

I hereby certify that the following Agenda was posted at least 72 hours prior to the time of the Board Meeting so noticed below, at the usual agenda posting location of the South Orange County Wastewater Authority [SOCWA] and at www.socwa.com.

REVISED



Danita Hirsh, Assistant Secretary
SOCWA and the Board of Directors thereof

*Regular Meeting of The
South Orange County Wastewater Authority
Board of Directors*

May 4, 2023
8:30 a.m.

PHYSICAL MEETING LOCATION:
DANA HILLS TENNIS CENTER
24911 Calle De Tennis
Dana Point, CA 92629

THE BOARD OF DIRECTORS MEETING ROOM IS WHEELCHAIR ACCESSIBLE. IF YOU REQUIRE ANY SPECIAL DISABILITY RELATED ACCOMMODATIONS, