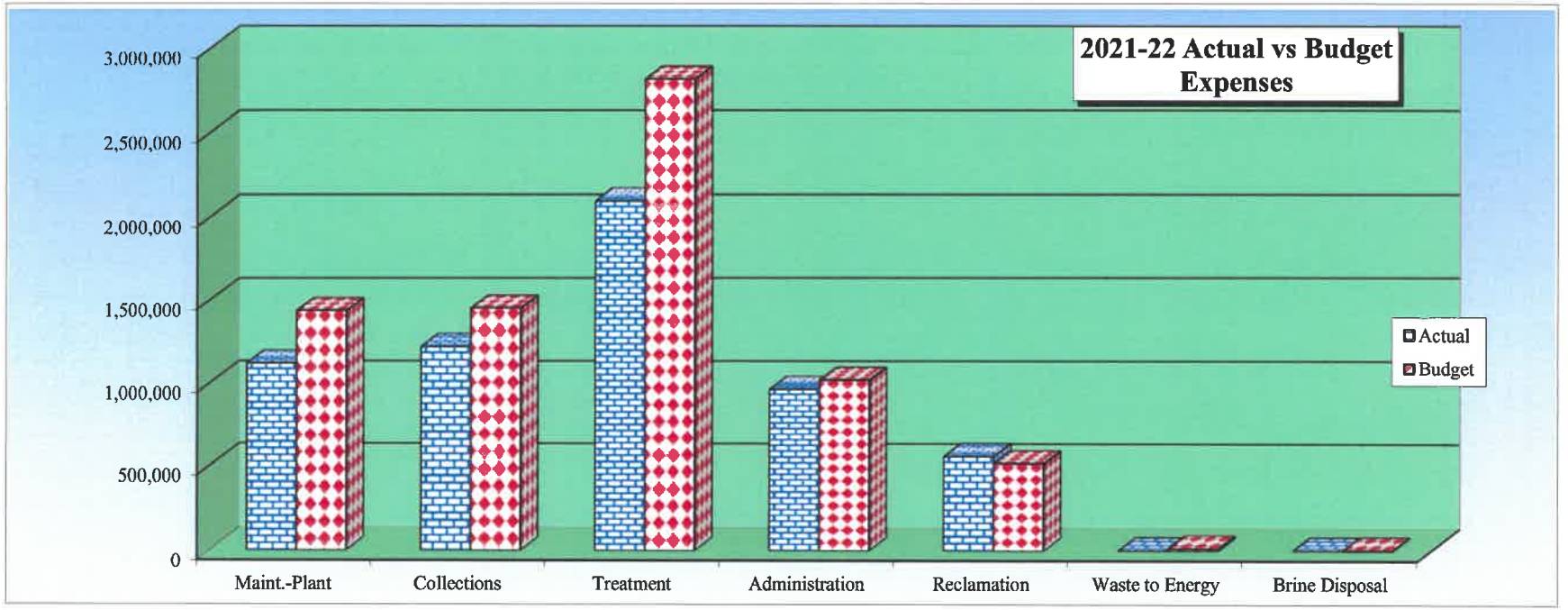
	10 Months Ended April 30, 2022	10 Months Ended April 30, 2022 Budget	Variance Fav/<Unf>	% Var
Income				
Revenue	85,025.13	65,833.30	19,191.83	29.2 %
TOTAL Income	85,025.13	65,833.30	19,191.83	29.2 %
******	85,025.13	65,833.30	19,191.83	29.2 %
****** OPERATING INCOME	85,025.13	65,833.30	19,191.83	29.2 %
Operating Expenses				
Salaries and Payroll Taxes				
Salaries and Payroll Taxes	1,379.86	1,345.80	(34.06)	-2.5 %
TOTAL Salaries and Payroll Taxes	1,379.86	1,345.80	(34.06)	-2.5 %
Office Expense				
Office Expense	0.00	20.80	20.80	100.0 %
TOTAL Office Expense	0.00	20.80	20.80	100.0 %
Operating Supplies				
Operating Supplies	0.00	1,000.00	1,000.00	100.0 %
TOTAL Operating Supplies	0.00	1,000.00	1,000.00	100.0 %
Repairs and Maintenance				
Repairs and Maintenance	914.77	2,083.40	1,168.63	56.1 %
TOTAL Repairs and Maintenance	914.77	2,083.40	1,168.63	56.1 %
TOTAL Operating Expenses	2,294.63	4,450.00	2,155.37	48.4 %
****** OPERATING INCOME (LOSS)	82,730.50	61,383.30	21,347.20	34.8 %
****** NET INCOME (LOSS)	82,730.50	61,383.30	21,347.20	34.8 %
****** NET INCOME (LOSS)	82,730.50	61,383.30	21,347.20	34.8 %

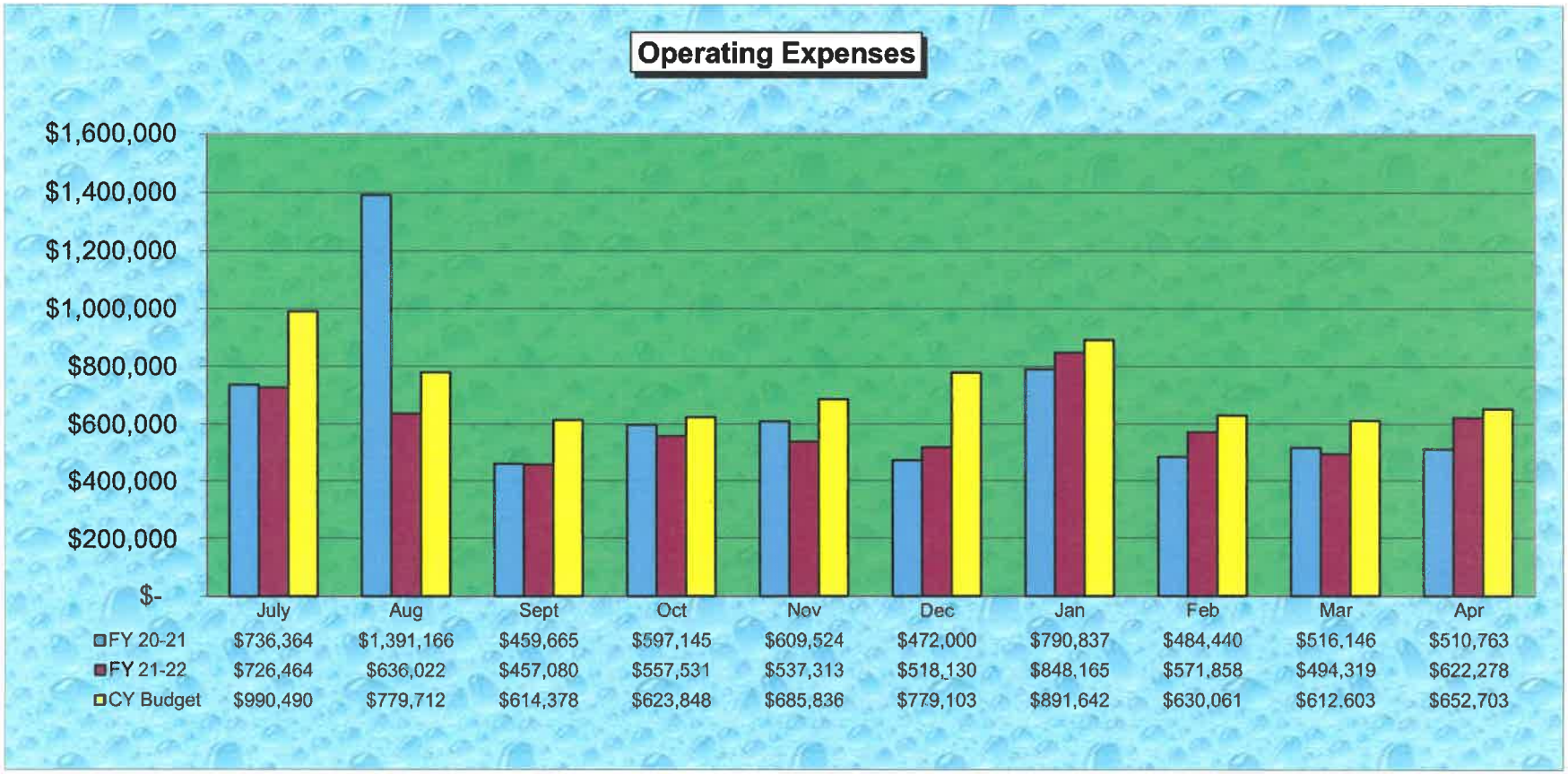

Assets - April 30, 2022
Other Assets
$2,501,564
Fixed Assets & CIP
$54,329,382
Cash
$45,002,663
Other Current Assets
$328,765


Liabilities - April 30, 2022
Current Liabilities
$680,325
Current Portion-Bonds
$0
Long-term Liabilities
$616,537
Net Position
$100,865,512


PBCSD Fees, 8.37%
PBCSD Capital 0.00%
Grant funds, 1.69%
Other, 0.92%
Property Tax, 17.13%
Permits, 0.43%
Interest, 1.31%
Highlands assessment, 1.58%
Recl O&M, 4.61%
Recl Capital, 0.00%
Connection fees, 0.19%
User Fee - CAWD, 63.76%
2021-22 Actual Revenues


PBCSD Fees, 7.51%
PBCSD Capital, 0.00%
Grant funds, 0.00%
Other, 0.54%
Property Tax, 16.35%
Permits, 0.06%
Interest, 2.63%
Highlands assessment, 1.66%
Recl O&M, 3.97%
Recl Capital, 0.00%
Connection fees, 0.13%
User Fee - CAWD, 67.15%
2021-22 Budget Revenues


2021-22 Actual vs Budget Expenses
3,000,000
2,500,000
2,000,000
1,500,000
1,000,000
500,000
0
Actual
Budget
Maint.-Plant
Collections
Treatment
Administration
Reclamation
Waste to Energy
Brine Disposal



	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr
FY 20-21	$736,364	$1,391,166	$459,665	$597,145	$609,524	$472,000	$790,837	$484,440	$516,146	$510,763
FY 21-22	$726,464	$636,022	$457,080	$557,531	$537,313	$518,130	$848,165	$571,858	$494,319	$622,278
CY Budget	$990,490	$779,712	$614,378	$623,848	$685,836	$779,103	$891,642	$630,061	$612.603	$652,703

Carmel Area Wastewater District
Capital Expenditures
2021-22

	BEG BAL	APR	CURRENT YTD	CUMULATIVE TOTAL	ANNUAL BUDGET	BUDGET SPENT
CAPITAL PURCHASES						
Admin						
		0	0	0	0	NA
		0	0	0	0	NA
Collections						
Dougherty Place sewer replacement		0	87,412	87,412	0	NA
Various sewer line replacements		42,325	42,325	42,325	0	NA
Treatment						
		0	0	0	0	NA
		0	0	0	0	NA
RECL share	0	0	0	0	0	NA
PBCSD share (1/3 of cost)	0	0	0	0	0	NA
Total Capital Purchases 21-22		**42,325**	**129,738**	**129,738**	**0**	**#DIV/0!**

Carmel Area Wastewater District
Capital Expenditures
2021-22

	BEG BAL	APR	CURRENT YTD	CUMULATIVE TOTAL	ANNUAL BUDGET	BUDGET SPENT
CIP PROJECTS						
Administration						
Collections						
Construction of new Gravity Sewer Line-Carmel Meadows	364,551	180	101,392	465,943	150,000	67.59%
Upper Rancho Canada Pipe Relocation	188,587	4,330	1,575,248	1,763,836	1,760,000	89.50%
Carmel Valley Manor Sewer-unbudgeted	180	0	0	180	0	NA
Scenic Rd Pipe Burst-Ocn/Bay	80,276	15,542	106,947	187,223	1,200,000	8.91%
Bay/Scenic Pump Station Rehab	6,727	0	24,165	30,892	250,000	9.67%
Pescadero Creek Area Pipe Rehab	0	11,768	83,483	83,483	450,000	18.55%
Treatment						
RECL share	0	0	0	0	0	NA
PBCSD share (1/3 of cost)	0	0	0	0	0	NA
Total CIP Projects 21-22	**640,321**	**31,820**	**1,891,236**	**2,531,557**	**3,810,000**	**49.64%**

Carmel Area Wastewater District
Capital Expenditures
2021-22

	BEG BAL	APR	CURRENT YTD	CUMULATIVE TOTAL	ANNUAL BUDGET	BUDGET SPENT
LONG TERM CIP PROJECTS						
Treatment						
Microturbine/Gas Conditioning System	55,115	26,640	26,640	81,754	150,000	17.76%
Elec/Mech Rehab & Sludge Holding Tank Project **(RECL 4%)**	896,671	233,202	2,933,333	3,830,004	5,000,000	58.67%
WWTP Perimeter Tree Planting	2,897	0	2,123	5,020	60,000	3.54%
Critical Process Flood Adaptations **(RECL 30%)**	21,788	0	0	21,788	50,000	NA
Aeration Basin Improvements	9,030	0	8,302	17,332	0	NA
Ops Building Basement Bathroom	8,245	0	10,505	18,749	0	NA
RECL share	(39,135)	(9,328)	(117,334)	(156,469)	(200,000)	58.67%
PBCSD share (1/3 of cost)	(318,204)	(83,504)	(954,522)	(1,272,726)	(1,686,667)	56.59%
Total Long Term CIP Projects 21-22	**636,407**	**167,009**	**1,909,045**	**2,545,452**	**3,373,333**	**56.59%**
Total Capital (net of RECL and PBCSD)	**1,276,728**	**241,154**	**3,930,018**	**5,206,746**	**7,183,333**	**54.71%**

Carmel Area Wastewater District
Variance Analysis
2021-22

	YTD Actual/ YTD Budget Variance	
Maintenance - Plant		
Office Expense	-104.30%	Office supplies underbudgeted. Furniture and fixtures unbudgeted. Small dollar amounts.
Permits and Fees	-29.50%	Mo. Bay Air Resources District permits underbudgeted. Small dollar amounts.
Safety	-33.30%	Supplies, boots and gear underbudgeted.
Collections		
Salaries and Payroll Taxes	-6.40%	Slightly underbudgeted.
Truck and Auto Expenses	-54.60%	Diesel, repair parts and vehicle accessories underbudgeted.
Office Expense	-23.90%	Computers and equipment underbudgeted.
Permits and Fees	-13.00%	Slightly underbudgeted. Small dollar amounts.
Safety	-19.10%	Supplies and training underbudgeted. Small dollar amounts.
Other Expense	-102.40%	Recruiting unbudgeted. Small dollar amounts.
Administration		
Salaries and Payroll Taxes	-8.00%	Slightly underbudgeted.
Office Expense	-44.30%	District codifications unbudgeted. Furnishings and supplies underbudgeted. Small dollar amounts.
Utilities	-5.30%	Natural gas underbudgeted. Small dollar amounts.
Other Expense	-7.20%	Rate payer claims unbudgeted. Small dollar amounts.
Waste to Energy		
Salaries and Payroll Taxes	-21.40%	Timing of salaries. Small dollar amounts.

District Obligations:

1) 2004 Highlands Project Bond Proceeds $3,057,165 - Balance $585,000

Carmel Area Wastewater District
2021-22 Resolutions Amending the Budget

Resolution #	Description	Budgeted	Amendment	Spent To Date
		$ -	$ -	$ -
	No budget amendments to date.			
	Total To Date	$ -	$ -	$ -

STAFF REPORT

TO: Board of Directors

FROM: Daryl Lauer, Collection Superintendent

DATE: May 26, 2022

SUBJECT: Monthly Report – April

RECOMMENDATION

Receive Report- Informational only; no action required.

Permits Issued

Sewer Lateral Permits issued in April ……..... 26

Total Fees $3,840.00

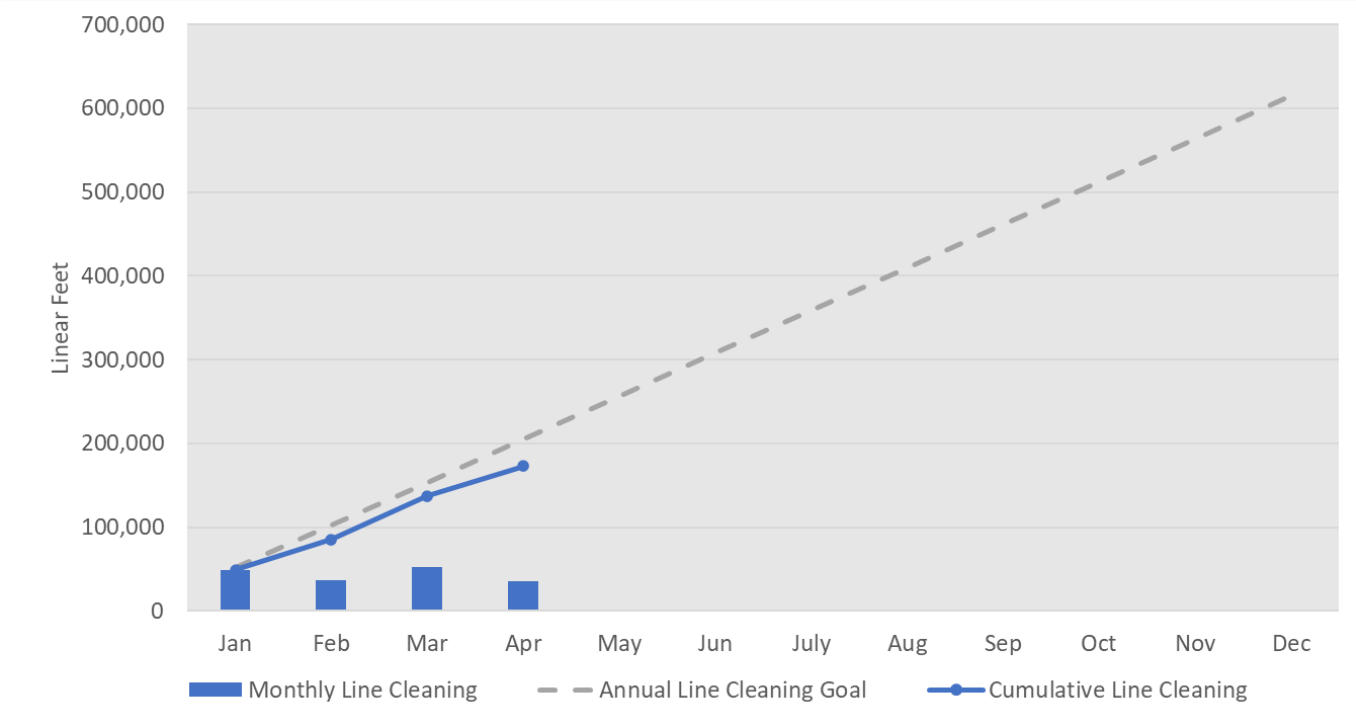
Maintenance

Attached is a map of the areas cleaned and Closed-Circuit Television (CCTV) inspected in the past three months. There were 35,310 feet of sewer lines cleaned, 3,743 feet of CCTV inspections and no manhole inspections were performed during the month of April.

Recent Line Cleaning Summary

Cleaning period	Footage Cleaned	Percentage Cleaned	Size of Pipe Cleaned
April	35,310 ft.	8.59%	6 – 15 inches
March	52,215 ft.	12.70%	6 – 27 inches
February	36,470 ft.	8.87%	6 – 12 inches

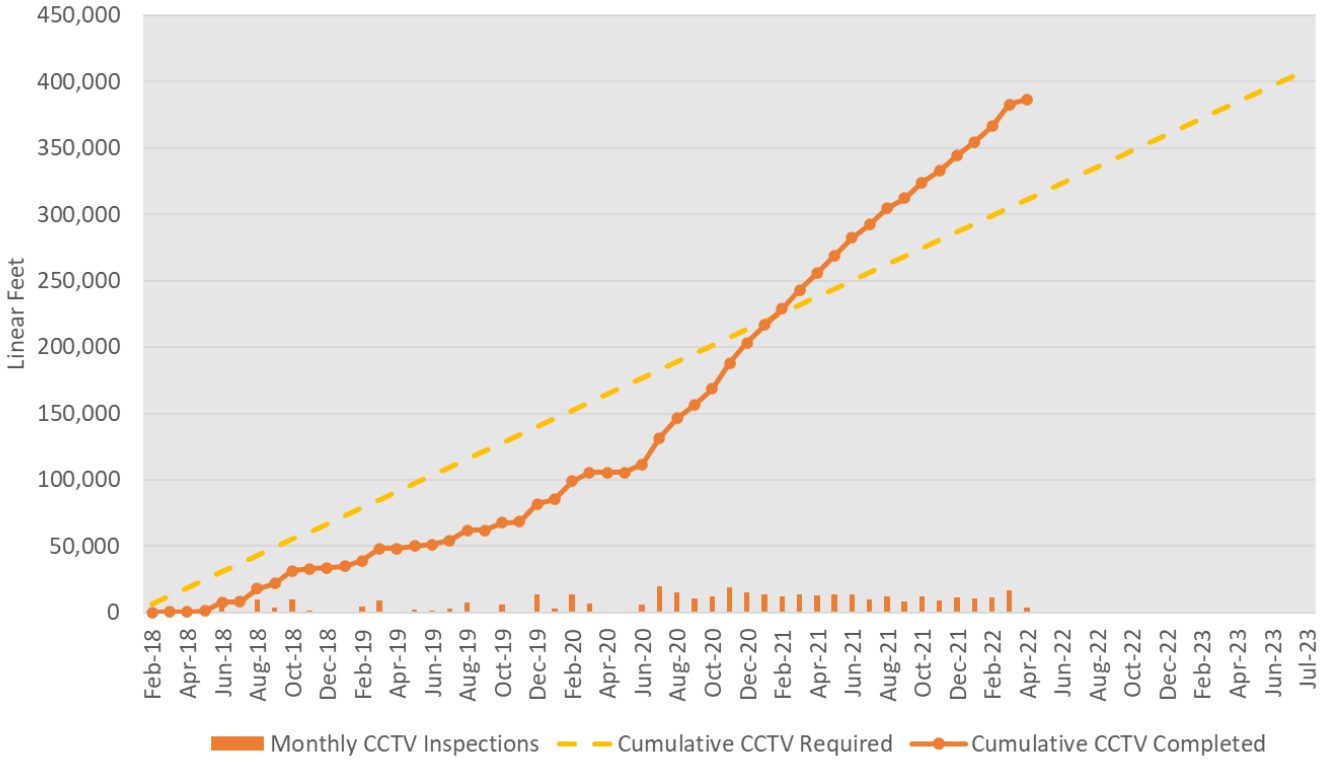
Annual Line Cleaning Graph



Line Cleaning Table

Total Target Amount (Linear Feet)	Cumulative Complete (Linear Feet)	Remaining (Linear Feet)
615,000	172,706	442,294

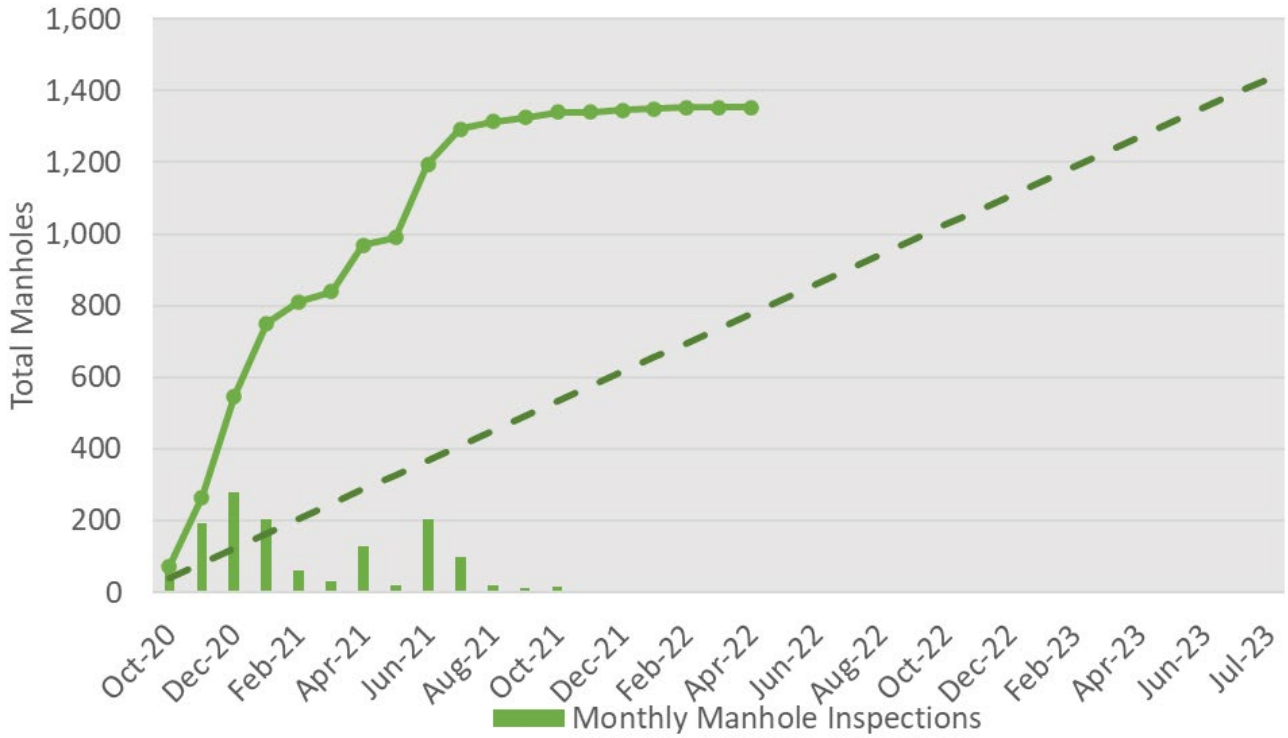
CCTV Progress Graph (River Watch Settlement Agreement Target)



CCTV Table

Total Required amount (Linear Feet)	Cumulative Complete (Linear Feet)	Remaining (Linear Feet)
408,672	386,622	22,050

Manhole Inspection Progress Graph (Riverwatch Settlement Agreement Target)



Manhole Inspection Table

Total Required Amount (Manholes)	Actual Complete (Manholes)	Remaining (Manholes)
1428	1353	75

Construction Activities

- N/A

Staff Development

- Staff completed several in-person tail gate trainings.
- Daryl Lauer & Barry Blevins attended the California Water Environment Association Annual Conference in Sacramento in April.

General Comments

- N/A

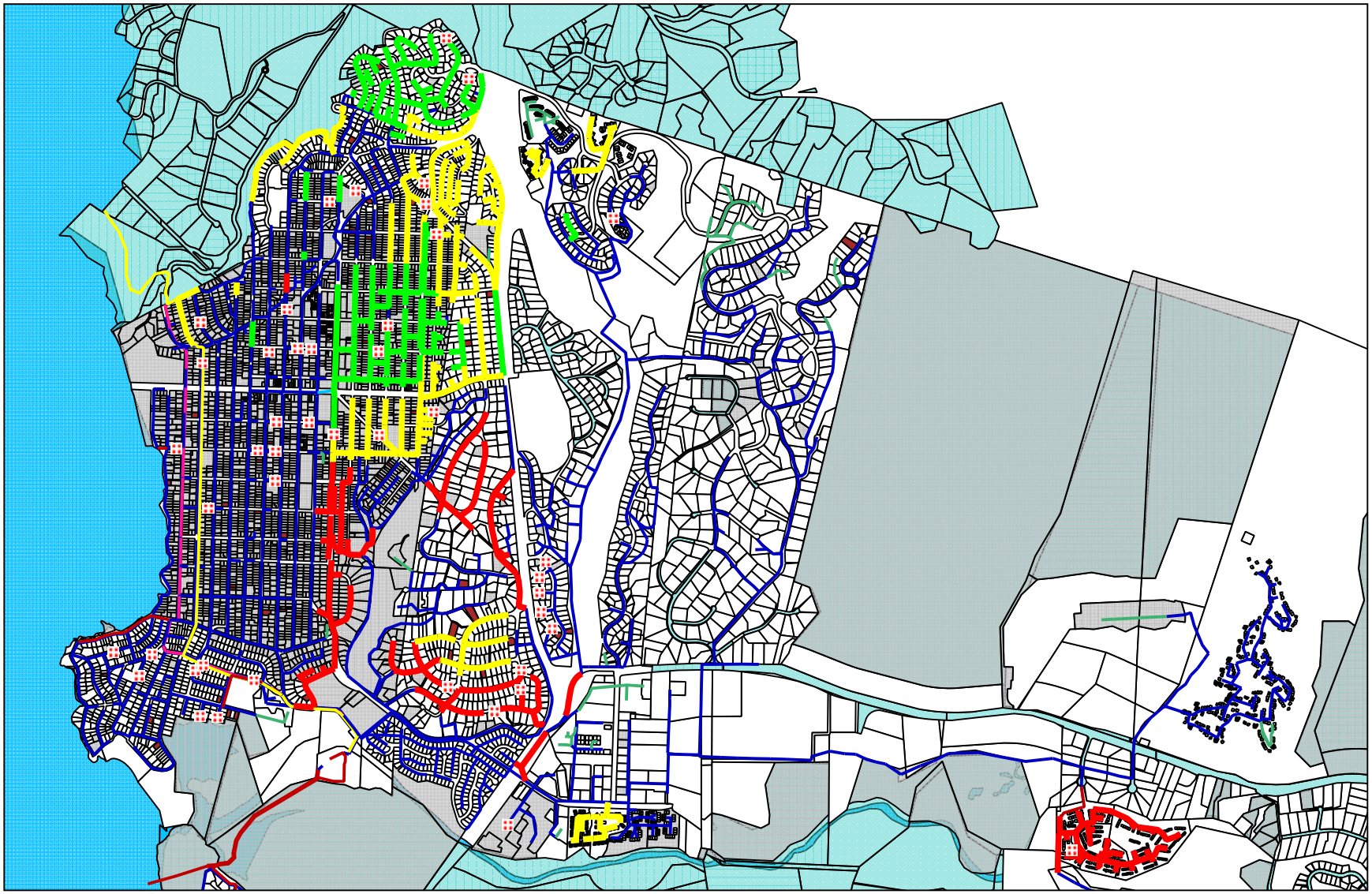
Service Calls Responded to by Crew

Date	Time	Callout	Resolution
4/17/2022	4:50 PM	Pump Fail	Called to 8th & Scenic for a pump fail. Staff disabled the pump and took it out of rotation till the next day. Staff found rags had clogged the impeller. Staff cleared the impeller and put the pump back in service.
4/26/2022	3:55 PM	Pump Fail	Called to Hacienda for a pump fail. Staff disabled the pump and took it out of rotation till the next day. Staff found rags had clogged the impeller. Staff cleared the impeller and put the pump back in service.

USA Location Requests – 128
Plumbing permit inspections – 23
Private Sewer Lateral Compliance Certificates Issued – 20

FUNDING
N/A

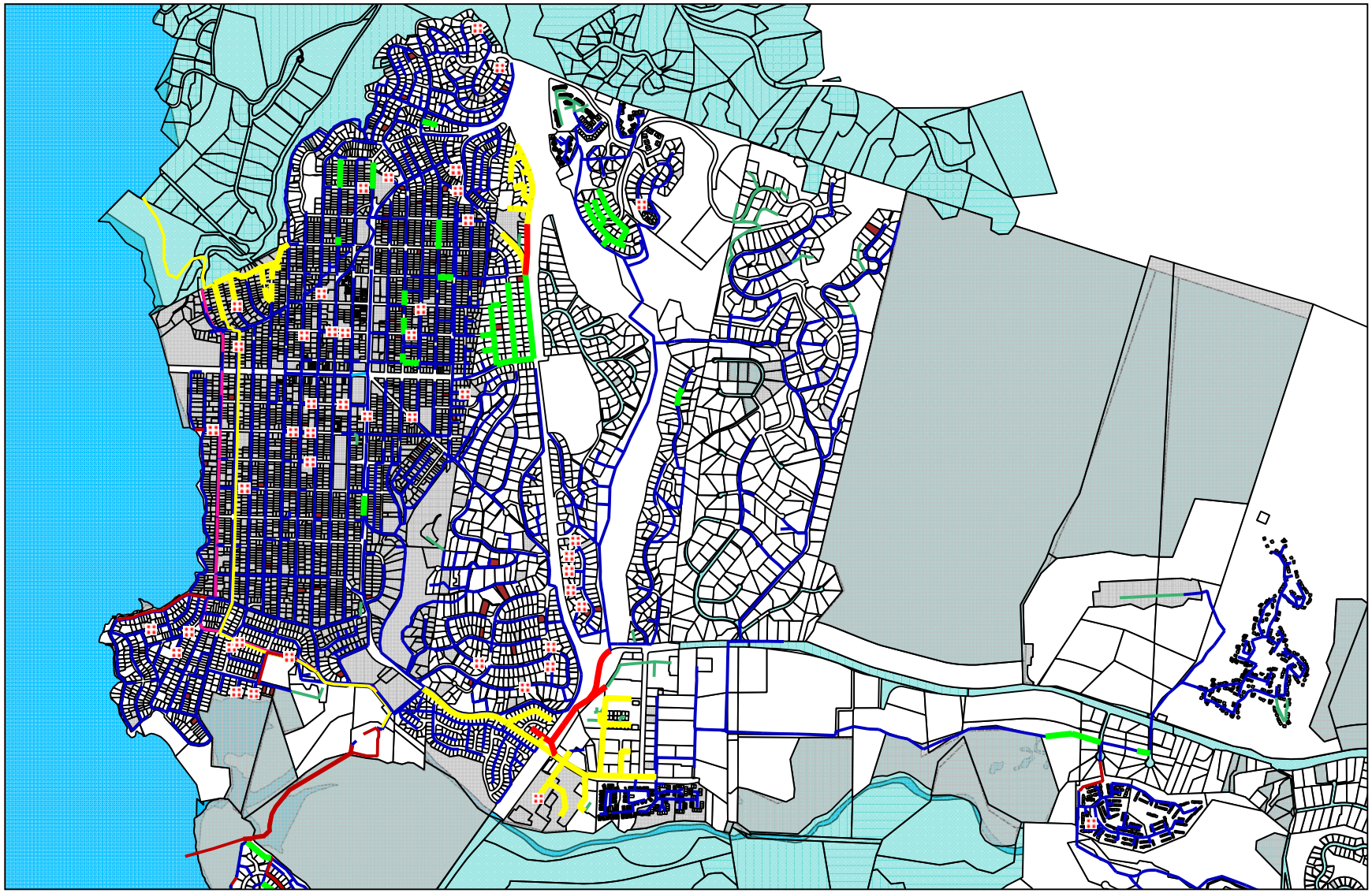
April (Red)	35,310 feet	
March (Yellow)	52,215 feet	
February (Green)	36,470 feet	Monthly Cleaning Map



RedZone ROBOTICS

5/9/2022

April (Red)	3,743 feet	
March (Yellow)	16,601 feet	
February (Green)	11,627 feet	Monthly CCTV Map



RedZone ROBOTICS

5/9/2022

STAFF REPORT

To: Board of Directors

From: Mark Dias, Safety and
Regulatory Compliance Administrator
(S/C Admin Dias)

Date: May 26, 2022

Subject: Monthly Safety Report (for April 2022)

RECOMMENDATION

Receive Report- Informational only; no action required

DISCUSSION

Safety & Training

- **April 6- Heat Illness Prevention Program Training.** With a spring heatwave expected the following day, S/C Admin Dias presented and trained staff on the Heat Illness Prevention Program. The program was updated in November. Heavy emphasis was placed on the fact that there is an acclimatization period of several days for workers bodies to adjust to heat stress and each person acclimatizes differently. Staff was trained on the different types of heat illness symptoms and if they are experiencing any heat illness symptoms, they should take a break and inform their supervisor accordingly. This will become a recurring (annual) training each spring or early summer.

- **April 13- Safety Culture (Thinking of the Next Person).** Mark Napier, Collections Worker II, gave a presentation on ways to think about the next person who will be using an area; especially when temporarily storing deliveries and larger equipment indoors. Examples were given about how to thoughtfully place items to help the next person using the space. These included: keeping walkways clear; placing items where they could easily be accessed for relocation to its final location; and not blocking access to other equipment.

- **April 30- Cell phone distractions.** Ray DeOcampo, Lab Supervisor, gave a presentation called, "Distracted While Walking" which emphasized how the use of cell phones causes people to lose situational awareness. This can lead to workers walking into objects, being struck by moving equipment and tripping over objects.

- **April 27- Stairway Safety.** S/C Admin Dias gave a presentation on twelve tips to prevent injures while using stairways. It was emphasized that on the plant walkways and stairways can change on a daily or even hourly basis. Staff cannot assume that a stairway will be the same as the last time it was used. Changes occur with the weather or because cords, hoses and equipment were put into use for a project.

Ongoing Safety Improvements

During April, Maintenance Superintendent Chris Foley and S/C Admin Dias continued to implement safety improvements and seek input from the operations crew and the Safety Committee. Activities during April included:

- **New Formalized Monthly Housekeeping Inspections.** In February a worker was injured when a pile of pipes shifted and rolled onto his leg. A physical solution was installed on the pipe rack to prevent a reoccurrence. As part of general safety checks, S/C Admin Dias walks the site at least once a day to look for hazards or unsafe practices. However, it was decided to formalize a monthly housekeeping inspection checklist so these types of inspections could be documented. The checklist includes proper storage (overhead, tipping, shifting), but was expanded to also include accumulation of combustible materials and trip hazards.

- **Removal of expired epoxies.** As part of projects in the 2010-decade, various epoxies were purchased to coat piping and surfaces. The unused epoxies were being stored in a metal Conex container. As part of the relocation of oils, paints and coatings into the old chlorine storage room last year, the epoxies were determined to be well past their expiration dates (7 to 10 years past). In addition, the heating and cooling extremes in the metal Conex exceeded the manufacturer's storage temperature criteria. The Monterey Regional Waste Management District takes up to 225 lbs. of materials per month at a nominal cost of $1 per pound. This was determined to be much less expensive than disposal via a hazardous materials disposal company. The last load of epoxies was taken in April. Any newly procured epoxies and paints are now stored indoors to avoid temperature extremes to extend their shelf-life.

Tours and Outreach

- **Tours**. Tours remain on temporary hold while several areas of the plant are being impacted by Phase II construction activities. Carmel High requested a tour and because a meaningful tour could not be safely given, S/C Admin Dias will be giving four classroom presentations at the school in May.

Injuries; First Aid Incidents; Workers Compensation Claims

There were no first aid injuries or Workers' Compensation cases in April. The employee with the foot injury (as reported in February's report) remained on restricted duty for the entire month (21 working days). The tracking matrix below reflects data through April 30.

	Work Related Injuries and Illnesses for 2022 Calendar Year				
TYPE	New Incidents (Month)	Total Incidents (Year)	Total Days Away from Work (Year)	Total Days of Job Restriction (Year)	Cumulative days lost (Year)
OSHA Injuries	0	1	1	59	1
OSHA Illnesses	0	0	0	0	0
Other WC Claims	0	0	0	0	0
First Aid (non-OSHA)	0	0	0	0	0

FUNDING
N/A- Informational item only

Wastewater Treatment Facility Operations Report

	HYDRAULIC LOADINGS					2022 YEAR-TO-DATE	
Report for: April 2022	**Total Monthly, MG**	**Avg. Daily, MGD**	**Min Daily, MGD**	**Max Daily, MGD**	**% of Total**	**MG**	**acre-feet**
CAWD Flow	23.329	0.740	0.751	0.883	66.462	94.72	290.56
PBCSD Flow	11.772	0.392	0.301	0.556	33.538	46.81	143.57
Total Plant Flow	35.101	1.132	1.052	1.439	100.00	141.53	434.14
Tertiary Flow	25.631	0.915	0.000	1.099	73.021	100.60	308.58
Ocean Discharge	9.026	0.301	0.112	1.124	25.714	41.08	126.00
Potable Water	0.000	0.000	0.000	0.000	0.000	0.000	0.000

TERTIARY PROCESS HISTORY

Total Annual Reclamation Production (2022)	100.60MG (308.58acre-ft.)
Total Lifetime Reclamation Production (94-22)	9.00 BG (27.61 K acre-ft.)
12 Month Rolling Total Reclamation Production	354.53 MG (1088.05 acre-ft.)

ELECTRICAL COSTS

Monthly Totals	**Apr'22 kWh**	**Price per kWh**	**Apr'22**	**Mar'22**	**Feb'22**	**Jan'22**
Secondary	122,940.00	$ 0.184	$ 22,586.54	$ 17,535.45	$ 15,984.77	$ 11,880.60
Blowers	52,128.96	$ 0.192	$ 10,018.75	$ 9,692.95	$ 6,357.66	$ 9,456.60
CAWD Total	175,068.96		$ 32,605.29	$ 27,228.40	$ 22,342.43	$ 21,337.20
Tertiary	77,094.24	$ 0.203	$ 15,648.90	$ 16,666.66	$ 14,522.02	$ 16,423.59
MF/RO	83,588.00	$ 0.220	$ 18,367.65	$ 19,014.22	$ 19,657.48	$ 17,709.53
Reclaim Total	160,682.24		$ 34,016.55	$ 35,680.88	$ 34,179.50	$ 34,133.12
Adjusted Monthly Totals (1)	**CAWD Total**	$ 20,034.57		**Reclamation Total**		$ 46,587.27

kW-h Per Acre Foot

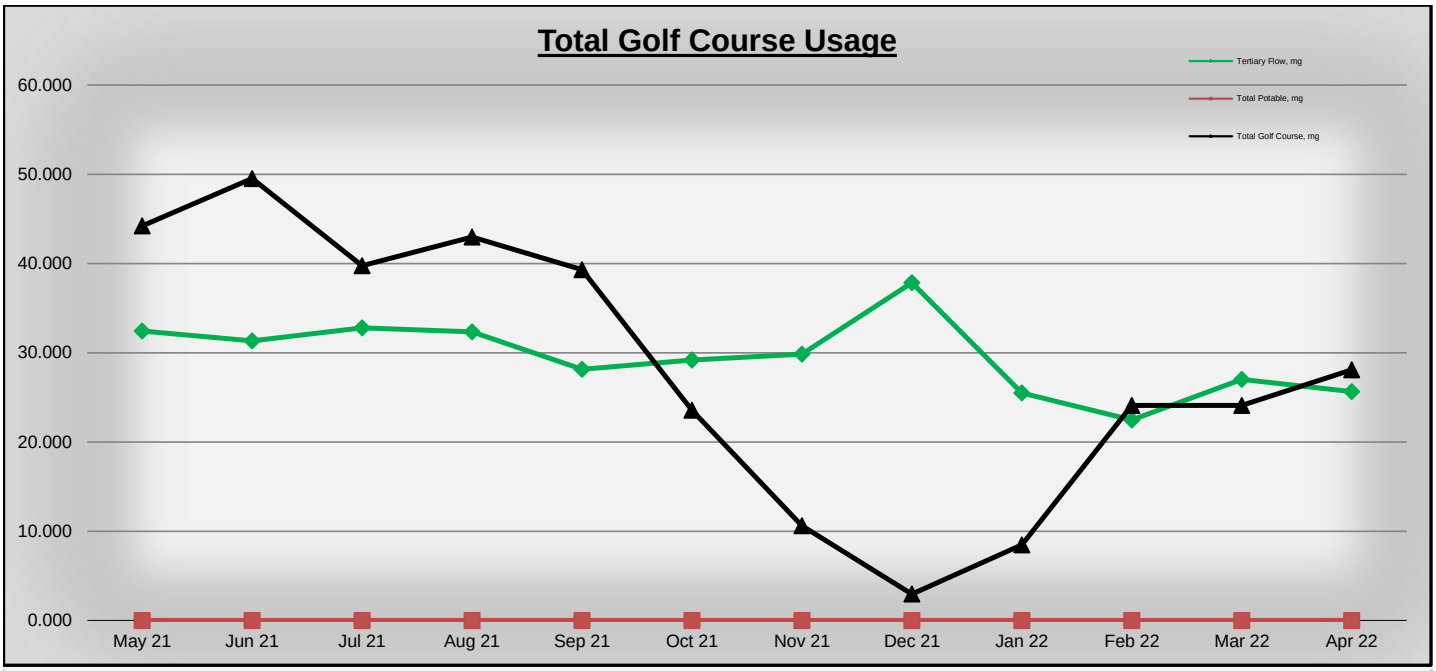
	2021				2022			
	1 QTR	**2 QTR**	**3 QTR**	**4 QTR**	**1 QTR**	**2 QTR**	**3 QTR**	**4 QTR**
CAWD	1453.87	1327.64	1298.73	1681.53	1409.48	N/A	N/A	N/A
Reclamation	1984.84	1939.79	1682.65	1887.92	2190.20	N/A	N/A	N/A

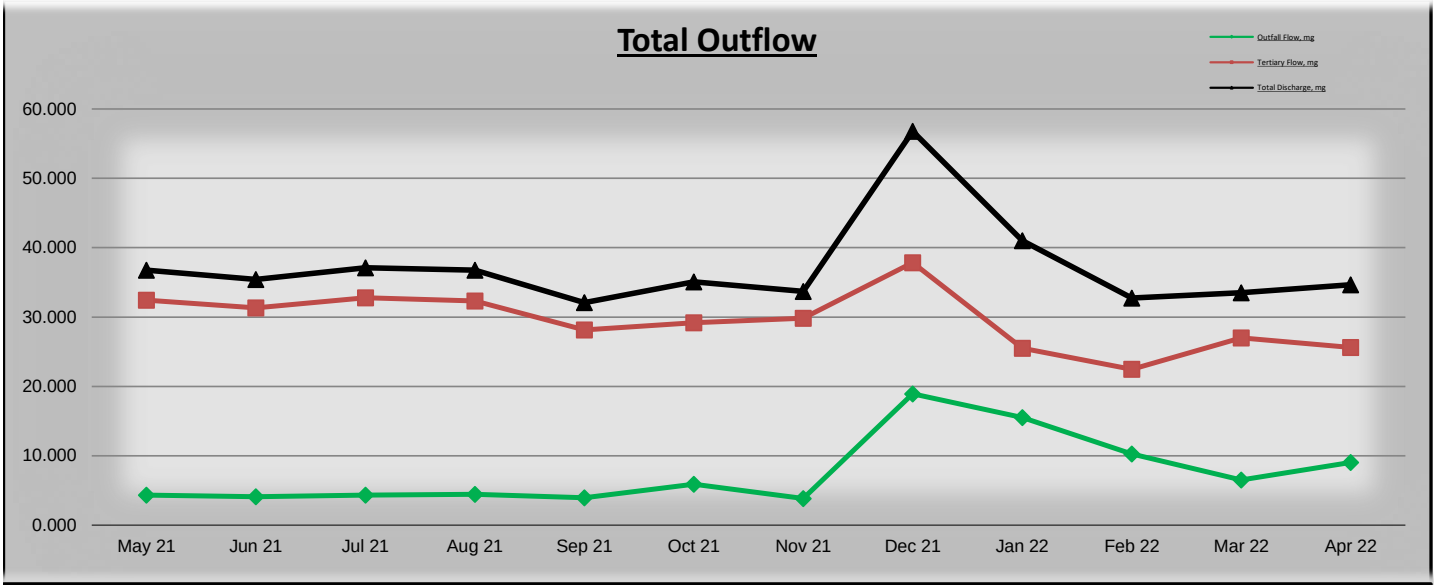
MICROTURBINE SUMMARY

Month	**Apr '22 kW-h**	**Mar'22**	**Feb'22**	**Jan '22**	**Accumulated Totals**
Production,kW-h (2)	0	24,427	22,570	18,128	1,225,671.00

(1) Cost adjustment for Reclamation percentage for Secondary power costs and CAWD's percentage for Tertiary's power costs due to the Lab's power usage.

(2) Microturbine system off-line due to the gas compressor malfunction.


Total Golf Course Usage
Tertiary Flow, mg
Total Potable, mg
Total Golf Course, mg
60.000
50.000
40.000
30.000
20.000
10.000
0.000
May 21
Jun 21
Jul 21
Aug 21
Sep 21
Oct 21
Nov 21
Dec 21
Jan 22
Feb 22
Mar 22
Apr 22


Total Outflow
Outfall Flow, mg
Tertiary Flow, mg
Total Discharge, mg
60.000
50.000
40.000
30.000
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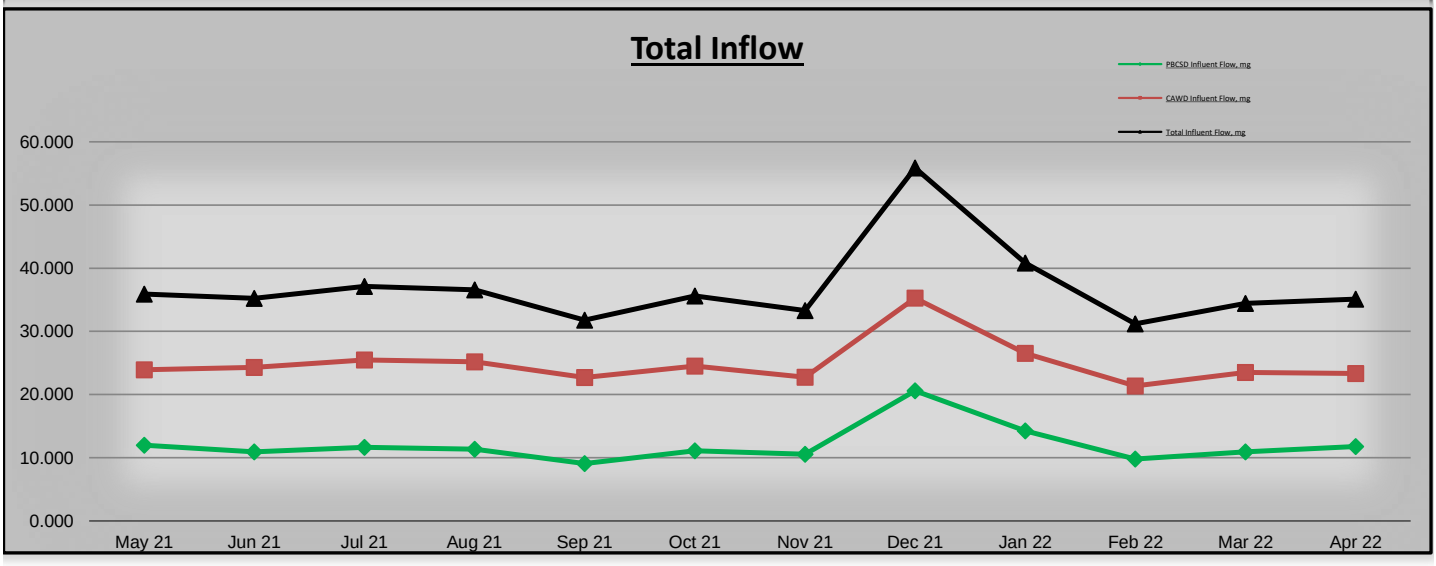
Total Inflow
PBCSD Influent Flow, mg
CAWD Influent Flow, mg
Total Influent Flow, mg
60.000
50.000
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30.000
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0.000
May 21
Jun 21
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Jan 22
Feb 22
Mar 22
Apr 22

Wastewater Treatment Facility Operations Report

	HYDRAULIC LOADINGS					2022 YEAR-TO-DATE	
Report for: March 2022	**Total Monthly, MG**	**Avg. Daily, MGD**	**Min Daily, MGD**	**Max Daily, MGD**	**% of Total**	**MG**	**acre-feet**
CAWD Flow	23.496	0.758	0.681	0.893	68.243	71.40	219.00
PBCSD Flow	10.934	0.353	0.295	0.424	31.757	35.03	107.46
Total Plant Flow	34.430	1.111	0.976	1.317	100.00	106.43	326.47
Tertiary Flow	27.006	0.965	0.333	1.198	78.437	74.97	229.96
Ocean Discharge	6.519	0.210	0.108	0.960	18.934	32.05	98.31
Potable Water	0.000	0.000	0.000	0.000	0.000	0.000	0.000

TERTIARY PROCESS HISTORY

Total Annual Reclamation Production (2022)	74.97MG (229.96acre-ft.)
Total Lifetime Reclamation Production (94-22)	8.97 BG (27.53 K acre-ft.)
12 Month Rolling Total Reclamation Production	359.65 MG (1103.76 acre-ft.)

ELECTRICAL COSTS

Monthly Totals	**Mar'22 kWh**	**Price per kWh**	**Mar'22**	**Feb'22**	**Jan'22**	**Dec'21**
Secondary	89,062.00	$ 0.197	$ 17,535.45	$ 15,984.77	$ 11,880.60	$ 16,980.55
Blowers	54,171.04	$ 0.179	$ 9,692.95	$ 6,357.66	$ 9,456.60	$ 9,227.58
CAWD Total	143,233.04		$ 27,228.40	$ 22,342.43	$ 21,337.20	$ 26,208.13
Tertiary	86,548.72	$ 0.193	$ 16,666.66	$ 14,522.02	$ 16,423.59	$ 14,959.99
MF/RO	85,639.00	$ 0.222	$ 19,014.22	$ 19,657.48	$ 17,709.53	$ 25,021.75
Reclaim Total	172,187.72		$ 35,680.88	$ 34,179.50	$ 34,133.12	$ 39,981.74
Adjusted Monthly Totals (1)	**CAWD Total**	$ 16,675.12		**Reclamation Total**		$ 46,234.16

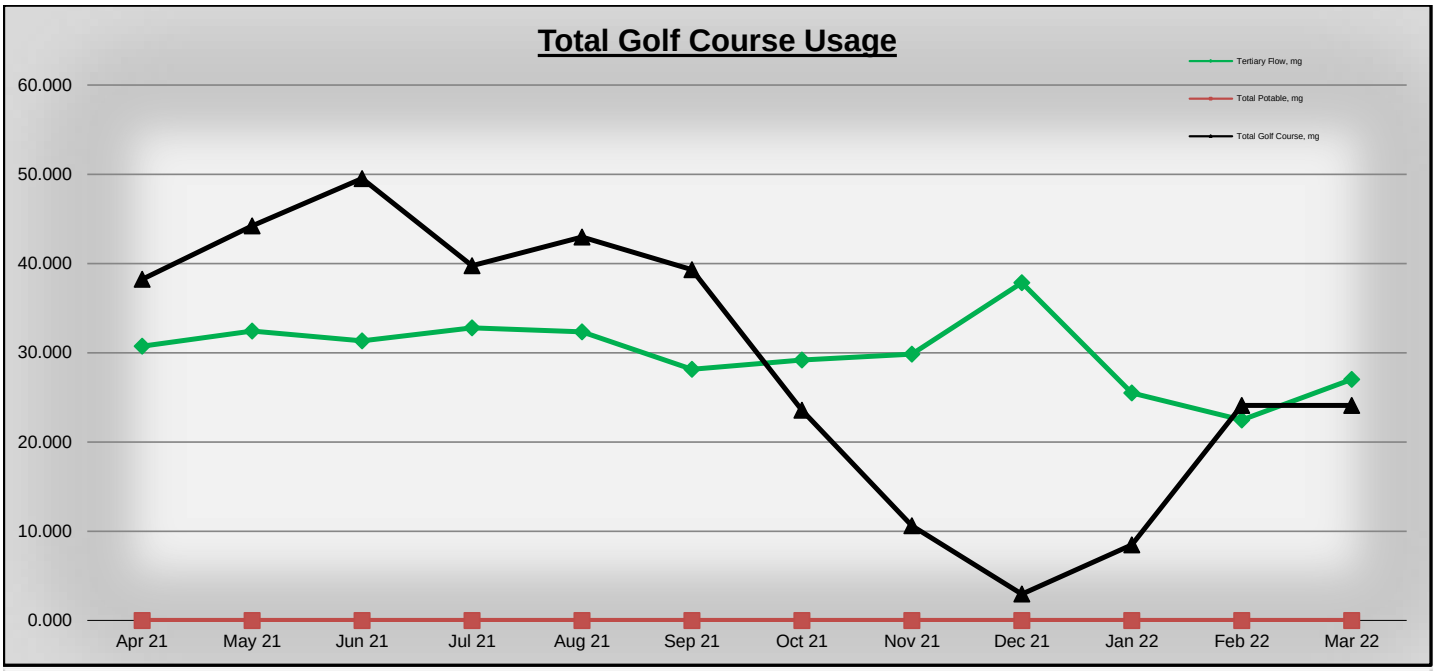
kW-h Per Acre Foot

	2021				2022			
	1 QTR	**2 QTR**	**3 QTR**	**4 QTR**	**1 QTR**	**2 QTR**	**3 QTR**	**4 QTR**
CAWD	1453.87	1327.64	1298.73	1681.53	1409.48	N/A	N/A	N/A
Reclamation	1984.84	1939.79	1682.65	1887.92	2190.20	N/A	N/A	N/A

MICROTURBINE SUMMARY

Month	**Mar '22 kW-h**	**Feb'22**	**Jan '22**	**Dec '21**	**Accumulated Totals**
Production,kW-h	24,427	22,570	18,128	0	1,225,671.00

(1) Cost adjustment for Reclamation percentage for Secondary power costs and CAWD's percentage for Tertiary's power costs due to the Lab's power usage.


Total Golf Course Usage
Tertiary Flow, mg
Total Potable, mg
Total Golf Course, mg
60.000
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30.000
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Apr 21
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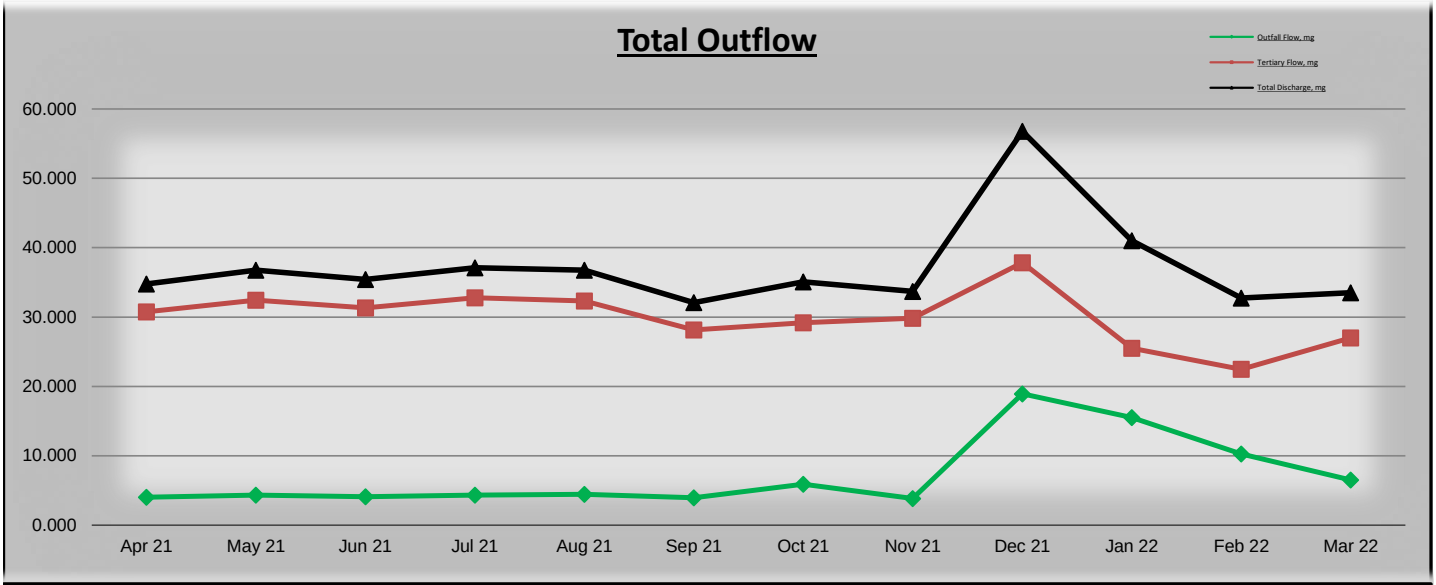
Total Outflow
Outfall Flow, mg
Tertiary Flow, mg
Total Discharge, mg
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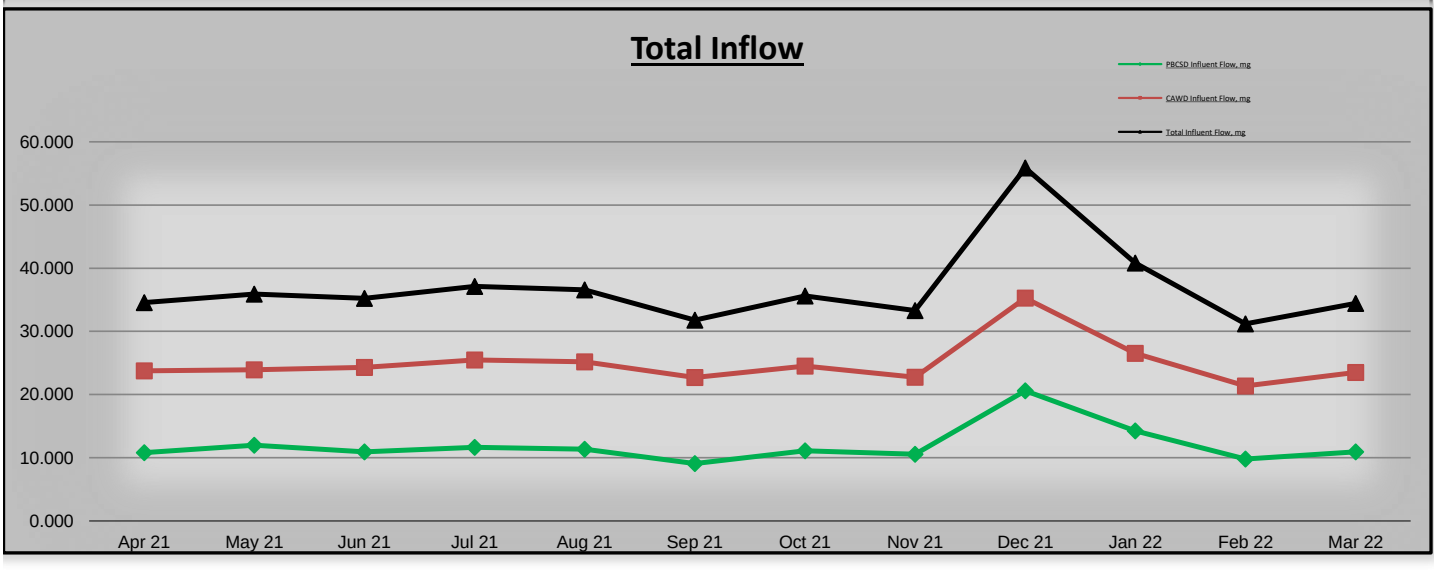
Total Inflow
PBCSD Influent Flow, mg
CAWD Influent Flow, mg
Total Influent Flow, mg
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Apr 21
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Jan 22
Feb 22
Mar 22

Wastewater Treatment Facility Operations Report

	HYDRAULIC LOADINGS					2022 YEAR-TO-DATE	
Report for: February 2022	**Total Monthly, MG**	**Avg. Daily, MGD**	**Min Daily, MGD**	**Max Daily, MGD**	**% of Total**	**MG**	**acre-feet**
CAWD Flow	21.369	0.763	0.711	0.828	68.510	47.90	146.93
PBCSD Flow	9.822	0.351	0.315	0.453	31.490	24.10	73.92
Total Plant Flow	31.191	1.114	1.026	1.281	100.00	72.00	220.85
Tertiary Flow	22.463	0.832	0.000	1.121	72.018	47.96	147.12
Ocean Discharge	10.278	0.367	0.106	0.916	32.952	25.53	78.31
Potable Water	0.000	0.000	0.000	0.000	0.000	0.000	0.000

TERTIARY PROCESS HISTORY

Total Annual Reclamation Production (2022)	47.96MG (147.12acre-ft.)
Total Lifetime Reclamation Production (94-22)	8.94 BG (27.45 K acre-ft.)
12 Month Rolling Total Reclamation Production	346.48 MG (1063.33 acre-ft.)

ELECTRICAL COSTS

Monthly Totals	**Feb'22 kWh**	**Price per kWh**	**Feb'22**	**Jan'22**	**Dec'21**	**Nov'21**
Secondary	95,502.00	$ 0.167	$ 15,984.77	$ 11,880.60	$ 16,980.55	$ 11,680.56
Blowers	57,377.44	$ 0.111	$ 6,357.66	$ 9,456.60	$ 9,227.58	$ 10,158.54
CAWD Total	152,879.44		$ 22,342.43	$ 21,337.20	$ 26,208.13	$ 21,839.10
Tertiary	74,567.44	$ 0.195	$ 14,522.02	$ 16,423.59	$ 14,959.99	$ 15,275.57
MF/RO	89,935.00	$ 0.219	$ 19,657.48	$ 17,709.53	$ 25,021.75	$ 19,507.16
Reclaim Total	164,502.44		$ 34,179.50	$ 34,133.12	$ 39,981.74	$ 34,782.73
Adjusted Monthly Totals (1)	**CAWD Total**	$ 12,486.54		**Reclamation Total**		$ 44,035.39

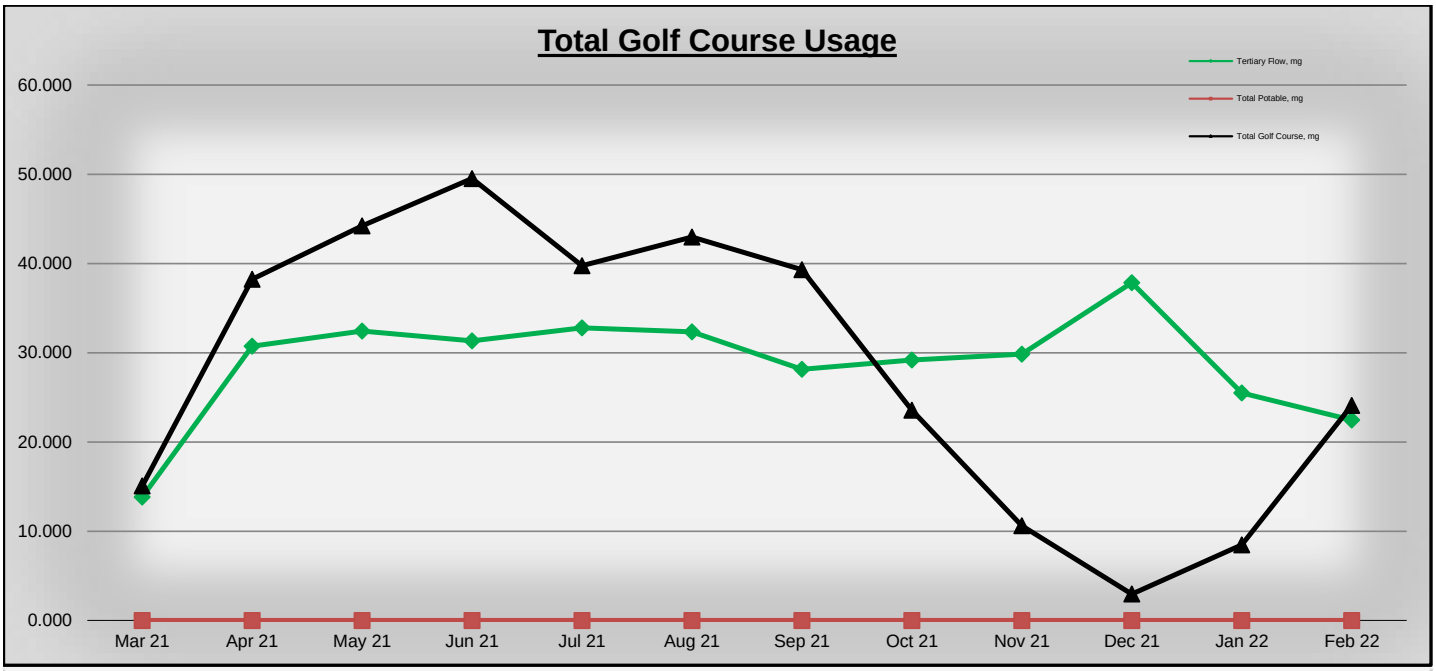
kW-h Per Acre Foot

	2021				2022			
	1 QTR	**2 QTR**	**3 QTR**	**4 QTR**	**1 QTR**	**2 QTR**	**3 QTR**	**4 QTR**
CAWD	1453.87	1327.64	1298.73	1681.53	N/A	N/A	N/A	N/A
Reclamation	1984.84	1939.79	1682.65	1887.92	N/A	N/A	N/A	N/A

MICROTURBINE SUMMARY

Month	**Feb '22 kW-h**	**Jan'22**	**Dec '21**	**Nov '21**	**Accumulated Totals**
Production,kW-h	22,570	18,128	0	0	1,201,244.00

(1) Cost adjustment for Reclamation percentage for Secondary power costs and CAWD's percentage for Tertiary's power costs due to the Lab's power usage.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Total Golf Course, mg
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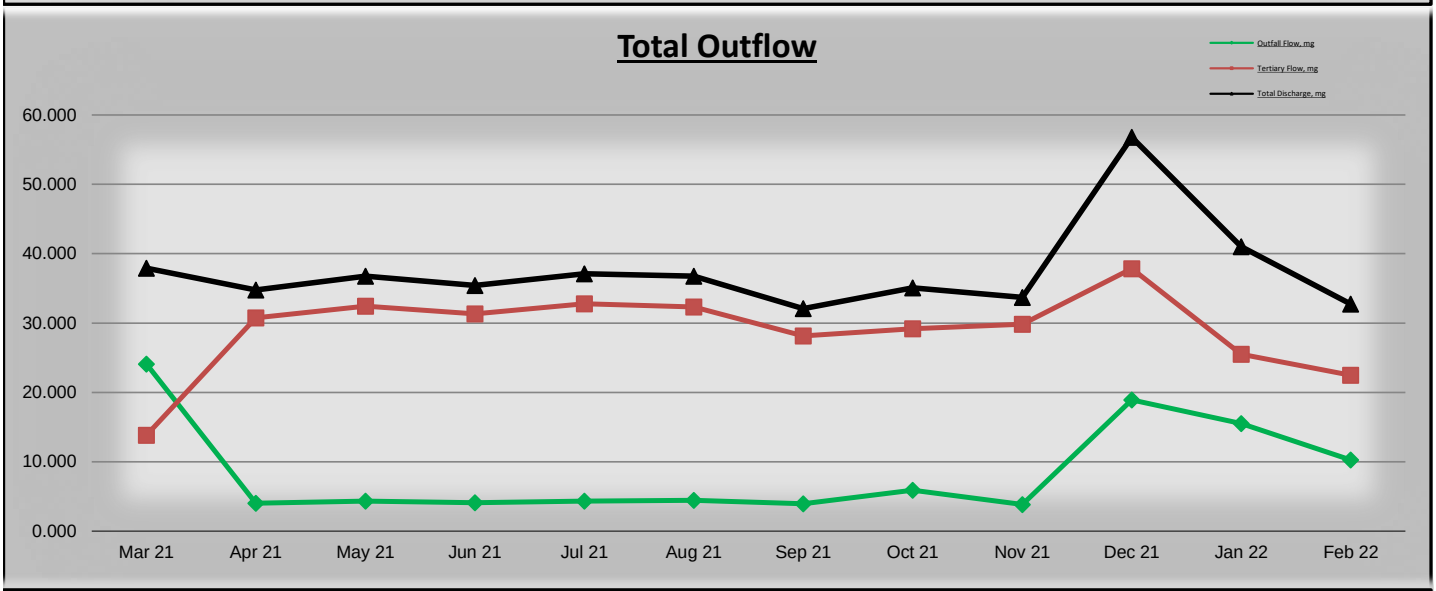
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Tertiary Flow, mg
Total Discharge, mg
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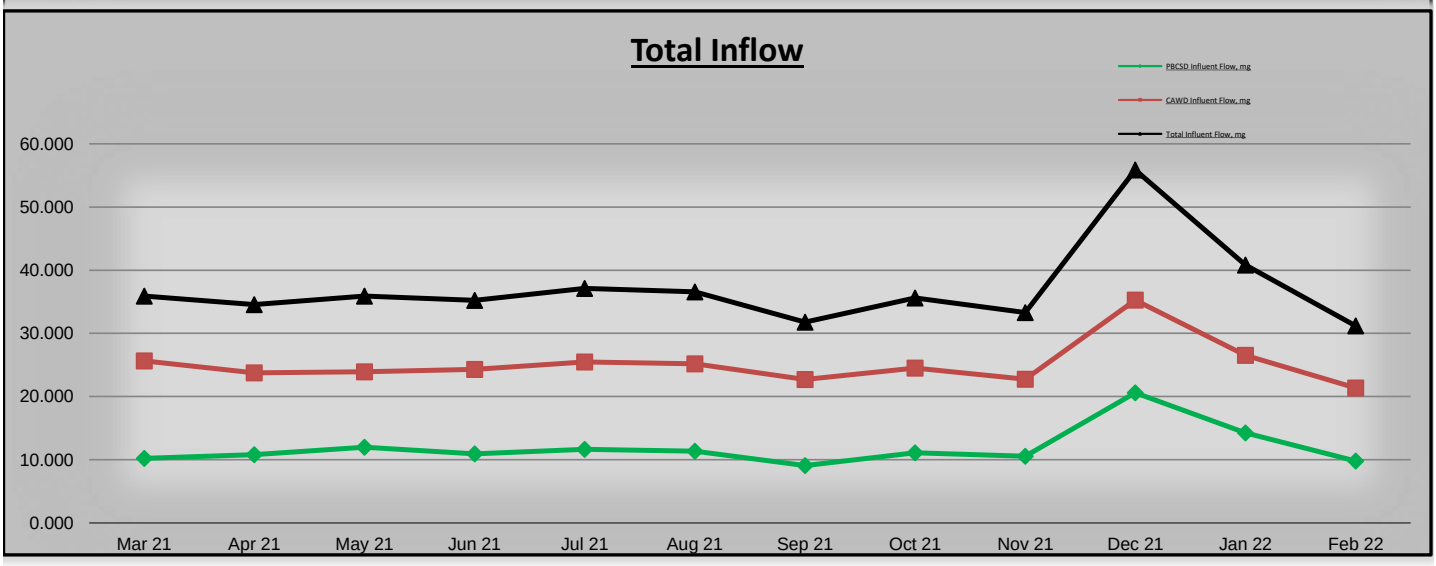
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PBCSD Influent Flow, mg
CAWD Influent Flow, mg
Total Influent Flow, mg
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STAFF REPORT

To: Board of Directors

From: Ray De Ocampo - Laboratory/Environmental Compliance Supervisor

Date: May 26, 2022

Subject: Monthly Report – April 2022

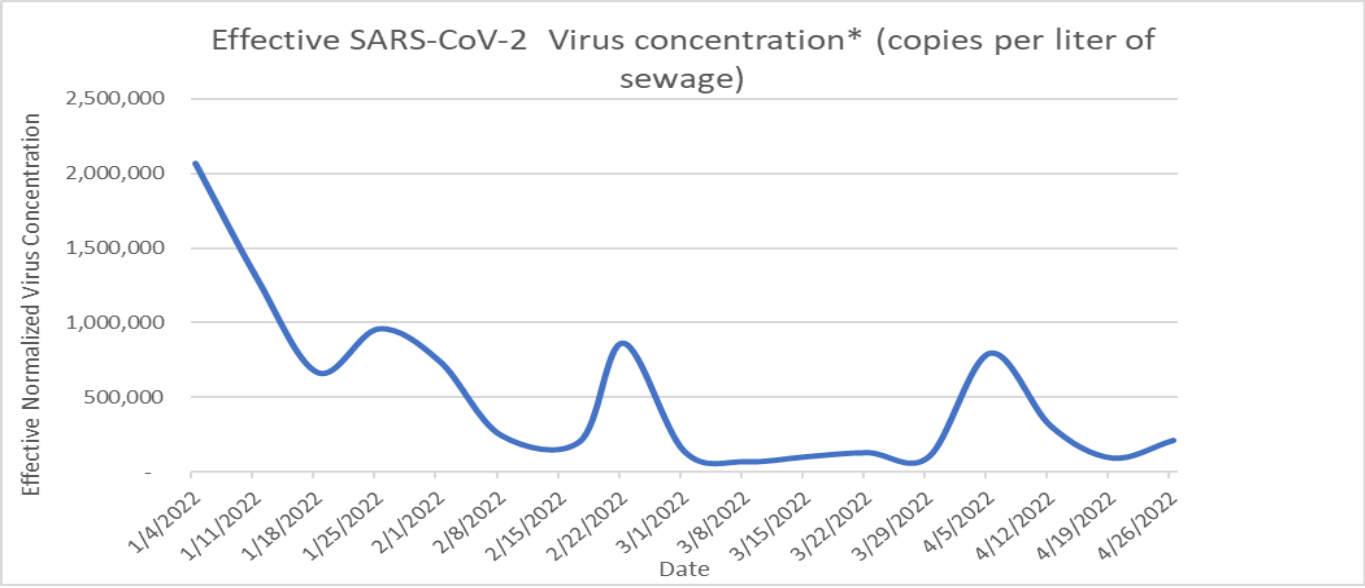
RECOMMENDATION

Receive Report - Informational only; No action required.

DISCUSSION

LABORATORY REPORT

- Biobot Analytics continues to provide COVID-19 analysis for Carmel Area Wastewater District (CAWD) composite samples of the Influent Pump Station. Biobot samples are available upon request and can also be viewed on the CAWD website: https://www.cawd.org/biobot-analytics-weekly-reports-of-concentration-levels-sars-cov-2#/body_file-e72defec-6488-4185-b5f3-ab45b2fe531e .



* effective virus concentration value is derived by adjusting the raw virus concentration to account for dilution & other factors (copies per liter of sewage)

- On April 11-14, 2022, Fanny Mui attended the California Water Environment Association (CWEA) Annual Conference in Sacramento, CA. Fanny was among the CWEA Monterey Section Laboratory Analyst winners going for the State award.

ENVIRONMENTAL COMPLIANCE REPORT

- Pretreatment grease trap letters were sent to Café Carmel and Bagel Bakery owners to require their businesses to install grease traps. Since the CAWD Pretreatment Ordinance 22-02 was approved, staff was able to assess businesses that are food service establishments that were not on the pretreatment program.
- The owner of a new restaurant, Promesa, contacted the Environmental Compliance staff to ask what will be required for a CAWD discharge permit and fees to be paid. Staff sent out the discharge permit application and fee invoice to Promesa which they completed and paid. Promesa staff anticipate opening in May 2022.

Restaurant Inspections

Restaurant	Compliant	Reason for Non-Compliance	Comments
Tommy Wok	Yes		
The Cottage	Yes		
Mission Bistro	Yes		
Myo Yogurt	Yes		
Sweet Reba's	Yes		
Island Taco	Yes		
L 'Escargot	Yes		
The Breadsong and SteakCraft	Yes		
Lafayette Bakery	Yes		
The Noodle Palace	Yes		
Casanova's	Yes		

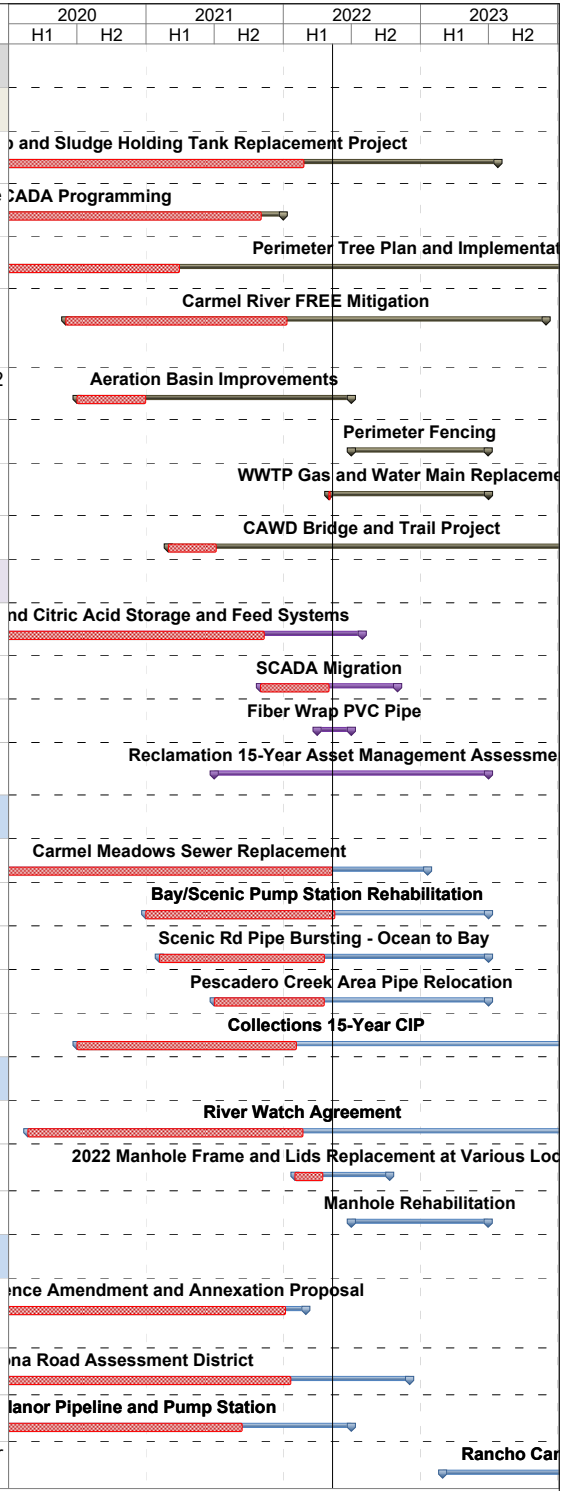
Grocery Store/Delicatessen Inspections

Grocery Store/Delicatessen	Compliant	Reason for Non-Compliance	Comments
Bruno's Deli and Market	Yes		
Sea Harvest Fish Market	Yes		

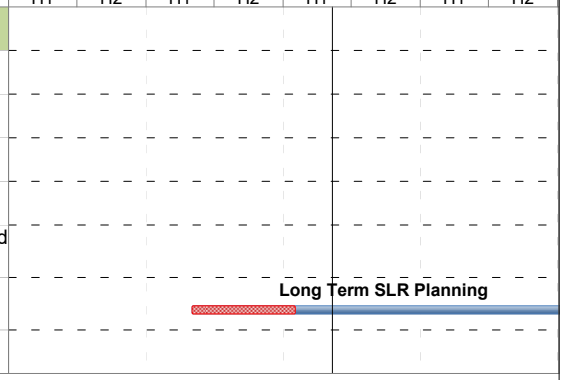
Compliance Register

% Compliance	Maintenance	Mechanical
February 2022	92	100
March 2022	100	100
April 2022	100	100

Project Number	GL	Task Name	Manager	Start	Finish	Current FY Budget	Cumulative Budget	Status
		Projects Implementation Plan Schedule						
		Treatment Plant Capital Projects						
18-01	1620.000	Elec/Mech Rehab and Sludge Holding Tank Replacement Project	Treanor	4/30/18	7/25/23	$5,000,000	$10,946,671	In Construction
18-05	5858.004	PLC/SCADA Programming	Foley	10/8/18	12/31/21	$200,000	$455,807	Anticipated Completion June 2022
18-28	1626.000	Perimeter Tree Plan and Implementation	Treanor	7/1/19	6/30/26	$60,000	$237,897	Planning Stakeholder Meeting
19-21	1993.000	Carmel River FREE Mitigation	Treanor	6/1/20	11/30/23	$0	$0	Design/Permitting/ Developing Funding Agreement
19-19	1634.000	Aeration Basin Improvements	Waggoner	7/1/20	6/30/22	$0	$9,030	Planning Installation for 2022
19-18	1593.000	Perimeter Fencing	Treanor	7/1/22	6/29/23	$200,000	$200,000	Scoping Design Work
22-03		WWTP Gas and Water Main Replacement	Treanor	5/2/22	6/30/23	$0	$300,000	In Study Phase
22-04	5500.006	CAWD Bridge and Trail Project	Treanor	3/1/21	2/29/28	$0	$550	Inactive
		Reclamation Capital Projects						
18-26	14777	Sulfuric Acid and Citric Acid Storage and Feed Systems	Treanor	1/1/19	7/29/22	$370,000	$438,743	In Construction
21-09	14776	SCADA Migration	Foley	11/1/21	10/31/22	$140,000	$140,000	In Progress 70%
21-10		Fiber Wrap PVC Pipe	Foley	4/1/22	6/30/22	$25,000	$25,000	Pending
		Reclamation 15-Year Asset Management Assessment	Treanor	7/1/21	6/30/23	$50,000	$50,000	Request Qualifications from Consultants
		Collections Capital Projects						
19-03	1586.000	Carmel Meadows Sewer Replacement	Lather	8/1/19	1/19/23	$150,000	$2,014,551	In Design / CEQA
20-07	1636.000	Bay/Scenic Pump Station Rehabilitation	Lather	12/31/20	6/30/23	$250,000	$756,726	In Design
20-08	1635.000	Scenic Rd Pipe Bursting - Ocean to Bay	Lather	2/5/21	6/30/23	$1,200,000	$1,280,276	In Design / CEQA
21-05	1637.000	Pescadero Creek Area Pipe Relocation	Lather	7/1/21	6/30/23	$450,000	$1,700,000	In Design
20-06		Collections 15-Year CIP	Lather	7/1/20	7/1/40	$0	$62,899,430	Work In Progress
		Collections Non-Capital Projects						
20-05		River Watch Agreement	Lather	2/21/20	2/21/24	$0	$0	Work In Progress
22-02	6130.005/ 6140.005	2022 Manhole Frame and Lids Replacement at Various Locations	Lather	2/1/22	10/10/22	$55,000	$55,000	Contracting
21-06	6140.005	Manhole Rehabilitation	Lather	7/1/22	6/29/23	$150,000	$150,000	On Hold Till Next FY
		Assessment Districts/Annexations						
19-09	5500.005	2020 Sphere of Influence Amendment and Annexation Proposal	Lather	3/15/19	3/1/22	$0	$50,000	In process of obtaining CDP Ammendment for annexations in coastal zone
18-21	1631.000/ 2505.000	Corona Road Assessment District	Lather	8/2/18	12/2/22	$0	$0	In Design / CEQA
19-08	1632.000	Carmel Valley Manor Pipeline and Pump Station	Lather	7/3/18	6/30/22	$0	$0	Re-Design by Property Owner in Progress
		Rancho Canada Subdivision	Lather	3/1/23	2/27/25	$0	$0	In Design by Property Owner



Project Number	GL	Task Name	Manager	Start	Finish	Current FY Budget	Cumulative Budget	Status
		Other Non-Capital Projects						
		Workforce Now	Foley			$0	$0	Implementation
		Employee Contract Negotiations	Buikema			$0	$0	In Progress
		Real Property Investigation	Buikema			$75,000	$75,000	Evaluation in Progress
		Cyber Security	Foley			$17,000	$17,000	Ongoing
		Lean Six Sigma	Buikema			$0	$0	Green Belt Level Training and Certification
22-01	5500.006	Long Term SLR Planning	Buikema / Treanor	5/3/21	2/29/40	$250,000	$1,400,000	In Progress
		Source Control Grease Task Force	Lather			$0	$0	In Progress



Treatment Plant Capital Project Summaries

Photo: New Sludge Tank Under Construction

Project Number:	**18-01**	
Project Name:	**Wastewater Treatment Plant (WWTP) – Elec/Mech Rehab & Sludge Holding Tank Replacement Project**	
Project Location:	Wastewater Treatment Plant	
Project Manager:	Treanor	
Status:	In Construction	
Project Description:	This project is a multi-area project at the WWTP aimed at mitigating risk of failure in the Influent Pump Station, Headworks, 3W/Chlorine Analyzer Building, Effluent Building and Sludge Storage Tank. Most of the work involves replacing aged electrical and mechanical equipment in existing buildings.	
Department:	Treatment	
Financial:	Cumulative Budget: $10,946,671	Cumulative Spent: $3,830,004
	FY Budget: $5,000,000	FY Spent: $2,933,333
Reclamation Share:	Estimated at 2.7% of project cost.	
Other Entities:	Pebble Beach Community Services District, CAWD/PBCSD Reclamation Project	
Permits Required:	Coastal Commission Notification	
Challenges:	Electrical Cutover Coordination; Steel tank vs concrete design to code	
Schedule:	• Construction anticipated for FY21/22 into FY22/23	
Consultants:	Design: Kennedy/Jenks Consultants Construction Management: Currie Engineers	
Contractor:	Clark Bros. Inc.	

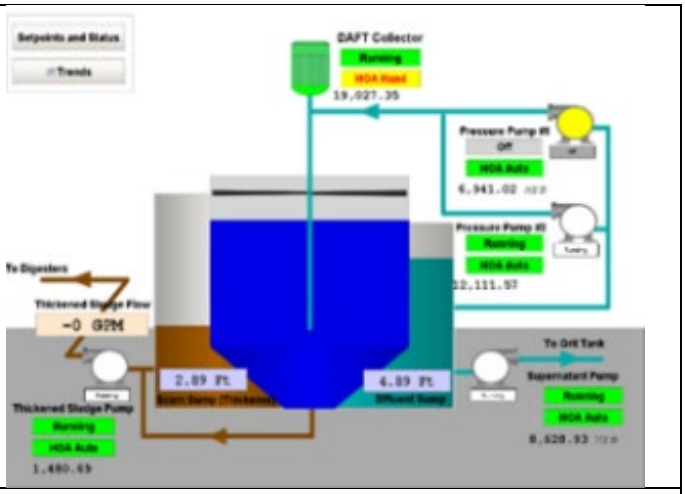


Photo: DAFT SCADA Overview Screen

Project Number:	**18-05**	
Project Name:	**Programmable Logic Controller (PLC) and Supervisory Control and Data Acquisition (SCADA) Programming Project**	
Project Location:	Wastewater Treatment Plant	
Project Manager:	Foley	
Status:	Anticipated Completion June 2022	
Project Description:	During the Phase 1 project a new SCADA software package from Inductive Automation was installed to parallel the existing system. This project includes the migration of the remaining SCADA screens from the legacy system to the new system. The PLC code is also being updated to the CAWD standards that are being developed during this project. This project is necessary to replace obsolete software and hardware so that the automated controls, alarms, and reporting remain accurate and reliable.	
Department:	Treatment	
Financial:	Cumulative Budget: $455,807	Cumulative Spent: $273,297
	FY Budget: $200,000	FY Spent: $17,490
Reclamation Share:	Partial Reclamation	
Other Entities:	None	
Permits Required:	None	
Schedule:	Some minor additional work remains and will be completed by 06-30-22	
Consultants:	Frisch Engineering	

Photo: Eucalyptus trees on South Side of Treatment Plant

Project Number:	**18-28**	
Project Name:	**Perimeter Tree Plan and Implementation**	
Project Location:	Wastewater Treatment Plant	
Project Manager:	Treanor	
Status:	Planning Stakeholder Meeting	
Project Description:	Planning and landscaping around the treatment plant. This will include looking into possibly replacing the non-native eucalyptus trees around the perimeter of the treatment plant with native tree species. The project will start with a study and a plan to determine costs, sequencing schedule, and visual impacts. The Eucalyptus trees around the plant have ongoing maintenance costs, which may be offset in the long term with a different type of tree screening. The purpose is to improve security around plant perimeter.	
Department:	Treatment	
Financial:	Cumulative Budget: $237,897	Cumulative Spent: $5,020
	FY Budget: $60,000	FY Spent: $2,123
Reclamation:	N/A	
Other Entities:	N/A	
Permits Required:	Currently unknown (In Study Phase)	
Challenges:	Time it will take for new trees to grow up that will fully screen treatment plant from view	
Schedule:	• Study moved to 2022; anticipate completion 06-30-26	
Consultants:	Scott Hall Landscape Design	
Contractor:	TBD	

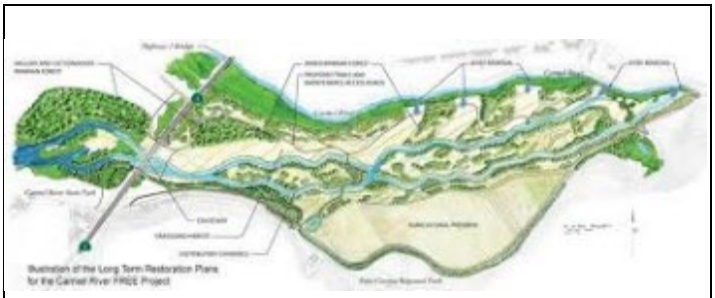


Photo: Carmel River Floodplain Restoration and Environmental Enhancement (CRFREE)

Project Number:	**19-21**	
Project Name:	**Carmel River Floodplain Restoration & Environmental Enhancement (CRFREE) Mitigation**	
Project Location:	Carmel River Lagoon	
Project Manager:	Treanor	
Status:	Design/Permitting/Developing Funding Agreement	
Project Description:	The CRFREE Project intends to create a new river channel in the Carmel River lagoon floodplain, which will significantly impact existing wastewater pipelines that cross the lagoon. To fully mitigate impacts from CRFREE the pipelines which are currently crossing over a portion of the lagoon are proposed to be installed underground using Horizontal Directional Drilling construction methods.	
Department:	Engineering	
Financial:	Coastal Conservancy Grant Budget: $750,000	Cumulative Spent: $618,569
		FY Spent: $130,756
** Project is being funded by CRFREE initiated grants		
Reclamation Share:	N/A	
Other Entities:	Monterey County	
Permits Required:	Coastal Commission, CA Fish and Wildlife, Army Corp of Engineers, Reginal Water Quality Control Board (RWQCB)	
Challenges:	Construction near environmentally sensitive habitat and obtaining new easement from State Parks	
Schedule:	• Construction anticipated in Summer 2023	
Consultants:	Design: Kennedy Jenks and Staheli Trenchless CEQA: Johnson Marigot	
Contractor:	TBD	

Photo: Existing air diffuser system

Project Number:	**19-19**	
Project Name:	**WWTP – Aeration Basin Improvements**	
Project Location:	Wastewater Treatment Plant	
Project Manager:	Waggoner	
Status:	Planning Installation for 2022	
Project Description:	The Aeration Basins 4A & 4B need to have additional diffusers installed to ensure the proper air (oxygen) transfer into the wastewater to support the aerobic microorganisms in the basins.	
Department:	Treatment	
Financial:	Cumulative Budget: $17,332	Cumulative Spent: $17,332
	FY Budget: $0	FY Spent: $8,302
Reclamation Share:	N/A	
Other Entities:	N/A	
Permits Required:	N/A	
Challenges:	Weather conditions and Scheduling	
Schedule:	• Design is complete • Materials ordered and received • Construction anticipated for 2022	
Consultants:	N/A	
Contractor:	N/A	

Photo: Existing Dilapidated Fence

Project Number:	**19-18**	
Project Name:	**Perimeter Fencing**	
Project Location:	Wastewater Treatment Plant	
Project Manager:	Treanor	
Status:	Scoping Design Work	
Project Description:	Install a new fence around the perimeter of the WWTP.	
Department:	Treatment	
Financial:	Cumulative Budget: $200,000	Cumulative Spent: $0
	FY Budget: $200,000	FY Spent: $0
Reclamation Share:	N/A	
Other Entities:	N/A	
Permits Required:	CEQA MND, CDP Notification	
Challenges:	Environmental Mitigations	
Schedule:	• Design in FY22-23 • Construction in FY23-24	
Consultants:	Kennedy Jenks	
Contractor:	TBD	

Photo: Gas Meter on North Side of River

Project Number:	**22-03**	
Project Name:	**WWTP Gas and Water Main Replacement**	
Project Location:	Wastewater Treatment Plant	
Project Manager:	Treanor	
Status:	In Study Phase	
Project Description:	The WWTP natural gas and water utility service exists on the opposite side of the Carmel River from the WWTP. CAWD owns the piping under the river for these utilities. The water line and gas line are PVC and identified as having a high risk of failure. The gas line is needed for plant operations to provide supplementary heating to the digesters for thermophilic digestion.	
Department:	Treatment	
Financial:	Cumulative Budget: $300,000	Cumulative Spent: $0
	FY Budget: $0	FY Spent: $0
Reclamation Share:	N/A	
Other Entities:	Cost Share w/ Collections @ 5.5%	
Permits Required:	TBD	
Challenges:	Underground work in riparian area	
Schedule:	• Currently undergoing alternatives analysis study • Design in FY22-23 • Construction in FY23-24	
Consultants:	Kennedy Jenks	
Contractor:	N/A	

Photo: Conceptual Rendering of Public Use and Bridge

Project Number:	**22-04**	
Project Name:	**CAWD Bridge and Trail Project**	
Project Location:	Wastewater Treatment Plant	
Project Manager:	Treanor	
Status:	Inactive	
Project Description:	Construct a new bridge at the location of the existing CAWD bridge over the Carmel River. Bridge would be open for public use would allow new walking trails to connect the City of Carmel-by-the-Sea (Mission Trail) to the Regional Parks (Palo Corona).	
Department:	Treatment	
Financial:	Cumulative Budget: $0	Cumulative Spent: $550
	FY Budget: $0	FY Spent: $0
**No budget. Funding potential via Carmel River Settlement grants.		
Reclamation Share:	N/A	
Other Entities:	State Parks, Catholic Diocese, City of Carmel-by-the-Sea, Regional Parks District	
Permits Required:	TBD	
Challenges:	Underground work in riparian area	
Schedule:	Pending an application for grant funding.	
Consultants:	TBD	
Contractor:	TBD	

Reclamation Capital Project Summaries

Photo: Existing totes used for Sulfuric Acid storage and Feed

Project Number:	**18-26**	
Project Name:	**Sulfuric Acid & Citric Acid Storage & Feed Systems Project**	
Project Location:	Reclamation – Microfiltration (MF)/Reverse Osmosis (RO)	
Project Manager:	Treanor	
Status:	In Construction	
Project Description:	Code compliance upgrades for existing acid chemical storage and feed system used by Reclamation for enhancing RO recovery. Project includes code compliant secondary containment and separation of dissimilar chemicals.	
Department:	Treatment	
Financial:	Cumulative Budget: $438,743	Cumulative Spent: $68,743
	FY Budget: $370,000	FY Spent: $0
Reclamation Share:	100%	
Other Entities:	Reclamation Project	
Permits Required:	Coastal Commission Notification	
Challenges:	Hazardous Chemical Safety	
Schedule:	Construction 2021/2022	
Consultants:	Trussell Technologies, Inc	
Contractor:	Monterey Peninsula Engineering	

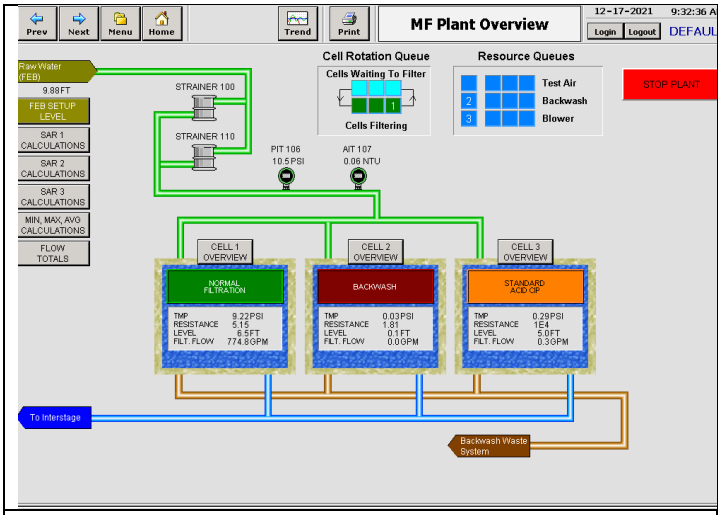


Photo: Microfiltration SCADA Overview

Project Number:	**21-09**	
Project Name:	**Reclamation Supervisory Control and Data Acquisition (SCADA) Migration Project**	
Project Location:	Reclamation Plant	
Project Manager:	Foley	
Status:	In Progress 71%	
Project Description:	Migration of reclamation legacy from RSView32 SCADA screens, alarms and trending to Ignition SCADA platform utilized by the treatment plant and collections pump stations. The legacy system software is no longer supported and poses a cybersecurity risk. It has been in service for 14+ years and the hardware is past its useful life. The new system will be more secure and installed on modern, reliable hardware.	
Department:	Reclamation	
Financial:	Cumulative Budget: $140,000	Cumulative Spent: $99,075
	FY Budget: $140,000	FY Spent: $30,827
Reclamation Share:	100%	
Other Entities:	Reclamation Project	
Permits Required:	None	
Challenges:	Structure of old Programming	
Schedule:	Work started in December 2021	
Consultants:	Frisch Engineering	

Collections Capital Project Summaries

Photo: View gravity pipe in Carmel easement

Project Number:	**19-03**	
Project Name:	**Carmel Meadows Sewer Replacement**	
Project Location:	Collection System	
Project Manager:	Lather	
Status:	In Design / California Environmental Quality Act (CEQA)	
Project Description:	The project will replace 1,300 feet of Ductile Iron Pipe (DIP) on an aerial span and eight manholes by constructing a small pump station at the end of Mariposa Drive. This project is located on an easement parallel to Ribera Road and was originally installed in the early 1960's.	
Department:	Collections	
Financial:	Cumulative Budget: $2,014,551	Cumulative Spent: $465,763
	FY Budget: $150,000	FY Spent: $89,977
Permits Required:	Coastal Permit and Environmental Review	
Challenges:	Redirecting the sewer to the pump station without requiring booster pumps for individual houses.	
Schedule:	Design and Environmental Review completed by 5/26/22. Construction to begin FY22/23.	
Consultants:	SRT Consultants, WRA Environmental	
Contractor:	TBD	

Photo: Looking at Pump Station Exterior

Project Number:	**20-07**	
Project Name:	**Bay/Scenic Pump Station Rehabilitation**	
Project Location:	Collection System	
Project Manager:	Lather	
Status:	In Design	
Project Description:	Remodel the interior of the pump station and update SCADA panel to remove from areas prone to flooding.	
Department:	Collections	
Financial:	Cumulative Budget: $756,726	Cumulative Spent: $30,892
	FY Budget: $250,000	FY Spent: $21,031
Reclamation Share:	0%	
Other Entities:	Carmel-by-the-Sea, Coastal Commission	
Permits Required:	Exemptions from CEQA & Coastal Commission	
Challenges:	Traffic Control	
Schedule:	Design 2021, Construct 2022, completed by 06-23	
Consultants:	SRT	
Contractor:	Pending	

Photo: Pipe Bursting Limits on Scenic

Project Number:	**20-08**	
Project Name:	**Scenic Rd Pipe Bursting - Ocean to Bay**	
Project Location:	Collection System	
Project Manager:	Lather	
Status:	In Design / CEQA	
Project Description:	Replace approximately 9,525 linear feet of existing 6-inch clay pipe with a new 8-inch High-Density Polyethylene (HDPE) and includes manhole rehabilitation.	
Department:	Collections	
Financial:	Cumulative Budget: $1,280,276	Cumulative Spent: $187,223
	FY Budget: $1,200,000	FY Spent: $81,125
Reclamation Share:	0%	
Other Entities:	Carmel-by-the-Sea, Coastal	
Permits Required:	CEQA & Coastal Commission permit required.	
Challenges:	Traffic control & poorly mapped underground utilities. Cultural Resources at southern end of project.	
Schedule:	Design 2021-2022, Construct 2023, completed 06-23	
Consultants:	MNS, Rincon	
Contractor:	Pending	

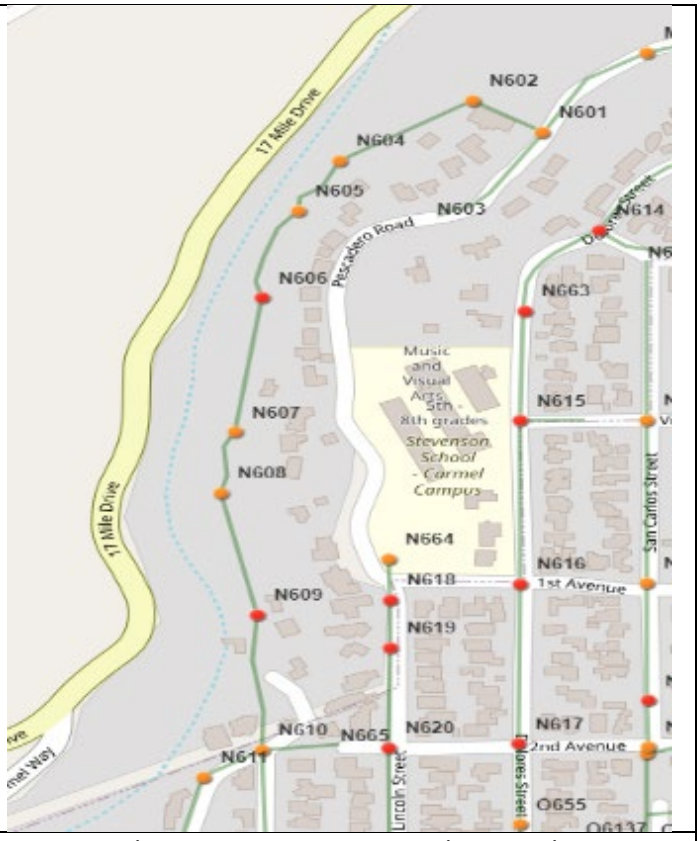


Photo: Sewer Line at Pescadero Creek

Project Number:	**21-05**	
Project Name:	**Pescadero Creek Area Pipe Relocation**	
Project Location:	Collection System	
Project Manager:	Lather	
Status:	In Design	
Project Description:	Relocate damaged pipe from creek slope to roadway	
Department:	Collections	
Financial: O&M	Cumulative Budget: $1,700,000	Cumulative Spent: $83,483
	FY Budget: $450,000	FY Spent: $83,483
Reclamation Share:	0%	
Other Entities:	N/A	
Permits Required:	Environmental Review	
Challenges:	Narrow road, depth of manhole, houses to be placed on individual pumps	
Schedule:	Start design, public outreach, & Environmental in Winter 2022/23.	
Consultants:	MNS, Denise Duffy	
Contractor:	TBD	

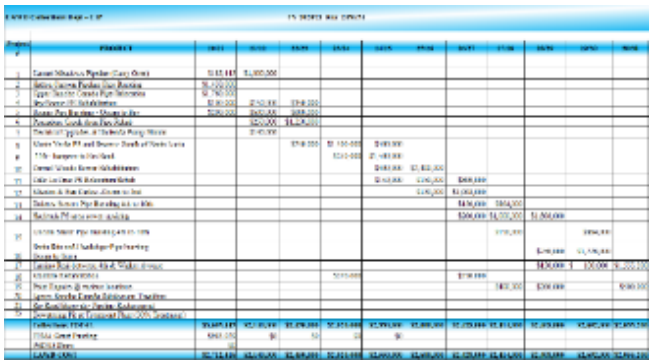


Photo: LT Capital Schedule

Project Number:	**20-06**	
Project Name:	**Collections 15 -Year CIP**	
Project Location:	Collection System	
Project Manager:	Lather	
Status:	Work in Progress	
Project Description:	Utilize updated sewer line inspection information and flow modeling to develop a 20-year Construction Improvement Plan	
Department:	Collections	
Projection of Total Capital Costs-15-Yr $60M	Construction Costs: $63M	Administration Costs: $10M (20% engineering, legal, admin.)
Financial:	Cumulative 15YR Budget: EST $63M	Cumulative Spent: N/A
	FY Budget: N/A	FY Spent: N/A
Reclamation Share:	0%	
Other Entities:	River Watch-see project #20-05	
Permits Required:	none	
Challenges:	Need all pipeline CCTV results to be completed to develop plan.	
Schedule:	2020 - 2040	
Consultants:	West Yost	
Contractor:	N/A	

Collections Non-Capital Project Summaries

Photo: River Watch logo

Project Number:	**20-05**	
Project Name:	**River Watch Agreement**	
Project Location:	Collection System	
Project Manager:	Lather	
Status:	Work in Progress	
Project Description:	Work with Collections to provide data that is needed to satisfy the milestones in the agreement with River Watch. As of April 2022, there are 75 remaining manholes to be inspected out of 1,428 for the FY.	
Department:	Collections	
Financial:	Cumulative Budget: N/A	Cumulative Spent: N/A
	FY Budget: N/A	FY Spent: N/A
Reclamation Share:	0%	
Other Entities:	River Watch	
Permits Required:	none	
Challenges:	Closed caption television (CCTV) scheduling deadlines. The Board agreed to increase staffing by one full time equivalent (FTE) to assist in meeting the required schedule. Received 1 yr. extension from River Watch due to COVID-19.	
Schedule:	Due date June 2023	
Consultants:		
Contractor:	N/A	

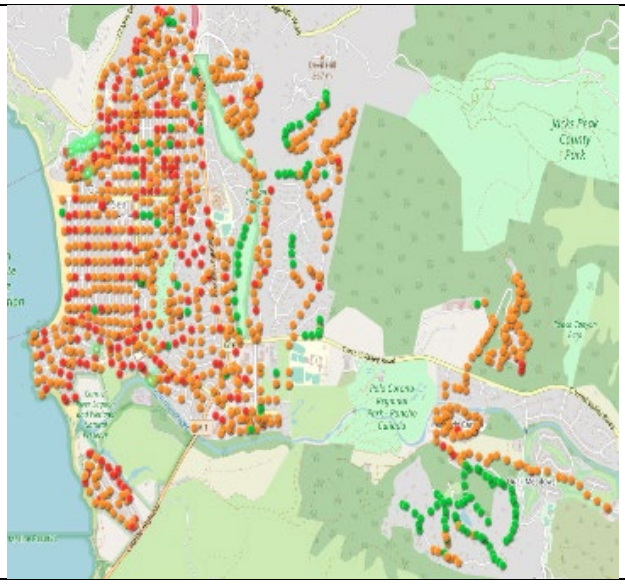


Photo: Manhole Inspection Map

Project Number:	**22-02**	
Project Name:	**2022 Manhole Frame & Lid Replacement at Various Locations**	
Project Location:	Collection System	
Project Manager:	Lather	
Status:	Bid Awarded 04/20/22	
Project Description:	Remove and replace 29 frames, rings and lids at various locations	
Department:	Collections	
Financial: O&M	Cumulative Budget: $205,000	Cumulative Spent: $0
	FY Budget: $205,000	FY Spent: $0
Reclamation Share:	0%	
Other Entities:	N/A	
Permits Required:	none	
Challenges:	Traffic control	
Schedule:	Complete by 10/10/2022	
Consultants:	none	
Contractor:	Coastal Paving & Excavating	

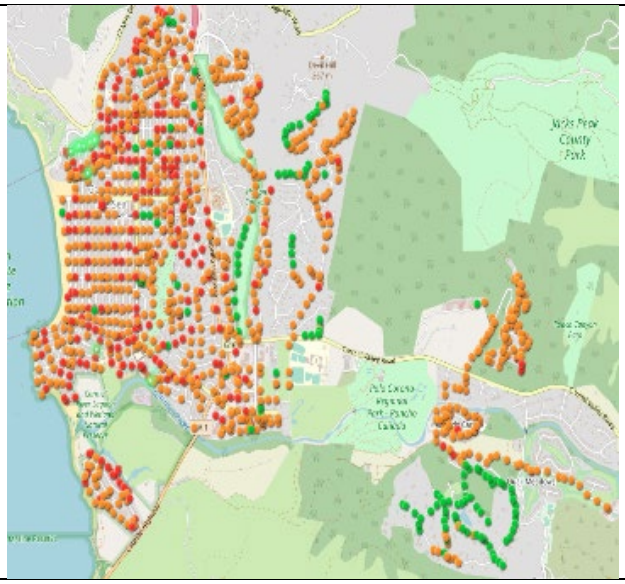


Photo: Manhole Inspection Map

Project Number:	**21-06**	
Project Name:	**Manhole Rehabilitation**	
Project Location:	Collection System	
Project Manager:	Lather	
Status:	On Hold Till Next FY22-23	
Project Description:	Line Manholes with a solvent-free rigid polyurethane material that seals surface and provides structural integrity	
Department:	Collections	
Financial: O&M	Cumulative Budget: $150,000	Cumulative Spent: $0
	FY Budget: $150,000	FY Spent: $0
Reclamation Share:	0%	
Other Entities:	N/A	
Permits Required:	none	
Challenges:	Traffic control	
Schedule:	Complete by 06-23	
Consultants:	none	
Contractor:	TBD	

Photo: Sewer Line Repair

Project Number:	**21-02**	
Project Name:	**2021 Pipeline Spot Repairs**	
Project Location:	Collection System	
Project Manager:	Lather	
Status:	Notice of Completion in April	
Project Description:	Repairs to damaged sections of pipe at various locations throughout the District as noted in sewer video inspections.	
Department:	Collections	
Financial: O&M	Cumulative Budget: $150,000 (FY21-22)	Cumulative Spent: $1,299
	FY Budget: $150,000 (FY21-22)	FY Spent: $1,299
Reclamation Share:	0%	
Other Entities:	N/A	
Permits Required:	City Encroachment	
Challenges:	Traffic control in area of town, depth of repair.	
Schedule:	Start date January 5, 2022. Completed on April 8, 2022.	
Consultants:	Pacific Engineering, geotechnical	
Contractor:	Rooter King	

Assessment Districts/Annexations

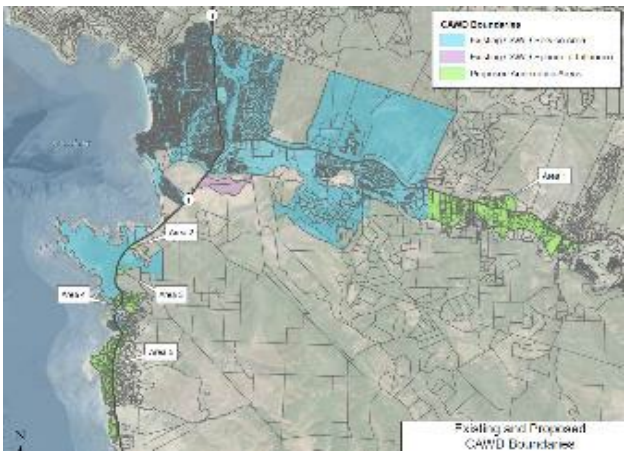


Photo: Areas of Potential Annexation

Project Number:	**19-09**	
Project Name:	**2021CAWD Sphere of Influence (SOI) Amendment & Annexation Proposal**	
Project Location:	Collection System	
Project Manager:	Lather	
Status:	In process of obtaining Coastal Development Permit Amendment for annexations in Coastal Zone	
Project Description:	The project will provide access for homes and businesses currently on septic systems and add 350 new connections to the District at build-out.	
Department:	Collections	
Financial:	Cumulative Budget: $105,000 (55K+50K)	Cumulative Spent: $73,675
	FY Budget: $0	FY Spent: $17,230
** No Budget included for Annexation b/c costs will be recouped through annexation fees.		
Permits Required:	Environmental Review, Local Agency Formation Commission (LAFCO) Annexation Approval	
Challenges:		
Schedule:	Waiting for State Board of Equalization	
Consultant:	Denise Duffy & Associates	

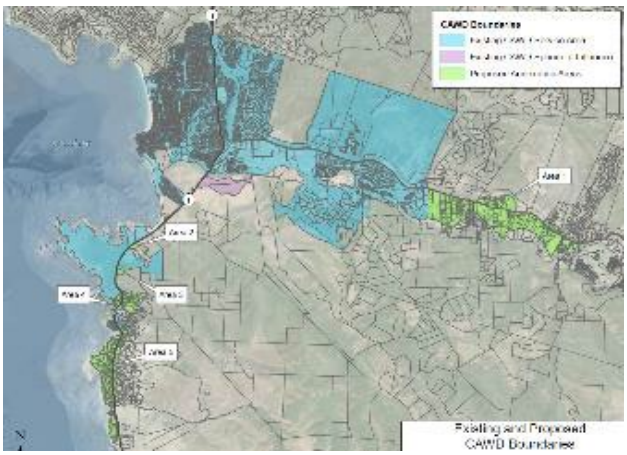


Photo: Areas of Potential Annexation

Project Number:	**18-21**	
Project Name:	**Corona Road Sewer Assessment District**	
Project Location:	Collection System	
Project Manager:	Lather	
Status:	In process of completing an Assessment Engineer's report, Coastal Permit application and environmental documents.	
Project Description:	The project will provide sewer facilities to the Corona Road neighborhood and parcels on the west side of Highway 1, across from Corona Road. #18-21 Corona Road (Deferred Revenue)	
Department:	Collections	
Financial:	Cumulative Budget: $67,000	Cumulative Spent: $
	FY Budget: $0	FY Spent: $
** No Budget included for project because the initial costs were funded by Corona Road residents.		
Permits Required:	Coastal Permit, CalTrans Encroachment permit, Environmental Review	
Challenges:	Assessment District process/approval and obtaining easements for pump station. Funds from homeowners in the amount of $67K have been received by CAWD.	
Schedule:	Complete studies July/August 2022, Assessment District proceeding September	
Consultant:	Denise Duffy & Associates and Monterey Bay Engineers	

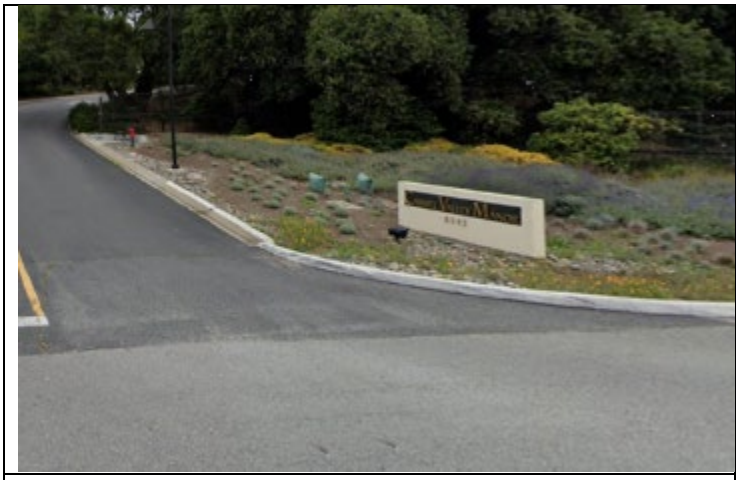


Photo: Entrance to Carmel Valley Manor

Project Number:	**19-08**	
Project Name:	**Carmel Valley Manor Pipeline and Pump Station**	
Project Location:	Collection System	
Project Manager:	Lather	
Status:	Re-Design by Property Owner in Progress	
Project Description:	Sewer extension project to be completed by the owners of Carmel Valley Manor to connect to CAWD's sewer system. Riley Ranch, #19-08 Carmel Valley Manor (Deferred Revenue).	
Department:	Collections	
Financial: this is an unbudgeted item- under repayment agreement	Cumulative Budget: $0	Cumulative Spent: $180
	FY Budget: $0	FY Spent: $180
Other Entities:	The prospect of a pipeline has given rise to a plethora of potential additional connections	
Permits Required:	County Encroachment Permit, Environmental Review completed.	
Challenges:	Funding, Repayment Agreement, easement agreements LAFCO annexation	
Schedule:	Approved without protest at 3/22/21 LAFCO hearing.	
Consultants:	MNS and Rincon are working for Carmel Valley Manor to permit and design the project.	
Contractor:	N/A	

Other Non-Capital Project Summaries

ADP Workforce Now

Photo: ADP Clip Art		
Project Number:	**N/A**	
Project Name:	**Workforce Now**	
Project Location:	All Supervisor Locations	
Project Manager:	Foley	
Status:	Implementation	
Project Description:	Implementation of a comprehensive Human Resource (HR) software database for all supervisors and employees to utilize. Modules provide employee development tracking, benefits administration, custom performance review templates, and employee goal management.	
Department:	Administration	
Financial:	Cumulative Budget: $0	Cumulative Spent: $2,520 (annual fee)
	FY Budget: $0	FY Spent: $2,520 (annual fee)
Challenges:	Technical issues need to be resolved & employee training	
Schedule:	Anticipate implementation in the Summer 2022	
Consultants:	ADP	

Photo: Handshake		
Project Number:	**N/A**	
Project Name:	**Employee Contract Negotiations**	
Project Location:	Administration	
Project Manager:	Barbara Buikema	
Status:	In Progress	
Project Description:	Bi-annual negotiations with Employee Groups	
Department:	Administration	
Financial:	Cumulative Budget: $0	Cumulative Spent: $0
	FY Budget: $0	FY Spent: $0
Schedule:	Must be complete by 06-30-22 or earlier	
Consultants:	None	

Photo: Real Estate Clip Art

Project Number:	**N/A**	
Project Name:	**Real Property Investigation**	
Project Location:	Carmel Valley	
Project Manager:	Barbara Buikema	
Status:	Evaluation in Progress	
Project Description:	An investigation of a possible new treatment facility site in the mouth of the Carmel Valley, which is in response to the Coastal Commission requirement to move facilities within 30 years.	
Department:	Administration	
Financial:	Cumulative Budget: $75,000	Cumulative Spent: $0
	FY Budget: $75,000	FY Spent: $0
Permits Required:	None – at this time	
Challenges:	Limited land possibilities, regulatory hurdles, and zoning	
Schedule:	12 months	
Consultants:	Mahoney & Associates	

Photo: Cyber Security Clip Art

Project Number:	**N/A**	
Project Name:	**Cyber Security**	
Project Location:	District-wide	
Project Manager:	Chris Foley	
Status:	Ongoing	
Project Description:	Internal Cyber Security Incident Response Team (CSIRT) formed, and they are working on a response plan & training. The upgrades to email filtering system have been completed. Stricter geofencing policies have been put in place, and a cold backup system that is sandboxed from the network was installed March 2022.	
Department:	All	
Financial:	Cumulative Budget: $17,000	Cumulative Spent: $0
	FY Budget: $17,000	FY Spent: $0
Challenges:	Ongoing training & the need for continual upgrades as skills of hackers grow.	
Schedule:	Continually updating	
Consultant:	Exceedio	

Photo: Six Sigma Clip Art

Project Number:	**N/A**
Project Name:	**Lean Six Sigma**
Project Location:	Management staff
Project Manager:	Barbara Buikema
Status:	Green Belt Level Training & Certification
Project Description:	Currently all managers have been assigned the task of earning a Green Belt certification. A couple of staff members will be moving on to the Black Belt self-study course. Also, will investigate an in-person trainer for the implementation of a specific agreed upon project.
Department:	Administration

Financial:	Cumulative Budget: $0	Cumulative Spent: $2,000
	FY Budget: $0	FY Spent: $2,000

Permits Required:	None
Challenges:	Implementation phase
Schedule:	Ongoing
Consultants:	Self-study online
Trainer:	To be determined

Photo: California coastline

Project Number:	**22-01**
Project Name:	**Long-Term Sea Level Rise Planning**
Project Location:	Treatment Plant
Project Manager:	Barbara Buikema/Patrick Treanor
Status:	In Progress
Project Description:	As conditions of Coastal Permit #3-82-199-A8 - the District submitted its Long-Term Coastal Hazards Plan on 03-03-22. Bringing a Wastewater Treatment Plant Alternatives Planning Assistance consultant services contract to the Board in May 2022.
Department:	Administration

Financial:	Cumulative Budget: $1,400,00	Cumulative Spent: $ 0
	FY Budget: $250,000	FY Spent: $0

Permits Required:	In response to California Coastal Commission
Challenges:	Establishing focus on long term objectives and committing to follow through items.
Schedule:	WWTP Relocation Alternatives on May 2022 agenda
Consultants:	Greeley & Hansen

STAFF REPORT

To: Board of Directors

From: Ed Waggoner, Operations Superintendent

Date: May 26, 2022

Subject: Monthly Operations Report – April 2022

RECOMMENDATION

Receive Report- Informational only; no action required.

DISCUSSION

Plant Operation

Treatment Plant:

- The treatment plant operations staff has continued finishing projects and concentrating on Preventative Maintenance Work Orders during the month of April. This included the implementation of the Operations Flood Preparation Standard Operating Procedures from the Plant Engineer.
- (Project #18-05) Programmable Logic Controller/Supervisory Control and Data Acquisition (PLC/SCADA). Operations staff has been meeting and working with Maintenance and Frisch Engineering on the upgrades and programming of the PLC/SCADA System.
- Software upgrade on blowers B211 and B213 performed by Blower Compressor Vacuum Systems (BCV) from April 18th thru April 22nd. BCV worked with Operations and Maintenance Staff while installing the software upgrade. This software upgrade is designed to allow the aeration system to run as efficiently as possible while maintaining proper dissolved oxygen levels in the aeration basins.

Reclamation:

- Staff continued preventative maintenance work on pumps, motors, and any equipment that needs maintenance for the Microfiltration and Reverse Osmosis Systems.
- Staff completed Clean-in-Place (CIP) cleans on Microfiltration (MF) Cells 1, 2 and 3. All cells cleaned successfully with Trans Membrane Pressures (TMPs) pressures ranging between 1.8 to 6.5 pounds per square inch (psi).

- Forest Lake Reservoir was at capacity on April 22. The Reclamation Facility was offline for three days before restarting and sending flow the early morning of April 25th.

Training:

- Operator Charles DayEngel attended Qualified Low Voltage Electrical Worker Training on April 12 in Fremont. Operations' long term plan is to send all Operators to this training during the next fiscal budget year.
- During the month of April 28, Ray DeOcampo and Kevin Young attended Fats Oil and Grease (FOG) Abatement Training instructed by the Western States Alliance in San Luis Obispo.
- Staff continues to complete online training at the treatment facility from Target Solutions as Carmel Area Wastewater District (CAWD) implements its new safety policies for the Exposure Control Plan updates for the COVID-19 virus.
- Staff continues to participate in scheduled tailgate safety meetings in the digester building conference room.

Capital Improvement:

- Staff continues working with Plant Engineer, Patrick Treanor, on Project #18-01, the Electrical/Mechanical Rehabilitation and Sludge Holding Tank Replacement Project for the following areas: Influent Pump Station, Headworks, Blower Building, Chlorination/Dechlorination Building, Effluent Building, Digester No. 1, Digester No. 1 Control Building and Dewatering Building.

Meetings Attended

- April 1, 2022, Operations staff attended a conference call with Trussell Technologies on reviewing the operational performance of the Microfiltration and Reverse Osmosis Systems.
- April 4, Attended a Teams Meeting with Enersponse Incorporated on Pacific Gas and Electric Demand Response Program.
- On April 5, attended an in-person Oversite Committee meeting, which included Carmel Area Wastewater District, the Golf Course Superintendents at the Pebble Beach Community Service District Offices for the Wastewater Reclamation Project.
- On April 6, attended a Zoom meeting with BCV for the new blower control software program upcoming installation.

- (Project #18-01) Attended a Teams Meeting on the construction progress of the Electrical/Mechanical Rehabilitation and Sludge Holding Tank Replacement Project for the following areas: Influent Pump Station, Headworks, Blower Building, Chlorination/Dechlorination Building, Effluent Building, Digester No. 1, Digester No. 1 Control Building and Dewatering Building.

Discharge Permit Violations

- There were no Reclamation Permit 93-72 discharge violations for the month of March 2022.
- There were no violations of the National Pollutant Discharge Elimination System (NPDES) Number CA0047996, Order No. R3-2014-0012 within the month of March 2022.

FUNDING

N/A-Informational item only

STAFF REPORT

To: Board of Directors

From: Chris Foley, Maintenance Superintendent

Date: May 26, 2022

Subject: Monthly Maintenance Report – April 2022

RECOMMENDATION

Receive Report- Informational only; no action required.

DISCUSSION

<u>Maintenance Projects in Progress/Completed</u>

- Staff had a kickoff meeting with Handshake Networking and Exceedio to discuss parameters for network intrusion testing. The process will begin on May 23rd and last at least 8 weeks. Handshake will work with Exceedio to correct any vulnerabilities and improve the system.

- The new gas compressor arrived, and installation is in progress. The updated electrical has been installed by Bryan Mailey Electric and improvements were made to the system to minimize corrosion by relocating some components inside while still adhering to lockout tagout code requirements. Startup of the compressor is scheduled for late May.

- Mathews Mechanical was brought back for 1 additional week to complete safety eyewash upgrades and complete treatment plant preventive maintenance work orders. The eyewash upgrade included new flow alarms and replacement of corroded eyewashes.

- Blower Vacuum Compressor System completed the programming update of the aeration basin and blowers. The programming was a success and is providing the required control of the system. The excess air when aeration basin demand is low is sent to the secondary distribution box (Dbox). The improved programming and tuning has successfully reduced the excess air by turning down the blower output, which saves energy and minimal excess air is then sent to the Dbox.

Upcoming Maintenance Projects

- Replacement of sulfuric acid pressure relief valves is scheduled for May. Safety, Maintenance, Operations and Engineering staff has been working on a collaborative solution to improve safety and communication when performing high risk maintenance activities. The plant engineer suggested Carmel Area Wastewater District implement a System Outage Request (SOR) program that will provide the framework required to formalize planning and safety of high-risk activities. The sulfuric valve replacement will be the first test of this new approach.

Staff Development

- Maintenance and Collections staff has reviewed the applications for the Maintenance and Collections Utility Worker Position and is coordinating the hiring process with the Human Resources Consultant.

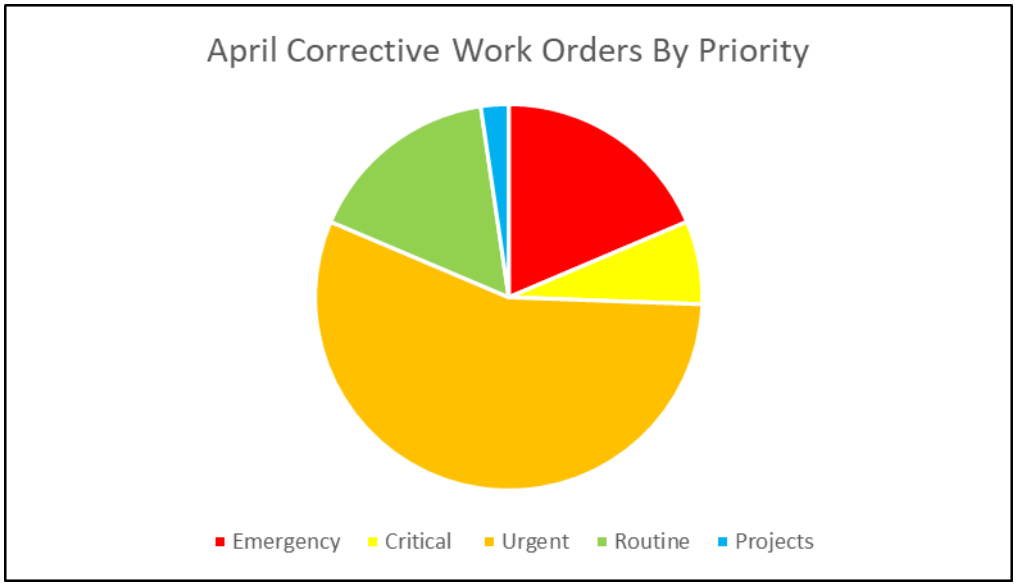
- Work continues on updating the schedule of training for safety and skills when onboarding new staff. This centralized approach is customized for each job class versus the previous distributed approach. The new approach will ensure there are no gaps in training and make it easier to find training records.

Work Order Metrics

Preventive Maintenance

Total Work Orders Generated	609
Total Work Orders Closed/Done	592
Total Work Orders Still Open	17
Percentage of Work Orders Completed	97.21%

Corrective Maintenance



Emergency	8
Critical	3
Urgent	24
Routine	7
Projects	1

FUNDING

N/A- Informational item only

Resolutions

STAFF REPORT

To: Board of Directors

From: Patrick Treanor, Plant Engineer

Date: May 26, 2022

Subject: Project #22-01 – Long-Term Sea Level Rise Planning – Wastewater Treatment Plant (WWTP) Relocation Alternatives Planning – Greeley and Hansen

RECOMMENDATION

It is recommended that the Board of Directors adopt a resolution authorizing the General Manager to execute a Professional Services Agreement with Greeley and Hansen for an alternatives analysis study for potential future relocation of the WWTP due to sea level rise. The study would be prepared for a not to exceed price of $251,705.09.

DISCUSSION

On March 2nd Carmel Area Wastewater District (CAWD) submitted a Long-Term Coastal Hazards Planning Roadmap to the Coastal Commission as required in Special Condition 9 of the WWTP Coastal Development Permit. Before submittal to the Coastal Commission the report was presented to the CAWD Sea Level Rise Committee.

The planning roadmap submitted to the Coastal Commission commits CAWD to completing a wide range of studies. Per Special Condition 9 of the WWTP Coastal Development Permit, CAWD must "*address the specific manner in which the Permittee intends to plan, develop, consider, and implement a long-term solution to address flooding and related coastal hazards threats to the WWTP (including as these threats may be exacerbated by climate change) in a manner with the least amount of coastal resource impacts… The Plan shall at a minimum identify capital costs, long-term life-cycle cost analyses, wastewater rate effects, environmental analysis, land use analysis, and impacts to current water resources and water recycling activities for a range of alternatives, including adaptation in place, relocation of the WWTP away from coastal hazards, consolidation with Monterey One Water, and other potential alternatives.*"

This relocation alternatives study will develop conceptual designs for relocation of the WWTP to lower Carmel Valley, and will also develop a novel alternative approach which would involve about 5 small "package plants" that could provide decentralized wastewater treatment in the CAWD service area.

The current effort will develop conceptual details for these wastewater treatment relocation alternatives. Architectural renderings of potential future facilities (useful for public outreach) are included as an optional task that could be authorized later under the contracted agreement with Greeley and Hansen.

The current effort is just a start to what will be a decades long planning effort aimed at better positioning CAWD's critical infrastructure for potential future climate change hazards. Many unforeseen challenges will emerge during the planning process, and a simple path to a solution is not clear at this time. Ongoing studies of alternatives will support CAWD in finding the best path forward.

The proposal from Greeley and Hansen is attached.

FUNDING

The CAWD O&M Budget for Treatment and Disposal includes $300,000 in FY21/22 for engineering studies related to sea level rise planning (Acct 5500.006).

Attachment:

1. Proposal – Greeley and Hansen

CARMEL AREA WASTEWATER DISTRICT

WWTP RELOCATION ALTERNATIVES PLANNING ASSISTANCE

April, 2022

GREELEY AND HANSEN

INTRODUCTION

Thank you for the opportunity to provide this proposal in response to your request for Greeley and Hansen to provide the Carmel Area Wastewater District (CAWD) with a Proposal to perform Consulting Engineering Services on an Alternatives Analysis to relocate the Wastewater Treatment Plant (WWTP) due to climate change and sea level rise. Based on our conversations with you, it is our understanding that the goal of this project is to develop plant relocation concepts for the CAWD WWTP. The benefits of this project will be development of concepts for the future, using the most advanced technologies to serve the local community and accomplish resources recovery(such as water, biosolids and energy).

BACKGROUND

The CAWD Wastewater Treatment Plant is a 3.0 million gallons per day (MGD) average annual permitted discharge flow facility that uses activated sludge for secondary treatment. The WPCP treats predominantly domestic wastewater. Current average dry weather flow (ADWF) is approximately 1.2 MGD which represents 40% of the permitted capacity. CAWD has an agreement with the Pebble Beach Community Services District (PBCSD) whereby PBCSD has access rights to one-third of the CAWD's WWTP capacity. Of the 1.2 MGD ADWF, approximately 0.8 MGD (67%) is from CAWD and 0.4 MGD from PBCSD (33%).

Currently CAWD is preparing a WWTP long-term coastal hazards planning roadmap, which includes alternatives analysis of relocating the WWTP to address sea level rise for the next 40 years. The option to relocate the WWTP is the subject of this proposal.

The modeling presented by CAWD in the 2018 Sea Level Rise Study indicated that the worst-case estimate of the timeline for major impacts to WWTP operations could be 60 years in the future (around 2080). At that time the greatest effects would occur during extreme precipitation events that have a low probability of occurring in any given year. While the modeling indicates a timeline of 60-years before major impacts, to be conservative CAWD proposes a plan that will work towards achieving hazard mitigation in 40-years. CAWD proposed a three phase effort to plan and implement the ultimate solution as shown below. This is a simplified framework that will need to be re-evaluated at 5-year intervals based on new information as it arises from ongoing coastal hazards monitoring and/or planning efforts.

Planning for a major infrastructure project such as moving a wastewater treatment plant is a complex endeavor. Therefore, feasibility and concept development is the focus for this study.

CAWD would like to evaluate options for continuing to provide wastewater treatment and recycled water to the constituents with facilities located within the immediate geographic area of the Carmel River watershed. This approach is an opportunity to develop next generation infrastructure local to the community. The proposed feasibility study will develop conceptual plans of new WWTP treatment infrastructure alternatives for centralized and decentralized concepts. Furthermore, CAWD intends to conduct ongoing Real Property Investigations to identify and potentially secure land for future development. Visual Aesthetics of new facilities for Public Outreach is an important part of this study.

The vision is to go from Wastewater Treatment Plant (WWTP) to Water Resource Recovery Facility (WRRF). The proposed tasks to respond to CAWD's inquiry are listed in the following scope of services.

PROPOSED SCOPE OF SERVICES

Task 1 - Data Collection

Under this Task Greeley and Hansen will review existing Monthly Operating Report (MOR) data (or similar) for the existing WWTP and as-built information. WWTP data of interest includes influent flows and loads, existing permits, etc. A data request will be submitted by Greeley and Hansen to CAWD for this information. It is anticipated that the three most recent years of MOR data would be sufficient for modeling purposes.

Key Deliverables:

- Data request letter (via email)
- Data review summary in PDF format

Schedule:

- Data request within 5 days of Notice to Proceed
- Data review summary within 3 weeks of receipt of available data

Task 2 – Centralized Wastewater Treatment Plant Conceptual Design

Task 2.1 – Conceptual Design of Proposed Wastewater and Treated Water Conveyance Systems

This Task includes development of one alternative for the conceptual design of proposed wastewater and treated water conveyance systems for the new Centralized Wastewater Treatment Plant (described in Task 2.2). The major components of the wastewater conveyance system will include conceptual layout and sizing for major components:

- Siting of a new main wastewater pump station away from flood hazards and collection system reconfiguration to route sanitary sewers to new pump station location. The new main pump station would be near the existing WWTP, but would be located outside of the immediate floodplain as much as possible
- Conveyance Piping between Pumping Station and New Water Resource Recovery Facility (WRRF) Location (site located at Carmel Valley Road and Canada Way)
- Wastewater Treatment Plant (further described in Task 2.2)
- Brine Discharge Piping/Outfall
- Connection Piping to existing Recycled Water Transmission Line

Key Deliverables:

- Draft and Final Technical Memorandum of Conceptual Design of Proposed Wastewater and Treated Water Conveyance in PDF format
- Conceptual Pipe alignment maps with pipe sizes in PDF format

Schedule:

- 4 weeks delivery of task

Task 2.2 – Conceptual Design of Centralized WRRF

This Task includes the conceptual design and evaluation of a state-of-the-art centralized WRRF located at Carmel Valley Road and Canada Way. Two flow scenarios will be used to determine the appropriate sizing of WRRF:

- CAWD + Pebble Beach Community Services District (PBCSD) Flows
  - 1.2 million gallons per day (MGD) Average Dry Weather Flow (ADWF)/3.6 MGD Average Wet Weather Flow (AWWF) (expandable to 1.5 MGD ADWF)
- CAWD Flow
  - 0.8 MGD ADWF/2.4 MGD AWWF (expandable to 1.1 MGD ADWF)

Under each flow scenario, it will be assumed that at least 90% of the water will be recycled for either irrigation at Pebble Beach Golf courses or potable reuse/river supply water (i.e., injection in the Carmel Valley Alluvial Aquifer). Brine discharge is anticipated to remain through CAWD's existing outfall. The major components of the conceptual design of a new Centralized WRRF will include at a minimum:

- Headworks
- Review/discussion of at least 2 different approaches for the primary and secondary biological treatment process and recommendation of the preferred process that will be used in the Conceptual Design. It is assumed that Membrane Bioreactor technology will be part of one of the 2 processes reviewed
- Tertiary Pretreatment and Reverse Osmosis treatment with at least 90% recovery
- Biosolids Treatment (digestion/dewatering) with methane capture renewable energy component (microturbines) and waste gas burner. Dewatered solids will be trucked to offsite disposal
- Advanced Disinfection treatment steps for Recycled Water Stream to achieve Potable Reuse standards
- Treatment of Ocean Effluent/Brine Waste Stream prior to disposal (disinfection step)
- Centralized Power Distribution Equipment and Standby Power Generator

One alternative (1) will be evaluated to manage biosolids as part of the processes. It will include centralized biosolids treatment process for the option of a centralized WRRFS' approach. Currently, the CAWD WWTP uses a belt filter press or a screw press to dewater digested sludge. The dewatered sludge is hauled by truck to Kern County where it is used as a compost amendment for non-food crops. It is assumed that the same sludge management concept applies to the plant. It will be evaluated Biosolids Treatment (digestion/dewatering) with methane capture renewable energy component (microturbines) and waste gas burner. Dewatered solids will be trucked to offsite disposal.

Conceptual design shall include buildings to house new treatment facilities as necessary to mitigate visual impacts and blend into the architectural style developed in Task 2.3., and will be reflected in the technical memorandum, including conceptual site plan and process flow diagram.

Key Deliverables:

- Technical Memorandum of Conceptual Design of Centralized WRRF (including Task 2.1 Conveyance infrastructure). Total summary of concepts of conveyance and treatment shall be provided for conveyance and treatment infrastructure. (draft and final) in PDF format
- Conceptual Site Plan for the two (2) alternatives in PDF format
- Process Flow Diagrams for each of the two (2) alternatives in PDF format

Schedule:

- 6 weeks delivery of task

Task 2.3 – Centralized WRRF Architectural Approach and Renderings **(OPTIONAL TASK)**

Visual impacts associated with a WRRF need to be mitigated by design of the facility to blend into the surrounding Carmel Valley community. Develop conceptual 3D architectural renderings to visualize the style and character of the new facilities. Buildings will have a barn style that melds modern and rustic stylistics elements, and landscape will resemble a ranch located in an oak woodland environment. The 3D architectural renderings will only be developed for the CAWD + Pebble Beach Community Services District (PBCSD) Flows

Key Deliverables:

- Technical Memorandum of WRRF Architectural Style, including three (3) Architectural 3D renderings in PDF format.

Schedule:

- 4 weeks delivery of task

Task 2.4 – Centralized WRRF Opinion of Probable Construction Cost (OPCC)

Conceptual level OPCC will be developed at a Class 4 level for system rehabilitation per the Association for the Advancement of Cost Engineering (AACE) International standard for the alternatives described in Task 2 and included in the respective Technical Memoranda (Tasks 2.1 through 2.3) and Report (Task 2.5). This class represents a "study or feasibility" maturity level and has an expected accuracy range of -15% to -30% and +20% to +50%.

Key Deliverables:

- Class 4 Level OPCCs for Each Conceptual Design Component in PDF format

Schedule:

- Provided with each Technical Memorandum and Report deliverable

Task 2.5 –Conceptual Centralized WRRF Report

This task includes development of a Conceptual Centralized WRRF Report which summarizes the proposed wastewater and treated water conveyance systems; conceptual design of a Centralized WRRF; and Centralized WRRF architectural approach Tasks 2.1 through 2.3). The Report shall include an Executive Summary that describes the report contents in a condensed section. Report shall be submitted to the County in electronic format.

Key Deliverables:

- Report (including Executive Summary) of Centralized biosolids treatment approach evaluation in PDF format

Schedule:

- 3 weeks delivery of task

Task 3 – Decentralized Wastewater Treatment Plants Conceptual Design

Task 3.1 – Determine Sub-Basins within CAWD Collection System for Locations of Decentralized Facilities

Review CAWD service area and develop a general sub basin delineation for multiple satellite treatment facilities with capacity of about 0.25 MGD ADWF. Approximately 5 sub basins within the District boundaries should be assumed generally as follows. CAWD will assist with GIS data on flow load in each basin:

- Carmel By the Sea
- Carmel Point
- Carmel Unincorporated South of Carmel River
- Rio Rd & Area East of Hwy 1
- Carmel Highlands

The CAWD will provide collection system maps that will highlight the areas above.

Key Deliverables:

- Technical Memorandum of Conceptual Design of Proposed Collection System for Locations of Decentralized Facilities PDF format
- Map showing each sub basin selected and approximation of flows to be treated in each sub basin. Resizing of sub basin boundaries as necessary to keep flows within about 0.25 MGD in PDF format.
- Conceptual Diagram of the system in PDF format

Schedule:

- 5 weeks delivery of task

Task 3.2 – Evaluation of Biosolids Treatment for Decentralized Approach

One (1) alternative will be evaluated to manage biosolids as part of the processes. It will include centralized biosolids treatment process for the option of a decentralized WRRFS' approach. Currently, the CAWD WWTP uses a belt filter press or a screw press to dewater digested sludge. The dewatered sludge is hauled by truck to Kern County where it is used as a compost amendment for non-food crops. It is assumed that the same sludge management concept applies to the plant. A centralized biosolids treatment facility at one of the satellite facilities to handle all the biosolids with evaluation of transport by either truck or pipelines will be considered.

Key Deliverables:

- Technical Memorandum of Conceptual Design of decentralized biosolids treatment approach evaluation in PDF format

Schedule:

- 3 weeks delivery of task

Task 3.3 – Conceptual Design of Decentralized WRRFs

A satellite package treatment plant option consisting of multiple small treatment facilities will be evaluated during this task. One flow scenario will be used to determine the appropriate sizing and number of satellite package treatment plants:

- CAWD Flow
  - 0.8 MGD ADWF/2.4 MGD AWWF

The size of each treatment plant is projected to be approximately 0.25 MGD dry weather flow and placed in multiple small locations about the Carmel Area. Each site is projected to be under one (1) acre in area. Specific locations of each decentralized plant will not be defined as part of this Task, however general sub-basins will be defined within the collection system that each individual satellite plant will serve (see Task 3.1). As with the centralized WRRF options (Task 2), it will be assumed 90% recycle of water for either irrigation or potable reuse/river supply water (i.e., injection in the Carmel Valley Alluvial Aquifer). Brine discharge is anticipated remain through CAWD's existing outfall. Components to include in the decentralized WRRF conceptual design includes:

- Conceptual overview of New Conveyance Pipelines needed for each location to connect to Brine Discharge Outfall, Recycled Water Transmission Piping, and Biosolids Conveyance Piping (if applicable)
- Small footprint MBR facility with 90% recycling capability
- Electrical equipment including Standby Power

Key Deliverables:

- Technical Memorandum of Conceptual Design of Decentralized WRRFs (draft and final) in PDF format. Total summary of concepts of conveyance and treatment (including preferred biosolids treatment approach determined in Task 3.2) shall be

provided including costs for conveyance and treatment infrastructure in PDF format
- Process Flow Diagrams of decentralized treatment plant in PDF format
- 3 Architectural 3D renderings of decentralized packaged plant in PDF format

Schedule:

- 6 weeks delivery of task

Task 3.4 – Decentralized WRRF Opinion of Probable Construction Cost (OPCC)

Conceptual level OPCC will be developed at a Class 4 level for system rehabilitation per the Association for the Advancement of Cost Engineering (AACE) International standard for the alternatives described in Task 3 and included in the respective Technical Memoranda (Tasks 3.1 through 3.3) and Report (Task 3.5). This class represents a "study or feasibility" maturity level and has an expected accuracy range of -15% to -30% and +20% to +50%.

Key Deliverables:

- Class 4 Level OPCCs for Each Conceptual Design Component in PDF format

Schedule:

- Provided with each Technical Memorandum and Report deliverable

Task 3.5 –Conceptual Decentralized WRRFs Report

This task includes development of a Conceptual Decentralized WRRF Report which summarizes the sub-basins within the CAWD Collection System for locations of Decentralized Facilities; conceptual Biosolids Treatment for Decentralized Approach; and conceptual design of a Decentralized WRRF. The Report shall include an Executive Summary that describes the report contents in a condensed section. Report shall be submitted to the County in electronic format.

Key Deliverables:

- Report (including Executive Summary) of Decentralized biosolids treatment approach evaluation in PDF format

Schedule:

- 3 weeks delivery of task

Task 4 – Project Management, Site Visits, Meetings, Workshops

At the start of the evaluation, the Greeley and Hansen team will visit with the WPCP staff to discuss the project and anticipated outcomes and discuss the available information that is available. At the conclusion of the project, a final workshop to discuss the findings and recommendations will be presented to CAWD staff. A total of eight (8) in-person meetings are included in this scope of work. Project management tasks will include project management, monthly project invoicing and budget management

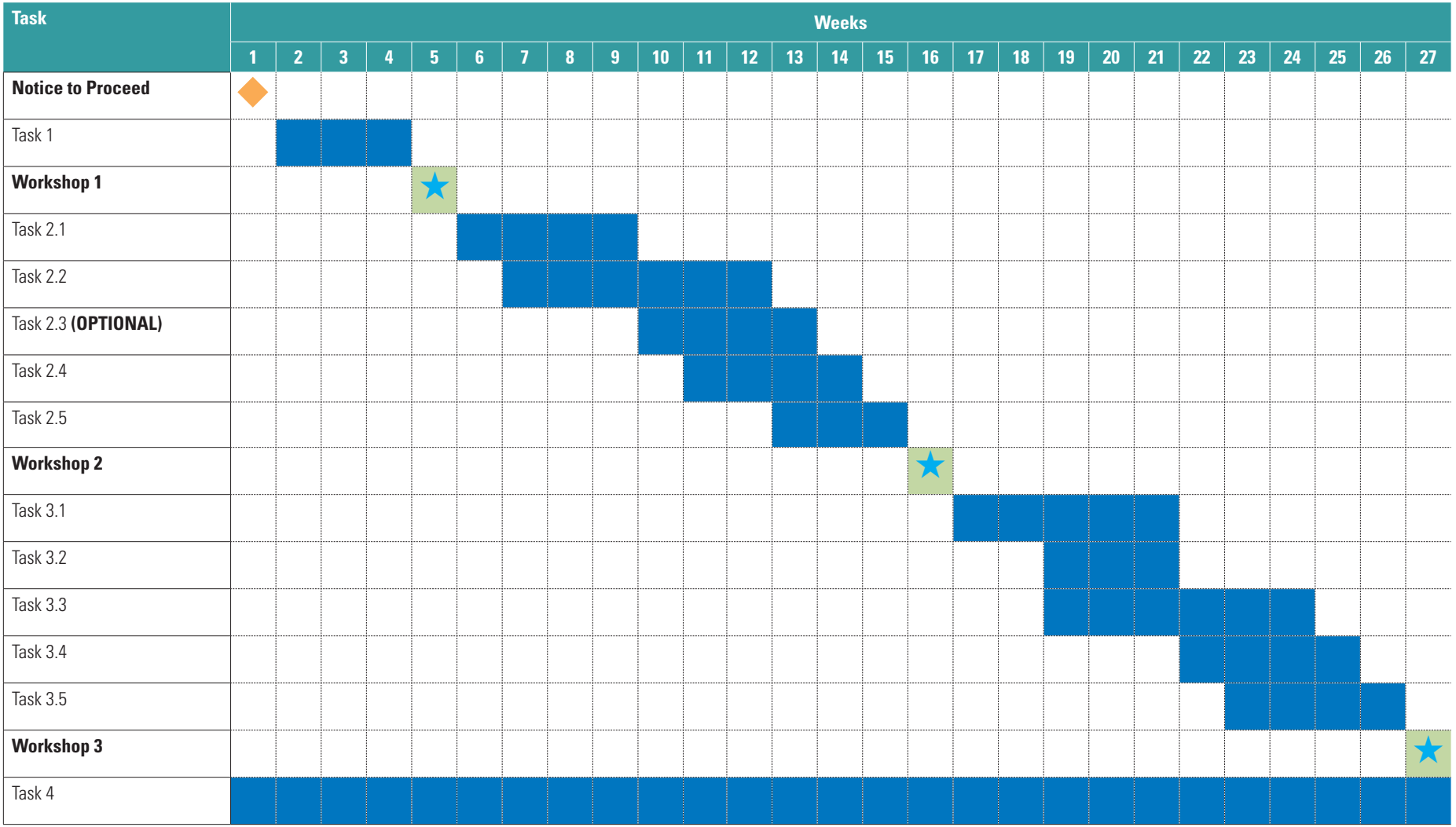
Key Deliverables:

- Agendas, Notes, Meeting/Workshop as per Schedule shown below
- Monthly invoices

CAWD's Responsibility:

- Attendance at meetings and workshops

Schedule:



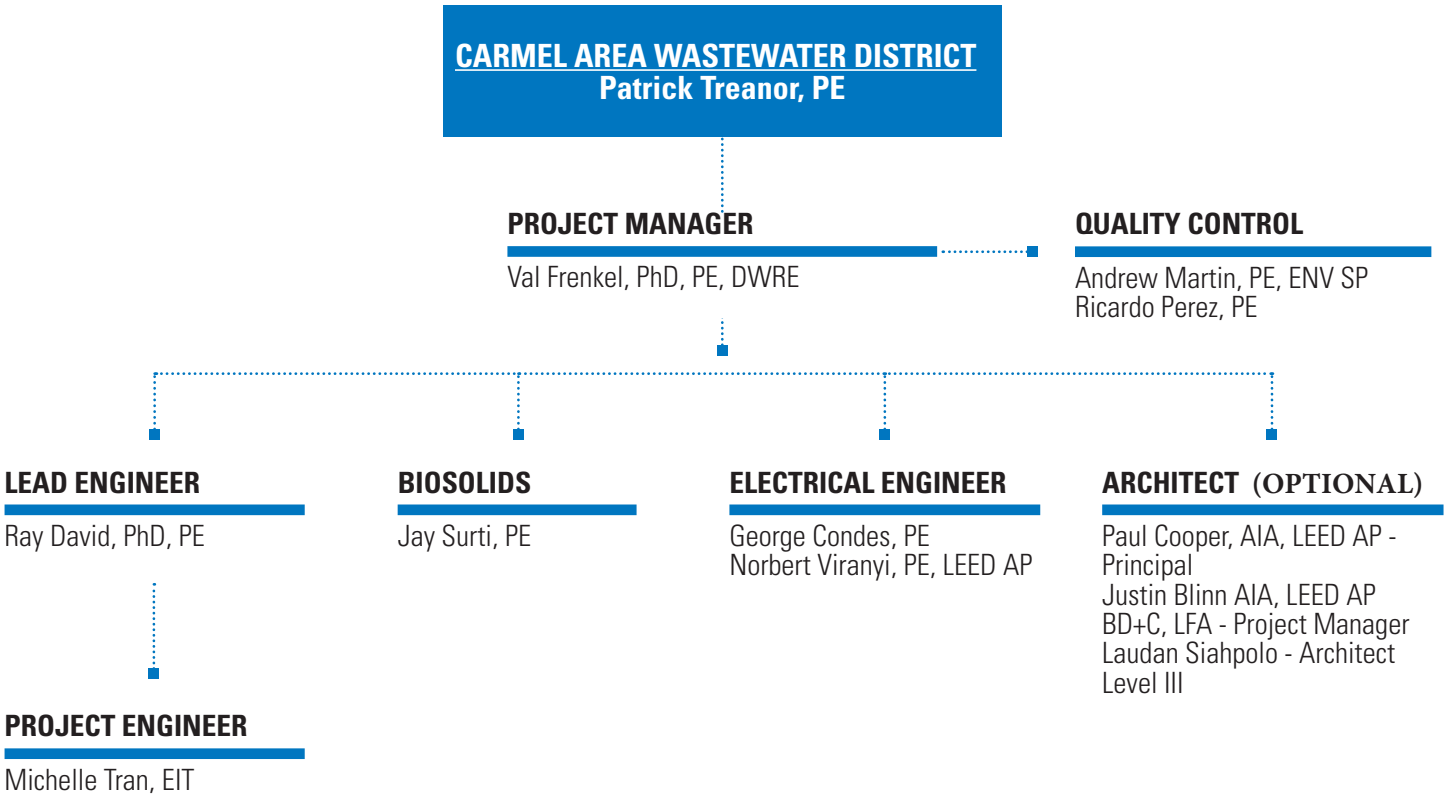
KEY:

Kickoff Meeting

Workshop

PROJECT TEAM

ORGANIZATIONAL CHART



TEAM MEMBER	PROFESSIONAL ENGINEER REGISTRATION	FIRM
Val S Frenkel, PhD, PE, DWRE	**California**, Michigan, New York	Greeley and Hansen
Andrew Martin, PE, ENV SP	Illinois, Indiana, Kentucky, Michigan, Mississippi, New Jersey, New York, Ohio, Oklahoma, South Carolina, Virginia and Wisconsin	Greeley and Hansen
Ricardo Perez, PE	**California**, Nevada, Indiana	Greeley and Hansen
Ray David, PhD, PE	Illinois, New York, Texas, and Oklahoma	Greeley and Hansen
Jay Surti, PE	New Jersey	Greeley and Hansen
George Condes, PE	Illinois	Greeley and Hansen
Norbert Viranyi, PE, LEED AP	**California,** Indiana, Arizona, Florida, Illinois, Maryland, Michigan, Nevada, New York, Ohio, Oklahoma, Virginia, Wisconsin, and District of Columbia	Greeley and Hansen
Michelle Tran, EIT	Engineer-in-Training: Arizona	Greeley and Hansen
Paul Cooper, AIA, LEED AP	Licensed Architect No. C28490; Issuer: **California** Board of Architects	TEF Architecture & Interior Design
Justin Blinn AIA, LEED AP BD+C, LFA	Licensed Architect No. 036920; Issuer: NY Board of Architects	TEF Architecture & Interior Design
Laudan Siahpolo	Licensed Architect No. C 37372; Issuer: **California** Board of Architects	TEF Architecture & Interior Design

Val S Frenkel, PhD, PE, DWRE
Project Manager

Firm:	Greeley and Hansen
Years of Experience:	44
Education:	- Ph.D. Water and Ecology Science, Lviv Polytechnic University, 1983 - M.Sc. Civil Engineering, Water and Wastewater, Lviv Polytechnic University, 1978
Professional Registrations:	Professional Engineer: California, Michigan, New York Professional Engineer (P.Eng.): Ontario, Canada Diplomate, Water Resource Engineering (D.WRE) Fellow WEF Fellow IWA Fellow ASCE/EWRI IDA Outstanding Professional in Water Reuse 2018
Professional Experience:	Dr. Val Frenkel is a well-recognized expert with 44 years of experience and a proven record of building from the ground up for various markets including water, wastewater, water reuse, salinity management, desalination, and membrane technologies. Dr. Frenkel has a successful record of applying technological approaches to provide project cost savings, often via development of new technologies and applications used worldwide for treating water and wastewater. He also serves as overall project manager responsible for the delivery of complete treatment systems including coordination of permitting and ancillary design disciplines. Dr. Frenkel's expertise includes all aspects of water/ wastewater business including, but not limited to: business development, program and project management, process design based on conventional and advanced technologies; membrane-based processes including MF, UF, NF, RO, ED, EDR, EDI, and MBR; potable water and wastewater treatment; water reuse; desalination; and salt management for industrial and municipal applications, food, power, semiconductor, oil and gas industries.

Project Experience:

Program Manager for the Design of a Submerged Membrane Bioreactor for the City of Lathrop, CA.

Design of submerged membrane bioreactor up to capacity 2.5 MGD and expansion up to 9.0 MGD. Process design, BNR and MBR design, and equipment selection

Project Manager for the Advanced Water Treatment System Evaluation for a Major National Dairy Processing Plant, CA. The proposed advanced water treatment system is based on the previous recommendations to condition source well water supplied to the plant, which is rich with calcium, chloride bicarbonate and silica. The tasks include detailed process and technological design; selection of equipment, pumps, and energy recovery devices; development of reverse osmosis specifications; and development of design documents.

Project Manager for the Development and Validation of Water Pollution Control Plant Process Model for the Carmel Area Wastewater District, Carmel-by-the-Sea, CA.

The Carmel Area Wastewater District (CAWD) Water Pollution Control Plant (WPCP) is a 3.0 million gallons per day (MGD) average annual permitted discharge flow facility that uses activated sludge for secondary treatment. Greeley and Hansen will utilize the CAWD WPCP's data for model development. Existing Monthly Operating Report (MOR) data (or similar) for the WPCP and as-built information will be the basis for the preliminary data analysis. WPCP data of interest includes influent flows and loads, as well as operating data such as mixed liquor suspended solids (MLSS) concentration, return activated sludge (RAS) concentration and flow rate, and other parameters as requested. It is anticipated that three years of MOR data would be sufficient for modeling purposes. The data collected from the MORs will be plotted, categorized into dry weather and wet weather data, and subsequently analyzed. A process model (BioWin) was used to model the WPCP and run seasonal simulations (four simulations total) of the WPCP. Analyses may include, but are not limited to oxygen uptake rates, growth rates, and decay rates. The data collected from a sampling program will allow the model to be refined, calibrated, and validated based on the actual plant specific parameters.

Technical Advisor for the Morris Forman Water Quality Treatment Center (MFWQTC) Primary Sedimentation Basin Technology Evaluation and Design for Louisville and Jefferson County Metropolitan Sewer District, KY.

Val Frenkel, PhD, PE, DWRE
Project Manager

The Morris Forman Water Quality Treatment Center (MFWQTC) Primary Sedimentation Basins (primary clarifiers) were constructed in 1958 and were rehabilitated in the 1970s when secondary treatment was added to the facility. The equipment in the clarifiers has exceeded the anticipated service life and performance is unreliable. The peak wet weather capacity of MFWQCT is 350 MGD. The 2012 Integrated Overflow and Abatement Plan (IOAP) increased retention of wet weather flows in the collection system which will result in longer sustained peak flows to the clarifiers. The IOAP was developed utilizing a sustained peak capacity of 330 MGD through the clarifiers. The MFWQTC Primary Sedimentation Basin Rehabilitation Project includes the design of the following components influent aerated channel, new bypass channel and blower room; primary sedimentation basins; north and south pump station equipment; chemically enhanced primary clarification (CEPT); and odor controls. Dr. Frenkel served as technical advisor and supported the design of the CEPT system (including creating jar testing protocol) and optimization of the existing biological odor control units for the purposes of treating air from the primary sedimentation basins and other nearby odorous areas.

Design Lead and Process Engineer for the Membrane Bioreactor (MBR) Design for the City of Santa Paula Ventura County, CA.
Design Lead and Process Engineer for the design of a 4.2 MGD submerged membrane bioreactor recycled water treatment and distribution system. Process design, BNR and MBR design, and equipment selection.

Process Engineer for the Membrane Bioreactor (MBR) Design for the City of Fillmore, Ventura County, CA.
Process Engineer for the design of a submerged MBR based on GE Water - ZENON hollow-fiber membranes, plus recycled water treatment and distribution systems. Process design, BNR and MBR design, equipment selection, start-up, and commissioning.

Process Engineer for the Crescent City Membrane Bioreactor (MBR) Design, Crescent City, CA.
Process Engineer for the design of submerged MBR based on SIEMENS hollow-fiber membranes, plus recycled water treatment and distribution systems. Start-up and commissioning.

Process Engineer for the Membrane Bioreactor (MBR) Design for the City of Lake of the Pines, CA.
Process Engineer for the design of submerged MBR based on KUBOTA flat-plate membranes, including recycled water treatment and distribution systems. Process design, BNR and MBR design, and equipment selection, start-up and commissioning.

Process Engineer for the Membrane Bioreactor (MBR) Design for the City of Coburg, OR.
Process Engineer for the design of submerged MBR based on SIEMENS hollow-fiber membranes, along with recycled water treatment and distribution systems. Process design, BNR and MBR design, and equipment selection.

Process Engineer for the Membrane Bioreactor (MBR) Design, City of La Center, WA.
Process Engineer for the design of submerged membrane bioreactor and recycled water treatment and distribution systems. Process design, BNR and MBR design, and equipment selection.

Process/Project Engineer for the Membrane Bioreactor (MBR) and Reverse Osmosis (RO) Pilot Study and Conceptual Project Design for a Confidential Food Processor Client Tracy, CA.
Dr. Frenkel served as the Process/Project Engineer for the pilot study and conceptual design of a 0.2-MGD capacity MBR and RO systems to treat olive production waste streams, creating an effluent suitable for recycling and reuse. He developed a flexible model to optimize and reduce the size of the treatment system, and evaluated and established design parameters for the MBR and RO systems.

Process Engineer for the Membrane Bio-reactor (MBR) Design, City of Arlington, WA.
Dr. Frenkel served as the Process Engineer for the design of submerged MBR based on KUBOTA flat-plate membranes, plus recycled water treatment and distribution systems. Process design, BNR and MBR design, equipment selection, and start-up and commissioning.

Principal Project Manager and Technology and Process Lead Engineer for Ashghal IDRIS Terminal Pumping Station and Sewage Treatment Works for the City of Doha, State of Qatar.
The advanced membrane technologies had a capacity of 130 MGD and an expansion of up to 260 MGD. Responsibilities included program management, project management and process design.

Andrew Martin, PE, ENV SP
Quality Control

Firm:	Greeley and Hansen
Years of Experience:	23
Education:	- B.S. Civil Engineering, University of Illinois at Urbana-Champaign, 1998
Professional Registrations:	Professional Engineer: Illinois, Indiana, Kentucky, Michigan, Mississippi, New Jersey, New York, Ohio, Oklahoma, South Carolina, Virginia and Wisconsin Envision™ Sustainability Professional (ENV SP) National Council of Examiners for Engineering and Surveying (NCEES) Record
Professional Experience:	Mr. Andrew Martin has over 23 years of experience managing multi-disciplinary teams in the study, pilot testing, design, and construction for complex multi-million dollar water and wastewater projects and multi-billion dollar programs that rehabilitate and optimize infrastructure and facilities. He has been involved as Project Director and Engineer providing the following services associated with distribution systems, collection system, stormwater management, water treatment, and wastewater treatment plant improvement projects: conditions assessments, master planning, strategic planning, detailed hydraulics, preliminary and final design, construction sequencing and phasing, green infrastructure, pilot testing, preparation of opinions of probable construction cost, design review workshops, risk mitigation, permitting, and office services during construction. Mr. Martin is a Greeley and Hansen Principal and serves as the firm's Technical Services & Innovation Center Managing Director.

Project Experience:

Quality Manager for the Bay Park Conveyance Project, Nassau County, NY.

The Nassau County Department of Public Works (NCDPW) and the New York State Department of Environmental Conservation (NYSDEC) is implementing the Bay Park Conveyance Project to improve water quality and storm resiliency in Long Island's Western Bays by conveying highly treated wastewater effluent from the South Shore Water Reclamation Facility located in Nassau County, New York to the Cedar Creek Water Pollution Control Plant for ultimate discharge miles offshore through an ocean outfall pipe. Greeley and Hansen is engaged as part of a design-build team lead by Western Bay Constructors. The design-build project is being designed, constructed and commissioned in a four-year schedule and includes the design of a new 75 MGD effluent diversion pumping station; a 14-mile conveyance system consisting of two new 72-inch microtunnels and a 60-inch slip lined repurposed aqueduct; a new receiving tank; replacement of effluent pumps at the Cedar Creek Water Pollution Control Plant, and an existing ocean outfall. Mr. Martin's responsibilities included quality management reviews and technical guidance and support to the preparation of Contract Documents. The Project will be completed in fall of 2024 with a forecasted cost of $500 million.

Program Director for the Great Water Alliance Program, Waukesha Water Utility, WI.

The Waukesha Water Utility (WWU) Great Water Alliance (Program) is an historic program to transition from groundwater wells to a surface water supply for the City of Waukesha, which is home to more than 71,000 residents. The St. Peter Sandstone aquifer, which has been the primary source of drinking water for not only Waukesha, but for communities throughout the Midwest, is being depleted in Southeast Wisconsin. Depletion of the St. Peter Sandstone aquifer has caused radium and other contaminants to become more concentrated. As a result, Waukesha needs a long-term, sustainable alternative to its existing water supply to protect public health and support future growth. The Great Lakes Compact Council unanimously approved Waukesha's application to source water from Lake Michigan. WWU subsequently commissioned Greeley and Hansen and their team of consultants to implement the Program to transition Waukesha's water supply from groundwater to Lake Michigan water. The purpose of the Program is to plan, design, and construct infrastructure with a 100-year useful life necessary

Andrew Martin, PE, ENV SP
Quality Control

to transition Waukesha's water supply. The Program is the first of its kind to access Great Lakes water through the Great Lakes Compact. Successful implementation of the Program will set industry precedence for solving water quality and water scarcity challenges for at-risk water supplies in other Great Lakes communities. As part of the Program, approximately 13 miles of transmission main (referred to as the "Water Supply Pipeline") with pumping facilities, storage, and chemical treatment will deliver potable water to Waukesha from a connection to a water system supplied with Lake Michigan water. Approximately 13 miles of pressure main (referred to as the "Return Flow Pipeline") with pumping facilities located at Waukesha's Clean Water Plant (CWP) are required to achieve a net zero water balance in the Great Lakes–St. Lawrence River Basin by discharging highly treated effluent to the Root River, which ultimately discharges into Lake Michigan. As Program Director, Mr. Martin's responsibilities included strategic and technical guidance, managing quality of deliverables and contract documents, financing and funding support, supporting the successful securing of over 80 permits, and overseeing the Program schedule and individual elements to meet multiple consent decree milestones.

The Program is currently in construction and approximately 50% complete. In addition to Program responsibilities, office services during construction are being provided and include overall project management and coordination for five contract packages, coordination between WWU, Construction Manager, and contractors, review of submittals, preparation of RFI responses, and development of as needed RFQs, supplemental drawings, and change orders.

Project Manager for the Consent Decree Negotiation and Regulatory Assistance Project, Greater Peoria Sanitary and Sewage Disposal District, Peoria, IL.
Project Manager for negotiations related to the consent decree proposed to address the GPSD's wet weather control program improvement program. The project includes negotiation of CD and permitting issues with USEPA (Region 5 and headquarters) and Illinois EPA. The negotiation program includes coordination of technical evaluations of the District's collection system, remote wet weather treatment facilities, and wastewater treatment facility (60 MGD secondary treatment capacity and 94 MGD wet weather treatment capacity). The negotiations address the District's compliance with state and federal CSO control program requirements and the modifications needed to incorporate the final requirements into the Districts NPDES permit. Other project tasks included wastewater treatment plant flow maximization, future process/nutrient control needs, financial assessment and affordability analysis, and incorporation of sustainable design elements.

Project Engineer for the Regional Optimization Master Plan (ROMP) for Pima County, AZ.
The program included review of existing county-wide infrastructure facilities and systems, review of future regulatory requirements, development of wastewater technology alternatives for meeting future needs, and preparation of the 25-year master plan. The County wastewater service area covers nearly 500 square miles and includes two major and nine subregional treatment facilities. The major facilities require upgrades to meet the future regulations, and the subregional facilities need to be expanded to meet rapid growth. The capital improvement program (CIP) costs were forecast to be over $500 million in 2006 construction costs.

Ricardo Perez, PE
Quality Control

Firm:	Greeley and Hansen
Years of Experience:	20
Education:	- B.S. Civil Engineering, **California** Polytechnic University, 2012
Professional Registrations:	Professional Engineer: California, Nevada, Indiana
Professional Experience:	Mr. Ricardo Perez is a Civil Engineer and Project Manager at Greeley and Hansen with over 20 years of experience in the planning, design, and construction of water, wastewater and stormwater infrastructure. His experience includes planning and design of water distribution and transmission mains, sewer collection systems including local collection systems, large trunk sewers, force mains, and brine waste disposal pipelines. Mr. Perez also has experience with assistance in the design of well sites and booster stations, subsurface utility engineering, rough grading and fine grading design, wet weather water collection systems including channel and water storage facilities, recreational facility design of public parks, sport complexes, and bicycle trails adjacent to storm water facilities. Ricardo has also contributed to services for hydraulic modeling, preparation of cost opinions, alternative analyses, life-cycle cost assessments, and providing engineering services during construction. In addition, he has assisted the City of Ontario and Jurupa Community Services District (both in California) in developing and updating their standards for water and wastewater applications.

Project Experience:

Project Engineer for the Verrado Z5S Booster Station for EPCOR Water, Buckhead, AZ.

An increase in growth and development in the Verrado community of Buckeye, Arizona prompted EPCOR Water to initiate the development of a new Booster Pump Station (BPS) to provide water services to two new pressure zones. This project was for the development of the Zone 5 S Booster Station (Z5S BPS). The new Z5S BPS was designed for a peak flow of 560 gpm. The new booster station included the design of a brand-new site for the booster station, hydropneumatic tank, sodium hypochlorite on-site generation system, standby generator, new building for process and electrical equipment, and tying into the existing Zone 4 BPS. Mr. Perez provided design for the civil and site layout for the project and provided support in the process and mechanical design as well.

Project Manager for the Geist Water Treatment Plant Storage Tank Expansion Project for Citizens Energy Group, Indianapolis, IN.

The Geist Water Treatment Plant had existing 0.78 MG of clean water storage. The Geist area, an area North of Indianapolis, is expected to continue growing in the near and distant future. Citizens Energy Group estimates a total of 2 MG gallons of clean water storage will be required in the future. As a part of this project an additional 1MG storage tank was designed and built to supplement the existing on-site storage. The tank is a clear well type, rectangular concrete tank built into the hillside to reduce visibility from neighbors of the area. The design of the new tank included supply mains, drain lines, level sensor, new electronic slide gate, new security camera and flexibility to isolate the new tank from the existing system for future maintenance and expansion.

Project Manager for the Merom and Mecca Comprehensive Planning Studies for Indiana American Water, IN.

Indiana American Water (INAW) provides approximately 110 million gallons per day (MGD) of high-quality, affordable water to nearly 300,000 customers in twenty-eight operating districts throughout Indiana. INAW has expressed its need for a Comprehensive Planning Study (CPS) for their Merom and Mecca districts with the goal of completing the CPS on a 15-year cycle. Both systems were acquired by INAW within the last ten years and currently do not have an existing CPS. The purpose of this CPS is to develop a fiscally sustainable

Ricardo Perez, PE
Quality Control

water management plan for each district to support and justify capital investments needed for rate adjustments to be approved by the Indiana Utility Regulatory Commission (IURC). The CPS were developed with the assistance from INAW. The Merom district has an average production of 20,000 GPD and obtains its water supply from 2 wells both sourced from a single well field. The system has a single elevated storage tank and an IDEM groundwater assessment has determined that the groundwater is highly susceptible to contamination. The Mecca district has an average production of 80,000 GPD and obtains its water supply from 2 wells both sourced from a single well field. The system has a single elevated storage tank and an IDEM groundwater assessment has determined that the groundwater is highly susceptible to contamination.

Key Aspects that were included in the CPS documents:

- Develop customer and demand forecasts for each customer category for the target years of 2023, 2028, 2033.
- Develop a calibrated distribution system hydraulic model for current year and future target years 2023 and 2033.
- Assess the adequacy of sources of supply, treatment facilities, and distribution system piping, distributive pumping, and distribution system storage capacity in their ability to meet current and projected demands and to provide adequate levels of service and reliability.
- Assess the adequacy of the treatment facilities in meeting current and proposed primary and secondary drinking water quality regulations, and American Water system water quality goals.
- Identify system hydraulic deficiencies based on pressure and fire flow guidelines.
- Development of a prioritized list of supply, treatment, pumping and distribution system capital Improvements.
- Development of a prioritized list of operational changes, where applicable, that could defer or eliminate the need for capital improvements.
- Development of recommended capital improvement projects to address system deficiencies.

Project Manager for the Aqueduct Intake Screen Immediate Improvements Study Phase and Final Design Phase for Citizens Energy Group, IN.
The Fall Creek Intake serves as an emergency water supply for Citizen's White River Treatment Plant. The project consisted of developing alternative low maintenance design options and cost opinions for the replacement of the existing 40 MGD Coanda Screens that were not functioning as designed and were being limited due to sediment accumulation and algae growth. Mr. Perez worked closely with Citizens Energy Group and coordinated with subconsultants, the project team, and IDEM to evaluate the conditions of the existing intake screen of the Fall Creek Intake and provided a technical memorandum as a part of the study phase with recommendations for optimizing the existing intake system. In the design phase Mr. Perez used the recommendations from the technical memorandum to develop construction drawings for modifying the existing intake. Challenges included incorporating the existing infrastructure to the final design; developing hydraulic calculations for each alternative to assure that the required flow of 40 MGD could be provided to the treatment plant; developing a unique design that took advantage of the existing Coanda Screen framework and working with IDEM to review and revise permitting for construction.

Project Manager for the 9th Street Storm Water Pump Station for Lafayette Renew in the City of Lafayette.
As a part of the ongoing clean water efforts and storm water management, Lafayette Renew implemented storm water improvement projects at two locations to address street flooding and improve drainage in the project areas. Storm water from the two projects is collected and conveyed to the new 4 MGD Pump Station. The Pump Station will deliver storm water previously carried by the City's combined sewer system, to reduce wet weather CSO discharge to the Wabash River. The Pump Station also serves as a community amenity by providing green space with passive educational activities focused on water and the environment. Key aspects of the project included design of the 4 MGD pump station, optimizing use of an existing 108-inch sewer pipe to maximize storage volume and provide overflow during high level storms, design of approximately 4,000 feet of gravity storm sewer, and design of 400 feet of storm water force main. Coordination with the Certificate of Appropriateness Committee, Historic Preservation Commission, and the 9th Street Hill Neighborhood Association was a critical element of the project to assure that the pump station provided an education and beneficial element to the neighborhood.

Ray David, PhD, PE
Lead Engineer

Firm:	Greeley and Hansen
Years of Experience:	15
Education:	- Ph.D. Civil and Environmental Engineering, Virginia Tech, 2016 - M.S. Civil Engineering, Purdue University, 2010 - B.S. Civil Engineering, Purdue University, 2007
Professional Registrations:	Professional Engineer: Illinois, New York, Texas, and Oklahoma
Professional Experience:	Dr. Ray David is an Associate of Greeley and Hansen wit over 15 years of experience in the design and construction wastewater engineering. His time at Greeley and Hansen includes planning, evaluation, design, and construction services of headworks facilities, odor control systems, air quality improvements, and solids handling system. His experience includes sludge handling and sludge disposal. He has serves as project manager on master planning projects which include evaluation of biosolids management programs and alternatives to evolve those programs, including centralized treatment strategies. His experience includes sludge processes such as digestions and composting. He serves as the odor control and air quality lead in Greeley and Hansen's Process Engineering Group. His experience with air quality and odor control includes both academic research while obtaining his PhD on the topic as well as practical applications. He has planned and designed numerous air quality and odor control system from biological systems to chemical amendment systems to carbon columns.

Project Experience:

Project Manager for the San Francisco Flood Resilience Programmatic Strategies for the San Francisco Public Utilities Commission, San Francisco, CA.

The purpose of the study is to engage stakeholders within the City to determine potential additional programmatic strategies for flood resilience. Specifically, the utilization of property modifications and other related programs that provide alternatives for private property owners was considered. Key decisions and development of consensus was determined through a facilitated workshop process. As these and additional programmatic strategies are developed, the following long-term challenges facing the San Francisco area will be considered: the effects of climate change and new storm patterns as it relates to precipitation intensity and duration; reasonable expectations of the public regarding flooding; and the highest return on investment for expenditures. Dr. David worked on and participated in the various study workshops and meetings, identified floodproofing technologies and modifications applicable for the City and County of San Francisco, assisted in the development of an Implementation Plan to achieve the goals identified during the workshops, and developed new and updated documentation for related programs.

Project Engineer for the Advanced Water Treatment System Evaluation for a Major National Dairy Processing Plant, CA.

This Major National Dairy Company is a leading producer of wholesale dairy products that has been committed to sustainability. This pledge towards innovation and sustainability has resulted in the construction of state-of-the-art production facilities. The proposed advanced water treatment system is based on the previous recommendations to condition source well water supplied to the plant, which is rich with calcium, chloride bicarbonate and silica. High concentrations of calcium hardness and silica in the source water require excessive use of the chemicals for production processes at the plant, excessive use of chemicals and water for CIP cleanings. At the same time excessive calcium and hardness in source water are carried over through the plant ending up in the industrial wastewater requiring intensive chemicals use, intensive cleanings of the treatment equipment and generating challenges with waste and produced brine (high strength salt) disposals. The tasks include detailed process and technological design; selection of equipment, pumps, and energy recovery devices; development of reverse osmosis specifications; and development of design documents.

Ray David, PhD, PE
Lead Engineer

Technical Advisor for the 30th and Sutherland Odor Control Study for Citizen Energy Group, Indianapolis, IN.
The area near 30th Street and Sutherland Avenue has documented complaints of odors emerging from the collection system. This study will sample and quantify the level and location of these odors and develop alternatives to address these complaints. The project includes performing a hydraulic evaluation of the collection system, conducting a field investigation to sample odorous gas in the collection system, reviewing data, identifying and conducting an alternative analysis, and creating a technical memorandum. Tasks included participation in progress meetings and workshop, development of a sampling plan, reviewing data, and evaluating alternatives.

Deputy Project Manager for the Department of Public Utilities Water and Sewer Facilities Plan Update Project, County of Henrico, VA.
The County's current Water and Sewer Facilities Plan was completed in 2007 and updated in 2011 to include the Innsbrook Small Area Plan. The County desires to update the current Water and Sewer Facilities Plan which will require evaluating the adequacy of existing water and wastewater systems, projecting future demands for residential and economic development, developing a prioritized facilities improvement plan to meet the County's needs through the year 2050, and include recommendations for long-term system concepts through build-out. The updated Water and Sewer Facilities Plan (the "Updated Facilities Plan") will reflect current facility requirements and will incorporate land use changes proposed in the 2040 Comprehensive Plan, which is an update to the County's Planning Department 2026 Comprehensive Plan. When it is completed, the Updated Facilities Plan will be added as an element of the 2040 Comprehensive Plan. The Updated Facilities Plan will be the principal planning document for future improvements to the County's water and wastewater system. The Updated Facilities Plan will be used to define DPU's 10-year Capital Improvement Plan and to document the plan for development of the water and wastewater facilities needed to accommodate projected growth within the County and certain areas of Hanover and Goochland Counties. The major project tasks to update the Public Utilities Water and Sewer Facilities Plan include the tasks: Data Collection and Compilation (Water and Sewer Facilities Plan Report and related technical memoranda; Water sales data; Water and Sewer System Flow Data; Rainfall Data at Sewage Pumping Stations; County's Geographic Information System (GIS) Mapping; Existing and Projected Future Land Use Data; Capital Improvement Program (CIP); and Project Data Management System); Population and Customer Projections (Existing land use development, customer, and population projections); Water Facilities Planning (Evaluate Existing Water Use; Update Unit Water Demand Rates; Update Existing Water Model; Develop Existing Demand Distribution; Water Model Operational Verification; Field Tests based on model verification; Develop Water System Planning Criteria; Develop Water Demand Projections; Evaluate Hydraulic Model of Water System; Evaluate Water System Improvement; Evaluate Facility Improvements Phasing; Develop Water Storage Tank Maintenance Program; Update Pressure Contour Layers; Develop Hydraulic Model Maintenance Plan); Sewer Facilities Planning (Evaluate Existing Wastewater Flow; Evaluate Sewer System Renewal Needs; Update Wet Weather Peak Flow Planning Criteria; Sewer Rainfall Derived Infiltration and Inflow (RDII) Volumes and Sewer Modeling; Identify Potential Redevelopment Areas and Expected Development Density Level; Develop Updated Sewer Model; Develop Wastewater Flow Projections; Calibrate Sewer Model; Run Preliminary Sewer Model; Run Final Sewer Model; Conduct Sewer Modeling Studies; Evaluate Sewer System Improvement; Evaluate Facility Improvement Phasing; Final 2030, 2040, 2050, and Build-Out Sewer Models); CIP Project Descriptions (Develop Technical Description for CIP projects); Cost Estimates (Develop Planning-Level Construction and Total Project Cost Estimate); Projected Capital Improvement Schedule (Develop Projected Schedule); Comprehensive Plan Coordination (Meet with County Planning Staff; Evaluate Water and Sewer Utility Impacts; Develop Technical Memoranda; Develop Water and Sewer Descriptions and Future Improvement Needs); Water and Sewer Model User Guide and Training (Develop Water and Sewer User Guides and Provide training in Water and Sewer Models); Treatment Facility Capacity Analysis (Conduct Current Facility Plans Review); Technical Memoranda (Studies Conducted); Reports (Water and Sewer Facilities Planning Studies Results); Project Meetings and Workshops (Develop Project Plan, Schedule, Workshops, Progress Meetings, and Coordination with County Staff); and Regulatory Assistance (Approval from Virginia Department of Health (VDH) and Department of Environmental Quality (DEQ)). Tasks included leading development of sewer model evaluation, population projections, storm size study, RDII evaluation, and CIP development. Dr. David managed project budget and schedule of the project, managed the project team, and managed subconsultant.

Jay Surti, PE
Biosolids

Firm:	Greeley and Hansen
Years of Experience:	19
Education:	- M.E. Environmental Engineering, Stevens Institute of Technology, 2008 - B.E. Environmental Engineering, Stevens Institute of Technology, 2003
Professional Registrations:	Professional Engineer: New Jersey
Professional Experience:	Mr. Jay Surti is a seasoned leader with more than 19 years of experience in project management, facility and master planning, and detailed design and construction for a wide range of complex water and wastewater projects, with specific expertise in biosolids handling and treatment systems. Mr. Surti has provided wastewater and residuals centric technical services that optimize existing operations and spearhead capital improvements to help achieve operational efficiency and realize reduction in electricity and chemicals consumption for numerous clients. Mr. Surti serves as Greeley and Hansen's Global Biosolids Practice Leader, using his in-depth expertise to develop regional biosolids management solutions for large wastewater treatment plants, improvements related to thickening and dewatering processes, solids stabilization processes, management of FOG and HSW including co-digestion, bioenergy recovery systems, thermal processes and biosolids end use. He is an expert on EPA Part 503 regulations and emerging issues (e.g., PFAS), that could potentially impact biosolids management approaches nationally.

Project Experience:

Technical Advisor for North WPCF Dewatering Expansion for Ocean County Utilities Authority, Ocean County, NJ. Assisting OCUA implement dewatering improvements at the North WPCF to meet processing capacity. Dewatered cake produced by the North WPCF is imported to the Central WPCF and dried in a centralized drying facility to produce Class A biosolids pellets. Class A biosolids are beneficially utilized for land application.

Technical Advisor, Biogas Storage Facilities, Newtown Creek Water Pollution Control Plant, New York City Department of Environmental Protection, New York City, NY.
Provide technical direction and QA/QC for the design of a new membrane gas storage system at the Newtown Creek Water Pollution Control Plant. Evaluate gas storage requirements based on existing and future biogas production, taking into consideration expansion of food waste co-digestion, a renewable natural gas (RNG) production facility and use of biogas in boilers to produce heat for digester heating.

Project Director, Homestead Wastewater Treatment Plant Improvements, New Jersey American Water, Columbus, NJ.
Serve as a Project Director and provide technical direction for improvements to the Homestead Wastewater Treatment Plant. Lead an alternatives evaluation to achieve permit compliance for ammonia during cold weather conditions. Design improvements include breakpoint chlorination, upgrade of chemical storage and feed facilities, pump station upgrades, and process monitoring and control upgrades.

Project Manager for the Biosolids Program Capital Improvements Plan, Department of Public Work, Westchester County, NY.
Developed a Capital Improvements Plan of solids processing improvements to the Peekskill WWTP and Yonkers WWTP. Assisted the County develop a plan to achieve its goal for reducing solids/sludge transportation costs, optimize inter-WWTP transfer by semi-regionalizing the County's solids processing operations and advance its goal to produce Class A biosolids. Planning level evaluation of a new dewatering system at the Peekskill WWTP to reduce transportation costs.*

Jay Surti, PE
Biosolids

Project Engineer for the Piscataway 30 MGD WWTP Bio-Energy Project, Washington Suburban Sanitary Commission, Accokeek, MD.
Complete design for a new biogas storage facility, dewatered cake pumping system and utility water pump station upgrades. Class A (thermally hydrolysis followed by mesophilic anaerobic digestion) dewatered biosolids produced by belt filter presses.*

Project Engineer for the 100+ MGD Central Treatment Plant, Middlesex County Utilities Authority, NJ.
Professional engineering advisory services to evaluate a Public Private Partnership (PPP) to implement advanced anaerobic digestion, thickening and dewatering processes to produce Class A biosolids for beneficial use. Provided review of basis of design for new gravity belt thickeners, enzymatic anaerobic digestion and centrifuge dewatering to produce Class A biosolids.*

Professional Engineer for the Biosolids Conceptual Design Project, South Central Wastewater Authority, Petersburg, VA.
Complete alternatives evaluation and conceptual design of new GBT thickening and dewatering systems. Conceptual design of sludge and dewatered cake conveyance, storage and pumping systems. Solids dewatering alternatives evaluated included belt filter presses, centrifuges and screw presses. Plant rated at 23 MGD.*

Project Engineer for the Springfield Regional 67 MGD Wastewater Treatment Facility, Springfield, MA.
Wastewater solids thickening and dewatering optimization to improve solids concentration and reduce trucking costs*

Project Engineer for the Holyoke Wastewater Treatment Plant, Holyoke, MA.
Wastewater solids thickening and dewatering optimization to improve solids concentration and reduce trucking costs*

Senior Technologist for the Waste-to-Energy Project, Hay Road 50+ MGD WWTP, City of Wilmington, DE.
Completed preliminary design to produce renewable electric power using digester gas and landfill gas, and use waste heat from the power generation process to produce dried biosolids. Completed a qualitative and carbon footprint comparison of the above-described project concept with other beneficial use biosolids processing technologies.*

Senior Technologist for the DAFT and Cake Bin Improvements, Metropolitan District Commission, Hartford, CT.
Design improvements to the dissolved air flotation thickeners (DAFTs) and dewatered cake storage bins at the Hartford WPCF. Develop contract documents for improvements.*

Senior Technologist for the Master Plan, Central Contra Costa Sanitation District, CA.
Lead master planning of solids treatment and resource recovery at the Facility. Solids treatment process consists of dissolved air flotation thickening, centrifuge dewatering and incineration. The goal of the master plan was to achieve energy neutrality. A combined cycle power generation facility producing electricity from incinerator of-gas and heat recovered from existing gas turbine would provide adequate energy to achieve net neutrality. New anaerobic digestion facilities was proposed. Improvements to dewatering processes proposed to reduce supplemental fuel consumption for incineration.*

Senior Technologist for the Solids, Project Definition Project, North Wastewater Treatment Plant, Baton Rouge, LA.
Develop the overall scheme of solids treatment and processing system to meet regulatory requirements and the City's short-term and long-term treatment goals. Complete project definition level design for thickening (gravity thickening and gravity belt thickening), anaerobic digestion and dewatering (belt filter press) systems for treating primary sludge and secondary sludge. *

Project Technologist for the Standard Operating Protocols, North Wastewater Treatment Plant and South Wastewater Treatment Plant, Baton Rouge, LA.
Worked with the treatment plant operations staff to develop Standard Operating Protocols (SOPs) for all liquid and solids treatment processes. Treatment processes include preliminary treatment (screenings and grit removal), primary treatment, trickling filters, solids contact basins, secondary clarifiers, sludge thickening systems, anaerobic digestion and energy recovery system, sludge dewatering system and major in-plant pump stations.*

Project Technologist for the Sludge Thickening Improvements, 50+ MGD Central Water Pollution Control Facility, Ocean County, NJ.
Complete planning level process design and develop improvement recommendations to enhance sludge handling and processing at the Ocean County Utilities Authority Central WPCF.*

** Indicates experience with previous firm*

George Condes, PE
Electrical Engineer

Firm:	Greeley and Hansen
Years of Experience:	18
Education:	- B.S. Electrical Engineering, University of Illinois at Chicago, 2003 - MBA specializing in Management, DePaul University, 2020
Professional Registrations:	Professional Engineer: Illinois
Professional Experience:	Mr. George Condes is the Electrical Group Head of Greeley and Hansen with more than 18 years of experience in the Design and Construction Industry. His experience includes design, feasibility studies, evaluation of existing facilities, and project management of large, multi-disciplined projects requiring the coordination of multiple subcontractors. His responsibilities involved the management of multi-firm teams and complex project issues. Mr. Condes has served as project manager and design engineer on numerous multi-million dollar projects, including Light and Heavy Industrial Manufacturing facilities, and Mission critical operation facilities. He has proven successes in establishing and utilizing highly effective project communication procedures and controls to optimize adherence to project goals, budget and schedule. As the Electrical Group Head and member of the Firm's Global Mechanical, Electrical, Plumbing, and Instrumentation & Controls (MEP/IC) Organization, he is responsible for the leadership, business management, and technical development of the Firm's Electrical Group.

Project Experience:

Technical Advisor for the Central Park Pumping Station Electrification for the Chicago Department of Water Management, Chicago, IL.

This potable water pumping station, originally built in the 1890's, was converted from steam turbine driven pumps to electric motor driven pumps. The existing 60 MGD and 80 MGD pumps were refurbished to "like new" condition; and new vacuum priming, lube oil, and hydraulic valve actuator power water systems were installed. Medium-voltage VFD's were installed to control the new 2000 HP and 3250 HP, 4.16 kV induction motors driving the pumps. A completely new power distribution system was installed, consisting of 12.47 kV main switchgear with two incoming utility feeders, 12.47 kV generator paralleling switchgear and four 2.5 MW, 12.47 kV generators, double-ended 12.47 kV-480 V unit substation, and 480 V power distribution. Five existing 25,000 lbs/hr high pressure steam boilers and associated steam piping were demolished. A fully automated SCADA system was installed to operate the pumping station based on distribution system pressures and flow demands. The design was performed entirely in 3D using Autodesk Revit and AutoCAD Civil 3D. Construction was phased to maintain full pumping station operation during conversion of the pumps, using temporary generators while the permanent standby power system is installed.

Technical Advisor and Quality Control Reviewer for City of Richmond, VA Task Orders.

Planning, Design, and Construction Services for electrical, instrumentation and control, mechanical, HVAC, fire protection, plumbing, fire alarm systems, and civil process engineering. Work under this Contract included the MIS Phase II Improvements, McCloy Pumping Station Improvements, Thickening and Dewatering Facility Upgrades, Electrical Hazard Assessments, and the Douglasdale Pump Station Improvements.

Technical Advisor for the Jones Island Water Reclamation Facility Motor Control Center Replacements Phase 1 for the Milwaukee Metropolitan Sewerage District (MMSD), Milwaukee, WI.

The project will replace 31 motor control centers and two unit substations at various process units within this 390 MGD plant. The existing equipment is nearing the end of its service life.

George Condes, PE
Electrical Engineer

Technical Advisor for Contract BB-215 for the Power Distribution Improvements at the Bowery Bay Water Resource Recovery Facility (WRRF) in Queens, NY.
This project involves Facility Planning Services, Design Services, Procurement Services, Design Service during Construction, and CM Services for the conversion or elimination of all 208V electrical loads to 480V loads throughout the plant. These project involves intensive field investigations, review of numerous record drawings, coordination with numerous ongoing and upcoming projects, and improvement in reliability and safety for the Plant's power distribution system. Project objectives include the elimination of numerous 4160V/208V oil filled switches and transformers and 208V motor control centers (MCCs) throughout the plant, consolidation of new 480V loads into the existing 480V infrastructure, the addition of 4 new double ended MCCs, the redevelopment of old electrical spaces into new NEC and NFPA 820 compliant electrical spaces, and a new digester complex electrical building to isolate new equipment from hazardous environment. This project also includes the refurbishment of the main substation 4 – 4160V reactors and synchronous bus for the incoming 4 utility services and the installation of new 4160V breaker mimic panels, a local mimic panel in the main substation and a remote mimic panel in the Plant Main Control Room.

Technical Advisor for the Reconstruction of Power Distribution at Wards Island Water Resource Recovery Facility (WRRF), Contract WI-292, NY.
This project involves the Facility Planning Services, Design Services, Procurement Services, and Design Service during Construction for the replacement and possible relocation of existing electrical equipment which make up a large portion of the 4160V and 480V power distribution system throughout the plant. This work includes evaluating the electrical distribution equipment and associated conductors for replacement and relocation; replacing existing or adding new HVAC equipment; and modifications and repairs to existing building components. This project will replace, refurbish, and/or relocate existing equipment. The Power Distribution Improvements at the Wards Island WWTP Project No. WI-292-DES will improve the reliability of the WWTP's power distribution system and treatment processes through the replacement or relocation of existing aging electrical distribution equipment throughout the plant.

Technical Advisor for the Piscataway WWTP Electrical Upgrades for the Washington Suburban Sanitary Commission, Accokeek, MD.
This project includes the site-wide replacement of medium and low voltage electrical distribution equipment including switchgear, motor control centers, and transformers. To facilitate the replacements and new site-wide underground ductbank system will be designed, that when completed will allow plant personnel to more easily and safely isolate and maintain the equipment. New equipment will feature the latest safety and communications technology to provide a safe work environment for plant personnel and a breadth of power usage data which can be analyzed to improve the operation of the plant. Responsibilities include the Quality Control review of the electrical design contract documents.

Technical Advisor, NYCDEP TI-169 for the Power Distribution Improvements at the Tallman Island WRRF, Queens, NY.
For the New York City Department of Environmental Protection Contract TI-169. All existing 208V loads will be converted to 480V operation or removed entirely. Project involves field investigation, coordination with various ongoing projects, and general improvements to the plants distribution system. This project also includes the elimination of several 4160V/208V substations and 208V motor control centers.

Technical Advisor for Various Types of Consulting Services for All Facilities Located within the Jurisdiction of MWRDGC on a Three-year Retainer Basis.
Electrical services include, but are not limited to design work, construction support services, estimating services, and inspection services.

Technical Advisor for North Shore Water Reclamation District (NSWRD) Electrical Condition Assessment and Electrical Master Plan.
The project assessed all electrical power distribution equipment at NSWRD's three Water Reclamation Facilities and ten Wastewater Pumping Stations. Surveys were conducted, and each component was scored on several parameters relating to condition and potential impact to operations. A ranking and Phase 1 master plan report was prepared to assist NSWRD in planning capital improvements. Responsible for leading the field surveys at all facilities and developing the report.

Norbert Viranyi, PE, LEED AP
Electrical Engineer

Firm:	Greeley and Hansen
Years of Experience:	31
Education:	- B.S. Electrical Engineering, Purdue University, 1991
Professional Registrations:	Professional Engineer: Indiana, Arizona, California, Florida, Illinois, Maryland, Michigan, Nevada, New York, Ohio, Oklahoma, Virginia, Wisconsin, and District of Columbia LEED Accredited Professional
Professional Experience:	As Project Engineer, he performs detailed design of water and wastewater facility electrical systems involving complex and unusual engineering challenges. He directs the preparation of designs, plans, specifications and invitations for bids. Mr. Viranyi ensures compliance with applicable standards (NFPA, UL, IEEE, ANSI, NEMA, ASTM), inspects work in progress and approves contractors' invoices. He supervises appropriate acceptance tests, releases projects for operation, and prepares operating procedures. He also prepares capital and maintenance budget estimates and prepares and presents technical reports for senior management and government entities. As the Senior Electrical Associate, he serves as the electrical technical lead for large and complex project assignments across the firm and is responsible for advancing and guiding the electrical group's technical and quality control efforts and technical advisor.

Project Experience:

Project Manager and Technical Advisor for the Central Park Pumping Station Electrification for the Chicago Department of Water Management, Chicago, IL.

This potable water pumping station, originally built in the 1890's, was converted from steam turbine driven pumps to electric motor driven pumps. The existing 60 MGD and 80 MGD pumps were refurbished to "like new" condition; and new vacuum priming, lube oil, and hydraulic valve actuator power water systems were installed. Medium-voltage VFD's were installed to control the new 2000 HP and 3250 HP, 4.16 kV induction motors driving the pumps. A completely new power distribution system was installed, consisting of 12.47 kV main switchgear with two incoming utility feeders, 12.47 kV generator paralleling switchgear and four 2.5 MW, 12.47 kV generators, double-ended 12.47 kV-480 V unit substation, and 480 V power distribution. Five existing 25,000 lbs/hr high pressure steam boilers and associated steam piping were demolished. A fully automated SCADA system was installed to operate the pumping station based on distribution system pressures and flow demands. The design was performed entirely in 3D using Autodesk Revit and AutoCAD Civil 3D. Construction was phased to maintain full pumping station operation during conversion of the pumps, using temporary generators while the permanent standby power system is installed. Responsibilities included overall project management to deliver high quality contract documents within budget and schedule, as well as conceptual design of the electrical distribution system. Project management responsibilities also included coordination of permit reviews, zoning application, public outreach, and low-interest Illinois EPA loan application.

Project Manager for the Power Distribution Improvements at Wards Island WRRF for the New York City Department of Environmental Protection, Manhattan, NY.

This project involves the Facility Planning Services, Design Services, Procurement Services, and Design Service during Construction for the large scale replacement of the plant power distribution system. This replacement and improvements project includes the 13.8kV/4160V main substation with 5 – 13.8kV utility services, 4 – 4160V switchgear, 5 – 4160V/480V unit substations, and 25 – 480V motor control centers. The project involves intensive field investigations, review of numerous record drawings, coordination with numerous ongoing and upcoming projects, and improvement in reliability and safety for the Plant's

power distribution system. Additional objectives are the redevelopment of old electrical spaces into new NEC and NFPA 820 compliant electrical spaces, and a new digester complex electrical building to isolate new equipment from hazardous environment.

Project Manager for the Piscataway WWTP Electrical Upgrades for the Washington Suburban Sanitary Commission, Accokeek, MD.

This project includes the site-wide replacement of medium and low voltage electrical distribution equipment including switchgear, motor control centers, and transformers. To facilitate the replacements and new site-wide underground ductbank system will be designed, that when completed will allow plant personnel to more easily and safely isolate and maintain the equipment. New equipment will feature the latest safety and communications technology to provide a safe work environment for plant personnel and a breadth of power usage data which can be analyzed to improve the operation of the plant. Responsibilities include the Quality Control review of the electrical design contract documents.

Technical Advisor for the Resiliency Program at the Hunts Point WRRF for the New York City Department of Environmental Protection, Bronx, NY.

This project involves the Facility Planning Services, Design Services, Procurement Services, and Design Service during Construction for the design and implementation of an assortment of storm mitigation strategies to provide a flood resilient design to a 100yr plus 40" storm event. These projects involve intensive field investigations, review of numerous record drawings, coordination with numerous ongoing and upcoming projects, and improvement in reliability for the Plant's process and power distribution system. Project scope include design for over 30 buildings/ areas onsite.

Electrical Project Engineer for the Terrence J. O'Brien Water Reclamation Plant UV Disinfection Project for the Metropolitan Water Reclamation District of Greater Chicago, Skokie, IL.

Scope of the project includes major medium voltage utility extensions, a new main electrical distribution station, and a complex process building housing the ultraviolet disinfection processes. Technical details include producing the design completely in 3D design software, the use of water-source heat pumps, LED lighting, and arc-flash mitigation strategies. Challenges of this project include providing extremely reliable power to the UV processes to maintain permit compliance and coordinating many disciplines in a tight and complex space. This assignment also required detailed coordination with ComEd for utility relocations and verification of adequate supply to the facility.

Electrical Project Manager for the new Water Reclamation Facility for the City of North Las Vegas, NV.

Project elements included design and construction of a new 50 MGD membrane bioreactor WRF. The facility uses Adjustable Frequency Drives in most processes. Active harmonic filters were used to mitigate the effects of harmonics produced by numerous 6-pulse AFDs. The project requirements included a comprehensive electrical power system analysis with an arc flash study.

Michelle Tran, EIT
Project Engineer

Firm:	Greeley and Hansen
Years of Experience:	4
Education:	- M.S. Civil, Environmental and Sustainable Engineering, Arizona State University, 2018 - B.S.E. Civil Engineering, Arizona State University, 2017
Professional Registrations:	Engineer-in-Training: Arizona Professional Engineer: Nevada (Pending)
Professional Experience:	Ms. Michelle Tran is a Civil Engineer with Greeley and Hansen with 4 years of experience in the water and wastewater field. She has provided aid to professional engineers in order to meet various project requirements and deadlines. Some tasks include design, evaluation of existing facilities, the development of an operations and maintenance manual, cataloguing and organizing client comments, and development of diagrams for use in reports. After graduating from Arizona State University, Ms. Tran was in charge of a water sampling project for the Arizona Department of Environmental Quality, as well as supported colleagues by performing literature reviews and technical reviews.

Project Experience:

Project Engineer for the SPA 1 Water Reclamation Facility (WRF) Original Wet Well Overflow Study in Surprise, AZ.

The project scope includes the assessment of existing sanitary sewer collection system conditions and evaluation of alternatives to resolve sanitary sewer overflow (SSO) issues experienced at the SPA 1 WRF Original Wet Well. Tasks includes hydraulic modeling and analysis of the SPA 1 WRF Original Wet Well and existing sanitary sewer collection system, development of alternatives to reduce SSO issues, development of a design report, and coordination with the client.

Project Engineer for the Lift Station 60 Decommissioning Project in Phoenix, AZ.

The project scope included development of a flow monitoring plan and a flow monitoring study of the Lift Station 60 sewer shed, and the downstream Lift Station 42 sewer shed. The flow monitoring data is used to appropriately design the Lift Station 60 bypass sanitary sewer and evaluate the receiving downstream lift station capacity to receive the bypassed Lift Station 60 flows. Additionally, abandonment of the wet well, influent gravity sewer mains, and force main are included as part of the project scope, as are a thorough inventory of equipment to salvage requiring specific specifications and details and coordination with the client and contractor. Decommissioning of all electrical facilities and equipment, on-site odor control system, and coordination for decommissioning of commercial utilities to the site were also part of the decommissioning scope and design.

Project Engineer for the Southside Wastewater Treatment Plant Peak Wet Weather Flow Optimization Project in Tulsa, OK.

The project scope included developing a Peak Wet Weather Strategy and Operation Manual to be used by Plant Staff for optimizing wet weather operations at the Southside Wastewater Treatment Plant. Various tasks included: defined modes of operation for controlling wet well and process control valves throughout the system, created flow diagrams for each mode of operation, and created a visual aid of SCADA screen controls for wet weather operations. The manual and technical memorandum are to be used for training plant staff, as well as providing guidance for pump station operations.

Michelle Tran, EIT
Project Engineer

Project Engineer for the Lake Las Vegas Lift Station 19 (LS19) and Lift Station 25 (LS25) Improvements Project for the City of Henderson in Henderson, NV.
The project scope included the decommissioning of LS25, diverting LS25 flows to LS19, and improvements to LS19 to increase capacity in order to handle higher flows and improve overall operations and maintenance. Tasks included coordination with the client, assistance during construction phase, and development of as-built drawings.

Project Engineer for the 11 MGD Reclaimed Water Pump Station Improvements Project in Las Vegas, NV.
The project scope includes the planning, design and engineering services during construction of a new reclaimed water pump station as a redundancy to the existing reclaimed water pump station. The project includes three 5.5 MGD pumps and interconnecting above-grade and below-grade piping systems. Responsible for the coordination of submittal review and request for information between Greeley and Hansen and the client during the construction phase.

Project Engineer for the Sludge Cake Conveyance Design Project in Las Vegas, NV.
The project scope includes evaluation of the existing sludge cake conveyance system and design of a new sludge cake conveyance system to improve sludge transfer process efficiency and overall operation and maintenance. Tasks included coordination with the client and contractor and assistance during construction.

Paul Cooper, AIA, LEED AP
Architecture - Principal

Firm: TEF Architecture & Interior Design

Education:
- Bachelor of Architecture, University of Oregon, Eugene, OR

Professional Registrations: Licensed Architect No. C28490; Issuer: CA Board of Architects

Professional Experience:

Paul leads TEF's infrastructure work and brings significant experience in the management of public sector contracts and integrated teams. A skilled and pro-active leader he is adept in facilitating team communication and moving projects forward.

Paul's recent experience includes a wide range of infrastructure assignments as well as expertise in managing local government and other public sector and institutional projects. He has been instrumental to elevating the design and delivery of electrical infrastructure programs for PG&E that have garnered award-winning recognition, most recently for the Larkin Street Substation Expansion, the first Net-Zero electrical switchgear building in the US certified by the International Living Future Institute's (ILFI) Zero Energy Building (ZEB) Certification™ of the Living Building Challenge.

Project Experience:

- 10,500 Sq Ft | PG&E Net Zero Energy Larkin Street Substation Expansion San Francisco, CA
- 29,000 Sq Ft | PG&E Hunters Point Substation, San Francisco, CA
- 4,000 Sq Ft | PG&E Mission Substation, San Francisco, CA
- 4,800 Sq Ft | PG&E San Mateo Substation, San Francisco, CA
- San Francisco International Airport, Terminal 3
  - 595,000 Sq Ft | West Modernization, San Francisco, CA (with Gensler)
- Fire Boat Station 35, Piers 22-1/2 + 24,
  - 15,0000 Sq Ft | Design Competition, San Francisco, CA
- 35,000 Sq Ft | UCSF Rock Hall Refresh, San Francisco, CA
- 9,300 Sq Ft | Bayview Opera House Renovation, San Francisco, CA
- 18,448 Sq Ft | Garfield Park + Pool Rehabilitation
- 40,000 Sq Ft | Live Oak School Expansion, San Francisco, CA
- 35,000 Sq Ft | Bay Area Metro Center, 5th Floor and Ground Floor
  - Build Out, San Francisco, CA
- 155,000 Sq Ft | Bay Area Metro Center Regional Agency
  - Headquarters, San Francisco, CA
- 27,000 Sq Ft | Swissnex/Swiss Consulate at Pier 17, San Francisco, CA

Justin Blinn AIA, LEED AP BD+C, LFA
Architecture - Project Manager

Firm: TEF Architecture & Interior Design

Education:
- Bachelor of Architecture, Rensselaer Polytechnic Institute, Troy, New York

Professional Registrations: Licensed Architect No. 036920; Issuer: NY Board of Architects

Professional Experience: Justin's thoughtful, honest approach to project leadership puts clients first. With 11 years of experience, he brings design acumen and technical precision to all stages of a project.

Justin has led a number of infrastructure projects, including utility enclosures and substations for PG&E, most notably the award-winning Larkin Street Substation Expansion and the San Mateo Substation enclosure. His knowledge and experience leading a wide range of assignments for public sector and institutional clients will also be an asset to the team.

Project Experience:

- 10,500 Sq Ft | PG&E Net Zero Energy Larkin Street Substation Expansion San Francisco, CA
- 29,000 Sq Ft | PG&E Hunters Point Substation, San Francisco, CA
- 4,800 Sq Ft | PG&E San Mateo Substation, San Francisco, CA
- 97,000 Sq Ft | Pier 70, Building 2, Multi-Family Residential Core + Shell Renovation, San Francisco, CA
- 47,500 Sq Ft | 915 North Point Apartments, San Francisco, CA
- 196,000 Sq Ft | Mission Armory, Core + Shell Renovation, San Francisco, CA
- 120,000 Sq Ft | 55/60 Francisco, San Francisco, CA
- 25,000 Sq Ft | 170 9th Street Renovation, San Francisco, CA
- Presidio Trust, San Francisco, CA
  - 41,000 Sq Ft | Gorgas Warehouse Renovation
  - 5,500 Sq Ft | Building 103 Tenant Improvement, San Francisco, CA
  - 4,500 Sq Ft | Building 1230 Tenant Improvement
  - 5,000 Sq Ft | Building 222
  - 5,500 Sq Ft | Building 103 Tenant Improvement
  - Commissary Design Analysis Studies
  - 3,000 Sq Ft | Chapel Upgrades Building 130
- 54,221 Sq Ft | University of California, San Francisco, Millberry Union, Improvement Plan & Event Center, San Francisco, CA

Laudan Siahpolo
Architecture - Architect Level III

Firm:	TEF Architecture & Interior Design
Education:	- Bachelor of Architecture, California Polytechnic State, University, San Luis Obispo, CA
Professional Registrations:	Licensed Architect No. C 37372; Issuer: California Board of Architects
Professional Experience:	Laudan has provided technical and design leadership to diverse projects at TEF, including institutional, public, and developer led assignments. Her experience ranges from large scale residential high rises to modest interventions requiring considerable technical precision. Laudan has been crucial to the success of several major infrastructure projects including TEF's Project Manager for the SFO Terminal 3 West project, a design/ build joint venture with Gensler, led by Turner Construction, as well as PG&E's Hunters Point Substation. She is also actively engaged in the application of LEAN and integrated design strategies as part of her management approach and brings diverse experience to inform smart design solutions across market sectors.

Project Experience:

- 29,000 Sq Ft | PG&E Hunters Point Substation, San Francisco, CA
- San Francisco International Airport, Terminal 3
  - 595,000 Sq Ft |West Modernization, San Francisco, CA (with Gensler)
- Fire Boat Station 35, Piers 22-1/2 + 24,
  - 15,0000 Sq Ft |Design Competition, San Francisco, CA
- 1,300 Sq Ft |Kaiser Oakland Pediatric Cardiovascular OR Renovation, Oakland, CA
- Stanford Health Care
  - 15,000 Sq Ft |Almaden Ranch Clinic, San Jose, CA
  - 42,000 Sq Ft |Burlingame Clinic, Burlingame, CA
- 183,000 Sq Ft |UC Berkeley David Blackwell Hall, Berkeley, CA*
- 857,400 Sq Ft |Anaha Tower, Block K, Ward Village, Honolulu, HI*
- 353,000 Sq Ft |Solaire, Transbay Block 6, San Francisco, CA*
- 392,500 Sq Ft |One Ala Moana, Residential Tower, Honolulu, HI*
- 113,000 Sq Ft |ASU Gymnasium Expansion and Renovation, Tempe, AZ*

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Task		Project Manager	Lead Project Engineer	Project Engineer	Electrical Engineer	Biosolids Engineer	QA/QC	QA/QC	Admin	Architect TEF **OPTIONAL**	Architect TEF **OPTIONAL**	Architect TEF **OPTIONAL**	TEF Hours	GH Hours	Total Labor Hours	TEF Fee **OPTIONAL**	GH Fee	Total Fee including **OPTIONAL**
		Val Frenkel	Ray David	Michelle Tran	George Condes	Jay Surti	Andy Martin	Ricardo Perez		Principal	Project Manager	Architect Level III						
Task 1 - Data Collection		8	30	40	0	0	0	0	0	0	2	2	4	78	82	$760.00	$15,864.20	$16,624.20
1-100	Data Collection	8	30	40							2	2	4	78	82	$760.00	$15,864.20	$16,624.20
Task 2 - Centralized Wastewater Treatment Plant Conceptual Design		44	100	140	15	30	0	4	0	2	3	27	32	333	365	$5,990.00	$73,617.75	$79,607.75
2-100	Conceptual Design of Proposed Wastewater and Treated Water Conveyance Systems	12	20	40				4					0	76	76	$-	$15,192.00	$15,192.00
2-200	Conceptual Design of Centralized WWTP	12	30	40		30							0	112	112	$-	$26,895.50	$26,895.50
2-300	Centralized WWTP Architectural Renderings **(Optional Task)**	4								2	3	27	32	4	36	$5,990.00	$1,297.80	$7,287.80
2-400	Centralized WRRF Opinion of Probable Construction Cost (OPCC)	8	30	30	15								0	83	83	$-	$18,376.35	$18,376.35
2-500	Conceptual Centralized WRRF Report	8	20	30									0	58	58	$-	$11,856.10	$11,856.10
Task 3 - Decentralized Wastewater Treatment Plants Conceptual Design		32	90	150	30	20	0	0	0	1	2	27	30	322	352	$5,460.00	$67,923.00	$73,383.00
3-100	Determine Sub-Basins within CAWD Collection System for Locations of Decentralized Facilities	8	20	40	20								0	88	88	$-	$18,109.00	$18,109.00
3-200	Evaluation of Biosolids Treatment for Decentralized Approach	4	10	30		20							0	64	64	$-	$14,283.50	$14,283.50
3-300	Conceptual Design of Decentralized WWTPs	4	20	20						1	2	27	30	44	74	$5,460.00	$9,314.00	$14,774.00
3-400	Decentralized WWTP 0.25 MGD	8	20	20	10								0	58	58	$-	$13,116.10	$13,116.10
3-500	Conceptual Decentralized WRRFs Report	8	20	40									0	68	68	$-	$13,100.40	$13,100.40
Task 4 - Project Management, Site Visits, Meetings, Workshops		102	68	30	0	0	20	10	50	4	9	3	16	280	296	$3,670.00	$70,394.14	$74,064.14
	Project Management, Coordination	30											0	30	30	$-	$9,733.50	$9,733.50
	Reporting	20	20										0	40	40	$-	$12,016.60	$12,016.60
	QA/QC	8					20	10					0	38	38	$-	$11,069.10	$11,069.10
	Workshops and Meetings - Total 8	28	28							4	9	3	16	56	72	$3,670.00	$16,823.24	$20,493.24
	Report, Draft and Final	16	20	30					50				0	116	116	$-	$20,751.70	$20,751.70
Total Hours		**186**	**288**	**360**	**45**	**50**	**20**	**14**	**50**	**7**	**16**	**59**	**82**	**1013**	**1095**	**$15,880.00**	**227,799.09**	**$243,679.09**
Billing Rate		**$324.45**	**$276.38**	**$124.43**	**$250.43**	**$324.45**	**$324.45**	**$198.45**	**$126.00**	**$325.00**	**$205.00**	**$175.00**						
Total		**$60,347.70**	**$79,597.44**	**$44,794.80**	**$11,269.35**	**$16,222.50**	**$6,489.00**	**$2,778.30**	**$6,300.00**	**$2,275.00**	**$3,280.00**	**$10,325.00**						
																	Total GH Labor Cost	**227,799.09**	$227,799.09
																	Subconsultant Cost		$15,880.00
																	ODC Cost	**7,232.00**	$7,232.00
																	GH Management Fee for Subconsultant - 5%		$794.00
																	TOTAL PROPOSAL COST	**235,031.09**	**$251,705.09**

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(800) 837-9779
greeley-hansen.com

RESOLUTION NO. 2022-15

A RESOLUTION AUTHORIZING THE GENERAL MANAGER TO EXECUTE A PROFESSIONAL SERVICES AGREEMENT WITH GREELEY AND HANSEN IN AN AMOUNT NOT TO EXCEED $251,705.09 FOR WASTEWATER TREATMENT PLANT (WWTP) RELOCATION ALTERNATIVES PLANNING ASSISTANCE FOR LONG-TERM SEA LEVEL RISE MITIGATION PLANNING (PROJECT #22-01)

-oOo-

WHEREAS, Special Condition 9 of the Carmel Area Wastewater District (CAWD) WWTP Coastal Development Permit requires planning for relocation of the WWTP as a potential alternative to mitigate impacts of sea level rise; and

WHEREAS, Greeley and Hansen has submitted an acceptable proposal and is well qualified to provide conceptual wastewater treatment planning services at a competitive rate;

NOW, THEREFORE, BE IT RESOLVED by the Board of Directors of the Carmel Area Wastewater District that it does hereby authorize the General Manager to enter into a professional services agreement, with a not to exceed amount of $251,705.09, with Greeley and Hansen for WWTP Relocation Alternatives Planning.

PASSED AND ADOPTED at a regular meeting of the Board of Directors of the Carmel Area Wastewater District duly held on May 26, 2022, by the following vote:

AYES: BOARD MEMBERS:

NOES: BOARD MEMBERS:

ABSENT: BOARD MEMBERS:

ABSTAIN: BOARD MEMBERS:

_____

Ken White, President of the Board

ATTEST:

_____

Domine Barringer, Secretary of the Board

STAFF REPORT

To: Board of Directors

From: Barbara Buikema, GM

Date: May 26, 2022

Subject: Authorizing Continued Remote Teleconference Meetings Through June 30, 2022

RECOMMENDATION

It is recommended that the Board of Directors proclaim a local emergency and authorize remote teleconference meetings for the period May 31 through June 30, 2022.

DISCUSSION

Since March 2020, Governor Newsom has issued a series of Executive Orders (N-25-20, N-29-20, N-35-20) declaring the State of California has been under a State of Emergency aimed at containing COVID-19. The Executive Orders modified certain requirements created by the Ralph M. Brown Act (Brown Act) or the state's local agency public meetings law. The District has been successfully operating under these conditions since they went into effect.

On June 11, 2021, the Governor issued Executive Order N-08-21 which rescinds the modifications made to the Brown Act effective September 30, 2021. After that date, agencies are required to observe all the usual Brown Act requirements as they existed prior to issuance of the orders.

However, after discussions with the California Special District's Association (CSDA), the Governor's office, and other stakeholders, the Governor's office modified its approach and Assembly Bill 361 was introduced in February 2021 and provides local agencies with the ability to meet remotely during proclaimed state emergencies under modified Brown Act requirements, similar in many ways to the rules and procedures established by the Governor's Executive Orders. Specifically, AB 361 suspends the requirements located in Government Code, section 54953. In short this means that during a state of emergency, under specified circumstances, local agencies can meet pursuant to modified Brown Act requirements.

AB 361 extends public meeting teleconferencing until January 1, 2024. With the Omicron variant leading to a rise of cases in California, it allows local governments to continue to conduct virtual meetings as long as there is a state proclaimed state of emergency, but it will not be quite as flexible as it had been under the Executive Order. It requires local officials to find that meeting in person would present an imminent safety risk to attendees. The key difference between Executive Order N-29-20 and AB 361 is that AB 361 requires a public comment period where the public can address the legislative body directly. It prohibits the board from limiting public comments only to those submitted in advance and specifies that the board must provide an opportunity for the public to comment in real time.

Local governments must reconsider the exemption every 30 days to ensure that the state of emergency proceeds and that local circumstances maintain that a health/safety risk exists. Essentially, the continued exemption of the Brown Act is dependent on when the State COVID-19 state of emergency ends. Carmel Area Wastewater District (CAWD) has been open to the public for several months with a type of hybrid whereby the Board and legal counsel are in the board room and some staff members are remote.

Staff is asking the board to approve continuance of open in-person meetings for the Board and referral of the public to the ZOOM link. Please note that we have also found some participants prefer to use ZOOM rather than making the trip to our offices – it is very convenient to sign on from home. We may find that we continue offering ZOOM meetings well after the pandemic disappears to accommodate customers who desire to participate virtually.

Finally, the requirement is month-to-month renewal of the resolution. We will bring this item back to the Board monthly as long as the State of Emergency remains in force.

FUNDING – No Impact

RESOLUTION NO. 2022-24

A RESOLUTION OF THE BOARD OF DIRECTORS OF THE CARMEL AREA WASTEWATER DISTRICT (CAWD), PROCLAIMING A LOCAL EMERGENCY, RATIFYING THE PROCLAMATION OF A STATE OF EMERGENCY BY GOVERNOR'S ORDER #N-25-20 DATED MARCH 4, 2020, AND AUTHORIZING REMOTE TELECONFERENCE MEETINGS OF THE LEGISLATIVE BODIES OF CAWD FOR THE PERIOD MAY 31 THROUGH JUNE 30, 2022, PURSUANT TO BROWN ACT PROVISIONS.

WHEREAS, the Carmel Area Wastewater District (District) is committed to preserving and nurturing public access and participation in meetings of the Board of Directors; and

WHEREAS, all meetings of Carmel Area Wastewater District's legislative bodies are open and public, as required by the Ralph M. Brown Act (Cal. Gov. Code 54950 – 54963), so that any member of the public may attend, participate, and watch the District's legislative bodies conduct their business; and

WHEREAS, the Brown Act, Government Code section 54953(e), makes provisions for remote teleconferencing participation in meetings by members of a legislative body, without compliance with the requirements of Government Code section 54953(b)(3), subject to the existence of certain conditions; and

WHEREAS, a required condition is that a state of emergency is declared by the Governor pursuant to Government Code section 8625, proclaiming the existence of conditions of disaster or of extreme peril to the safety of persons and property within the state caused by conditions as described in Government Code section 8558; and

WHEREAS, a proclamation is made when there is an actual incident, threat of disaster, or extreme peril to the safety of persons and property within the jurisdictions that are within the District's boundaries, caused by natural, technological, or human-caused disasters; and

WHEREAS, it is further required that state or local officials have imposed or recommended measures to promote social distancing, or, the legislative body meeting in person would present imminent risks to the health and safety of attendees; and

WHEREAS, such conditions now exist in the District, specifically, a State of Emergency has been proclaimed – Governor's order #N-25-20 dated March 4, 2020; and

WHEREAS, a State of Emergency exists in California due to the threat of COVID-19 and despite sustained efforts, the virus remains a threat, and further efforts to control the spread of the virus to reduce and minimize the risk of infection are needed; and

WHEREAS, the Board of Directors does hereby find that due to threat from the COVID-19 virus, and, California Occupational Safety & Health Administration (Cal/OSHA) COVID-19 Prevention Standards, AND, the District's written COVID-19 Prevention Policy has caused, and will continue to cause, conditions of peril to the safety of persons within the District that are likely to be beyond the control of services, personnel, equipment, and facilities of the District, and desires to proclaim a local emergency and ratify the proclamation of state of emergency by the Governor of the State of California; and

WHEREAS, as a consequence of the local emergency, the Board of Directors does hereby find that the legislative bodies of Carmel Area Wastewater District shall conduct their meetings without compliance with paragraph (3) of subdivision (b) of Government Code section 54953, as authorized by subdivision (e) of section 54953, and that such legislative bodies shall comply with the requirements to provide the public with access to the meetings as prescribed in paragraph (2) of subdivision (e) of section 54953; and

WHEREAS, the District is holding public meetings but requires the public to use ZOOM for access.

NOW, THEREFORE, THE BOARD OF DIRECTORS OF CARMEL AREA WASTEWATER DISTRICT DOES HEREBY RESOLVE AS FOLLOWS:

Section 1. Recitals. The Recitals set forth above are true and correct and are incorporated into this Resolution by this reference.

Section 2. Proclamation of Local Emergency. The Board hereby proclaims that a local emergency now exists throughout the District, and meeting in person with members of the public or staff would present a risk of infection to all present in a meeting.

Section 3. Ratification of Governor's Proclamation of a State of Emergency. The Board hereby ratifies the Governor of the State of California's Proclamation of State of Emergency, effective as of its issuance date of March 4, 2020.

Section 4. Remote Teleconference Meetings. The General Manager and legislative body of the Carmel Area Wastewater District are hereby authorized and directed to take all actions necessary to carry out the intent and purpose of this resolution including, conducting open and public meetings in accordance with Government Code section 54953(e) and other applicable provisions of the Brown Act.

Section 5. Effective Date of Resolution. This Resolution shall take effect immediately upon its adoption and shall be effective until the earlier of June 30, 2022, or such time the Board of Directors adopts a subsequent resolution in accordance with Government Code section 54953(e)(3) to extend the time during which the legislative bodies of Carmel Area Wastewater District may continue to teleconference without compliance with paragraph (3) of subdivision (b) of section 54953.

PASSED AND ADOPTED by the Board of Directors of Carmel Area Wastewater District, this 26th day of May 2022, by the following vote:

AYES: BOARD MEMBERS:

NOES: BOARD MEMBERS:

ABSENT: BOARD MEMBERS:

ABSTAIN: BOARD MEMBERS:

_____

Ken White, President of the Board

_____

Domine Barringer, Secretary to the Board

STAFF REPORT

To: Board of Directors

From: Barbara Buikema, General Manager

Date: May 26, 2022

Subject: Reclamation Budget 2022-23

RECOMMENDATION

It is recommended that the Board of Directors adopt a resolution approving the Carmel Area Wastewater District (CAWD)/Pebble Beach Community Service District (PBCSD) Fiscal Year 2022-23 Reclamation Project Budget.

DISCUSSION

The CAWD/PBCSD Reclamation Project Fiscal Year 2022-23 Budget was approved at the Technical Advisory Committee group level on May 3, 2022. Final approval was given by the Reclamation Management Committee (RMC) at its May 10, 2022 meeting. A copy of the Project 2022-23 Budget is attached.

Items approved by the RMC are brought to the CAWD or PBCSD Board, as appropriate, for approval and any applicable resolution.

FUNDING

All funding is covered by the Reclamation Project or by the Pebble Beach Company and Independent Reclaimed Water Users Group, as project guarantors.

Attachment:

- CAWD/PBCSD Reclamation Project 2022-23 Budget

CAWD/PBCSD RECLAMATION PROJECT

2022-23 BUDGET

Reviewed by Finance Officer's Work Group (FOWG) on - April, 2022

Reviewed by Technical Advisory Committee (TAC) on May 3, 2022

Presented to Reclamation Management Committee (RMC) on May 10, 2022

CAWD/PBCSD Reclamation Project
2022-23

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CAWD/PBCSD RECLAMATION PROJECT
2022-23 BUDGET SUMMARY

	Actual 2020-21	Estimated Actual 2021-22	2021-22 Budget	Proposed 2022-23 Budget	Inc/(Dec) 2022-23 Proposed to Proj.Actual 21-22	Budget 21-22
User Revenue						
Water Sales	2,718,134	2,805,618	2,884,000	3,421,188	21.94%	18.63%
Non Operating Share	4,120,604	4,535,537	4,116,000	4,057,756	-10.53%	-1.42%
Operating Expenses						
Plant Operating Expenses	1,761,523	2,385,413	2,004,873	2,535,194	6.28%	26.45%
PBCSD Expenses	395,403	458,739	550,250	580,000	26.43%	5.41%
CAWD Admin. Expenses	89,623	107,208	94,386	111,798	4.28%	18.45%
MPWMD Admin. Expenses	56,718	49,527	49,160	61,520	24.22%	25.14%
PBCo / IRWUG Expenses	50,638	53,505	53,775	55,926	4.52%	4.00%
Potable Water Costs	7,013	3,957	6,750	6,750	70.60%	0.00%
MPWMD fee	72,776	70,000	90,000	70,000	0.00%	-22.22%
	2,433,694	3,128,349	2,849,194	3,421,188	9.36%	20.08%
Operating Income/(Loss) before Amortization	4,405,044	4,212,807	4,150,806	4,057,756	-3.68%	-2.24%
Non OperatingRevenues/(Expenses)						
Interest Income	12,112	16,217	30,170	25,015	54.25%	-17.09%
Bond Carrying Costs	(20,055)	(20,000)	(25,000)	(20,000)	0.00%	-20.00%
Bank charges	0	0	(75)	(35)	n/a	-53.33%
Interest to MPWMD	(22,875)	(7,625)	(7,625)	0	-100.00%	-100.00%
Principal Pymt to MPWMD	(500,000)	(500,000)	(500,000)	0	-100.00%	-100.00%
LC Carrying Costs	(52,107)	(26,650)	(28,800)	(24,000)	-9.94%	-16.67%
COP Interest Expense	(3,450)	(2,708)	(18,200)	(13,000)	380.03%	-28.57%
COP Principal Payment	(2,400,000)	(2,500,000)	(2,500,000)	(2,600,000)	4.00%	4.00%
Interest on Principal Advanced	(46,718)	(61,515)	(70,000)	(35,880)	-41.67%	-48.74%
Past LC fees/Bond Carry Cost	(552,000)	(552,000)	(552,000)	(552,000)	0.00%	0.00%
Other Revenue/(Expense)	0	0	(158,000)	0	n/a	n/a
	(3,585,094)	(3,654,281)	(3,829,530)	(3,219,900)	-11.89%	-15.92%
Income/(Loss) before Capital	819,950	558,526	321,276	837,856	50.01%	160.79%
Capital Budget						
Purchases	35,346	115,000	164,750	237,300	106.35%	44.04%
Improvement Projects	319,966	379,453	959,900	1,220,556	221.66%	27.15%
	355,312	494,453	1,124,650	1,457,856	194.84%	29.63%
Net Income/(Loss)	464,638	64,073	(803,374)	(620,000)	-1067.64%	-22.83%
Less Unspent Capital			803,374	620,000		
Less Excess O&M Contributions				0		
Balanced Net Income	464,638	64,073	0	(0)	-100.00%	n/a
Amortization Exp	1,744,169	1,700,000	1,680,000	1,700,000	0.00%	1.19%

CAWD/PBCSD RECLAMATION PROJECT
REVENUE PROJECTIONS
FY 2022-23

Description	Acct. No.	Actual 2020-21	Estimated Actual 2021-22	2021-22 Budget	Proposed 2022-23 Budget	Comments
Revenue						
Interest Income - County	99906	11	8	40	15	O&M operating funds are on deposit with the County of Monte
Interest Income - Bank of America	99904	0	0	40	0	Water sales revenue funds are invested in money market acc
Interest Income- (O&M Reserve & Cap Repl)	99908	7,158	5,813	15,000	10,000	Renewal & replacement funds invested in highly rated comm'l
Gain (loss) on Securities	99936	4,927	10,396	15,000	15,000	
Interest Income - Union Bank (O&M)	99910	16	0	75	0	
Interest Income - Wells Fargo Escrow Acct	99912	0	0	15	0	
Other Revenue	99945	0	0	0	0	
Water Sales (inc. late pmts)	52000	2,718,134	2,805,618	2,884,000	3,421,188	See schedule p. 17
Fixed Cost Charge		4,120,604	4,535,537	4,116,000	4,057,756	
MPWMD fees (8.325%)	53000	(72,776)	(70,000)	(90,000)	(70,000)	Increase due to resumption of Districts User Fee on Cal-Am bills
TOTAL REVENUE		6,778,074	7,287,373	6,940,170	7,433,959	7.1% increase from 21-22 budget 2.0% increase from 21-22 Projected actual

Note 1: The origin of the 8.325% charge is based on the premise that all users of water provided by the Reclamation Project will pay the exact same cost as they would pay for a similar quantity of potable water. The specific provision related to the MPWMD User Fee is contained in Section 5, Bond Carying Costs, Operation and Maintenance Expenses and Operating Revenues, of the Financing Implementation Agreement Relating to Wastewater Reclamation Project dated Dec 1, 1992.

CAWD/PBCSD Reclamation Project
Operations and Maintenance Budget
Fiscal Year 2022-23

ITEM	Acct No.	Actual 2020-21	Estimated Actual 2021-22	2021-22 Budget	Proposed 2022-23 Budget	Comments/Notes
PLANT OPERATING EXPENSES:						
Plant Salaries, Benefits & Overhead						
Plant Superintendent	61100	16,913	19,082	17,385	19,655	
Laboratory Supervisor	61200	32,137	24,653	36,709	25,392	
Laboratory Technicians	61300	60,623	77,316	60,902	79,635	
Plant Operators	61400	157,549	207,590	157,205	213,818	need to add 208 hours of additional hours due to increased RO CIP's based on Trussell's recommendation
Maintenance Supervisor	61450	9,290	19,990	9,907	20,589	
Maintenance Mechanics	61500	31,557	31,859	37,521	32,815	
Plant Engineer	61600	8,921	16,833	30,000	17,338	
Safety Officer	61700	9,680	13,501	8,845	13,906	
Differential PR	62000	16,723	19,006	15,942	19,576	
Payroll Taxes, Benefits & Indirect Overhead	62100	171,787	214,915	187,207	221,362	
TOTAL PLANT SALARIES		515,180	644,744	561,623	664,086	COLA 3.8%
Energy Cost						
Tertiary Operations	63300	195,526	257,961	197,287	278,598	plus/minus due to weather conditions and storage levels
MF/RO Pad	63400	238,578	273,748	248,586	295,648	
Secondary Costs - EQ Basin PD Blower	63500	134,199	143,841	132,241	151,033	
SUBTOTAL		568,302	675,550	578,114	725,278	7.3% greater than 21-22 projected actual
Chemical Costs:						
Low Mag Ferric	64150	8,531	0	0	0	
Clean-in-place chemicals	64200	18,302	22,340	25,000	42,000	15% increase by vendor and increased frequency to monthly as recommended by Truessell
Antiscalant	64400	30,577	46,122	25,700	48,000	73% increase from vendor (current balance includes cost increase on some orders)
Phenylarsine oxide	64410	536	0	1,035	1,150	10% increase by vendor
Acetate buffer solution	64420	32	77	288	320	10% increase by vendor
Iodine solution	64430	253	131	288	500	10% increase by vendor
Citiric Acid	65160	22,323	48,859	21,600	85,000	340% increase per gallon by vendor. Budget amount also includes fuel surcharge
Sulfuric Acid	65170	24,388	44,357	30,000	40,755	includes slight increase and fuel surcharges
Acetic Acid	65180	624	1,112	920	1,050	10% increase by vendor
Sodium Bisulfite	65200	55,065	48,487	57,700	69,000	This is assuming 12 months of operation
Sodium Hypochlorite	65250	27,373	39,760	35,000	45,000	12% increase expected by vendor- assuming 12 months of operation
Polymer	65400	12,894	8,230	18,000	19,620	9% increase from vendor (4 totes/yr)
Gypsum	65500	0	0	0	0	
Miscellenous chemicals	65600	249	2,779	1,150	1,150	
Potassium Hydroxide	65700	0	40,861	28,000	29,960	7% increase expected by vendor-only purchased once a year
Potassium iodate solution	65725	285	0	690	800	10% increase by vendor
Potassium iodide	65750	2,014	0	2,558	2,900	10% increase by vendor
Ammonia Hydroxide	65800	55,333	84,639	63,000	89,000	Vendor was unsure of the actual increase for next year.
Phosphoric Acid	65900	0	0	0	0	
PHOS-58	65910	42,832	132,545	67,875	100,000	Cost estimate based on limited usage because of supply issues or alternative coagulants
Enzymes	65920	1,651	0	6,750	7,000	
SUBTOTAL		303,263	520,299	385,554	583,205	
Operating Supplies - Plant						
Repairs & Maintenance	66100	76,427	90,007	78,000	98,000	Valves. Walk thru, check spares
Plant Pumps	66190	24,431	58,840	20,000	30,000	
Laundry	66200	697	728	1,500	1,500	
Lubricants\Packing	66300	49	0	1,000	1,000	
Electrical Supplies	66400	7,736	12,088	12,000	15,000	

CAWD/PBCSD Reclamation Project
Operations and Maintenance Budget
Fiscal Year 2022-23

ITEM	Acct No.	Actual 2020-21	Estimated Actual 2021-22	2021-22 Budget	Proposed 2022-23 Budget	Comments/Notes
Laboratory Supplies	66500	38,199	63,117	44,000	46,200	Increase budget 5% to $30,450 lab general supplies (includes extra analysis for superintendent and 12% increase by Hach.) ,UV lamp $250(50/50), Isco Portable Sampler (1 new samplers) $4800/each (all Reclamation cost), IDEXX Quanti Tray-sealer $4000 (50/50)- If neeeded. RD
Paint	66600	0	0	5,000	2,000	
Postage & Office Supplies	67000	808	111	500	1,000	
First Aid Supplies	67100	0	0	200	200	
Janitorial Supplies	67100	0	0	200	0	
Personnel Supplies	67400	302	0	1,000	1,000	
Hand Tools	67600	631	0	1,000	1,500	
General Operating Supplies	67700	65	1,038	2,000	1,000	
Safety	67800	4,417	3,266	2,500	3,275	add shower cost, Mark to send out detail
Training	67900	1,245	0	2,500	2,500	
		155,007	229,196	171,400	204,175	
Membrane Costs						
Microfilter Membrane Modules	67510	103,057	132,700	132,700	160,000	Purchase of one sets of membranes per discussion during Trussell meeting on 4/1/2022 (price increase of 20%)
Annual Cartridge Filter Replacement	66700	4,233	10,426	10,000	12,500	25% increase by vendor
RO Membrane Elements	67500	0	0	0	15,000	
Spare Parts & Outfitting	66750	14,932	8,536	15,000	25,000	Increase due to increasing inventory due to long lead times for critical parts
		122,222	151,662	157,700	212,500	
Contractual Services:						
Chemical Waste Disposal	68100	0	0	500	500	
Plant Instrumentation	68200	35,065	41,257	38,800	38,800	Eaton UPS service, pressure switchs, VFD's, level transducers, PLC,
Fire Extinquisher Service	68300	0	226	250	500	
Calibration	68400	4,724	2,573	5,382	7,400	$5366 (50/50), TOC $4397 (50/50).
Contract Laboratory Analysis	68500	5,328	12,724	5,400	6,500	RO Quarterly Analysis.
Contract Lab Staffing		0	0	0	0	
Gypsum Injection System Maintenance/Lease	68600	0	0	0	0	
Contract Painting	68700	0	0	0	0	
System software/IT consulting	68710	19,766	40,430	30,500	30,500	Ignition license, Mainsaver, Interlogx, Trussell, SDSOnline. MF/RO Proprietary software-PLCs etc. H2O Innovations remote monitoring of increased recovery upgrade. Provides portal for analysis to further increase recovery optimization. We are limited by our effluent permit limits. It allows access to our data in a format for Trussell ($18K/yr), Safety Data Sheets software ($1K), e-NPDES Reporting Software $1.6K (50/50), Exceedio $3.4K (didn't budget for this last year)-ATL LIMS Gold Support $11,329.74 (50/50) &Parser $5.7K (50/50),
SAR Equipment Maintenance	68720	0	0	0	0	
Hoist Certification	68730	572	1,349	900	1,000	
Alarm-Tertiary Equipment	68900	211	229	250	250	
Alarm - Chlorine Equipment	68910	0	0	0	0	
Ion Chromatograph- Annual Maintenance	69400	0	0	0	0	
Demolition		0	0	0	0	
Clearlogx rentl		0	0	0	0	
SUBTOTAL		65,666	98,787	81,982	85,450	
Fees & Permits	69110	2,666	3,512	5,500	5,500	ELAP appl. FOA $3500 (50/50) , TNI 3RD PARTY $7500 (50/50)RD
Engineering Fees:						
Consulting	69200	29,217	61,663	63,000	35,000	Trussell Technologies
Membrane Cleaning Pilot	69250	0	0		20,000	MF/RO membrane autopsy
Disposal expense	69350	0	0		0	
Demolition expense	69360	0	0	0	0	
SUBTOTAL		29,217	61,663	63,000	55,000	
TOTAL PLANT OPERATING EXPENSES		1,761,523	2,385,413	2,004,873	2,535,194	26.4% increase from 21-22 budget 6.2% increase from 21-22 Projected actual

CAWD/PBCSD Reclamation Project
Operations and Maintenance Budget
Fiscal Year 2022-23

ITEM	Acct No.	Actual 2020-21	Estimated Actual 2021-22	2021-22 Budget	Proposed 2022-23 Budget	Comments/Notes
PEBBLE BEACH COM SVC DISTRICT						
DISTRIBUTION SYSTEM ADMIN & MAINT:						
Salaries, Benefits & Overhead						
General Manager	71000	0	0	0	0	
Principal Engineer	71100	11,291	10,733	12,000	10,000	Calculated based on the estimated PBCSD Admin staff time for CAWD/PBCSD Reclamation Project related duties. Prior years experience and next year's anticipated activities are used in the prediction of the FY 2022-23 estimated hours. FY 2022/23: COLA estimated at 4.7%; Increase in engineering salaries due to planned addition of an engineering position and increase in hours billed related to capital project management. Other Staffing Notes: In Jul 2021 a senior accountant was promoted to Finance Director, and the Finance & Info Sys Coordinator was promoted to Accountant. While there is a planned addition of Environmental Compliance Coordinator position, it is unknown to what extent the Reclamation will be billed, as such, no budget is included.
Finance Director	71200	810	1,658	1,500	2,000	
Senior Accountant/Accountant	71300	3,137	3,841	5,000	4,500	
Administrative Coordinator	71400	362	606	500	500	
Finance & Info Sys Coordinator	71500	576	0	0	0	
Senior/Associate/Associate Engineers	71600	1,684	6,192	6,000	10,500	
Engineering Intern	71700	522	160	500	500	
Payroll Taxes , Benefits & Overhead	71800	8,930	11,595	12,750	14,000	The payroll taxes, benefits and indirect overhead is calculated at 50% as agreed upon by the project participants.
SUBTOTAL		27,312	34,785	38,250	42,000	
Other Administrative & General Expenses:						
Insurance - Property & Liability	72100	5,396	6,316	8,500	7,500	Property ($5,000) / Liability ($2,500) FY 2022/23 Budgeted based on an 15% increase from actual paid in 2021/22
Insurance - Earthquake	72100	20,423	23,071	22,000	26,000	$25M Policy limit - FL Reservoir ($18,500) & Poppy Hills Storage Tank ($8,500); FY 2022/23 Budget based on an 15% increase from actual paid in 2021/22
Insurance - Forest Lake Dam Failure Liability	72100	3,026	3,476	5,000	4,000	In 2020-21 due to substantial increase in insurance costs, reduced coverage from $10M to $5M. (The cost of $10M coverage is $28,000); FY 2022/23 Budget based on an 15% increase from actual paid in 2021/22
Directors Fees	72200	300	100	500	500	2 Directors x 5 meetings/year x $50 per meeting
SUBTOTAL		29,145	32,963	36,000	38,000	
Total Administrative & General Expenses		56,457	67,748	74,250	80,000	
Distribution System O.&M. Expenses:						
Salaries, Benefits & Overhead:						
Field Operations Supervisor	73000	4,093	8,694	13,000	10,000	Calculated based on the estimated time to operate and maintain the Forest Lake Reservoir, 8 miles of distribution pipeline, the 2.5M gallon storage tank, and the Viscaino Rd emergency potable water station. FY 2022/23 COLA estimated at 4%; Total of 6 Maintenance staff budgeted (1 Ops Supervisor and 5 Maint Technicians/Workers)
Maintenance Technicians	73100	47,743	45,210	45,000	50,000	
Payroll taxes, Benefits & Overhead	73200	25,918	26,952	29,000	30,000	The payroll taxes, benefits and indirect overhead is calculated at 50% as agreed upon by the project participants.
SUBTOTAL		77,754	80,856	87,000	90,000	
Energy & Utilities:						
Potable Water Pump Station - PG&E	74000	566	696	1,000	1,000	PBCSD pumps will be turned on during emergencies. PBCSD pays a minimum of 1% of the cost per agreement with CalAm. In Sep 2018 purchase of potable water resulted in temporary increase in pump station electricity use.
SCADA System: DSL ATM / Telemetry Analc	74200	10,098	11,133	12,000	12,000	Monthly AT&T / Comcast & Verizon charges for lines between Potable Water Pump Station, Forest Lake, CAWD and PBCSD.
Wireless Alarm Sys Chg (Mission)	74300	911	947	1,000	1,000	Annual maint agmt for Cell Phone Alarm System at Poppy Hills Storage Tank and PB Golf Links 4th Fairway / 18th Green.
Forest Lake Treatment Facility (PG&E)	74400	26,620	28,162	35,000	30,000	Budgeted based on previous experience & anticipated operations (2019/20: Includes addition of a new VFD pump at Forest Lake while Reclam Tank is out of commission due to rehab project); FY 2022/23 decreased budget to reflect actual recent costs plus a small cushion for anticipated rate increases.
Forest Lake Eyewash Station (CalAm)	74500	965	1,096	1,000	1,500	Budgeted based on previous experience. Includes service to eyewash station at the chemical building.
Poppy Hill Booster Pump Station - PG&E	74600	927	1,090	1,500	1,500	Budgeted based on previous experience & anticipated operations.
Cathodic Protection	74700	1,039	985	1,500	1,000	2 Locations: Forest Lake Rd & Whitman Ln; Budgeted based on previous experience & anticipated operations
SUBTOTAL		41,126	44,109	53,000	48,000	
Source Water / Dry Weather Diversion						
Reclamation Source Water	77600	3,456	1,175	3,000	3,000	Materials/Supplies for Reclam Wells (MPCC #8 / MPCC #9 / Bird Rock); FY 2022/23 Budgeted $1,000 per location.

CAWD/PBCSD Reclamation Project
Operations and Maintenance Budget
Fiscal Year 2022-23

ITEM	Acct No.	Actual 2020-21	Estimated Actual 2021-22	2021-22 Budget	Proposed 2022-23 Budget	Comments/Notes
4th Fairway Dry Weather Diversion Facility	77700	5,091	2,613	4,000	2,000	Materials / Supplies for dry-weather diversion facilities at the PB Golf Links 4th Fairway & 18th Green (came on-line in 2021/22); FY 2022/23 Budgeted $1,000 per location.
Remote Flow Monitoring	77900	0	2,988	3,000	4,000	FY 2022/23: Neptune Meter at Bird Rock Well / Remote Reporting (Cloud-Based) Annual Service ($2,750); Badger Meter annual cellular svc chg ($250) for the other 2 well sites, and 2 dry-weather diversion sites. Bird Rock Well Level / MPCC #8 Well Level (In-Situ) $480 (2x$120/site)
Water Treatment Cost	77800	64,238	85,000	90,000	115,000	Cost to provide primary and secondary treatment at CAWD Treatment Plant. Alterntive Source Water Locations @ MPCC Well No 8 / 9 & Bird Rock; Pebble Beach Golf Links 4th Fairway / 18th Green (came on line in 2021/22); 18th Fairway
SUBTOTAL		72,784	91,776	100,000	124,000	
Distribution System - Other O.&M. Expenses:						
Other professional services	75200	539	1,178	1,000	1,500	Mgmt Comm Mtg Attendance & Minutes (Nov / Feb / May / Aug); FY 2022/23 Increase in Budget primarily due to increase in hourly rates billed by Paxton & Associates
Permits	75300	20,861	24,055	30,000	30,000	1. SWRCB-General Permit ($5,000) 2. DSOD-Forest Lake Operating Permit ($24,000) 3. MBUAPCD-Viscaino Generator ($400) / Environ Health-Viscaino Fuel Tank Permit ($600) (PBCSD: 2/5 & CalAm: 3/5)
Fuel	75500	2,077	3,616	2,500	4,000	FY 2022/23: 1) Estimated fuel use for vehicles billed in May and 2) Diesel fuel for Viscaino Rd. pump station UGST (Cal Am 3/5; Reclam Prj 2/5); UGST diesel fuel last purchased in Jan 2022
Training & Tuitions	75600	2,099	2,000	5,000	2,500	Maint & safety programs (regist/materials/travel/misc exp. Memberships & Certif) Includes Water Awareness Committee Membership ($1K); Watereuse Membership & training for maint employees ($1.5K)
SCADA System software/IT consulting	75800	2,427	3,000	3,000	7,000	Maintenance, diagnostic & consulting svcs related to GIS Development (Wallace Group); FY 2022/23 Plan to update PBCSD/Info Sys to add Reclamation distribution lines layer.
SCADA Platform Support Svcs Subscription	75900	0	4,378	10,000	7,000	Inductive Ignition Support Services Subscription (25% Reclam = $1.5K); Annual SCADA Updates & Programming Costs (E2 Consulting / Frisch Engineering) - Assignment #50 ($5.5K)
Consulting Services	76000	38,061	71,010	75,000	80,000	Misc General Consulting ($5K); Annual DSOD Report ($20K); Forest Lake Annual Monument Survey ($5K). FY 2022/23: Addition of CAWD condition assessment 3rd party review ($50K)
Reclamation Line Distribution Sys	76300	4,226	2,966	10,000	10,000	Meter calibration & Other General Repairs and Maintenance (R&M); Materials & Supplies
Viscaino Rd/Poppy Hills Pump Station	76400	2,163	2,337	4,000	4,000	Prev Maint / Annual load bank test / Underground tank leak detect & general R&M
Call Out Mileage Expense	76500	1,414	1,453	2,000	2,000	Quarterly Reimbursement to Maintenance Crew for vehicle mileage paid for work performed after hours, weekends & holidays
Forest Lake Reservoir - R & M	76600	18,165	4,785	25,000	25,000	General / Emergency repairs to Forest Lake
Poppy Hills Storage Tank (2.5 million gallon)	76700	2,308	1,582	1,500	2,000	Includes Cathodic Protect Inspection (every 3 yrs) / Tank (15-Point) Inspection (every 3 yrs) / Annual Cleaning Svc (done Feb/Mar) and Misc R&M
Rescue & Safety Supplies & Equipment	76800	0	0	1,000	0	
Forest Lake Chemicals	76900	30,458	31,835	40,000	40,000	Sulfuric Acid / Hypochlorite Tablets. Actual costs will be based on water usage. Chemicals needed based on demand, wet weather decreases demand which reduces the chemical purchases.
SCADA system equipment	77000	43	0	1,000	0	
Forest Lake Reservoir - Materials & Supplies	77100	6,152	20,055	25,000	23,000	Supplies & Equip: Deployable Probe, Water Sampling, Piezometer, Misc other ($6K); Gopher Contrl ($2K) / Insecticides ($15K)
Forest Lake reservoir equipment	77200	1,267	0	0	0	
Forest Lake reservoir ops service	77300	15,022	0	0	0	
SUBTOTAL		147,283	174,250	236,000	238,000	
Professional Fees - PBCSD:						
Remote Flow Monitoring	77900	0	0	0	0	
SUBTOTAL		0	0	0	0	
Total Distribution System O.&M. Expenses		338,947	390,991	476,000	500,000	
TOTAL PBCSD EXPENSES.....		395,403	458,739	550,250	580,000	5.4% increase from 21-22 budget 26.4% increase from 21-22 Projected actual

CAWD/PBCSD Reclamation Project
Operations and Maintenance Budget
Fiscal Year 2022-23

ITEM	Acct No.	Actual 2020-21	Estimated Actual 2021-22	2021-22 Budget	Proposed 2022-23 Budget	Comments/Notes
CAWD ADMIN & GENERAL EXPENSES						
ADMINISTRATIVE SALARIES	No.					
General Manager	81000	2,065	1,150	1,942	1,194	
Project Accountant	81200	9,822	12,724	10,046	13,207	
Engineering Associate	81100	0	0	0	0	
Admin. Services Coordinator/Scanner	81400	10,289	13,408	10,032	13,918	
Payroll Taxes, Benefits & Overhead	82100	10,998	13,641	11,010	14,160	
SUBTOTAL		33,174	40,924	33,030	42,479	COLA 3.8%
Administrative & General Expenses:						
Office Supplies & Postage	84000	346	289	0	250	
Audit & Consulting Fees	84100	18,450	18,450	19,050	16,850	
Employee training	84200	0	0	0	0	
Directors Fees	85000	750	1,050	1,050	1,050	
Legal Notices	89400	0	0	0	0	
Legal Fees	89400	533	660	1,250	750	
Insurance Expense	89500	36,369	45,836	40,006	50,419	CSRMA recommends 10-15% increase in insurance
Consulting	89600	0	0			
SUBTOTAL		56,449	66,284	61,356	69,319	
TOTAL CAWD EXPENSES		89,623	107,208	94,386	111,798	18.4% increase from 21-22 budget 4.2% increase from 21-22 Projected actual
MONTEREY PENINSULA WATER MANAGEMENT DISTRICT						
ADMINISTRATIVE EXPENSES:						
Administrative Salaries, Benefits & Overhead						
General Manager	91000	7,784	6,000	6,000	6,300	based on 10 hours
Administrative Services Manager	91200	8,307	8,000	8,000	8,300	based on 35 hours
Accountant	91300	5,022	4,000	4,000	4,200	based on 65 hours
IT Manager	91500	7,500	7,000	7,000	7,200	based on 40 hours
Payroll Taxes, Benefits & Overhead	92100					
SUBTOTAL		28,613	25,000	25,000	26,000	
Administrative & General Expenses						
CAL-Am Water Meter Service Charge	94300	24,116	24,527	24,160	30,720	8" meter (assumes 20% increase based on actual billings)
Legal Fees	99400	77	0	0	500	
Office Expense	99410	3,912	0	0	4,300	Software annual maintenance fee (financial & billing combined software)
		28,105	24,527	24,160	35,520	
TOTAL MPWMD EXPENSES		56,718	49,527	49,160	61,520	25.1% increase from 21-22 budget 24.2% increase from 21-22 Projected actual
PBCo / IRWUG Representative	79920	34,875	35,580	35,850	37,284	4% increase
Payroll Taxes, Benefits & Overhead	79990	15,763	17,925	17,925	18,642	
R&D Water Sources	99965	0	0	0		
SUB TOTAL		2,353,905	3,054,392	2,752,444	3,344,438	
POTABLE WATER COSTS	99601	7,013	3,957	6,750	6,750	
TOTAL OPERATING EXPENSES		2,360,918	3,058,349	2,759,194	3,351,188	21.4% increase from 21-22 budget 9.5% increase from 21-22 Projected actual

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5 yr avg		14.98%	14.15%	12.91%	10.43%	3.82%	1.65%	0.62%	1.96%	2.17%	7.54%	13.84%	15.91%	
Water Sales	52000	1,120,296	1,058,487	965,773	780,344	285,869	123,619	46,357	146,797	162,250	564,011	1,035,308	1,189,832	7,478,944
Less MPWMD Fees	2225	(10,486)	(9,907)	(9,039)	(7,304)	(2,676)	(1,157)	(434)	(1,374)	(1,519)	(5,279)	(9,690)	(11,136)	(70,000)
		1,109,811	1,048,580	956,734	773,041	283,193	122,462	45,923	145,423	160,731	558,732	1,025,618	1,178,696	7,408,944
Plant Superintendent	61100	1,512	2,268	1,512	1,512	1,512	1,512	2,268	1,512	1,512	1,512	1,512	1,512	19,655
Laboratory Supervisor	61200	1,953	2,930	1,953	1,953	1,953	1,953	2,930	1,953	1,953	1,953	1,953	1,953	25,392
Laboratory Technicians	61300	6,126	9,189	6,126	6,126	6,126	6,126	9,189	6,126	6,126	6,126	6,126	6,126	79,635
Plant Operators	61400	16,448	24,671	16,448	16,448	16,448	16,448	24,671	16,448	16,448	16,448	16,448	16,448	213,818
Maint Supervisor	61450	1,584	2,376	1,584	1,584	1,584	1,584	2,376	1,584	1,584	1,584	1,584	1,584	20,589
Plant Mechanics	61500	2,524	3,786	2,524	2,524	2,524	2,524	3,786	2,524	2,524	2,524	2,524	2,524	32,815
Safety Officer		1,334	2,000	1,334	1,334	1,334	1,334	2,000	1,334	1,334	1,334	1,334	1,334	17,338
Plant Engineer		1,070	1,605	1,070	1,070	1,070	1,070	1,605	1,070	1,070	1,070	1,070	1,070	13,906
Differential	62000	1,506	2,259	1,506	1,506	1,506	1,506	2,259	1,506	1,506	1,506	1,506	1,506	19,576
Payroll Taxes & Benefits & OH	62100	17,028	25,542	17,028	17,028	17,028	17,028	25,542	17,028	17,028	17,028	17,028	17,028	221,362
		51,084	76,625	51,084	51,084	51,084	51,084	76,625	51,084	51,084	51,084	51,084	51,084	664,086
Tertiary Treatment	63300	41,732	39,430	35,976	29,069	10,649	4,605	1,727	5,468	6,044	21,010	38,566	44,322	278,598
MF\RO Electrical	63400	44,286	41,843	38,178	30,848	11,301	4,887	1,833	5,803	6,414	22,296	40,926	47,035	295,648
Secondary Costs - EQ Basin PD Blo	63500	22,624	21,376	19,503	15,759	5,773	2,496	936	2,964	3,277	11,390	20,907	24,028	151,033
		108,642	102,648	93,657	75,675	27,722	11,988	4,496	14,236	15,734	54,696	100,400	115,385	725,278
Low Mag Ferric	64150	0	0	0	0	0	0	0	0	0	0	0	0	0
Clean-in-place chemicals	64200	6,291	5,944	5,424	4,382	1,605	694	260	824	911	3,167	5,814	6,682	42,000
Sodium hydroxide	64300	0	0	0	0	0	0	0	0	0	0	0	0	0
Antiscalant	64400	7,190	6,793	6,198	5,008	1,835	793	298	942	1,041	3,620	6,645	7,636	48,000
Phenylarsine oxide	64410	172	163	149	120	44	19	7	23	25	87	159	183	1,150
Acetate buffer solution	64420	48	45	41	33	12	5	2	6	7	24	44	51	320
Iodine solution	64430	75	71	65	52	19	8	3	10	11	38	69	80	500
Chlorine	65100	0	0	0	0	0	0	0	0	0	0	0	0	0
Citric Acid	65160	12,732	12,030	10,976	8,869	3,249	1,405	527	1,668	1,844	6,410	11,767	13,523	85,000
Sulfuric Acid	65170	6,105	5,768	5,263	4,252	1,558	674	253	800	884	3,073	5,642	6,484	40,755
Acetic Acid	65180	157	149	136	110	40	17	7	21	23	79	145	167	1,050

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Sodium Bisulfite	65200	10,336	9,765	8,910	7,199	2,637	1,140	428	1,354	1,497	5,204	9,552	10,977	69,000
Sodium Hypochlorite	65250	6,741	6,369	5,811	4,695	1,720	744	279	883	976	3,394	6,229	7,159	45,000
Polymer	65400	2,939	2,777	2,534	2,047	750	324	122	385	426	1,480	2,716	3,121	19,620
Gypsum	65500	0	0	0	0	0	0	0	0	0	0	0	0	0
Miscellenous chemicals	65600	172	163	149	120	44	19	7	23	25	87	159	183	1,150
Potassium Hydroxide	65700	4,488	4,240	3,869	3,126	1,145	495	186	588	650	2,259	4,147	4,766	29,960
Potassium iodate solution	65725	120	113	103	83	31	13	5	16	17	60	111	127	800
Potassium iodide	65750	434	410	374	303	111	48	18	57	63	219	401	461	2,900
Ammonia Hydroxide	65800	13,332	12,596	11,493	9,286	3,402	1,471	552	1,747	1,931	6,712	12,320	14,159	89,000
Phosporic Acid	65900	0	0	0	0	0	0	0	0	0	0	0	0	0
PHOS-58	65910	14,979	14,153	12,913	10,434	3,822	1,653	620	1,963	2,169	7,541	13,843	15,909	100,000
Enzymes	65920	1,049	991	904	730	268	116	43	137	152	528	969	1,114	7,000
		87,360	82,540	75,311	60,851	22,292	9,640	3,615	11,447	12,652	43,981	80,733	92,783	583,205
Repairs & Maintenance	66100	14,680	13,870	12,655	10,225	3,746	1,620	607	1,924	2,126	7,390	13,566	15,591	98,000
Plant Pumps	66190	4,494	4,246	3,874	3,130	1,147	496	186	589	651	2,262	4,153	4,773	30,000
Laundry	66200	225	212	194	157	57	25	9	29	33	113	208	239	1,500
Lubricants\Packing	66300	150	142	129	104	38	17	6	20	22	75	138	159	1,000
Electrical Supplies	66400	2,247	2,123	1,937	1,565	573	248	93	294	325	1,131	2,076	2,386	15,000
Laboratory Supplies	66500	6,920	6,539	5,966	4,820	1,766	764	286	907	1,002	3,484	6,395	7,350	46,200
Paint	66600	300	283	258	209	76	33	12	39	43	151	277	318	2,000
Postage	67000	150	142	129	104	38	17	6	20	22	75	138	159	1,000
First Aid Supplies	67100	30	28	26	21	8	3	1	4	4	15	28	32	200
Janitorial Supplies	67100	0	0	0	0	0	0	0	0	0	0	0	0	0
Tertiary Pump Alarm	67300	0	0	0	0	0	0	0	0	0	0	0	0	0
Personnel Supplies	67400	150	142	129	104	38	17	6	20	22	75	138	159	1,000
Hand Tools	67600	225	212	194	157	57	25	9	29	33	113	208	239	1,500
Operating Supplies	67700	150	142	129	104	38	17	6	20	22	75	138	159	1,000
Safety	67800	491	464	423	342	125	54	20	64	71	247	453	521	3,275
Training	67900	374	354	323	261	96	41	15	49	54	189	346	398	2,500
		30,584	28,897	26,366	21,303	7,804	3,375	1,266	4,008	4,429	15,397	28,264	32,482	204,175
Microfilter Membrance Modules	67510	23,967	22,645	20,661	16,694	6,116	2,645	992	3,140	3,471	12,066	22,149	25,455	160,000
Annual Cartridge Filter Replacement	66700	1,872	1,769	1,614	1,304	478	207	77	245	271	943	1,730	1,989	12,500
RO Membrance Elements	67500	2,247	2,123	1,937	1,565	573	248	93	294	325	1,131	2,076	2,386	15,000
Spare Parts & Outfitting	66750	3,745	3,538	3,228	2,608	956	413	155	491	542	1,885	3,461	3,977	25,000
		31,831	30,075	27,441	22,172	8,122	3,512	1,317	4,171	4,610	16,025	29,416	33,807	212,500

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Chemical Waste Disposal		75	71	65	52	19	8	3	10	11	38	69	80	500
Plant Instrumentation	68200	5,812	5,491	5,010	4,048	1,483	641	240	762	842	2,926	5,371	6,173	38,800
Fire Extinquisher Service	68300	75	71	65	52	19	8	3	10	11	38	69	80	500
Calibration	68400	1,108	1,047	956	772	283	122	46	145	161	558	1,024	1,177	7,400
Contract Laboratory Analysis	68500	974	920	839	678	248	107	40	128	141	490	900	1,034	6,500
Gypsum Injection System Maintenan	68600	0	0	0	0	0	0	0	0	0	0	0	0	0
Contract Painting	68700	0	0	0	0	0	0	0	0	0	0	0	0	0
System software/IT consulting	68710	0	0	0	0	0	0	0	0	0	0	0	0	0
SAR Equipment Maintenance	68720	4,569	4,317	3,939	3,182	1,166	504	189	599	662	2,300	4,222	4,852	30,500
Hoist Certification	68730	0	0	0	0	0	0	0	0	0	0	0	0	0
Alarm - Tertiary	68900	150	142	129	104	38	17	6	20	22	75	138	159	1,000
Alarm - Chlorine	68910	0	0	0	0	0	0	0	0	0	0	0	0	0
Equipment Rent - Ion Chromatograp	69400	37	35	32	26	10	4	2	5	5	19	35	40	250
Demolition		0	0	0	0	0	0	0	0	0	0	0	0	0
Clerlogx rental		0	0	0	0	0	0	0	0	0	0	0	0	0
		12,725	12,023	10,970	8,864	3,247	1,404	527	1,667	1,843	6,406	11,760	13,515	85,450
Fees & Permits (MBUAPCD)	69100	824	778	710	574	210	91	34	108	119	415	761	875	5,500
Engineering Fees														
Consulting	69200	5,243	4,954	4,520	3,652	1,338	579	217	687	759	2,639	4,845	5,568	35,000
Membrane Cleaning Pilot	69250	2,996	2,831	2,583	2,087	764	331	124	393	434	1,508	2,769	3,182	20,000
Disposal expense	69350	0	0	0	0	0	0	0	0	0	0	0	0	0
		8,239	7,784	7,102	5,739	2,102	909	341	1,080	1,193	4,148	7,614	8,750	55,000
		331,288	341,371	292,639	246,261	122,584	82,003	88,220	87,800	91,665	192,152	310,031	348,680	2,535,194
General Manager	71000	0	0	0	0	0	0	0	0	0	0	0	0	0
Principal/Assistant Engineer	71100	1,498	1,415	1,291	1,043	382	165	62	196	217	754	1,384	1,591	10,000
Deputy General Manager/CFO	71200	300	283	258	209	76	33	12	39	43	151	277	318	2,000
Senior Accountant	71300	674	637	581	470	172	74	28	88	98	339	623	716	4,500
Administrative Assistant	71400	75	71	65	52	19	8	3	10	11	38	69	80	500
Finance & Info Sys Coordinator	71500	0	0	0	0	0	0	0	0	0	0	0	0	0
Associate Engineers	71600	1,573	1,486	1,356	1,096	401	174	65	206	228	792	1,454	1,670	10,500
Engineering Intern	71700	75	71	65	52	19	8	3	10	11	38	69	80	500
PR Taxes, Benefits & Overhead	71800	2,097	1,981	1,808	1,461	535	231	87	275	304	1,056	1,938	2,227	14,000

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		6,291	5,944	5,424	4,382	1,605	694	260	824	911	3,167	5,814	6,682	42,000
Insurance - Property & Liability	72100	1,123	1,061	968	783	287	124	46	147	163	566	1,038	1,193	7,500
Insurance - Earthquake	72100	3,895	3,680	3,357	2,713	994	430	161	510	564	1,961	3,599	4,136	26,000
Insurance - FL Dam Failure Liability	72100	599	566	517	417	153	66	25	79	87	302	554	636	4,000
Directors Fees	72200	75	71	65	52	19	8	3	10	11	38	69	80	500
		5,617	5,307	4,842	3,913	1,433	620	232	736	814	2,828	5,191	5,966	38,000
Salaries, Benefits & Overhead:														
Field Maintenance Supervisor	73000	1,498	1,415	1,291	1,043	382	165	62	196	217	754	1,384	1,591	10,000
Maintenance Technicians	73100	7,490	7,076	6,457	5,217	1,911	826	310	981	1,085	3,771	6,921	7,955	50,000
PR Taxes, Benefits & O.H.	73200	4,494	4,246	3,874	3,130	1,147	496	186	589	651	2,262	4,153	4,773	30,000
		13,481	12,738	11,622	9,390	3,440	1,488	558	1,767	1,952	6,787	12,459	14,318	90,000
Potable Water Pump Station - PG&E	74000	150	142	129	104	38	17	6	20	22	75	138	159	1,000
SCADA System: DSL ATM/Telemetry	74200	1,798	1,698	1,550	1,252	459	198	74	236	260	905	1,661	1,909	12,000
Wireless Alarm Sys Chg (Mission)	74300	150	142	129	104	38	17	6	20	22	75	138	159	1,000
Forest Lake Treatment Facility (PG&	74400	4,494	4,246	3,874	3,130	1,147	496	186	589	651	2,262	4,153	4,773	30,000
Forest Lake Eyewash Station (CalAm	74500	225	212	194	157	57	25	9	29	33	113	208	239	1,500
Poppy Hill Booster Pump Station - P	74600	225	212	194	157	57	25	9	29	33	113	208	239	1,500
Cathodic Protection	74700	150	142	129	104	38	17	6	20	22	75	138	159	1,000
		7,190	6,793	6,198	5,008	1,835	793	298	942	1,041	3,620	6,645	7,636	48,000
Reclamation Source Water	77600	449	425	387	313	115	50	19	59	65	226	415	477	3,000
4th Fairway Dry Weather Diversion F	77700	300	283	258	209	76	33	12	39	43	151	277	318	2,000
Remote Flow Monitoring	77900	599	566	517	417	153	66	25	79	87	302	554	636	4,000
Water Treatment Cost	77800	17,226	16,276	14,850	11,999	4,396	1,901	713	2,257	2,495	8,673	15,919	18,295	115,000
		18,574	17,550	16,012	12,938	4,740	2,050	769	2,434	2,690	9,351	17,165	19,727	124,000
Other professional services	75200	225	212	194	157	57	25	9	29	33	113	208	239	1,500
Permits	75300	4,494	4,246	3,874	3,130	1,147	496	186	589	651	2,262	4,153	4,773	30,000
Fuel	75500	599	566	517	417	153	66	25	79	87	302	554	636	4,000
Training & Tuitions	75600	374	354	323	261	96	41	15	49	54	189	346	398	2,500
SCADA System software/IT con	75800	1,049	991	904	730	268	116	43	137	152	528	969	1,114	7,000
Consulting Services		11,983	11,322	10,331	8,347	3,058	1,322	496	1,570	1,736	6,033	11,074	12,727	80,000
Reclamation Line Distribution Sy	76300	1,498	1,415	1,291	1,043	382	165	62	196	217	754	1,384	1,591	10,000
Viscaino Rd/Poppy Hills Pump S	76400	599	566	517	417	153	66	25	79	87	302	554	636	4,000

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Call Out Mileage Expense	76500	300	283	258	209	76	33	12	39	43	151	277	318	2,000
Forest Lake Reservoir - R & M	76600	3,745	3,538	3,228	2,608	956	413	155	491	542	1,885	3,461	3,977	25,000
Poppy Hills Storage Tank (2.5 m	76700	300	283	258	209	76	33	12	39	43	151	277	318	2,000
Rescue & Safety Supplies & Equ	76800	0	0	0	0	0	0	0	0	0	0	0	0	0
Forest Lake Chemicals	76900	5,992	5,661	5,165	4,174	1,529	661	248	785	868	3,017	5,537	6,364	40,000
SCADA system equipment	77000	0	0	0	0	0	0	0	0	0	0	0	0	0
Forest Lake Reservoir - Material	77100	3,445	3,255	2,970	2,400	879	380	143	451	499	1,735	3,184	3,659	23,000
		35,651	33,684	30,733	24,833	9,097	3,934	1,475	4,671	5,163	17,948	32,946	37,864	238,000
Consulting	76000	0	0	0	0	0	0	0	0	0	0	0	0	0
Remote Flow Monitoring	77900	0	0	0	0	0	0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0	0	0	0	0	0
		68,231	64,466	58,820	47,526	17,411	7,529	2,823	8,941	9,882	34,351	63,055	72,466	580,000
General Manager	81000	92	138	92	92	92	92	138	92	92	92	92	92	1,194
Project Accountant	81200	1,016	1,524	1,016	1,016	1,016	1,016	1,524	1,016	1,016	1,016	1,016	1,016	13,207
Engineering Assistant	81100	0	0	0	0	0	0	0	0	0	0	0	0	0
Secretary\Finance Tech.	81400	1,071	1,606	1,071	1,071	1,071	1,071	1,606	1,071	1,071	1,071	1,071	1,071	13,918
Payroll Taxes & Benefits	82100	1,089	1,634	1,089	1,089	1,089	1,089	1,634	1,089	1,089	1,089	1,089	1,089	14,160
Indirect Overhead	82100	0	0	0	0	0	0	0	0	0	0	0	0	0
		3,268	4,901	3,268	3,268	3,268	3,268	4,901	3,268	3,268	3,268	3,268	3,268	42,479
Office Supplies & Postage	84000	37	35	32	26	10	4	2	5	5	19	35	40	250
Audit & Consulting Fees	84100	0	4,212	4,212	4,213	4,213	0	0	0	0	0	0	0	16,850
Employee Training	84200	0	0	0	0	0	0	0	0	0	0	0	0	0
Directors Fees	85000	157	149	136	110	40	17	7	21	23	79	145	167	1,050
Legal Notices	89400	0	0	0	0	0	0	0	0	0	0	0	0	0
Legal Fees	89400	112	106	97	78	29	12	5	15	16	57	104	119	750
Insurance Expense	89500	7,552	7,136	6,511	5,261	1,927	833	313	990	1,094	3,802	6,980	8,021	50,419
		7,860	11,638	10,987	9,688	6,219	867	325	1,030	1,138	3,957	7,263	8,347	69,319
		11,127	16,539	14,255	12,955	9,486	4,135	5,227	4,297	4,406	7,224	10,531	11,615	111,798
General Manager	91000	944	892	814	657	241	104	39	124	137	475	872	1,002	6,300

CAWD/PBCSD Reclamation Project
Monthly Budget Projections
2022-23

	ACCT No.	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23	ANNUAL BUDGET 2022-23
Admin Services Manager	91200	1,243	1,175	1,072	866	317	137	51	163	180	626	1,149	1,320	8,300
Accountant	91300	629	594	542	438	161	69	26	82	91	317	581	668	4,200
Chief Tech Officer	91500	1,079	1,019	930	751	275	119	45	141	156	543	997	1,145	7,200
Payroll Taxes & Benefits& O.H.	92100	0	0	0	0	0	0	0	0	0	0	0	0	0
		3,895	3,680	3,357	2,713	994	430	161	510	564	1,961	3,599	4,136	26,000
CAL-Am Water Meter Svc. Chg.	94300	4,602	4,348	3,967	3,205	1,174	508	190	603	666	2,317	4,253	4,887	30,720
Legal Fees	99400	75	71	65	52	19	8	3	10	11	38	69	80	500
Software Maint Fees	99410	644	609	555	449	164	71	27	84	93	324	595	684	4,300
		8,571	8,098	7,389	5,970	2,187	946	355	1,123	1,241	4,315	7,921	9,103	61,520
PBCo / IRWUG Representative		4,661	4,661	4,661	4,661	4,661	4,661	4,661	4,661	4,661	4,661	4,661	4,661	55,926
		423,878	435,135	377,764	317,373	156,328	99,273	101,285	106,822	111,854	242,703	396,199	446,525	3,344,438
		685,933	613,445	578,970	455,668	126,865	23,189	(55,362)	38,602	48,877	316,029	629,420	732,171	4,064,506
POTABLE WATER COSTS	99601	1,011	955	872	704	258	112	42	132	146	509	934	1,074	6,750
		684,922	612,490	578,098	454,963	126,607	23,078	(55,404)	38,469	48,730	315,520	628,485	731,097	4,057,756
Interest Income - Reserve Funds	551	1,498	1,415	1,291	1,043	382	165	62	196	217	754	1,384	1,591	10,000
Interest Income- Union Bank	553	0	0	0	0	0	0	0	0	0	0	0	0	0
Interest Income - Well Fargo/Phase I	554	0	0	0	0	0	0	0	0	0	0	0	0	0
Water Entitlements	555	0	0	0	0	0	0	0	0	0	0	0	0	0
Gain/(loss) on Mkt Value of Securitie	560	2,247	2,123	1,937	1,565	573	248	93	294	325	1,131	2,076	2,386	15,000
Interest Income-County	550	2	2	2	2	1	0	0	0	0	1	2	2	15
Interest Income - Bank of Amer.	549	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Income	561	0	0	0	0	0	0	0	0	0	0	0	0	0
Bank Charges - BoA	571	(5)	(5)	(5)	(4)	(1)	(1)	(0)	(1)	(1)	(3)	(5)	(6)	(35)
Bond Carrying Costs	573	(2,996)	(2,831)	(2,583)	(2,087)	(764)	(331)	(124)	(393)	(434)	(1,508)	(2,769)	(3,182)	(20,000)
O&M Reserve Funds	10.1	0	0	0	0	0	0	0	0	0	0	0	0	0
Contribution to Capital Repl. Fund	11.1	0	0	0	0	0	0	0	0	0	0	0	0	0

CAWD/PBCSD Reclamation Project
Monthly Budget Projections
2022-23

	ACCT No.	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23	ANNUAL BUDGET 2022-23
Subtotal		746	705	643	520	190	82	31	98	108	376	689	792	4,980
Interest Income - Construction Fd.	25100	0	0	0	0	0	0	0	0	0	0	0	0	0
Interest Income - Bond Fund	25101	0	0	0	0	0	0	0	0	0	0	0	0	0
Interest Income - W.F.-Construct.	25104	0	0	0	0	0	0	0	0	0	0	0	0	0
Loss on Disposal	26300	0	0	0	0	0	0	0	0	0	0	0	0	0
Interest Expense - COP's	99958	(1,947)	(1,840)	(1,679)	(1,356)	(497)	(215)	(81)	(255)	(282)	(980)	(1,800)	(2,068)	(13,000)
Principal Payment - COP's	26450	(389,463)	(367,975)	(335,744)	(271,281)	(99,380)	(42,975)	(16,116)	(51,033)	(56,405)	(196,074)	(359,917)	(413,636)	(2,600,000)
L/C Carrying Costs	573	(3,595)	(3,397)	(3,099)	(2,504)	(917)	(397)	(149)	(471)	(521)	(1,810)	(3,322)	(3,818)	(24,000)
Amortization Expense	576	(254,649)	(240,599)	(219,525)	(177,376)	(64,979)	(28,099)	(10,537)	(33,368)	(36,880)	(128,202)	(235,331)	(270,455)	(1,700,000)
Interest Pymt to MPWMD		0	0	0	0	0	0	0	0	0	0	0	0	0
Principal Pymt to MPWMD		0	0	0	0	0	0	0	0	0	0	0	0	0
Interest on Principal Advanced		(5,375)	(5,078)	(4,633)	(3,744)	(1,371)	(593)	(222)	(704)	(778)	(2,706)	(4,967)	(5,708)	(35,880)
Past LC fees/Bond Carry Cost payable		(82,686)	(78,124)	(71,281)	(57,595)	(21,099)	(9,124)	(3,421)	(10,835)	(11,975)	(41,628)	(76,413)	(87,818)	(552,000)
Subtotal		(737,714)	(697,013)	(635,961)	(513,856)	(188,244)	(81,403)	(30,526)	(96,666)	(106,841)	(371,401)	(681,750)	(783,504)	(4,924,880)
		(736,968)	(696,308)	(635,318)	(513,337)	(188,054)	(81,321)	(30,495)	(96,568)	(106,733)	(371,026)	(681,061)	(782,711)	(4,919,900)
		202,602	156,781	162,305	119,003	3,532	(30,144)	(75,362)	(24,731)	(21,123)	72,697	182,755	218,840	837,856

CAWD/PBCSD Reclamation Project
Non-Operating Expenses
Fiscal Year 2022-23

ITEM	Acct No.	Actual 20-21	Estimated Actual 2021-22	2021-22 Budget	Proposed 2022-23 Budget	Comments
NON-OPERATING EXPENSES:						
Project - Bond Carrying Costs	99956	20,055	20,000	25,000	20,000	Bond Carrying Costs
						U.S. Bank (Admin fee) $3,850
						U.S. Bank (Incidental fee) $ 385
						Arbitrage Calculation - Yield Restriction (3-13 next due 3-23) $0
						Moody's - annual fee $5,000
						Standard & Poors - review credit rating $3,500
						Stifel, Nicolaus & Co - quarterly $16,000
						Total..... $28,735
Bank charges	99952	0	0	75	35	Stop payments (0 @ $20) & wire transfer fees (3 @ $25)
L/C Carrying Costs	99959	52,107	26,650	28,800	24,000	Letter of Credit $2.0K per month thru June then zero
COP Interest Expense	99958	3,450	2,708	18,200	13,000	Assumes 0.50% on $2,600,000
COP Principal Payment	22041	2,400,000	2,500,000	2,500,000	2,600,000	Per COP Schedule
Interest on Principal Advanced	99957	46,718	61,515	70,000	35,880	Int rate 3.25%
Past LC fees/Bond Carry Cost payable	22041	552,000	552,000	552,000	552,000	$5,520,000 monthly through 06-30-23 (10 years)
Interest Payment to MPWMD	99961	22,875	7,625	7,625	0	Paid in full 10-31-21
Funding Agreement with MPWMD		500,000	500,000	500,000	0	
R & D Water Sources		0	0	0	0	
Abandoned Well Costs/R&D Water Costs		0	0	0	0	
Contribution to Capital Replacement Fund	11.1	0	0	158,000	0	current balance 03-31-22 $494.6K
Amortization Exp	99962	1,744,169	1,700,000	1,680,000	1,700,000	
TOTAL NON OPERATING EXPENSES		5,341,374	5,370,498	5,539,700	4,944,915	10.7% decrease from 21-22 budget
						7.9% decrease from 21-22 Projected actual

COP	Payment 07/01	Year	Bond Carrying Costs	
	2,300,000	2020		
	2,400,000	2021		
	2,500,000	2022	552,000	yr ending 06-30-22
	2,600,000	2023	552,000	yr ending 06-30-23
	9,800,000			

MPWMD			
	15,250	10/31/20	Interest
	500,000	10/31/20	Principal
	7,625	4/30/21	Interest
	7,625	10/31/21	Interest
	500,000	10/31/21	Principal

CAWD/PBCSD Reclamation Project
Capital Budget
Fiscal Year 2022-23

CAWD/PBCSD Reclamation Project			FY 2022/23 *thru* 2026/27					
Project #		PROJECT	22/23	23/24	24/25	25/26	26/27	Unscheduled
CAPITAL PROJECTS								
1	CAWD	WWTP Phase 2 - Reclamation Share	$ 131,556					
2	CAWD	Sulfuric/Citric Chemical Storage and Feed (carry over)	$ 334,000					
3	CAWD	Asset Analysis and Master Plan	$ 300,000					
4	CAWD	Fiber Wrap PVC Pipe	$ 25,000					
5	CAWD	Ammonia Tank Replacement	$ 100,000					
6	CAWD	SCADA Migration (carry over)	$ 80,000					
7	PBCSD	Pipeline Cathodic Protection (Carmel)	$ 250,000					
CAPITAL PURCHASES								
a	CAWD	Laboratory Ion Chromatograph (10% CAWD)	$ 57,000					
b	CAWD	Laboratory Autoclave (50% CAWD)	$ 32,000					
c	CAWD	ATL LIMS System new generation (50% CAWD)						$ 38,790
d	CAWD	Laboratory Dishwashers (2) (75% CAWD/25% Reclamation)						$ 30,000
e	PBCSD	Forest Lake Blowers (2)		$ 80,000				
f	PBCSD	Flow Meters Remote Measuring System (12)	$ 120,000					
g	PBCSD	Forest Lake Mixers Installation	$ 25,000					
h	PBCSD	Forest Lake Backwash Basin Pump	$ 25,000					
Total			$1,479,556	$ 80,000	$ -	$ -	$ -	$ 68,790
RECLAMATION Share			$1,457,856	$ 80,000	$ -	$ -	$ -	$ 26,895
PBCSD Share			$ 7,226	$ -	$ -	$ -	$ -	$ 7,493
CAWD Share			$ 14,474	$ -	$ -	$ -	$ -	$ 34,403
Allocated Total			$1,479,556	$ 80,000	$ -	$ -	$ -	$ 68,790

1 **FY 2022-23 Budget**
CAWD/PBCSD Reclamation Project

Project Name:	WWTP Phase 2 - Reclamation Share
Agency	CAWD
Total Cost:	$ 255,127
CY Budget	$ 131,556

Contact:	Treanor
Area	Effluent Building and Lab
Asset Type:	Electrical
Avg Useful Life:	30 years
Est Residual Life:	10 years
% Consumed Life:	66%
Category:	Maintenance
Urgency:	High
Carry Forward:	No

Asset Description

CAWD is currently constructing the Elec/Mech Rehab and Sludge Holding Tank Project which includes Reclamation costs for new electrical and wet well mixing equipment for the Effluent Building and new power feeder to the Laboratory. About 2.7% of the total project is attributable to Reclamation based on the bid price and contractor schedule of values.

Year Built: Various
Rehabilitation Date (Extendng life of Asset): Various
Rehab Life Extension: 30 years

Justification

Electrical improvements are required to address aging electrical in the Effluent Building which includes the RO Concentrate Effluent Pump. The project also includes providing a new power feed to the lab so that the lab equipment has automatic standby power from the main switchgear. Additional cost attributable to Reclamation includes the Effluent Pump Station wet well mixing system which is needed to avoid build up of precipitates from RO Concentrate in the wet well which can cause discharge permit exceedences for TSS.

Budget Impact/Other

	Prior Yr	22-23	23-24	24-25	25-26	26-27	Total
Labor	$ 55,555						$ -
Engineering	$ 12,500						$ -
Parts & Supplies	$ 55,555						$ -
Chemicals							$ -
Utility							$ -
Other		$ 131,556					$ 131,556
Total	$ 123,610	$ 131,556	$ -	$ -	$ -	$ -	$ 131,556

2 **FY 2022-23 Budget**
CAWD/PBCSD Reclamation Project

Project Name:	Sulfuric/Citric Chemical Storage and Feed (carry over)		
Agency	CAWD		
Total Cost:	$ 414,000		
CY Budget	$ 334,000	Carry Over Amount	

Contact:	Treanor
Area	MF/RO
Asset Type:	Various
Avg Useful Life:	15 Years
Est Residual Life:	15 Years
% Consumed Life:	NA
Category:	Capital Improvement
Urgency:	High
Carry Forward:	Yes

Asset Description

The existing acid containment and storage at the Pad does not meet code requirements for seperation of dissimilar chemicals that could create an exothermic reaction if inadvertantly mixed. Furthermore, the volume of storage creates logistical issues and safety concerns with manually moving large totes of highly acidic chemicals. The project is currently in construction. The design of the system includes concrete secondary containment walls, adequately sized tanks that can receive bulk chemical deliveries, and feed pumps for MF CIP and for RO feed pH adjustment.

Year Built: NA
Rehabilitation Date (Extendng life of Asset): NA
Rehab Life Extension: NA

Justification

The existing citric and sulfuric acid systems are not built to code and are a safety concern. Having a fully designed and implemented system will address code issues and will also allow operators more ability to fine tune the pH adjustment upstream of the RO system in order to reduce scaling and manage RO recovery.

Carry Over from 21/22 Budget $370,000 Spent $80,000 Carry Over $290,000

Budget Impact Other

	Prior Yr	22-23	23-24	24-25	25-26	26-27	Total
Labor	$ 40,000	$ 124,000					$ 124,000
Engineering							$ -
Parts & Supplies	$ 40,000	$ 190,000					$ 190,000
Chemicals							$ -
Utility							$ -
SCADA integration		$30,000					$ 30,000
Total	$ 80,000	$ 344,000	$ -	$ -	$ -	$ -	$ 344,000

3 **FY 2022-23 Budget**
CAWD/PBCSD Reclamation Project

Project Name:	Asset Analysis and Master Plan
Agency	CAWD
Total Cost:	$ 300,000
CY Budget	$ 300,000

Contact:	Treanor
Area	Tertiary/MF/RO
Asset Type:	NA
Avg Useful Life:	NA
Est Residual Life:	NA
% Consumed Life:	NA
Category:	Study
Urgency:	Med
Carry Forward:	No

Asset Description

The assets at the Tertiary Building and MF/RO Pad have not been evaluated for risk of failure and estimated remaining useful life which are needed in order to develop long term capital budget plan. This capital study would evaluate the existing assets and create a long term (10 to 15 year) capital plan for the Reclamation Treatment facilities.

Year Built: NA
Rehabilitation Date (Extendng life of Asset): NA
Rehab Life Extension: NA

Justification

Long Term Budget Planning

Budget Impact/Other

	Prior Yr	22-23	23-24	24-25	25-26	26-27	Total
Labor							$ -
Engineering		$ 300,000					$ 300,000
Parts & Supplies							$ -
Chemicals							$ -
Utility							$ -
Other							$ -
Total	$ -	$ 300,000	$ -	$ -	$ -	$ -	$ 300,000

4 **FY 2022-23 Budget**
CAWD/PBCSD Reclamation Project

Project Name:	Fiber Wrap PVC Pipe
Agency	CAWD
Total Cost:	$ 50,000
CY Budget	$ 25,000

Contact:	Treanor
Area	Tertiary/MF/RO
Asset Type:	Piping
Avg Useful Life:	20 years
Est Residual Life:	10 years
% Consumed Life:	50%
Category:	Maintenance
Urgency:	Med-High
Carry Forward:	No

Asset Description

The process piping at the MF/RO Pad is primarily made of PVC which is much more prone to stress fatigue failures than compared to steel or iron piping.

Year Built: 2007
Rehabilitation Date (Extendng life of Asset): NA
Rehab Life Extension: NA

Justification

Pipe failures at the MF/RO Pad cause system outages as there is no redundancy in the main process piping. A small pipe failure can lead to complete shutdown of the MF/RO system in order to facilitate repairs. Repairs of PVC pipe can take 2 to 3 days to complete. Installing a reinforcing resin impregnated fiber pipe wrap system can mitigate pipe failures in locations where it is installed. While it is not feasible to wrap all the piping in the facility that may crack and break, certain critical lines associated with the MF system will be targeted to mitigate failures in these locations.

Budget Impact/Other

	Prior Yr	22-23	23-24	24-25	25-26	26-27	Total
Labor	$ 12,500	$ 12,500					$ 12,500
Engineering							$ -
Parts & Supplies	$ 12,500	$ 12,500					$ 12,500
Chemicals							$ -
Utility							$ -
Other							$ -
Total	$ 25,000	$ 25,000	$ -	$ -	$ -	$ -	$ 25,000

5 **FY 2022-23 Budget**
CAWD/PBCSD Reclamation Project

Project Name:	Ammonia Tank Replacement
Agency	CAWD
Total Cost:	$ 100,000
CY Budget	$ 100,000

Contact:	Waggoner
Area	Tertiary
Asset Type:	Process Equip (Liquid)
Avg Useful Life:	15 years
Est Residual Life:	2 years
% Consumed Life:	87%
Category:	Capital Equipment
Urgency:	Important
Carry Forward:	No

Asset Description

Ammonia Storage tank with air scubber unit that holds 1,500 gallons of Ammonia Hydroxide for chlormation of plant effluents.

Year Built: 2008
Rehabilitation Date (Extendng life of Asset): N/A
Rehab Life Extension: 15

Justification

The current Ammonia storage tank is reachng it's end of service life. Replacement with an updated tank and scubber that meets current codes of CalOSHA requirments of the storage of Ammonia Hydroxide. Staff would like to upsize to a 2,000 gallon storage tank to reduce the number of deliveries throughout the year.

Budget Impact/Other

	Prior Yr	22-23	23-24	24-25	25-26	26-27	Total
Labor		$ 10,000					$ 10,000
Engineering							$ -
Parts & Supplies		$ 90,000					$ 90,000
Chemicals							$ -
Utility							$ -
Other							$ -
Total	$ -	$ 100,000	$ -	$ -	$ -	$ -	$ 100,000

6 **FY 2022-23 Budget**
CAWD/PBCSD Reclamation Project

Project Name:	SCADA Migration	Contact:	Foley
Agency	CAWD	Area	Tertiary/MF/RO
Total Cost:	$ 159,182	Asset Type:	SCADA
CY Budget	$ 80,000 Carry Over Amount	Avg Useful Life:	15 Years
		Est Residual Life:	0 years
		% Consumed Life:	100%
		Category:	Capital Improvement
		Urgency:	High
		Carry Forward:	Yes

Asset Description

Rockwell Automation RSView32 Supervisory Control and Data Acquisition System (SCADA) that monitors and controls tertiary, microfiltration and reverse osmosis systems and equipment. The system includes equipment control, visualization, alarming and data logging.

Year Built: 1993
Rehabilitation Date (Extendng life of Asset): 2008
Rehab Life Extension: 12

Justification

The RSView32 system is obsolete and utilizes Microsoft Windows 7 Operating System(OS). This is a network security vulnerability due to Windows 7 OS and RSView32 updates have ceased. The new system will be added to the CAWD Inductive Automation Ignition SCADA platform and integrate with the treatment plant application. It is critical to upgrade to the new platform to continue automated control of the reclamation system and equipment.

Budget Impact/Other

	20-21	Prior Yr	22-23	23-24	24-25	25-26	Total
Labor							$ -
Engineering	$ 19,182	$ 60,000	$ 80,000				$ 159,182
Parts & Supplies			carry over				$ -
Chemicals							$ -
Utility							$ -
Other							$ -
Total	$ 19,182	$ 60,000	$ 80,000	$ -	$ -	$ -	$ 159,182

a	**FY 2022-23 Budget**	Contact:	Waggoner
	CAWD/PBCSD Reclamation Project	Area	Misc Structures
		Asset Type:	Support Equipment
Project Name:	Laboratory Ion Chromatograph (90% Reclamation)	Avg Useful Life:	10 years
Agency		Est Residual Life:	1 year
Total Cost:	$ 57,000	% Consumed Life:	97%
CY Budget		Category:	Capital Equipment
		Urgency:	2 = Very Important
		Carry Forward:	Yes

Asset Description

The Ion Chromatograph unit is a Laboratory instrument used to analyze various chemical constituents for the process control and reporting for the Reclamation Project.

Year Built:	Jul-05
Rehabilitation Date (Extendng life of Asset):	N/A
Rehab Life Extension:	N/A

Justification

The Ion Chromatography unit (IC) is coming to the end of its useful life as outlined by the manufacturer service representative. The manufacture of the Ion Chromatography unit will stop supporting parts and services in the next two years. Once that support stops replacement parts and consumables will become difficult to obtain along with service request of the equipment. The Ion Chromatography unit is used to analyze the reclaim water sent to Pebble Beach for golf course irrigation. The samples are tested at different intervals ranging from weekly, monthly and daily if needed. Samples collected and tested on a weekly schedule are the Reclaim Line and MF/RO Blend, for the monthly schedule samples that are collected are PBCSD Storage Tank, Pebble Beach Golf Course, Spanish Bay Golf Course and Forest Lake Reservior, and depending if Pebble Beach Wells are turned on there are three other samples The specific analysis that can be performed on the IC are the Anion and Cation ions in the water sample. The Anions are negative charged ions- Fluoride, Chloride, Nitrate, Sulfate and Phosphate. The Cations are positive charged ions- Sodium, Ammonium, Potassium, Magnesium, Calcium. Also the Sodium Absorption Ratio (SAR) and Adjusted SAR are calculated from the various test. Since the feed source of water is coming from the CAWD Secondary Effluent we are also testing the water coming in.

Budget Impact/Other

	Prior Yr	22-23	23-24	24-25	25-26	26-27	Total
Labor							$ -
Engineering							$ -
Parts & Supplies		$ 57,000					$ 57,000
Chemicals							$ -
Utility							$ -
Other							$ -
Total	$ -	$ 57,000	$ -	$ -	$ -	$ -	$ 57,000

b **FY 2022-23 Budget**
CAWD/PBCSD Reclamation Project

Project Name: Laboratory Autoclave (50% Reclamation)
Agency
Total Cost: $ 32,000
CY Budget

Contact: Waggoner
Area Misc Structures
Asset Type: Support Equipment
Avg Useful Life: 20 years
Est Residual Life: 1 year
% Consumed Life: 89%
Category: Capital Equipment
Urgency: 3 = Important
Carry Forward: Yes

Asset Description

The autoclave is used to conduct NPDES permit coliform tests and to destroy samples that are completed prior to disposal.

Year Built: Jun-93
Rehabilitation Date (Extendng life of Asset): N/A
Rehab Life Extension: N/A

Justification

The autoclave unit has reached the end of the service life recommended by the manufacturer.
It is essential to complete the permit required analysis and maintain compliance with EPA and ELAP requirements.

Budget Impact/Other

	Prior Yr	22-23	23-24	24-25	25-26	26-27	Total
Labor							$ -
Engineering							$ -
Parts & Supplies		$ 32,000					$ 32,000
Chemicals							$ -
Utility							$ -
Other							$ -
Total	$ -	$ 32,000	$ -	$ -	$ -	$ -	$ 32,000

c **FY 2021-22 Budget**
Carmel Area Wastewater District

Project Name:	ATL Laboratory Information Management System (LIMS)	Contact:	Waggoner
Dept:	Treatment	Area	Misc Structures
Total Cost:	$ 38,790	Asset Type:	Office Equip
CY Budget	$ -	Avg Useful Life:	20 years
GL Account:		Est Residual Life:	15 years
		% Consumed Life:	25%
		Category:	Capital Equipment
		Urgency:	5 = Future
		Carry Forward:	Yes

Asset Description

The Accelerated Technology Laboratory (ATL) Laboratory Information Management System (LIMS) is used for laboratory data management. All the laboratory data (NPDES and process control) is entered into the LIMS and able to generate reports, and queries from all the different projects and analysis tests.

Year Built:	2014
Rehabilitation Date (Extending life of Asset):	N/A
Rehab Life Extension:	N/A

Justification

This is entered into the "Unscheduled" due to uncertainty of when ATL will update the software current version being used. ATL works from the Microsoft programs and when Microsoft makes changes to the operating system some of the ATL features will not work. The ATL representative could not give me any updates on what Microsoft will upgrade. The new version of LIMS are built from different modules that the customer would like to have.

Budget Impact/Other

	Unscheduled	Total
Labor		
Engineering		$ -
Parts & Supplies	$ 36,000	$ 36,000
Chemicals		$ -
Utility		$ -
Other	$ 2,790	$ 2,790
Total	$ - $ - $ - $ - $ - $ 38,790	$ 38,790

d **FY 2022-23 Budget**
Carmel Area Wastewater District

Project Name:	Laboratory Dishwashers (2) (75% CAWD/25% Reclamation)	Contact:	Waggoner
Dept:	Treatment	Area	Lab
Total Cost:	$ 30,000	Asset Type:	Process Equip (Chemical)
CY Budget	$ -	Avg Useful Life:	10 years
GL Account:		Est Residual Life:	5 years
		% Consumed Life:	50%
		Category:	Capital Equipment
		Urgency:	5 = Future
		Carry Forward:	Yes

Asset Description

The laboratory uses two specialized, industrial dishwasher configured for different bottle washing uses. One dishwasher is used for glassware of BOD bottles, beakers and flasks that go through a washing cycle of hot water, soap wash, rinse -tap and DI water, and acid wash. The second dishwasher is used as a universal wash that larger items can be washed and the sample bottles used for sample collection.

Year Built:	2016
Rehabilitation Date (Extendng life of Asset):	N/A
Rehab Life Extension:	N/A
Asset Condition Rating:	Good

Justification

This is listed as "Unscheduled", the dishwashers are currently working well - no time frame when to replace. These Laboratory dishwashers are Speciality Industrial Units designed to accommodate specificly designed laboratory glassware and equipment.

Budget Impact/Other

	Unscheduled	Total
Labor	$ 2,000	$ 2,000
Engineering		$ -
Parts & Supplies	$ 26,000	$ 26,000
Chemicals		$ -
Utility		$ -
Other	$ 2,000	$ 2,000
Total	$ - $ - $ - $ - $ - $ 30,000	$ 30,000

CAWD/PBCSD RECLAMATION PROJECT

STATUS OF FY 2021-22 CAPITAL OUTYLAYS AND 2022-23 PROPOSED BUDGET

ITEM	Actual thru 2/28/22	Projected thru 6/30/22	FY 2021-22 Original Budget	FY 2021-22 Adjusted Budget	STATUS	Comments /Notes
CAPITAL FY 2020-21						
Pipeline Cathodic Protection (Carmel)	-	20,000	250,000	250,000	*Re-budget in FY 2022-23*	Rebudget in 2022/23
Forest Lake Mixers (2)	-	95,000	75,000	75,000	Planned completion by 6/30/22	2/8/22 RMC Report: Cost is $90K; No budget adj requested as cost of Outlet Gate operators is underbudget
Forest Lake Outlet Gate Electric Operators	-	20,000	50,000	50,000	Planned completion by 6/30/22	2/8/22 RMC Report: Cost is expected to be $20K; Will install in house.
Forest Lake Inflatable Work Boat	-	-	20,000	20,000	Delete from Budget & LTCOP	
Forest Lake Chemical Feed System Improvements	9,651	-	-	-	Complete & In Service	
TOTAL PBCSD CAPITAL EXPENSES	9,651	135,000	395,000	395,000		

PROPOSED BUDGET FY 2022-23	Proposed FY 2022-23	Proposed FY 2023-24	DESCRIPTION
Forest Lake Blowers (2)		80,000	Replace two blowers at Forest Lake Chemical Building that supply air and vertical mixing at Forest Lake every fifteen years.
Flow Meters Remote Measuring System (12)	120,000		Replace the irrigation meters and install cellular antennas to allow recycled water meter readings to be remotely moniored; replace meter valult lids, meter piping, valves and appurtenances.
Pipeline Cathodic Protection (Carmel)	250,000		Expects to spend $20K in FY 2021/22, remaining unspent rebudgeted from 2021/22.
Forest Lake Mixers Installation	25,000		May need to hire divers.
Forest Lake Backwash Basin Pump	25,000		Materials Purchase, Planned installation in-house.
TOTAL PBCSD CAPITAL EXPENSES	420,000	80,000	

CAWD/PBCSD Reclamation Project

RECLAIMED & POTABLE WATER SALES

Total Water sales - excluding meter charges.

Year	Potable AF	Reclaimed AF	Total AF	Total Water Sales	Cost per AF	Annual Change
1994-95 (partial year)	n/a	n/a	675.863	780,669.00	$1,155	
1995-96	277.00	726.56	1,003.56	1,142,810.00	$1,139	46.39%
1996-97	372.00	689.00	1,061.00	1,291,410.00	$1,217	13.00%
1997-98	166.31	626.00	792.31	960,924.43	$1,213	-25.59%
1998-99	189.53	646.37	835.90	1,004,078.00	$1,201	4.49%
1999-00	282.92	780.41	1,063.33	1,278,885.77	$1,203	27.37%
2000-01	317.00	636.00	953.00	1,379,969.00	$1,448	7.90%
2001-02	344.37	642.49	986.86	1,413,050.00	$1,432	2.40%
2002-03	272.16	706.55	978.71	1,406,089.00	$1,437	-0.49%
2003-04	486.60	810.31	1,296.91	2,158,690.00	$1,664	53.52%
2004-05	240.79	684.36	925.15	1,544,984.00	$1,670	-28.43%
2005-06	156.16	718.51	874.67	1,490,644.00	$1,704	-3.52%
2006-07	161.21	883.00	1,044.21	1,891,132.53	$1,811	26.87%
2007-08	128.92	1,061.01	1,189.93	2,235,363.00	$1,879	18.20%
2008-09	56.00	980.00	1,036.00	1,915,828.00	$1,849	-14.29%
2009-10	61.84	866.66	928.50	1,807,929.00	$1,947	-5.63%
2010-11	0.00	867.00	867.00	1,840,264.00	$2,123	1.79%
2011-12	0.00	977.00	977.00	2,344,687.00	$2,400	27.41%
2012-13	0.00	964.00	964.00	4,315,770.67	$4,477	84.07%
2013-14	0.00	1,039.00	1,039.00	5,420,192.00	$5,217	25.59%
2014-15	0.00	1,001.30	1,001.30	5,379,027.00	$5,372	-0.76%
2015-16	24.00	1,006.00	1,030.00	5,513,758.00	$5,353	2.50%
2016-17	0.00	839.00	839.00	5,661,358.00	$6,748	2.68%
2017-18	0.00	1,032.00	1,032.00	6,328,302.00	$6,132	11.78%
2018-19	15.37	894.00	909.37	6,299,411.00	$6,927	-0.46%
2019-20	0.00	1,066.00	1,066.00	7,063,288.00	$6,626	12.13%
2020-21	0.00	1,025.00	1,025.00	6,838,738.00	$6,672	-3.18%
2021-22 (*est*)	0.00	1,025.00	1,025.00	7,000,000.01	$6,829	2.36%
2022-23 (*budget*)	0.00	1,000.00	1,000.00	7,478,944.00	$7,479	6.84%

Actual 2021-22		Potable AF	Reclaimed AF	Total AF	Total Water Sales	Cost per AF	Cost per AF Est. Act. Variance
Jul-21		0.00	122.00	122.00	694,873.84	5,696.00	-16.59%
Aug-21		0.00	132.00	132.00	723,497.84	5,481.00	-19.74%
Sep-21		0.00	121.00	121.00	691,107.65	5,712.00	-16.36%
Oct-21		0.00	72.00	72.00	551,595.94	7,661.00	12.18%
Nov-21		0.00	33.00	33.00	440,602.39	13,352.00	95.51%
Dec-21		0.00	9.00	9.00	365,237.13	40,582.00	494.24%
Jan-22		0.00	26.00	26.00	418,126.37	16,082.00	135.49%
Feb-22		0.00	74.00	74.00	556,358.86	7,518.00	10.08%
Mar-22	*est.*	0.00	21.00	21.00	337,722.00	16,082.00	135.49%
Apr-22	*est.*	0.00	73.00	73.00	559,253.00	7,661.00	12.18%
May-22	*est.*	0.00	134.00	134.00	734,454.00	5,481.00	-19.74%
Jun-22	*est.*	0.00	154.00	154.00	844,074.00	5,481.00	-19.74%
YTD		0.00	971.00	971.00	6,916,903.02	7,123.00	4.30%

Actual 2020-21	Potable AF	Reclaimed AF	Total AF	Total Water Sales	Cost per AF	Cost per AF Est. Act. Variance
Jul-20	0.00	146.00	146.00	730,113.74	5,001.00	-25.04%
Aug-20	0.00	128.00	128.00	682,039.00	5,328.00	-20.14%
Sep-20	0.00	105.00	105.00	621,987.97	5,924.00	-11.21%
Oct-20	0.00	101.00	101.00	610,503.60	6,045.00	-9.40%
Nov-20	0.00	51.00	51.00	479,193.55	9,396.00	40.83%
Dec-20	0.00	22.00	22.00	402,919.10	18,315.00	174.51%
Jan-21	0.00	13.00	13.00	378,586.19	29,122.00	336.48%
Feb-21	0.00	8.00	8.00	364,055.73	45,507.00	582.07%
Mar-21	0.00	46.00	46.00	466,058.67	10,132.00	51.86%
Apr-21	0.00	117.00	117.00	654,258.85	5,592.00	-16.19%
May-21	0.00	136.00	136.00	702,903.82	5,168.00	-22.54%
Jun-21	0.00	152.00	152.00	746,117.62	4,909.00	-26.42%
YTD	0.00	1,025.00	1,025.00	6,838,737.84	6,672.00	0.00%

Actual 2019-20	Potable AF	Reclaimed AF	Total AF	Total Water Sales	Cost per AF	Cost per AF Est. Act. Variance
Jul-19	0.00	155.00	155.00	776,100.00	5,007.00	-24.43%
Aug-19	0.00	155.00	155.00	776,422.00	5,009.00	-24.40%
Sep-19	0.00	139.00	139.00	729,402.00	5,247.00	-20.81%
Oct-19	0.00	127.00	127.00	697,805.00	5,495.00	-17.07%
Nov-19	0.00	51.00	51.00	481,889.00	9,449.00	42.60%
Dec-19	0.00	2.00	2.00	343,410.00	171,705.00	2491.38%
Jan-20	0.00	3.00	3.00	346,009.00	115,336.00	1640.66%
Feb-20	0.00	46.00	46.00	466,461.00	10,140.00	53.03%
Mar-20	0.00	19.00	19.00	391,008.00	20,579.00	210.58%
Apr-20	0.00	61.00	61.00	576,389.00	9,449.00	42.60%
May-20	0.00	151.00	151.00	792,297.00	5,247.00	-20.81%
Jun-20	0.00	157.00	157.00	786,099.00	5,007.00	-24.43%
YTD	0.00	1,066.00	1,066.00	7,163,291.00	6,720.00	1.42%

Operating Costs - billed per AF usage	
Operating Expenses	3,351,188.49
MPWMD fee	70,000.00
Prior Yr O&M rollover	0.00
	3,421,188.49
Estimated AF	1,000.00
Price per AF	3,421.19

Non Operating Costs - billed per Agreement %	
Non Operating Expenses	3,219,900.00
Capital Budget	1,457,856.00
Prior Yr Capital Projects (rollover)	(620,000.00)
	4,057,756.00

		Monthly
MPCC-Dunes	12.13%	41,000.24
MPCC-Shore	12.13%	41,000.24
Cypress Point	12.13%	41,000.24
Poppy Hills	12.13%	41,000.24
Pebble Beach	12.13%	41,000.24
Spyglass Hill	12.13%	41,000.24
Spanish Bay	12.13%	41,000.24
PB Range	3.63%	12,257.80
Peter Hay	3.50%	11,835.12
PB Resorts	3.50%	11,835.12
Equestrian Center	3.00%	10,144.39
Stevenson School	1.50%	5,072.20
	100.00%	338,146.33

Prior Yr Capital Projects (rollover)		Orig. Budget	Spent	Carry Over
CAWD	SCADA Migration (carry over	$ 140,000	$ 60,000	$ 80,000
CAWD	Sulfuric/Citric Chemical Storage and Feed (carry over)	$ 370,000	$ 80,000	$ 290,000
PBCD	Pipeline Cathodic Protect	$ 250,000	$ -	$ 250,000
				$ 620,000

RESOLUTION NO. 2022-25

A RESOLUTION ADOPTING THE CARMEL AREA WASTEWATER DISTRICT (CAWD)/PEBBLE BEACH COMMUNITY SERVICE DISTRICT (PBCSD) FISCAL YEAR 2022-23 RECLAMATION PROJECT BUDGET

-oOo-

WHEREAS, the attached CAWD/PBCSD Reclamation Project Fiscal Year 2022-23 Budget was approved at the Technical Advisory Committee group level and final approval was given by the Reclamation Management Committee (RMC) at its May 10, 2022 meeting; and

WHEREAS, items approved by the RMC are brought to the CAWD or PBCSD Board, as appropriate, for approval and any applicable resolution.

NOW, THEREFORE, BE IT RESOLVED by the Board of Directors of the Carmel Area Wastewater District that it does hereby adopt the attached CAWD/PBCSD Reclamation Project Fiscal Year 2022-23 Budget.

PASSED AND ADOPTED at a regular meeting of the Board of Directors of the Carmel Area Wastewater District duly held on May 26, 2022, by the following vote:

AYES: BOARD MEMBERS:
NOES: BOARD MEMBERS:
ABSENT: BOARD MEMBERS:
ABSTAIN: BOARD MEMBERS:

_____

Ken White, President of the Board

ATTEST:

_____

Domine Barringer, Secretary of the Board

Staff Report

To: Board of Directors

From: Barbara Buikema, General Manager

Date: May 26, 2022

Subject: Sewer Connection Fee for FY 2022-23

RECOMMENDATION

It is recommended that the Board of Directors adopt a resolution approving an increase in the basic residential unit connection fee to $8,272.66 as detailed in the attached Schedule of Connection Fees effective June 1, 2022.

DISCUSSION

Sewer connection fees are set by ordinance in accordance with the California Health and Safety Code Section 5474. Connection fees are charged to recover a portion of the capital costs for the treatment facility from future users. Per the State Water Resources Control Board (SWRCB) guide for grant funded facilities, connection fees may be used to recover debt service costs if the user had been connected when the treatment works began operation. Connection fees may not be used to recover excessive cost from future users in order to reduce charges to current users. Connection fees may not be used to fund replacement costs. Therefore, the District calculations are based on the acquisition cost of its plant assets.

The accompanying summary computation shows that the recommended connection fee (performed as of the last full year of fixed asset data available) has increased 9.8% from $7,532.64 on 06-01-21 to $8,272.66 on 05-26-22. Detailed computation spreadsheets are available at the Board's request. Because CAWD is a built-out,(fully developed) District it is estimated that the increase of $740.02 per connection fee will not result in any substantial revenue gains for the year. Capital Improvement Projects (CIP) are not included in the computation until they are complete and moved into Fixed Assets.

Although we have historically calculated connection fees each year effective July 1st, based on the last full year of fixed asset data; there is nothing in Ordinance 85-02 that prohibits adjusting the fee at an alternate time during the year. The exact language of the Ordinance is "… which shall be determined annually, or more frequently if this Board deems it appropriate…"

The District's total assets are reflected on the books at a cost basis of $101,626,665. This figure includes all Reclamation tertiary and secondary facilities and the Collection system. It does not include the impact of reductions from receipt of grant funds and reimbursement from PBCSD. It does not include any increased land appraisal value. It is generally acknowledged that the replacement cost for total Plant assets would be about $125-150 million.

The purpose of the connection calculation is to determine what a new connector would be expected to pay for his/her fair share of treatment and disposal assets. The calculation is per equivalent residential unit based on original construction costs adjusted to present day value. It does not attempt to recover replacement costs because of State Resources Control Board (SWRCB) direction to charge for acquisition value only. A new connector becomes part owner of the District upon payment of the fees because he is paying a pro-rata share of the cost of assets used to treat the property owner's sewage.

Please note: for the purposes of this calculation, office equipment, vehicles and structures are not fully depreciated but are instead assigned a minimum salvage value of 10% for equipment and vehicles and 25% for structures. This assumption ensures that all assets will retain some value in the computation regardless of whether they are fully depreciated.

The formula for the connection fee, as suggested by Kennedy/Jenks/Chilton (engineering consultant), starts with assets of $101,626,665 and excludes all Reclamation tertiary (Reclamation Secondary facilities are included) and Collection assets to arrive at applicable connection fee assets of $49,808,957. Actual replacement costs for these assets would be $65 - $80 million.

According to the formula, the applicable assets are then depreciated according to appropriate lives (down to a stated minimum), updated by the current Engineering News Record (ENR) Construction index and decreased by grant funds received and reimbursement from PBCSD. This mathematical process reduces the applicable assets from $49,808,957 down to a local present value cost of $27,001,411. To this is added the District's current assets of $43,404,198, for a total value of applicable assets of $70,405,610.

A connection fee per gallon per day is determined by dividing $70,405,610 (total current value) by 2,000,000 gallons per day (gpd), which is CAWD's share of the permitted authorized flows. The 2 million gpd figure is CAWD's 2/3 share of permitted flows as opposed to actual flows or designed flows. The resulting figure is then multiplied by 235 gpd (the average daily flow per equivalent residential unit) to arrive at the actual connection fee per equivalent residential unit.

This calculation results in a connection fee per equivalent residential unit (ERU) of $8,272.66 The reasons for the increase include an increase in the ENR index of 3.35% from 2020 and an increase in current assets increase of 11.2 % over 2020. The current assets can vary greatly from year-to-year depending on cash on hand, accounts receivable, prepaid expenses, and other cash items.

COMPARISON CONNECTION FEES

The SWRCB survey of Single-Family Dwelling (SFD) Connection Fee for the last year available FY 2016-17 average is $4,297.26. Monterey County average connection fee for a Single-Family Dwelling is $4,818.97 for the FY 2016-17 survey. This is the last available report from the State Water Resources Control Board.

CAWD's 2022 connection fee represents a 71.7% increase over the five-year-back Monterey County average. The two most significant reasons behind the increase are the Phase 1 and Phase 2 work done at the treatment plant and the increase in the District's current assets.

Attachments:

1. 2022 Calculation Fee Calculations 06-22
2. Connection Fee Calculations effective 06-01-22

CARMEL AREA WASTEWATER DISTRICT - CONNECTION FEE CALCULATIONS
Jun-22

Asset No	GL No	A DESCRIPTION OF ASSET	B CUR YR.	C PUR YR.	D USE LIFE	E % VALUE REMAININC	F ORIGINAL COST	G DEPRECIATED VALUE	H CURRENT ENR	J ORIGIN ENR	K UPDATED VALUE	L LOCAL COST	M LOCAL VALUE	N % CSD COST	O CSD VALUE
		Grand Total:					**101,626,665.98**	**54,113,078.94**			**87,201,563.94**	100.0	**85,321,723.87**		**27,001,411.50**

EXCLUDED ASSETS:

	GL Acct #			
Reclamation - Tertiary Structures	1426	to	1431	35,384,151.66
Reclamation - O & M	1460			460,305.31
Pump Station structures	1501	to	1506	1,170,300.67
Pump Station Equipment	1521	to	1527	1,509,600.36
Sewer Systems	1530			13,293,350.40
Total				51,817,708.40

49,808,957.58 ck 101,626,665.98 ck

Land	308,060.00
Assets	101,318,605.79
	101,626,665.79
CIP	1,634,067.11
	103,260,732.90
deprec	(53,931,869.10)
Total FA	49,328,863.80

TOTAL ASSETS PER AUDITED GENERAL LEDGER	**103,260,732.90**	
CIP	**(1,634,067.11)**	
	101,626,665.79	
	oob	(0.19)

a. Current CAWD share value from above.		$27,001,411.50	
b. Total current assets as of end of June 30, 2021		$43,404,198.94	
c. Total current value of all District assets. (a+b)		$70,405,610.44	
d. Current Authorized Design Flow. (NPDES Permit)		3,000,000	gpd
e. Average daily flow per capita. (Design criteria)		100	gpd
f. Average number of people per residential unit.(County Planning)	2.35	2.35	persons.
g. Average daily flow per residential unit. (e*f)		235	gpd
h. CAWD Share of authorized flows. (2/3 * d)		2,000,000	gpd
i. Connection fee per unit flow. (c/h)		$35.20	per gpd.
j. Connection fee per E.R.U. (g*i)		$8,272.66	per residential unit.

A = Input Item No. from auditor's depreciation schedule.
B = Input current year.
C = Input year of purchase.
D = Input number of years for depreciation.
E = (1-((B-C)/D))*100 = % value remaining. All assets are depreciated down to a functional value of 25% of cost for structures & 10% of cost for equip
F = Input original cost.
G = (E*F)/100 = depreciated value.
H = Input current year ENR. (San Francisco Construction) Use Sept/Oct ENR for previous fiscal year in column B.
J = Input ENR for year of purchase. (San Francisco Construction) Use Sept/Oct ENR of current fiscal year of purchase. Therefore, Col H & J can never be the same.
K = (G*J)/H = updated value.
L = Input local cost % when considering grant funding received. Reverts to 100% when asset functional value floor reached
M = (L*K)/100 =local cost.
N = Input CSD share % when considering 1/3 paid by PBCSD.
O = (M*N)/100 = CAWD cost.

Connection fees may not be used to fund replacement costs

CARMEL AREA WASTEWATER DISTRICT
CONNECTION FEE CALCULATIONS

Based on audited figures for capital assets at June 30, 2021
effective June 1, 2022

Balance of applicable assets - June 30, 2021		101,626,665.98
Depreciated Value.....	54,113,078.94	
ENR Updated Value.....	87,201,563.94	
Local Value - Net after grant funds.....	85,321,723.87	
Excluded Assets		
Reclamation – Tertiary Structures	35,384,151.66	
Reclamation – O&M	460,305.31	
Pump Station Structures	1,170,301.67	
Pump Station Equipment	1,509,600.36	
Sewer System	13,293,350.40	
CAWD's share - Net of PBCSD reimbursement.....		27,001,411.50
Add Current assets balances at June 30, 2019.....		43,404,198.94
(A) Total value of applicable assets.....		70,405,610.44
(B) Average daily flow per equivalent residential unit as prescribed by the County.....	235 gpd	
(C) CAWD's share of authorized flows: 2/3 x 3 mgd.....	2,000,000 gpd	
(D) Connection fee per gallon per day: (A) divided by (C).....	$35.20	
Connection fee per Equivalent Residential Unit (B) X (D).....		**$ 8,272.66**

Note: Applicable assets exclude Collection sewers, pipelines and pump stations, and the tertiary portion of the Reclamation Project.

Formula used was suggested by Kennedy/Jenks/Chilton and has been used since 1985.

RESOLUTION NO. 2022-26

A RESOLUTION SPECIFYING THE DISTRICT SEWER CONNECTION AND ANNEXATION FEES, AS ADOPTED BY ORDINANCE NO. 85-2, COMMENCING JUNE 1, 2022

-oOo-

WHEREAS, Ordinance No. 85-2 establishes and adopts sewer connection and annexation fees for the Carmel Area Wastewater District, pursuant to a general formula for the determination of said fees as set forth in that ordinance, with said fees to be adjusted annually, or more frequently, based upon certain factors and determinations to be made by the District General Manager, including the current value of District assets; and

NOW, THEREFORE, BE IT RESOLVED by the Board of Directors of the Carmel Area Wastewater District that, based upon the revised information now presented to it, the District's sewer connection and annexation fees, as adopted and established by Ordinance No. 85-2, are hereby specified to be $8,272.66 per equivalent residential unit or per acre of vacant land, commencing June 1, 2022, and continuing until revised by further action of this Board.

PASSED AND ADOPTED by the Board of Directors of the Carmel Area Wastewater District at a regular meeting duly held on May 26, 2022, by the following vote:

AYES: BOARD MEMBERS:

NOES: BOARD MEMBERS:

ABSENT: BOARD MEMBERS:

ABSTAIN: BOARD MEMBERS:

_____

Ken White, President of the Board

ATTEST:

_____

Domine Barringer, Secretary of the Board

Information/Discussion

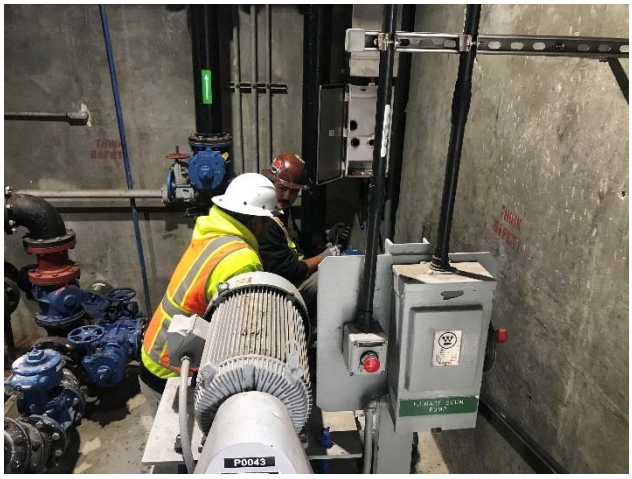
Carmel Area Wastewater District

WWTP Elec/Mech Rehab and Sludge Holding Tank Replacement Project

Construction Progress Report

May 11th, 2022

Prepared by: Patrick Treanor, Plant Engineer
Contractor: Clark Bros Inc (CBI)



Section 1: Project Summary

Project Summary			
General Contractor		Clark Bros Inc	
Contract Value			
Contract Bid Amount		$7,291,500	
Change Orders Issued to Date		1	
Value Added Change Order Cost (1)	% of Bid Amount	$28,199.96	0.38%
Non Value Added Change Order Cost (2)	% of Bid Amount	$47,839.58	0.66%
Total Change Order Cost	% of Bid Amount	$76,039.54	1.0%
Current Contract Value		$7,367,539.54	
Open/Pending Potential Change Orders (PCO)		0	
Contract Time			
Notice To Proceed		September 7th, 2021	
Original Contract Time		550 Calendar Days	
Calendar Days Elapsed		246 Days	
Weather Days: Accepted to Date		0 Days	
Contract Change Order(s) Time Extension		0 Days	
Current Contract Completion Date		March 3rd, 2023	
Contract Progress Summary			
Total Project Time Expended		45%	
Total Project Cost Expended		33% (not including retention)	

Notes:

1. Value Added Change Orders include: District Requested Additional Work and Betterments
2. Non Value Added Change Orders include: Design Issues, and Unforeseen/Differing Site Conditions

Section 2: Work Performed This Month

2.1 General

Work this month included final stripping of tank wall forms, concrete patching of the tank, and start of elevated walkway rebar. Also, underground piping work was conducted. Electrical conduit rough-in continued in the headworks area.

2.1.1 Submittals

Submittals reviewed this month included pipe layout drawings, concrete patching materials, and O&M Manuals.

2.1.2 PLC Programming

PLC programming by Frisch Engineering is in progress.

2.2 Site Work

2.2.1 Potholing/Locating Existing Utilities

None.

2.3 Sludge Holding Tank Replacement

The tank walls are completed and all forms are removed. Work has begun on the elevated walkway and stairway. Underground piping work was in progress this month for the new tank sludge feed.

2.4 Influent Pump Station Rehab

No work observed.

2.5 Headworks Rehab

Conduit lay out and rough-in continued inside the Headworks structure this month

2.6 Chlorination Building Rehab/3W System Improvements

The 3W bladder tank concrete pad was formed and rebar installed.

2.7 Effluent Pump Station Rehab

No work observed.

Section 3: Project Issues

In March 2022, Clark Bros informed CAWD of delays in procurement of the Motor Control Center (MCC) equipment. Clark Bros is currently working on a revised project schedule reflecting new equipment delivery dates. No major equipment will start arriving on-site until June/July with MCC equipment anticipated in September.

Section 4: RFI and Submittals Review Summary

The following table contains a summary of RFI/Clarifications and Submittals to date:

	Total Number Processed	Number Received in Current Month
RFI/Clarifications	35	4
Submittals	130	4

Section 5: Change Order Summary

Potential change orders (PCOs) are being generated for differing site conditions, owner requested changes, and design issues.

	Total Number Processed to Date	Open PCO Pending Quote/Approval	Number Generated in Current Month	Total Cost Approved to Date
Potential Change Orders (PCO)	6	0	0	NA
Change Orders	1	0	0	$76,039.54

Section 6: Project Schedule and Budget

6.1 Schedule

The Baseline CPM Schedule is being revised based on new equipment procurement lead times.

6.2 Budget

At this time the approved change orders amount to 1% of the project cost. The project management team is continually monitoring the costs of potential changes to manage costs.

Currently the amount to be paid to CBI is 33% (not including retention) of the total approved budget (36% with retention).

Section 7: Photos

- Sludge Holding Tank Replacement
- Headworks Rehab
- Chlorination Building Rehab/3W System Improvements

Photos:
Sludge Holding Tank
Replacement

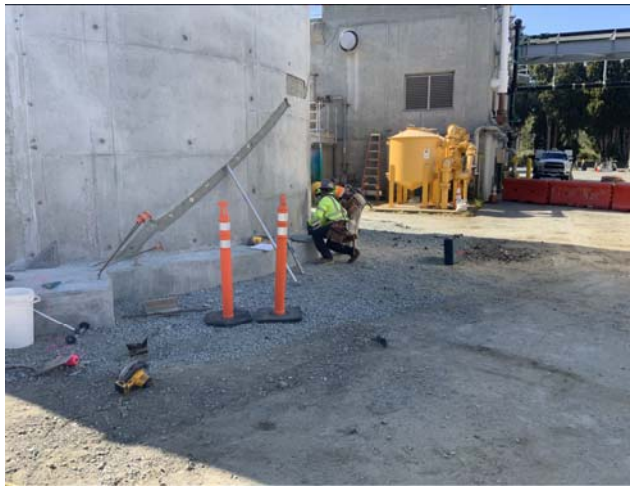









CAT



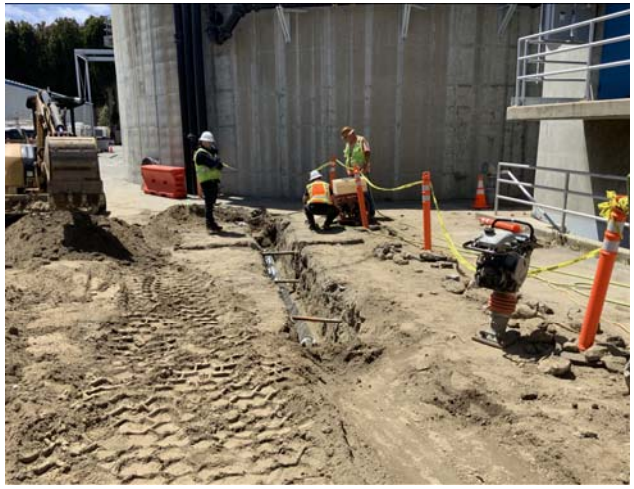



CAUTION





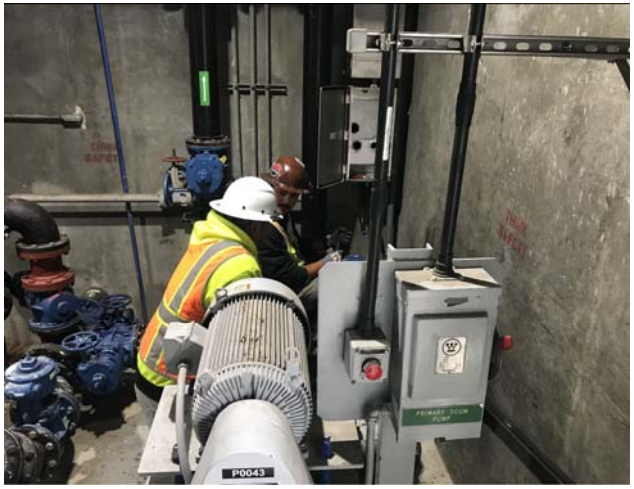








Photos:
Headworks Rehab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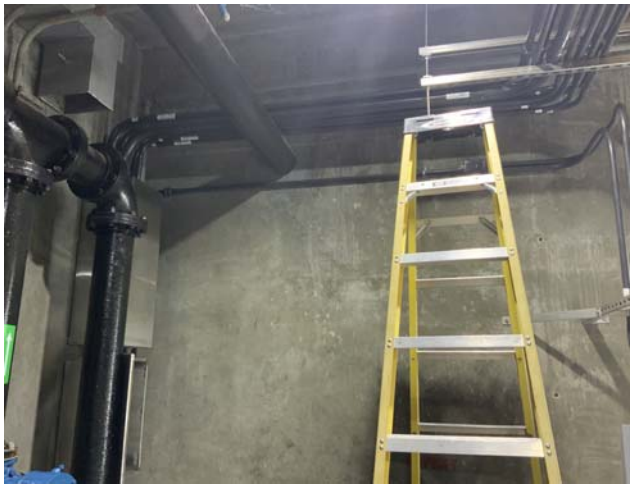

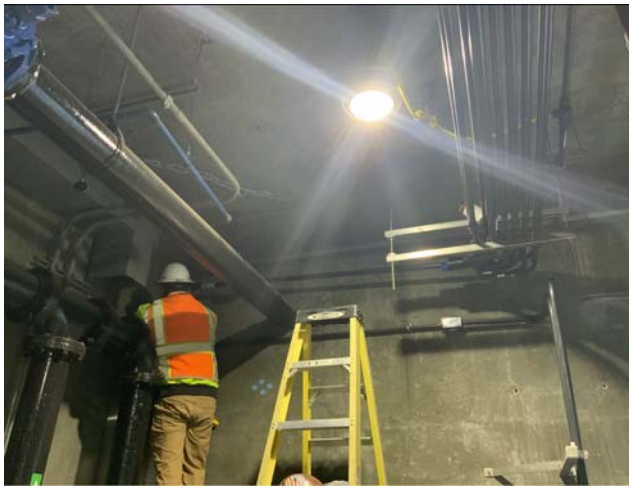

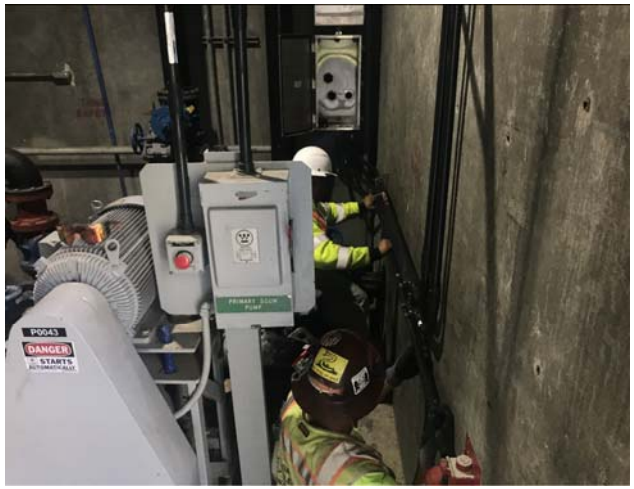
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DANGER

Photos:
Chlorination Building/3W System Improvements

STAFF REPORT

To: Board of Directors

From: Barbara Buikema, General Manager

Date: May 26, 2022

Subject: Pebble Beach Community Services District (PBCSD) – Regular Board Meeting on April 29, 2022

DISCUSSION

Agenda items from the April 29, 2022, meeting that are of specific interest to this District:

- Kelvin Ellison, Maintenance Technician was recognized as the 2021 California Water Environment Association Collection System Person of the Year.

- Total cash balance at the end of March 2022 was $24.6M; of that amount $20.2M was designated for Capital Acquisition and Outlay Reserves. Property taxes comprise roughly 80% of District revenues with user fees making up 22%. of total actual cost of wastewater operations.

- Staff presented the 2022-23 Preliminary Budget, which includes $17.1M in property tax revenues and 2.6M in charges for services. The fiscal year 2022-23 property tax revenue increased by $800K or 5%. The sewer user fees are proposed to increase by 9%. Estimated annual revenue that will be generated by the proposed fee increase is $1.38M. The budget includes $7.1M for wastewater expenditures, excluding the carry-over amount from the prior year. The proposed difference between the budgeted expenditures and the user fee revenues is to be financed from property tax ($2.5M), capital outlay reserve ($3.0M), and investment and other revenues $132K.

- The proposed residential sewer user fee of $29.10 per month is the lowest on the peninsula.

- The preliminary budget includes a recommended cost of living adjustment of 4.7%.

- The Board authorized execution of an agreement with Eide Bailly LLP for audit services for a period of three years 2021-22, 2022-23, and 2023-24. Staff requested proposals from twenty firms and received eight responses.

- Forest Lake Reservoir is holding 115 million gallons (MG) or 353-acre feet (AF) of recycled water. This represents 100% of the permitted capacity of 115 MG. The current storage volume is 3% above the historic average of 112 MG or 343 AF.

- Total irrigation water demand for the 2022 calendar year through March was 174-acre feet (AF). Total demand for the calendar year is 278% above the 5-year average of 46 AF through March. The month of March reflected a net storage increase of approximately 1 MG. By comparison, a net storage decrease of approximately 1 MG occurred in March of last year.

- Average daily wastewater flow of 353,000 gallons per day (GPD) was measured in March at the PBCSD-Carmel gate. This represents 32% of the total flow at the Carmel Area Wastewater District (CAWD) treatment facility. The measured PBCSD flow was 39% below the five-year average of 576,000 GPD for the month of March. The CAWD total flows were 29% below the five-year average of 1,569,000 GPD for March.

- The dry weather diversion facilities located adjacent to the 4th fairway and 18th green of Pebble Beach Golf Links were put into service on/around March 9th. The three wells (MPCC No. 8, MPCC No. 9, and MPCC Bird Rock) were brough online for four days in late March only to be taken offline (along with the two diversion facilities) due to a storm event near the end of the month Total production for the 2022 calendar year through mid-April was approximately 2.5 million gallons.

- Supervisory Control and Data Acquisition (SCADA) system upgrade is dependent upon material supply issues. Implementation at Pump Station P5 is dependent on receipt of PLC components. Given these impacts they have begun design work on Pump Station No. 3.

- Corrosion protection engineers conducted additional field work to confirm presence of a discontinuity along the section of recycled water pipeline that traverses underneath the Carmel River. They are in the process of amending cathodic protection design documents to provide mitigation.

- The Board approved an amended job description of the Deputy General Manager.

- Average daily wastewater flows measured in million gallons per day (MG) show:

MONTH	TOTAL	CAWD FLOW	PBCSD FLOW	PBCSD
July – 21	37.117	25.481	11.636	31.350%
Aug – 21	36.578	25.206	11.372	31.090%
Sept – 21	31.800	22.717	9.083	28.563%
Oct – 21	35.625	24.518	11.107	31.177%
Nov – 21	33.282	22.731	10.551	31.702%
Dec – 21	55.861	35.261	20.600	36.877%
Jan – 22	40.807	26.530	14.277	34.987%
Feb – 22	31.191	21.369	9.822	31.490%
Mar – 22	34.430	23.496	10.934	31.757%
Total	336.691	227.309	109.382	32.487%

STAFF REPORT

To: Board of Directors

From: Barbara Buikema, General Manager

Date: May 26, 2022

Subject: Reclamation Management Committee (RMC) Meeting 05-10-22

RECOMMENDATION

No action is required; this report is informational only.

DISCUSSION

- The RMC accepted the Carmel Area Wastewater District (CAWD)/Pebble Beach Community Service District (PBCSD) Reclamation Project 2022-23 Budget and recommended that it go before the CAWD Board for approval. This budget reflects the inflationary pressures and supply line difficulties we are experiencing at this time.

- Mr. Grover reviewed the financial statements indicating the project was in good financial standing as it moves into the spring/summer irrigation season.

- Mr. Waggoner reviewed the maintenance and water recovery efforts at the plant and is working with Trussell Engineering to maximize water production and maximize the life span of the membranes. Historically membranes have lasted only 1.5 years, we now have two cells that were initiated in late 2018 and one in September 2021.

- Mr. Treanor provided an update on the Sulfuric Acid Tank Project. The original subcontractor has been replaced and it appears the project is on track.

- The treatment facility ran out of ammonia on May 9th, which forced the District to discharge approximately 80K gallons to the bay. In an effort to mitigate a repeat of this type of issue, the RMC approved the replacement of the ammonia tank on an emergency basis.

- Mr. Becker, District Engineer of PBCSD gave a review of activities in the Distribution System including the 90% design submittal for the pipeline cathodic protection system. He reviewed the capital budget to date and indicated the variance was an increase of $35K.

- Forest Lake Reservoir is at 94% of 115 million gallons (MG) of the permitted maximum capacity or 108 MG. Storage volume at Forest Lake Reservoir first reached maximum capacity on January 21st and remained at or near maximum capacity throughout February and into March. The onset of the irrigation season was observed to commence on April 25th.

Other Items

Action Required- Requesting Motion to Accept the Reports

STAFF REPORT

To: Board of Directors

From: Barbara Buikema, General Manager

Date: May 26, 2022

Subject: Summary of Monterey County Treasurer Report dated 03-31-22

RECOMMENDATION

Action required – requesting acceptance of report.

DISCUSSION

The U.S. economy during this period was characterized by the following factors: a strong labor market, inflation at a 40-year high, and depressed consumer confidence. The Russian invasion of Ukraine also impacted the economic landscape by causing commodity prices to soar (particularly those of energy), creating significant geopolitical uncertainty, and triggering market volatility.

The Federal Reserve tightened monetary policy by initiating the first of what is expected to be many interest rate increases in 2022. The Federal Reserve's balance sheet reduction is also likely to begin soon.

On March 31, 2022, the Monterey County investment portfolio contained an amortized book value of $2,425,854,604 spread among 241 separate securities and funds. The par value of those funds was $2,419,914,130 with a market value of $2,371,225,548 or 98% of amortized book value. The portfolio's net earned income yield for the period was 0.40% The portfolio produced an estimated quarterly income of $2,375,763 that will be distributed proportionally to all agencies participating in the investment pool. The investment portfolio had a weighted average maturity of 505 days. The County Treasury continues to use shorter term debt to provide portfolio liquidity and enhanced investment opportunities.

PORTFOLIO CHARACTERISTICS			
	09-30-21	12-31-21	03-31-22
Total Assets	$2,129,066,305.90	$2,473,716,071.02	$2,419,914,130
Market Value	$2,140,839,223.96	$2,471,600,788.14	$2,371,225,548
Days to Maturity	571	503	505
Yield	0.57%	0.42%	0.40%
Estimated Earnings	$2,945,448.07	$2,371,429.71	$2,375,762.59

The Monterey County Treasurer's portfolio consists of fixed income investments, all of which are authorized by the State of California Government Code §53601.

PORTFOLIO ASSET COMPOSITION 03-31-22	
Corporate Notes	10.5%
Overnight Liquid Assets	18.8%
US Treasuries	41.8%
Federal Agencies	15.1%
Commercial Paper	8.3%
Negotiable CDs	3.2%
Supranationals	2.4%
Municipal Bonds	<0.1%
Asset Backed Securities	<0.1%

Future Strategy: Given the volatile market environment related to the COVID-19 pandemic, the Treasury continues strategically investing matured assets while accounting for potential liquidity needs. As market conditions evolve, the portfolio is well positioned for interest rate increases and will continue to be actively managed under the established tenets of safety and liquidity while seeking to maximize the total rate of return.

The investment portfolio was in compliance with all applicable provisions of state law and the adopted Investment Policy and contained sufficient liquidity to meet all projected outflows over the next six months.

Note: The Monterey County Treasurer Report is available on the Monterey County Treasury website.

CARMEL AREA WASTEWATER DISTRICT
SUMMARY OF RETIREMENT PENSION PLAN TRUSTEES
MEETING HELD – May 17, 2022

A meeting of the Retirement Pension Plan Trustees was held on Tuesday, May 17, 2022 at 2:30 p.m.

Those Present Included: Rob Wellington, Legal Counsel, Trustee
Robert Siegfried, Director, Trustee
Barbara Buikema, General Manager, Trustee
Bill Hastie, Hastie Financial Group
Haley Hitchman, Hastie Financial Group

Note: This meeting was held via ZOOM software

Action required: Requesting Acceptance of Report

I. 1st Quarter 2022 Review

After a relatively calm 2021, volatility in the global equity markets returned in the first quarter of 2022. This volatility was brought on by inflation that surged to a 40-year high, the Federal Reserve stated intent to raise interest rates faster than previously thought, and Russia's full-scale military invasion of Ukraine. These factors fueled a rise in volatility and pushed stocks lower in the first quarter of 2022.

All four major U.S. equity indices posted negative returns for the first quarter of 2022, although the S&P 500 and Dow saw only mild losses compared to the NASDAQ and Russell 2000 (small capitalization stocks). Investors rotated out of growth-oriented, technology stocks in favor of less expensive value stocks, such as financials and energy stocks. Accordingly, value stocks dramatically outperformed growth stocks over the previous three months.

In the face of rising inflation and the Federal Reserve consistently signaling that it was going to raise interest rates faster than investors had previously expected, the U.S. bond market posted one of its worst quarterly performances in many years. As expected, shorter-duration bonds outperformed longer-duration bonds (duration is a measure of a bond's sensitivity to changes in interest rates) as rising inflation weighed heavily on the longer-duration issues.

Investment-grade corporate bonds posted negative returns and underperformed lower-quality but higher-yielding (junk bonds) corporate bonds, which also declined in value but more modestly so.

This underperformance of investment-grade bonds reflected the impact of rising Treasury yields, while the outperformance of high-yield bonds serves as a reminder of the still-positive outlook for the U.S. economy and corporate America, despite the macroeconomic headwinds of inflation, geopolitical unrest, and rising interest rates.

1st quarter was especially challenging given the "risk-on, risk-off" theme of the U.S. stock and bond markets, vacillating from "buy on the dip" and "sell into the rally." Day-to-day performance varied widely often with the news headlines of the day.

As of 03-31-22 the total weighted return for the quarter was <5.30%>. The Ending Balance with accrued interest was $6,406,527. Total Gains for the quarter were <$366,633>.

II. 2nd Quarter Action Plan

Investors continue to face uncertainty entering the second quarter of 2022. There is anticipation of continued volatility across most asset classes in the short term. Note that the U.S. economy is very strong, and unemployment remains historically low. Interest rates are rising but remain far below levels where most economists forecast that they would begin to slow the economy. And consumer spending, one of the main engines of growth for the U.S. economy, is robust, and corporate and personal balance sheets are healthy.

Hastie Financial has recommended multiple changes for the 2nd quarter including purging growth stocks, focusing on value, and use of alternatives that will not be tied to the markets. Inflation in the energy sector is an opportunity, as well as in the financial and industrial sectors. Hastie recommends a well-diversified portfolio remains the best path forward.

Portfolio Risk Measures (3-year measure):

	Three Year	S&P 500	Five Year	S&P 500	Ten Year	S&P 500
Beta (a)	0.60		0.59		0.60	
Standard Deviation (b)	11.69	17.76	10.00	15.78	8.52	13.24
Mean	12.98	18.92	10.02	15.99	8.21	14.64
Alpha	1.20		0.12		<0.72>	

(a) Strategy is to maintain Beta in the range of 0.60 - 0.67.

(b) Strategy is to remain at roughly 2/3 of S&P 500, this is inline with current investment objectives.

III. Section 115

The Section 115 account balance as of end of 1st quarter was:

Strategy 1	$245,372.99
Strategy 2	$242,533.99

This represents a combined loss of $12,093 or 2.4% since account inception. The losses experienced were lower than those in the Strategic Asset Management Plan.

There being no further business, the meeting was adjourned at approximately 3:20 p.m.

Respectfully submitted,
Barbara Buikema, General Manager

Monterey County
Board of Supervisors

168 West Alisal Street,
1st Floor
Salinas, CA 93901
831.755.5066
www.co.monterey.ca.us

Board Order

A motion was made by Supervisor Chris Lopez, seconded by Supervisor Luis A. Alejo to:

Receive and Accept the Treasurer's Report of Investments for the Quarter Ending March 31, 2022.

PASSED AND ADOPTED on this 26th day of April 2022, by roll call vote:

AYES: Supervisors Alejo, Phillips, Lopez, Askew and Adams
NOES: None
ABSENT: None
(Government Code 54953)

I, Valerie Ralph, Clerk of the Board of Supervisors of the County of Monterey, State of California, hereby certify that the foregoing is a true copy of an original order of said Board of Supervisors duly made and entered in the minutes thereof of Minute Book 82 for the meeting April 26, 2022.

Dated: May 3, 2022
File ID: 22-340
Agenda Item No.: 57

Valerie Ralph, Clerk of the Board of Supervisors
County of Monterey, State of California

Julian Lorenzana, Deputy

Introduced: 4/13/2022 **Current Status:** Draft

Version: 1 **Matter Type:** General Agenda Item

Receive and Accept the Treasurer's Report of Investments for the Quarter Ending March 31, 2022.

RECOMMENDATION:

It is recommended that the Board of Supervisors:

Receive and Accept the Treasurer's Report of Investments for the Quarter Ending March 31, 2022.

SUMMARY:

Government Code Section 53646 (b) (1) states the Treasurer may submit a quarterly report of investments. The attached exhibits provide a narrative portfolio review of economic and market conditions that support the investment activity during the January - March period, the investment portfolio position by investment type, and the investment portfolio by maturity range.

DISCUSSION:

The U.S. economy during this period was characterized by the following factors: a strong labor market, inflation at a 40-year high, and depressed consumer confidence. The Russian invasion of Ukraine also impacted the economic landscape by causing commodity prices to soar (particularly those of energy), creating significant geopolitical uncertainty, and triggering market volatility.

The Federal Reserve tightened monetary policy by initiating the first of what is expected to be many interest rate increases in 2022. The Federal Reserve's balance sheet reduction is also likely to begin soon.

On March 31, 2022, the Monterey County investment portfolio contained an amortized book value of $2,425,854,604 spread among 241 separate securities and funds. The par value of those funds was $2,419,914,130 with a market value of $2,371,225,548 or 98% of amortized book value. The portfolio's net earned income yield for the period was 0.40%. The portfolio produced an estimated quarterly income of $2,375,763 that will be distributed proportionally to all agencies participating in the investment pool. The investment portfolio had a weighted average maturity of 505 days. The County Treasury continues to use shorter term debt to provide portfolio liquidity and enhanced investment opportunities.

The investment portfolio follows all applicable provisions of state law and the adopted Investment Policy and contains sufficient liquidity to meet all projected outflows over the next six months. Market value pricings were obtained through resources such as Bloomberg LLP, US Bank, and live-bid

pricing of corporate securities.

OTHER AGENCY INVOLVEMENT:
A copy of this report will be distributed to all agencies participating in the investment pool. The Treasury Quarterly Reports are also posted on the County Treasurer's website. A monthly report of investment transactions is provided to the Board of Supervisors as required by Government Code 53607.

FINANCING:
The investment portfolio contains sufficient liquidity to meet all projected expenditures over the next six months. Investment earnings in the General Fund appear to be trending somewhat below the CAO's FY 2021-22 budget due to significantly lower yields on investments purchased during the COVID-19 Pandemic.

BOARD OF SUPERVISORS STRATEGIC INITIATIVES:
This recommendation supports the Administration initiative by providing transparency and accountability in the management of County funds in the Treasurer's investment portfolio.

Mark a check to the related Board of Supervisors Strategic Initiatives
X Administration

DocuSigned by:
Jake Stroud
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4/14/2022 | 12:11 PM PDT
Prepared by Jake Stroud, Chief Deputy Treasurer-Tax Collector, x5828

DocuSigned by:
Mary A. Zeeb
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4/14/2022 | 1:25 PM PDT
Approved by Mary A. Zeeb, Treasurer-Tax Collector, x5015

Attachments:
Exhibit A - Investment Portfolio Review 03.31.22
Exhibit B - Portfolio Management Report 03.31.22
Exhibit C - Aging Summary 04.01.22

cc:
Auditor-Controller - Internal Audit Section
All depositors
County Administrative Office
County Counsel

Exhibit A
Investment Portfolio Review
Quarter Ending March 31, 2022

OVERVIEW

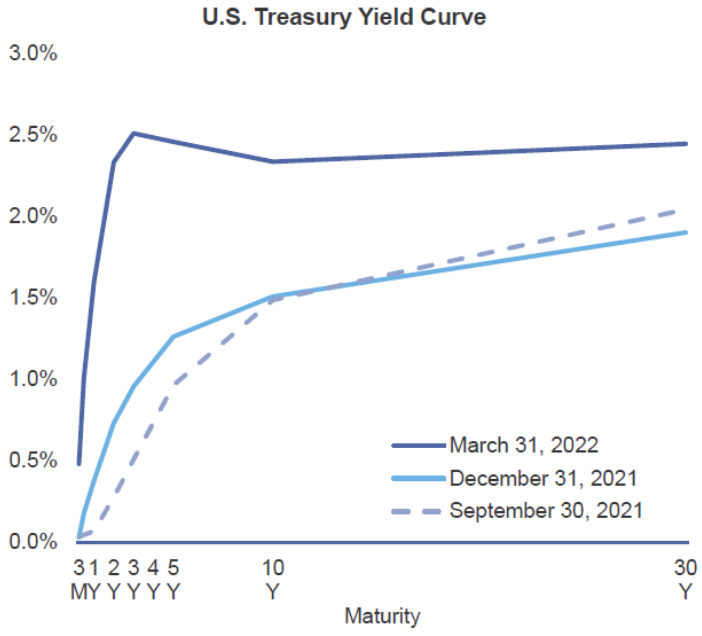
January 1, 2022 – March 31, 2022
The U.S. economy during this period was characterized by the following factors: a strong labor market, inflation at a 40-year high, and depressed consumer confidence. The Russian invasion of Ukraine also impacted the economic landscape by causing commodity prices to soar (particularly those of energy), creating significant geopolitical uncertainty, and triggering market volatility.

The Federal Reserve tightened monetary policy by initiating the first of what is expected to be many interest rate increases in 2022. The Federal Reserve's balance sheet reduction is also likely to begin soon.

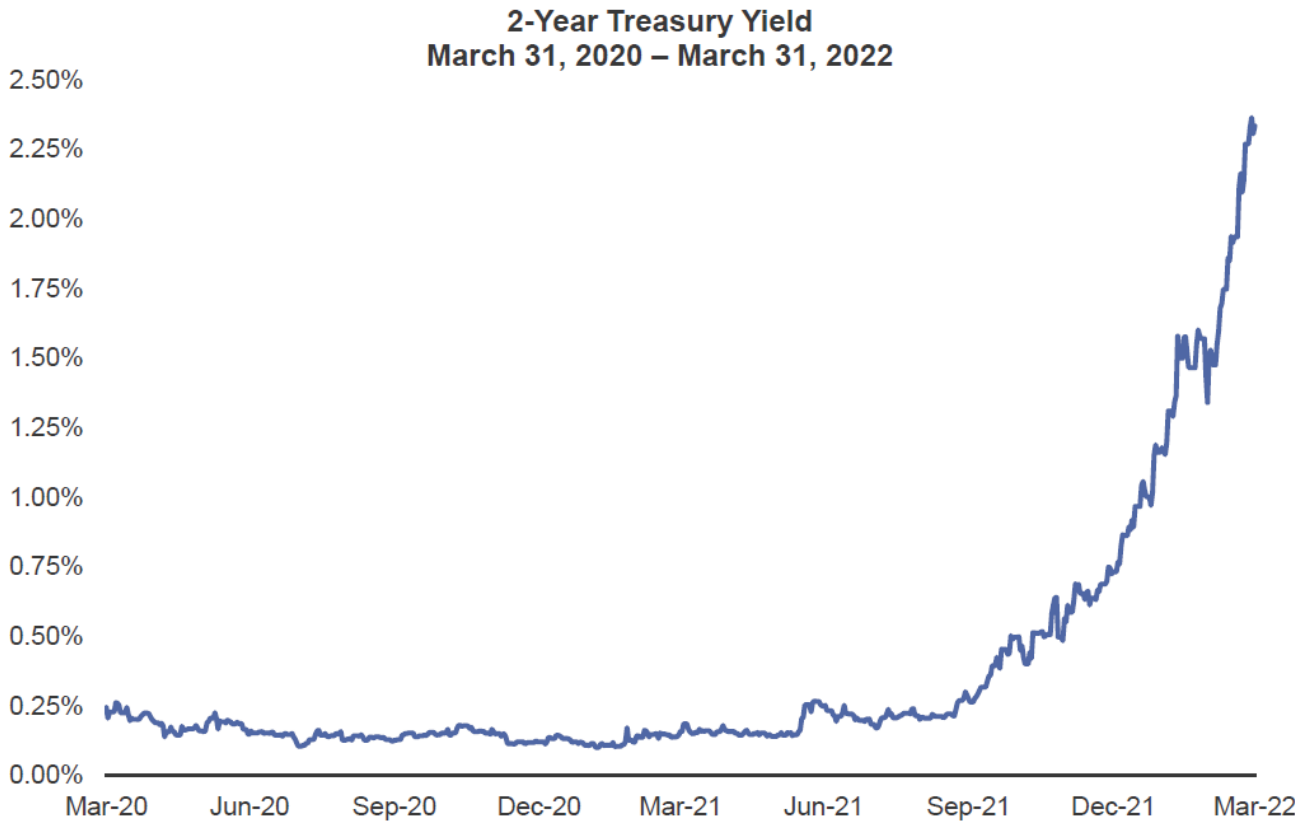
U.S. TREASURY YIELD CURVE

- The U.S. Treasury yield curve was significantly steeper from quarter end to quarter end.
- The yield curve was partially inverted at quarter end, as the yield on the 3-year Treasury note ended the quarter above longer-term rates.

	03/31/22	12/31/21	Change
3-month	**0.48%**	0.03%	+0.45%
1-year	**1.60%**	0.38%	+1.22%
2-year	**2.33%**	0.73%	+1.60%
3-year	**2.51%**	0.96%	+1.55%
5-year	**2.46%**	1.26%	+1.20%
10-year	**2.34%**	1.51%	+0.83%
30-year	**2.45%**	1.90%	+0.55%



- The 2-year Treasury yield increased significantly during the quarter.



PORTFOLIO STRATEGY

Monterey County Treasury investments continue to focus on capturing relative value while remaining cautious. The following indicators reflect key aspects of the investment portfolio in light of the above noted conditions:

1. Market Access – During the quarter, investment purchases for the portfolio included Corporate Notes, U.S. Treasury Notes, Commercial Paper, and Negotiable CDs. The Treasurer continues to maintain an adequate level of liquid assets to ensure the ability to meet all cash flow needs.

2. Diversification - The Monterey County Treasurer's portfolio consists of 241 separate fixed income investments, all of which are authorized by the State of California Government Code 53601 and the Investment Policy.

   The portfolio asset spread is detailed in the table below:

Portfolio Asset Composition								
Corporate Notes	Negotiable CDs	Overnight Liquid Assets	U.S. Treasuries	Federal Agencies	Commercial Paper	Supra-nationals	Municipal Bonds	Asset Backed Securities
10.5%	3.2%	18.8%	41.8%	15.1%	8.3%	2.4%	<0.1%	<0.1%

- Total may not equal 100% due to rounding

3. Credit Risk – Approximately 87.2% of the investment portfolio is comprised of U.S. Treasuries, Federal Agency securities, Negotiable CDs, and other liquid funds. All assets have a better than investment grade rating. U.S. Treasuries are not specifically rated, but are considered the safest of all investments. All corporate debt (10.5%) is rated in the higher levels of investment grade and all Federal Agency and Municipal holdings are rated AA- or higher. The Supranationals (2.4%) are rated AAA. The credit quality of the Treasurer's portfolio continues to be high.

   The portfolio credit composition is detailed in the table below:

	Portfolio Credit Composition							
AAA	AAAm	AA	A	A-1 (Short Term)	Aaf/S1+ (CalTRUST)	BBB+ (split rated)	LAIF (not rated)	Not Rated by S&P
2%	12%	59%	7%	11%	4%	2%	3%	<1%

- Total may not equal 100% due to rounding

4. Liquidity Risk – Liquidity risk, as measured by the ability of the County Treasury to meet withdrawal demands on invested assets, was actively managed during the January – March quarter. The portfolio's weighted average maturity was 505 days, and the Treasurer maintained $444.7 million (19%) invested in overnight investments and $497.2 million (21%) in securities with maturities of one day to one year to provide immediate liquidity to be able to react quickly to unanticipated needs or opportunities in the current environment.

PORTFOLIO CHARACTERISTICS

	December 31, 2021	March 31, 2022
Total Assets	$2,473,716,071	$2,419,914,130
Market Value	$2,471,600,788	$2,371,225,548
Days to Maturity	503	505
Yield	0.42%	0.40%
Estimated Earnings	$2,371,429.71	$2,375,762.59

Given the evolving market environment related to the COVID-19 Pandemic, the Treasury continues strategically investing matured assets while accounting for potential liquidity needs. As market conditions evolve, the portfolio will continue to be actively managed under the established tenets of safety and liquidity while seeking to maximize the total rate of return.

Exhibit B

Monterey County
Portfolio Management
Portfolio Details - Investments
March 31, 2022

CUSIP	Investment #	Issuer	Average Balance	Purchase Date	Par Value	Market Value	Book Value	Stated Rate	Moody's	S&P	YTM	Maturity Date
Money Market Accts - GC 53601(k)(2)												
SYS12159	12159	DREYFUS AMT FREE TAX EXEMPT MM			9,230,253.13	9,230,253.13	9,230,253.13	0.150			0.150	
		Subtotal and Average	**9,230,150.87**		**9,230,253.13**	**9,230,253.13**	**9,230,253.13**				**0.150**	
State Pool - GC 16429.1												
SYS11361	11361	LAIF			75,000,000.00	75,000,000.00	75,000,000.00	0.320			0.320	
		Subtotal and Average	**75,000,000.00**		**75,000,000.00**	**75,000,000.00**	**75,000,000.00**				**0.320**	
CALTRUST/CAMP - GC 53601(p)												
SYS12211	12211	CalTrust Liquidity			20,350,000.00	20,350,000.00	20,350,000.00	0.091			0.091	
SYS11802	11802	CalTrust Blackrock			0.00	0.00	0.00	0.025	Aaa	AAA	0.025	
SYS12296	11803	CalTrust (LEAF)			20,000,000.00	20,000,000.00	20,000,000.00	0.106			0.106	
SYS12219	12219	CalTrust MERMA			331,369.53	331,369.53	331,369.53	0.091			0.091	
SYS11801	11801	CalTrust Short Term			50,000,000.00	50,000,000.00	50,000,000.00	0.316	Aaa	AAA	0.316	
SYS10379	10379	Calif. Asset Mgmt			269,800,000.00	269,800,000.00	269,800,000.00	0.252		AAA	0.252	
		Subtotal and Average	**431,867,250.15**		**360,481,369.53**	**360,481,369.53**	**360,481,369.53**				**0.244**	
SWEEP ACCOUNT-MORG STNLY												
SYS12041	12041	Morgan Stanley			1.00	1.00	1.00	0.250			0.250	
		Subtotal and Average	**1.00**		**1.00**	**1.00**	**1.00**				**0.250**	
SWEEP ACCOUNT - CUSTOM												
SYS12138	12138	Morgan Stanley			22,506.35	22,506.35	22,506.35	0.064			0.064	
		Subtotal and Average	**143,548.65**		**22,506.35**	**22,506.35**	**22,506.35**				**0.064**	
Medium Term Notes - GC 53601(k)												
88579YBH3	12359	MMM COMPANY		02/24/2020	130,000.00	127,224.50	130,621.94	2.000	A1	A+	1.825	02/14/2025
02079KAB3	12397	Alphabet INC		08/17/2020	5,000,000.00	5,104,500.00	5,277,160.25	3.375	Aa2	AA+	0.432	02/25/2024
023135AW6	12317	Amazon		09/03/2019	200,000.00	201,276.00	201,068.63	2.400	A1	AA	1.936	02/22/2023
023135BP0	12375	Amazon		06/03/2020	5,415,000.00	5,326,356.45	5,412,037.79	0.400	A1	AA	0.447	06/03/2023
023135BW5	12501	Amazon		05/12/2021	5,680,000.00	5,467,568.00	5,674,156.65	0.450	A1	AA	0.499	05/12/2024
023135BW5	12502	Amazon		05/12/2021	75,000.00	72,195.00	74,922.84	0.450	A1	AA	0.499	05/12/2024
025816CM9	12544	American Express Credit		11/23/2021	135,000.00	127,245.60	134,792.01	1.650	A2	BBB+	1.685	11/04/2026
037833DV9	12383	Apple Inc Corp Notes		06/30/2020	5,000,000.00	4,935,700.00	5,019,262.85	0.750	Aa1	AA+	0.401	05/11/2023
037833AS9	12445	Apple Inc Corp Notes		12/11/2020	5,000,000.00	5,107,550.00	5,303,694.90	3.450	Aa1	AA+	0.524	05/06/2024
037833DM9	12568	Apple Inc Corp Notes		02/24/2022	4,130,000.00	4,072,303.90	4,120,369.04	1.800	Aaa	AA+	1.898	09/11/2024

Exhibit B

Monterey County
Portfolio Management
Portfolio Details - Investments
March 31, 2022

CUSIP	Investment #	Issuer	Average Balance	Purchase Date	Par Value	Market Value	Book Value	Stated Rate	Moody's	S&P	YTM	Maturity Date
Medium Term Notes - GC 53601(k)												
04636NAA1	12526	Astrazeneca Finance LLC		07/23/2021	135,000.00	125,161.20	135,530.43	1.200	A3	A-	1.101	05/28/2026
06406FAD5	12371	Bank of New York Mellon Corp		05/21/2020	125,000.00	124,831.25	127,033.11	2.200	A1	A	0.932	08/16/2023
06406HCX5	12417	Bank of New York Mellon Corp		09/30/2020	5,000,000.00	5,054,500.00	5,306,575.65	3.250	A1	A	0.702	09/11/2024
06406RAN7	12478	Bank of New York Mellon Corp		03/31/2021	4,000,000.00	3,855,760.00	4,059,982.69	1.600	A1	A	1.088	04/24/2025
06406RAS6	12493	Bank of New York Mellon Corp		04/26/2021	50,000.00	47,869.00	49,963.09	0.500	A1	A	0.536	04/26/2024
06406RAN7	12554	Bank of New York Mellon Corp		01/07/2022	5,000,000.00	4,819,700.00	5,034,939.17	1.600	A1	A	1.360	04/24/2025
06051GJH3	12436	Bank of America Corp		11/20/2020	4,400,000.00	4,257,044.00	4,407,726.05	0.810	A2	A-	0.740	10/24/2024
06051GHW2	12479	Bank of America Corp		03/31/2021	5,000,000.00	4,913,000.00	5,187,817.55	2.456	A2	A-	1.074	10/22/2025
06051GJH3	12490	Bank of America Corp		04/19/2021	5,000,000.00	4,837,550.00	5,002,809.13	0.810	A2	A-	0.779	10/24/2024
06051GFX2	12562	Bank of America Corp		02/03/2022	90,000.00	91,115.10	94,725.13	3.500	A2	A-	2.137	04/19/2026
06051GKM0	12579	Bank of America Corp		03/22/2022	100,000.00	99,865.00	100,000.00	3.384	A2	A-	3.384	04/02/2026
110122DT2	12432	BRISTOL-MYERS SQUIBB		11/13/2020	80,000.00	77,769.60	80,000.00	0.537	A2	A+	0.537	11/13/2023
110122DT2	12439	BRISTOL-MYERS SQUIBB		11/20/2020	5,000,000.00	4,860,600.00	5,002,576.42	0.537	A2	A+	0.505	11/13/2023
110122CM8	12444	BRISTOL-MYERS SQUIBB		12/11/2020	5,000,000.00	5,037,100.00	5,255,010.92	2.900	A2	A+	0.621	07/26/2024
084664BT7	12291	Berkshire Hathaway Finance		04/26/2019	8,625,000.00	8,645,268.75	8,629,948.35	3.000	Aa2	AA	2.509	05/15/2022
14913R2D8	12481	CATERPILLAR FINL SERVC		03/31/2021	5,000,000.00	4,902,150.00	5,017,016.18	0.650	A2	A	0.380	07/07/2023
14913R2L0	12506	CATERPILLAR FINL SERVC		05/17/2021	10,000,000.00	9,565,300.00	9,990,495.93	0.450	A2	A	0.495	05/17/2024
14913R2P1	12530	CATERPILLAR FINL SERVC		09/14/2021	135,000.00	128,652.30	134,849.92	0.600	A2	A	0.645	09/13/2024
16764BV1	12368	Chevron Corp. Global		05/11/2020	75,000.00	75,000.00	75,000.00	1.141			1.141	05/11/2023
166764BT6	12404	Chevron Corp. Global		09/17/2020	5,000,000.00	5,057,150.00	5,216,763.72	2.895	Aa2	AA-	0.503	03/03/2024
808513BN4	12474	CHARLES SCHWAB CORP		03/18/2021	25,000.00	24,168.75	24,991.82	0.750	A2	A	0.767	03/18/2024
172967GL9	12308	Citibank		07/12/2019	250,000.00	252,907.50	251,852.94	3.375	A3	BBB+	2.523	03/01/2023
172967MR9	12406	Citibank		09/17/2020	5,000,000.00	4,958,950.00	5,073,733.54	1.678	A3	BBB+	0.711	05/15/2024
172967MX6	12536	Citibank		10/07/2021	4,500,000.00	4,289,760.00	4,513,382.24	0.981	A3	BBB+	0.845	05/01/2025
172967ND9	12539	Citibank		11/08/2021	3,840,000.00	3,654,182.40	3,861,262.63	1.281	A3	BBB+	1.071	11/03/2025
191216CL2	12403	Coca- Cola Co		09/16/2020	5,000,000.00	4,948,650.00	5,155,419.58	1.750	A1	A+	0.458	09/06/2024
20030NCR0	12414	COMCAST CORP		09/30/2020	5,000,000.00	5,104,200.00	5,301,199.06	3.700	A3	A-	0.703	04/15/2024
254687FK7	12319	The Walt Disney Company		09/06/2019	240,000.00	235,680.00	239,605.92	1.750	A2	BBB+	1.851	08/30/2024
291011BG8	12415	EMERSON ELECTRIC CO		09/30/2020	80,000.00	80,732.80	85,704.75	3.150	A2	A	0.848	06/01/2025
38141GXS8	12462	Goldman Sachs		02/17/2021	60,000.00	55,897.20	60,109.27	0.855	A2	BBB+	0.807	02/12/2026
38141GYE8	12515	Goldman Sachs		06/22/2021	10,000,000.00	9,671,800.00	9,985,198.19	0.657	A2	BBB+	0.746	09/10/2024
38141GXZ2	12555	Goldman Sachs		01/07/2022	5,000,000.00	4,893,800.00	4,985,854.74	0.673	A2	BBB+	0.946	03/08/2024
38141GZH0	12560	Goldman Sachs		01/24/2022	130,000.00	126,737.00	130,000.00	1.757	A2	BBB+	1.757	01/24/2025
437076CM2	12581	Home Depot Inc		03/28/2022	20,000.00	19,932.00	19,965.10	2.700	N/A	A	2.760	04/15/2025
438516BW5	12370	Honeywell International		05/20/2020	100,000.00	99,716.00	102,965.76	2.300	A2	A	0.995	08/15/2024
438516CB0	12571	Honeywell International		02/25/2022	5,000,000.00	4,816,200.00	4,868,696.43	1.350	A2	A	2.214	06/01/2025

Exhibit B

Monterey County
Portfolio Management
Portfolio Details - Investments
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CUSIP	Investment #	Issuer	Average Balance	Purchase Date	Par Value	Market Value	Book Value	Stated Rate	Moody's	S&P	YTM	Maturity Date
Medium Term Notes - GC 53601(k)												
438516CB0	12574	Honeywell International		03/01/2022	65,000.00	62,610.60	63,253.90	1.350	A2	A	2.234	06/01/2025
02665WCZ2	12318	American Honda Finance		09/03/2019	200,000.00	198,594.00	201,608.28	2.400	A3	A-	2.021	06/27/2024
02665WDF5	12333	American Honda Finance		11/27/2019	5,000,000.00	5,003,100.00	4,999,986.28	1.950	A3	A-	1.952	05/20/2022
459200JZ5	12527	IBM Corp Notes		07/23/2021	120,000.00	121,256.40	130,600.49	3.300	A3	A-	1.094	05/15/2026
24422EUA5	12180	John Deere Capital Corp		03/12/2018	250,000.00	252,252.50	249,105.14	2.700	A2	A	3.209	01/06/2023
24422EVH9	12374	John Deere Capital Corp		06/04/2020	3,340,000.00	3,278,711.00	3,338,880.81	0.700	A2	A	0.726	07/05/2023
24422EVH9	12382	John Deere Capital Corp		06/30/2020	5,000,000.00	4,908,250.00	5,009,184.61	0.700	A2	A	0.553	07/05/2023
24422EUX5	12446	John Deere Capital Corp		12/11/2020	5,000,000.00	5,012,350.00	5,198,025.73	2.600	A2	A	0.531	03/07/2024
24422EWA3	12573	John Deere Capital Corp		02/28/2022	65,000.00	61,186.45	63,220.00	1.700	A2	A	2.309	01/11/2027
46647PBZ8	12473	JP Morgan Chase		03/16/2021	65,000.00	63,765.00	65,000.00	0.697	A2	A-	0.697	03/16/2024
46647PBQ8	12482	JP Morgan Chase		04/05/2021	3,900,000.00	3,847,233.00	3,954,814.91	1.514	A2	A-	0.557	06/01/2024
46647PCH7	12510	JP Morgan Chase		06/01/2021	165,000.00	157,339.05	165,000.00	0.824	A2	A-	0.824	06/01/2025
46647PCH7	12517	JP Morgan Chase		06/22/2021	10,000,000.00	9,535,700.00	9,977,665.96	0.824	A2	A-	0.920	06/01/2025
46625HRV4	12545	JP Morgan Chase		11/23/2021	125,000.00	124,032.50	131,599.79	2.950	A2	A-	1.830	10/01/2026
46647PCH7	12561	JP Morgan Chase		01/24/2022	10,000,000.00	9,535,700.00	9,820,452.36	0.824	A2	A-	1.651	06/01/2025
539830BE8	12468	Lockheed Martin Corp		03/08/2021	60,000.00	60,362.40	63,319.70	2.900	A3	A-	0.840	03/01/2025
539830BH1	12528	Lockheed Martin Corp		07/23/2021	120,000.00	122,870.40	130,928.58	3.550	A3	A-	0.947	01/15/2026
57636QAB0	12282	MASTERCARD INC		04/04/2019	250,000.00	254,455.00	253,142.24	3.375	A1	A+	2.699	04/01/2024
58933YAR6	12469	MERCK & CO INC		03/09/2021	125,000.00	125,290.00	131,083.94	2.750	A1	A+	0.897	02/10/2025
6174468W2	12458	Morgan Stanley		01/25/2021	100,000.00	98,373.00	100,000.00	0.529	A1	BBB+	0.529	01/25/2024
61772BAA1	12491	Morgan Stanley		04/22/2021	15,000.00	14,690.85	15,000.00	0.731	A1	BBB+	0.731	04/05/2024
61772BAA1	12492	Morgan Stanley		04/22/2021	50,000.00	48,969.50	50,039.50	0.731	A1	BBB+	0.671	04/05/2024
6174468R3	12516	Morgan Stanley		06/22/2021	5,000,000.00	4,708,450.00	4,998,932.65	0.864	A1	BBB+	0.872	10/21/2025
61747YEA9	12519	Morgan Stanley		06/24/2021	10,000,000.00	9,500,300.00	9,966,537.85	0.790	A1	BBB+	0.934	05/30/2025
66989HAP3	12412	Novartis Capital Corp		09/22/2020	125,000.00	121,980.00	129,010.06	1.750	A1	AA-	0.594	02/14/2025
641062AU8	12529	Nestle Holdings Inc.		09/14/2021	195,000.00	185,154.45	195,000.00	0.606	N/A	AA-	0.606	09/14/2024
63743HFC1	12564	National Rural Util Coop		02/07/2022	40,000.00	38,752.00	39,998.86	1.875	A2	A-	1.876	02/07/2025
717081ES8	12280	PFIZER INC		04/04/2019	250,000.00	252,772.50	251,173.00	2.950	A2	A+	2.692	03/15/2024
717081ES8	12402	PFIZER INC		09/16/2020	5,000,000.00	5,055,450.00	5,232,979.83	2.950	A2	A+	0.486	03/15/2024
857477BM4	12575	State Street Corp		03/14/2022	125,000.00	123,941.25	125,744.95	2.901	A1	A	2.742	03/30/2026
857477BE2	12576	State Street Corp		03/17/2022	5,000,000.00	4,928,350.00	4,947,470.09	2.354	A1	A	2.776	11/01/2025
89236TGT6	12358	Toyota Motor Corporation		02/21/2020	130,000.00	126,198.80	129,840.54	1.800	A1	A+	1.845	02/13/2025
89236THF5	12401	Toyota Motor Corporation		09/16/2020	5,000,000.00	4,880,000.00	5,002,775.48	0.500	A1	A+	0.459	08/14/2023
89236TGT6	12485	Toyota Motor Corporation		04/13/2021	5,000,000.00	4,853,800.00	5,126,793.91	1.800	A1	A+	0.898	02/13/2025
89236TJT3	12556	Toyota Motor Corporation		01/13/2022	5,000,000.00	4,816,950.00	4,997,819.72	1.450	A1	A+	1.466	01/13/2025
89236TJT3	12557	Toyota Motor Corporation		01/13/2022	65,000.00	62,620.35	64,919.19	1.450	A1	A+	1.495	01/13/2025

Exhibit B

Monterey County
Portfolio Management
Portfolio Details - Investments
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CUSIP	Investment #	Issuer	Average Balance	Purchase Date	Par Value	Market Value	Book Value	Stated Rate	Moody's	S&P	YTM	Maturity Date
Medium Term Notes - GC 53601(k)												
87612EBM7	12558	TARGET CORP		01/24/2022	35,000.00	33,800.55	34,942.73	1.950	A2	A	1.986	01/15/2027
87612EBM7	12559	TARGET CORP		01/24/2022	65,000.00	62,772.45	65,044.42	1.950	A2	A	1.935	01/15/2027
87612EBL9	12577	TARGET CORP		03/17/2022	5,000,000.00	4,928,950.00	4,959,715.52	2.250	A2	A	2.527	04/15/2025
904764BG1	12369	Unilever Capital Corp		05/20/2020	60,000.00	60,755.40	62,536.76	3.250	A1	A+	0.968	03/07/2024
91324PDM1	12398	United Health Group Inc		08/19/2020	2,125,000.00	2,163,845.00	2,240,127.36	3.500	A3	A+	0.573	02/15/2024
91324PEB4	12508	United Health Group Inc		05/19/2021	5,000,000.00	4,789,750.00	5,000,106.51	0.550	A3	A+	0.549	05/15/2024
91324PEB4	12509	United Health Group Inc		05/19/2021	4,455,000.00	4,267,667.25	4,451,710.26	0.550	A3	A+	0.585	05/15/2024
91159HHX1	12313	US BANCORP		08/06/2019	200,000.00	198,684.00	200,569.62	2.400	A2	A+	2.270	07/30/2024
91159HHX1	12405	US BANCORP		09/17/2020	5,000,000.00	4,967,100.00	5,211,075.05	2.400	A2	A+	0.525	07/30/2024
92826CAC6	12203	Visa Inc		06/07/2018	250,000.00	251,920.00	249,385.77	2.800	A1	AA-	3.178	12/14/2022
931142DP5	12447	Walmart Inc		12/11/2020	5,000,000.00	5,084,150.00	5,269,415.61	3.300	Aa2	AA	0.449	04/22/2024
931142EM1	12572	Walmart Inc		02/25/2022	60,000.00	60,675.60	62,195.57	3.050	Aa2	AA	2.114	07/08/2026
		Subtotal and Average	**252,327,282.90**		**255,020,000.00**	**249,762,500.55**	**258,044,525.84**				**0.965**	
Negotiable CDs - GC 53601(i)												
22552G6R6	12563	Credit Suisse		02/04/2022	25,000,000.00	24,785,500.00	25,000,000.00	1.100	N/A	A-1	1.100	02/03/2023
89114WC29	12514	Toronto Dominion Bank		06/11/2021	25,000,000.00	24,971,750.00	25,000,000.00	0.170	N/A	A-1+	0.170	06/10/2022
89114WTL9	12582	Toronto Dominion Bank		03/29/2022	25,000,000.00	24,568,750.00	25,000,000.00	2.150	N/A	N/A	2.150	03/28/2023
		Subtotal and Average	**70,444,444.44**		**75,000,000.00**	**74,326,000.00**	**75,000,000.00**				**1.140**	
Commercial Paper Disc.- GC 53601(h)												
00084CH21	12570	ABN Amro Funding USA		02/25/2022	25,000,000.00	24,894,000.00	24,943,625.00	0.660	P-1	A-1	0.662	08/02/2022
17327BM93	12578	CitiGroup Global Market		03/17/2022	15,000,000.00	14,819,400.00	14,826,750.00	1.650	P-1	A-1	1.670	12/09/2022
22533UL43	12566	Credit Agricole Securities USA		02/14/2022	30,500,000.00	30,183,715.00	30,308,798.89	1.040	P-1	A-1	1.058	11/04/2022
4497W1J23	12553	ING		01/06/2022	30,000,000.00	29,821,500.00	29,949,950.00	0.390	P-1	A-1	0.395	09/02/2022
62479MHS5	12546	MUFG Bank LTD/NY		11/30/2021	25,000,000.00	24,873,500.00	24,966,312.50	0.330	P-1	A-1	0.335	08/26/2022
62479MJD6	12551	MUFG Bank LTD/NY		12/22/2021	25,000,000.00	24,840,750.00	24,956,458.33	0.380	P-1	A-1	0.386	09/13/2022
63873KL47	12565	NATIXIS_NA		02/10/2022	10,000,000.00	9,896,300.00	9,947,558.33	0.870	P-1	A-1	0.875	11/04/2022
63873KL47	12567	NATIXIS_NA		02/15/2022	10,000,000.00	9,896,300.00	9,934,900.00	1.080	P-1	A-1	1.088	11/04/2022
63873KJ99	12548	Natixis NY Branch		12/15/2021	26,750,000.00	26,583,615.00	26,700,950.91	0.410	P-1	A-1	0.411	09/09/2022
		Subtotal and Average	**200,773,380.06**		**197,250,000.00**	**195,809,080.00**	**196,535,303.96**				**0.680**	
Fed Agcy Coupon Sec - GC 53601(f)												
3130AFW94	12264	Federal Home Loan Bank		02/15/2019	370,000.00	371,150.70	369,510.46	2.500		AA+	2.576	02/13/2024
3130AJM22	12407	Federal Home Loan Bank		09/18/2020	12,535,000.00	11,972,303.85	12,579,389.79	0.440	Aaa	AA+	0.292	08/28/2024
3130AKJW7	12451	Federal Home Loan Bank		12/16/2020	25,000,000.00	23,217,500.00	25,018,538.08	0.600	Aaa	AA+	0.580	12/15/2025

Exhibit B

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CUSIP	Investment #	Issuer	Average Balance	Purchase Date	Par Value	Market Value	Book Value	Stated Rate	Moody's	S&P	YTM	Maturity Date
Fed Agcy Coupon Sec - GC 53601(f)												
3137EAES4	12384	Federal Home Loan Mtg Corp		06/30/2020	25,000,000.00	24,472,000.00	24,984,387.78	0.250	Aaa	AA+	0.301	06/26/2023
3137EAEU9	12391	Federal Home Loan Mtg Corp		07/23/2020	155,000.00	144,359.25	154,489.12	0.375		AA+	0.476	07/21/2025
3137EAES4	12395	Federal Home Loan Mtg Corp		08/17/2020	22,635,000.00	22,156,948.80	22,627,756.36	0.250	Aaa	AA+	0.276	06/26/2023
3137EAEW5	12399	Federal Home Loan Mtg Corp		09/04/2020	15,000,000.00	14,596,500.00	15,003,548.41	0.250	Aaa	AA+	0.233	09/08/2023
3137EAEW5	12400	Federal Home Loan Mtg Corp		09/04/2020	290,000.00	282,199.00	290,068.60	0.250	Aaa	AA+	0.233	09/08/2023
3137EAEW5	12409	Federal Home Loan Mtg Corp		09/18/2020	25,000,000.00	24,327,500.00	25,004,107.01	0.250	Aaa	AA+	0.239	09/08/2023
3137EAEV7	12411	Federal Home Loan Mtg Corp		09/18/2020	25,000,000.00	24,363,000.00	25,002,262.55	0.250	Aaa	AA+	0.243	08/24/2023
3137EAEV7	12413	Federal Home Loan Mtg Corp		09/30/2020	25,000,000.00	24,363,000.00	25,007,347.46	0.250	Aaa	AA+	0.229	08/24/2023
3134GWVB9	12420	Federal Home Loan Mtg Corp		10/15/2020	10,650,000.00	9,911,103.00	10,644,367.56	0.550	Aaa	N/A	0.565	09/29/2025
3137EAEY1	12421	Federal Home Loan Mtg Corp		10/16/2020	250,000.00	242,342.50	249,573.47	0.125	N/A	AA+	0.236	10/16/2023
3137EAEZ8	12429	Federal Home Loan Mtg Corp		11/05/2020	29,545,000.00	28,654,513.70	29,530,856.12	0.250	N/A	AA+	0.280	11/06/2023
3134GXBD5	12448	Federal Home Loan Mtg Corp		12/11/2020	25,000,000.00	23,930,000.00	24,994,582.66	0.360	Aaa	N/A	0.370	05/15/2024
3135G0V34	12263	Federal National Mtg Assn		02/08/2019	335,000.00	336,463.95	334,539.52	2.500		AA+	2.580	02/05/2024
3135G03U5	12366	Federal National Mtg Assn		04/24/2020	470,000.00	443,849.20	469,407.13	0.625	Aaa	AA+	0.667	04/22/2025
3135G04Q3	12372	Federal National Mtg Assn		05/22/2020	240,000.00	235,404.00	239,725.09	0.250	Aaa	AA+	0.351	05/22/2023
3135G03U5	12373	Federal National Mtg Assn		06/03/2020	450,000.00	424,962.00	451,740.69	0.625	Aaa	AA+	0.497	04/22/2025
3135G04Z3	12380	Federal National Mtg Assn		06/19/2020	545,000.00	510,779.45	544,274.67	0.500	Aaa	AA+	0.542	06/17/2025
3135G04Q3	12381	Federal National Mtg Assn		06/30/2020	31,000,000.00	30,406,350.00	30,993,397.18	0.250	Aaa	AA+	0.269	05/22/2023
3135G05G4	12385	Federal National Mtg Assn		07/10/2020	515,000.00	503,185.90	514,529.42	0.250	Aaa	AA+	0.322	07/10/2023
3135G04Z3	12386	Federal National Mtg Assn		07/10/2020	950,000.00	890,349.50	951,334.90	0.500	Aaa	AA+	0.456	06/17/2025
3135G05R0	12394	Federal National Mtg Assn		08/12/2020	15,000,000.00	14,644,950.00	14,987,752.32	0.300	Aaa	AA+	0.360	08/10/2023
3135G05G4	12396	Federal National Mtg Assn		08/17/2020	15,000,000.00	14,655,900.00	14,996,699.42	0.250	Aaa	AA+	0.267	07/10/2023
3135G05G4	12408	Federal National Mtg Assn		09/18/2020	25,000,000.00	24,426,500.00	25,001,020.50	0.250	Aaa	AA+	0.247	07/10/2023
3135G0V75	12416	Federal National Mtg Assn		09/30/2020	13,800,000.00	13,610,112.00	14,274,658.14	1.750	Aaa	AA+	0.216	07/02/2024
3135G06H1	12440	Federal National Mtg Assn		11/25/2020	25,000,000.00	24,218,500.00	24,992,839.19	0.250	N/A	AA+	0.267	11/27/2023
		Subtotal and Average	**370,236,540.57**		**369,735,000.00**	**358,311,726.80**	**370,212,703.60**				**0.308**	
US Treasury Note-GC 53601(b)												
9128284D9	12226	U.S. Treasury		11/07/2018	850,000.00	856,511.00	845,926.17	2.500	Aaa	N/A	3.017	03/31/2023
912828T91	12245	U.S. Treasury		01/11/2019	500,000.00	495,800.00	493,100.41	1.625	Aaa	N/A	2.557	10/31/2023
912828VB3	12246	U.S. Treasury		01/11/2019	785,000.00	783,955.95	778,337.52	1.750	Aaa	N/A	2.555	05/15/2023
912828V23	12260C	U.S. Treasury		01/31/2019	500,000.00	499,920.00	497,469.14	2.250	Aaa	N/A	2.560	12/31/2023
912828U57	12261	U.S. Treasury		02/08/2019	500,000.00	499,295.00	497,092.11	2.125	Aaa	N/A	2.498	11/30/2023
912828P38	12262	U.S. Treasury		02/08/2019	700,000.00	701,204.00	695,896.09	1.750	Aaa	N/A	2.492	01/31/2023
9128286G0	12274	U.S. Treasury		03/07/2019	400,000.00	400,436.00	398,697.78	2.375	Aaa	N/A	0.000	02/29/2024
912828WJ5	12305	U.S. Treasury		06/06/2019	500,000.00	501,035.00	505,803.11	2.500	Aaa	N/A	1.924	05/15/2024

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US Treasury Note-GC 53601(b)												
912828S35	12309	U.S. Treasury		07/12/2019	750,000.00	744,607.50	746,053.41	1.375	Aaa	N/A	1.815	06/30/2023
912828Q29	12320	U.S. Treasury		09/06/2019	950,000.00	947,777.00	951,462.83	1.500	Aaa	N/A	1.341	03/31/2023
912828YM6	12331	U.S. Treasury		11/19/2019	170,000.00	165,857.10	169,296.15	1.500	Aaa	N/A	1.668	10/31/2024
912828Z52	12352	U.S. Treasury		02/05/2020	500,000.00	484,610.00	500,022.21	1.375	Aaa	N/A	1.373	01/31/2025
912828YM6	12353	U.S. Treasury		02/05/2020	500,000.00	487,815.00	501,513.37	1.500	Aaa	N/A	1.378	10/31/2024
912828YY0	12354A	U.S. Treasury		02/05/2020	370,000.00	362,570.40	373,690.15	1.750	N/A	N/A	1.374	12/31/2024
912828ZC7	12362	U.S. Treasury		03/04/2020	400,000.00	384,516.00	403,348.73	1.125	Aaa	N/A	0.831	02/28/2025
912828ZR4	12379	U.S. Treasury		06/18/2020	25,000,000.00	24,989,000.00	24,996,955.10	0.125	Aaa	N/A	0.199	05/31/2022
912828ZM5	12410	U.S. Treasury		09/18/2020	30,700,000.00	30,696,009.00	30,699,763.82	0.125	Aaa	N/A	0.134	04/30/2022
91282CAP6	12419	U.S. Treasury		10/15/2020	20,300,000.00	19,674,354.00	20,284,941.56	0.125	Aaa	N/A	0.173	10/15/2023
91282CAG6	12424	U.S. Treasury		11/03/2020	25,000,000.00	24,917,000.00	24,996,433.93	0.125	Aaa	N/A	0.159	08/31/2022
912828M80	12425	U.S. Treasury		11/04/2020	25,000,000.00	25,109,500.00	25,303,850.45	2.000	Aaa	N/A	0.170	11/30/2022
91282CAR2	12426	U.S. Treasury		11/04/2020	25,000,000.00	24,845,750.00	24,993,410.22	0.125	Aaa	N/A	0.170	10/31/2022
912828TY6	12427	U.S. Treasury		11/04/2020	25,000,000.00	25,052,750.00	25,226,562.50	1.625	Aaa	N/A	0.171	11/15/2022
91282CAN1	12428	U.S. Treasury		11/04/2020	25,000,000.00	24,885,750.00	24,994,118.14	0.125	Aaa	N/A	0.172	09/30/2022
91282CAR2	12434	U.S. Treasury		11/18/2020	500,000.00	496,915.00	499,853.93	0.125	Aaa	N/A	0.175	10/31/2022
91282CAP6	12441	U.S. Treasury		12/01/2020	20,900,000.00	20,255,862.00	20,880,736.55	0.125	Aaa	N/A	0.185	10/15/2023
91282CAZ4	12443	U.S. Treasury		12/08/2020	325,000.00	300,472.25	324,794.29	0.375	Aaa	N/A	0.392	11/30/2025
91282CAX9	12450	U.S. Treasury		12/11/2020	28,210,000.00	27,986,294.70	28,204,413.60	0.125	Aaa	N/A	0.155	11/30/2022
91282CBA8	12452	U.S. Treasury		12/16/2020	25,000,000.00	24,117,250.00	24,978,311.21	0.125	Aaa	N/A	0.175	12/15/2023
91282CAW1	12454	U.S. Treasury		12/22/2020	25,000,000.00	24,224,500.00	25,038,862.20	0.250	Aaa	N/A	0.154	11/15/2023
91282CBA8	12455	U.S. Treasury		12/22/2020	25,000,000.00	24,117,250.00	24,982,665.12	0.125	Aaa	N/A	0.166	12/15/2023
912828YE4	12456	U.S. Treasury		12/22/2020	25,000,000.00	24,292,000.00	25,616,663.00	1.250	Aaa	N/A	0.224	08/31/2024
912828YM6	12457	U.S. Treasury		12/22/2020	22,500,000.00	21,951,675.00	23,229,583.26	1.500	Aaa	N/A	0.238	10/31/2024
91282CBE0	12459	U.S. Treasury		02/01/2021	20,000,000.00	19,244,600.00	19,980,567.31	0.125	Aaa	N/A	0.179	01/15/2024
91282CBM2	12461	U.S. Treasury		02/16/2021	14,400,000.00	13,827,888.00	14,382,741.94	0.125	Aaa	N/A	0.189	02/15/2024
91282CBM2	12463	U.S. Treasury		02/26/2021	10,000,000.00	9,602,700.00	9,962,479.82	0.125	Aaa	N/A	0.326	02/15/2024
912828ZF0	12464	U.S. Treasury		03/01/2021	25,000,000.00	23,551,750.00	24,945,493.27	0.500	Aaa	N/A	0.574	03/31/2025
91282CAB7	12465	U.S. Treasury		03/01/2021	30,000,000.00	27,813,300.00	29,599,469.40	0.250	Aaa	N/A	0.657	07/31/2025
91282CBQ3	12466	U.S. Treasury		03/04/2021	250,000.00	231,132.50	247,801.81	0.500	Aaa	N/A	0.729	02/28/2026
91282CBH3	12467	U.S. Treasury		03/04/2021	250,000.00	230,342.50	246,743.56	0.375	Aaa	N/A	0.721	01/31/2026
912828P46	12470	U.S. Treasury		03/09/2021	500,000.00	483,320.00	515,238.53	1.625	Aaa	N/A	0.821	02/15/2026
91282CBN0	12471	U.S. Treasury		03/09/2021	500,000.00	493,280.00	499,891.75	0.125	N/A	N/A	0.148	02/28/2023
91282CBM2	12472	U.S. Treasury		03/09/2021	500,000.00	480,135.00	498,154.64	0.125	Aaa	N/A	0.322	02/15/2024
91282CBR1	12475	U.S. Treasury		03/23/2021	200,000.00	192,126.00	199,728.27	0.250	Aaa	N/A	0.320	03/15/2024
912828ZF0	12476	U.S. Treasury		03/26/2021	250,000.00	235,517.50	249,445.64	0.500	Aaa	N/A	0.575	03/31/2025

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CUSIP	Investment #	Issuer	Average Balance	Purchase Date	Par Value	Market Value	Book Value	Stated Rate	Moody's	S&P	YTM	Maturity Date
US Treasury Note-GC 53601(b)												
912828YH7	12477	U.S. Treasury		03/31/2021	25,000,000.00	24,411,250.00	25,632,277.26	1.500	Aaa	N/A	0.478	09/30/2024
9128286Z8	12480	U.S. Treasury		03/31/2021	19,000,000.00	18,725,450.00	19,568,268.64	1.750	Aaa	N/A	0.409	06/30/2024
91282CBR1	12484	U.S. Treasury		04/06/2021	250,000.00	240,157.50	249,461.14	0.250	Aaa	N/A	0.361	03/15/2024
91282CBC4	12486	U.S. Treasury		04/12/2021	250,000.00	230,850.00	246,018.92	0.375	Aaa	N/A	0.809	12/31/2025
91282CBV2	12487	U.S. Treasury		04/15/2021	22,000,000.00	21,132,100.00	22,005,257.40	0.375	Aaa	N/A	0.363	04/15/2024
91282CBV2	12494	U.S. Treasury		04/30/2021	20,000,000.00	19,211,000.00	20,015,075.74	0.375	Aaa	N/A	0.338	04/15/2024
912828XX3	12495	U.S. Treasury		04/30/2021	500,000.00	495,410.00	518,030.89	2.000	Aaa	N/A	0.385	06/30/2024
91282CBR1	12496	U.S. Treasury		05/05/2021	250,000.00	240,157.50	249,799.83	0.250	Aaa	N/A	0.291	03/15/2024
91282CBE0	12499	U.S. Treasury		05/11/2021	25,000,000.00	24,055,750.00	24,947,157.90	0.125	Aaa	N/A	0.243	01/15/2024
91282CAK7	12500	U.S. Treasury		05/11/2021	25,000,000.00	24,290,000.00	24,973,932.50	0.125	Aaa	N/A	0.196	09/15/2023
91282CBR1	12505	U.S. Treasury		05/13/2021	13,200,000.00	12,680,316.00	13,192,189.55	0.250	Aaa	N/A	0.280	03/15/2024
912828YE4	12511	U.S. Treasury		06/02/2021	15,000,000.00	14,575,200.00	15,316,275.33	1.250	Aaa	N/A	0.371	08/31/2024
91282CCF6	12513	U.S. Treasury		06/07/2021	200,000.00	186,016.00	199,719.10	0.750		N/A	0.784	05/31/2026
91282CBW0	12518	U.S. Treasury		06/25/2021	250,000.00	232,852.50	248,799.77	0.750	Aaa	N/A	0.870	04/30/2026
9128282N9	12520	U.S. Treasury		06/30/2021	25,000,000.00	24,822,250.00	25,948,678.04	2.125	Aaa	N/A	0.484	07/31/2024
91282CCG4	12521	U.S. Treasury		06/30/2021	30,000,000.00	28,612,500.00	29,854,082.60	0.250	Aaa	N/A	0.472	06/15/2024
9128282Y5	12522	U.S. Treasury		06/30/2021	22,000,000.00	21,816,080.00	22,877,732.21	2.125	Aaa	N/A	0.513	09/30/2024
91282CBX8	12532	U.S. Treasury		09/30/2021	20,750,000.00	20,383,555.00	20,731,181.83	0.125	Aaa	N/A	0.209	04/30/2023
912828YV6	12533	U.S. Treasury		09/30/2021	20,000,000.00	19,482,800.00	20,487,999.68	1.500	Aaa	N/A	0.575	11/30/2024
912828YM6	12534	U.S. Treasury		09/30/2021	20,000,000.00	19,512,600.00	20,485,559.01	1.500	Aaa	N/A	0.551	10/31/2024
91282CBC4	12535	U.S. Treasury		10/06/2021	135,000.00	124,659.00	132,781.72	0.375	Aaa	N/A	0.822	12/31/2025
912828ZL7	12537	U.S. Treasury		11/02/2021	20,000,000.00	18,727,400.00	19,665,670.96	0.375	Aaa	N/A	0.927	04/30/2025
91282CAB7	12538	U.S. Treasury		11/02/2021	20,000,000.00	18,542,200.00	19,521,479.52	0.250	Aaa	N/A	0.982	07/31/2025
91282CCJ8	12540	U.S. Treasury		11/09/2021	400,000.00	373,592.00	396,523.64	0.875	Aaa	N/A	1.085	06/30/2026
91282CCW9	12541	U.S. Treasury		11/09/2021	380,000.00	352,199.20	374,286.96	0.750	Aaa	N/A	1.100	08/31/2026
91282CAJ0	12543	U.S. Treasury		11/16/2021	26,000,000.00	24,055,980.00	25,285,657.51	0.250	Aaa	N/A	1.073	08/31/2025
91282CDH1	12549	U.S. Treasury		12/22/2021	24,000,000.00	22,939,680.00	23,921,045.50	0.750	Aaa	N/A	0.877	11/15/2024
91282CBR1	12550	U.S. Treasury		12/22/2021	25,000,000.00	24,015,750.00	24,773,003.21	0.250	Aaa	N/A	0.719	03/15/2024
9128283P3	12552	U.S. Treasury		12/22/2021	25,000,000.00	24,830,000.00	25,913,943.19	2.250	Aaa	N/A	0.899	12/31/2024
91282CCL3	12569	U.S. Treasury		02/25/2022	15,600,000.00	14,889,420.00	15,175,956.16	0.375	Aaa	N/A	1.588	07/15/2024
91282CCK5	12580	U.S. Treasury		03/22/2022	25,000,000.00	24,436,500.00	24,490,685.91	0.125	Aaa	N/A	1.782	06/30/2023
912828R28	12583	U.S. Treasury		03/31/2022	25,000,000.00	24,955,000.00	24,965,906.84	1.625	Aaa	N/A	1.753	04/30/2023
91282CBM2	12584	U.S. Treasury		03/31/2022	25,000,000.00	24,006,750.00	24,030,711.90	0.125	Aaa	N/A	2.248	02/15/2024
		Subtotal and Average	**942,130,690.66**		**1,018,825,000.00**	**990,199,758.10**	**1,021,332,534.36**				**0.530**	

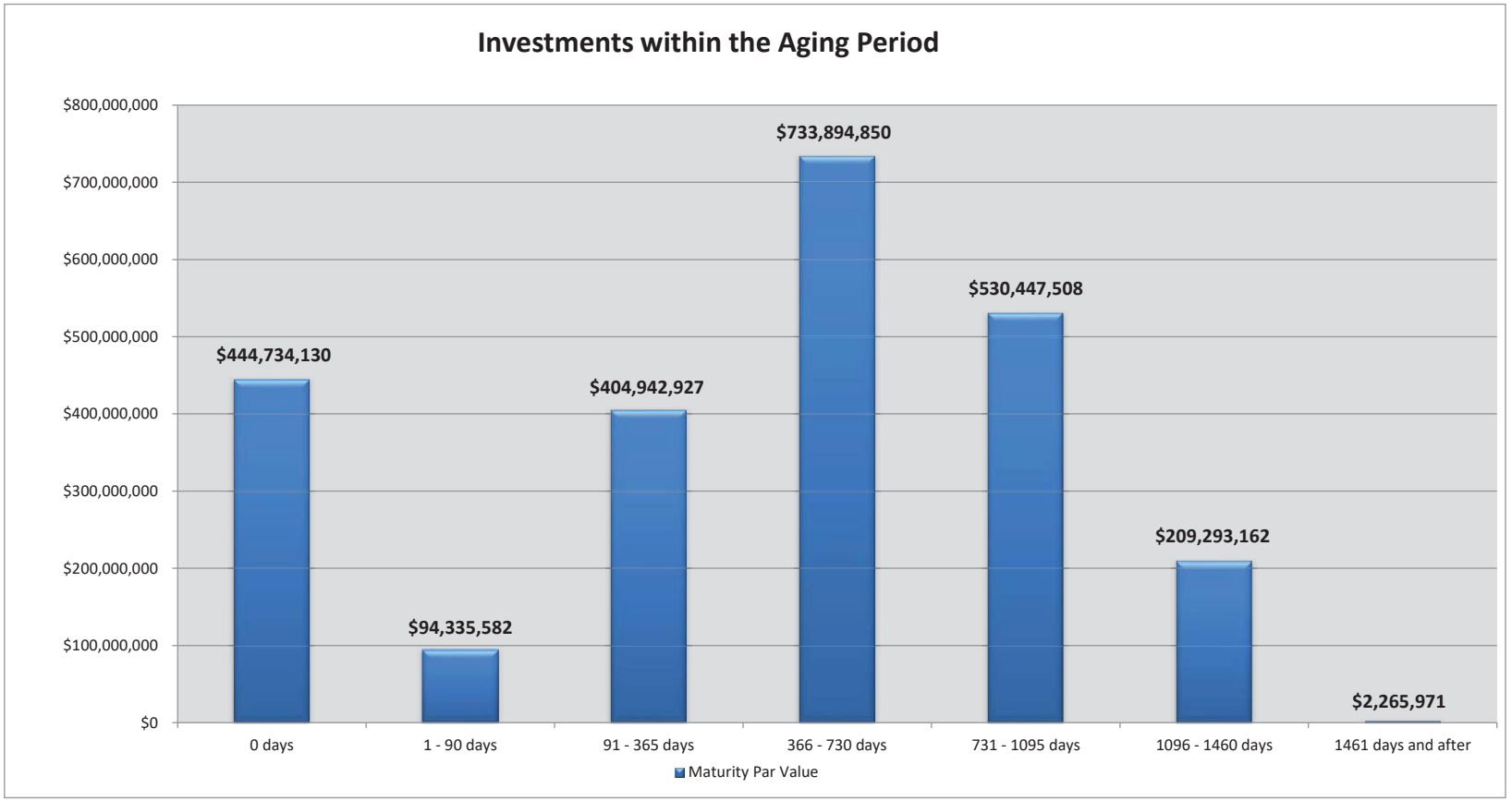
Exhibit B

Monterey County
Portfolio Management
Portfolio Details - Investments
March 31, 2022

CUSIP	Investment #	Issuer	Average Balance	Purchase Date	Par Value	Market Value	Book Value	Stated Rate	Moody's	S&P	YTM	Maturity Date
Supranationals												
459058JV6	12488	Inter-America Devel BK		04/20/2021	190,000.00	186,485.00	189,792.97	0.126		AAA	0.230	04/20/2023
459058JV6	12489	Inter-America Devel BK		04/20/2021	5,000,000.00	4,907,500.00	4,995,525.69	0.126		AAA	0.210	04/20/2023
4581X0DM7	12365	INTER AMERICAN DEVEL BK		04/24/2020	270,000.00	265,334.40	269,965.84	0.500		AAA	0.511	05/24/2023
4581X0DZ8	12531	INTER AMERICAN DEVEL BK		09/23/2021	265,000.00	252,322.40	264,838.04	0.500	Aaa	AAA	0.525	09/23/2024
459058JM6	12437	INTL BK RECON & DEVELP		11/24/2020	355,000.00	343,526.40	354,580.92	0.250	N/A	AAA	0.322	11/24/2023
459058JM6	12438	INTL BK RECON & DEVELP		11/24/2020	21,955,000.00	21,245,414.40	21,929,081.92	0.250	N/A	AAA	0.322	11/24/2023
459058GX5	12503	INTL BK RECON & DEVELP		05/13/2021	15,000,000.00	14,964,150.00	15,302,428.57	1.876		AAA	0.214	06/19/2023
459056HV2	12504	INTL BK RECON & DEVELP		05/13/2021	15,000,000.00	14,670,300.00	15,374,236.71	1.500	Aaa	AAA	0.455	08/28/2024
		Subtotal and Average	**58,727,816.56**		**58,035,000.00**	**56,835,032.60**	**58,680,450.66**				**0.321**	
Asset Backed Security(GNMA/CMO)												
14041NFY2	12547	Capital One Multi-Asset		11/30/2021	195,000.00	186,464.85	194,973.13	1.040	N/A	AAA	1.047	11/16/2026
		Subtotal and Average	**194,973.13**		**195,000.00**	**186,464.85**	**194,973.13**				**1.047**	
Municipal Bonds												
13017HAK2	12435	California Earthquake Authorit		11/24/2020	55,000.00	54,494.55	55,000.00	1.477	N/A	N/A	1.477	07/01/2023
54438CYK2	12431	Los Angeles CCD		11/10/2020	100,000.00	93,796.00	100,000.00	0.773	Aaa	AA+	0.773	08/01/2025
544647FC9	12542	Los Angeles Unified SD		11/10/2021	80,000.00	75,127.20	80,000.00	1.455	Aa3	N/A	1.455	07/01/2026
646140DN0	12460	NJ TPK AUTH-B-TXBL		02/04/2021	55,000.00	52,011.85	55,000.00	0.897	A1	AA-	0.897	01/01/2025
650036DT0	12453	NY ST Urban		12/23/2020	270,000.00	254,493.90	270,000.00	0.870	N/A	AA+	0.870	03/15/2025
798306WP7	12422	SAN JUAN CA UNIF SCH		10/29/2020	55,000.00	51,791.85	55,000.00	0.852	Aa2	N/A	0.899	08/01/2025
798306WN2	12423	SAN JUAN CA UNIF SCH		10/29/2020	60,000.00	57,442.80	60,000.00	0.702	Aa2	N/A	0.702	08/01/2024
574193TQ1	12392	State of Maryland		08/05/2020	110,000.00	104,933.40	109,981.98	0.510	Aaa	AAA	0.517	08/01/2024
91412HFM0	12388	University of California		07/16/2020	55,000.00	51,778.65	55,000.00	0.933	Aa2	AA	0.933	05/15/2025
977123X78	12389	Wisconsin St Transport		07/30/2020	140,000.00	131,156.20	140,000.00	0.774	N/A	AAA	0.774	07/01/2025
977123X60	12390	Wisconsin St Transport		07/30/2020	140,000.00	133,828.80	140,000.00	0.624	N/A	AAA	0.624	07/01/2024
		Subtotal and Average	**1,150,076.67**		**1,120,000.00**	**1,060,855.20**	**1,119,981.98**				**0.852**	
		Total and Average	**2,412,226,155.68**		**2,419,914,130.01**	**2,371,225,548.11**	**2,425,854,603.54**				**0.518**	

Exhibit C
Monterey County
Aging Summary
By Maturity Date
As of April 1, 2022

				Maturity Par Value	Percent of Portfolio	Current Book Value	Current Market Value
Aging Interval:	0 days	(04/01/2022 - 04/01/2022)	10 Maturities	444,734,130.01	18.38%	444,734,130.01	444,734,130.01
Aging Interval:	1 - 90 days	(04/02/2022 - 06/30/2022)	5 Maturities	94,335,582.37	3.90%	94,326,653.55	94,305,127.75
Aging Interval:	91 - 365 days	(07/01/2022 - 04/01/2023)	26 Maturities	404,942,927.30	16.73%	404,698,536.05	402,414,417.70
Aging Interval:	366 - 730 days	(04/02/2023 - 03/31/2024)	72 Maturities	733,894,849.61	30.33%	733,168,646.83	714,844,226.70
Aging Interval:	731 - 1095 days	(04/01/2024 - 03/31/2025)	72 Maturities	530,447,507.67	21.92%	539,262,313.87	515,893,826.30
Aging Interval:	1096 - 1460 days	(04/01/2025 - 03/31/2026)	40 Maturities	209,293,162.22	8.65%	207,217,370.06	196,720,457.05
Aging Interval:	1461 days and after	(04/01/2026 -)	16 Maturities	2,265,970.79	0.09%	2,446,953.17	2,313,362.60
			Total for 241 Investments	2,419,914,129.97	100.00	2,425,854,603.54	2,371,225,548.11



*Totals may differ due to rounding.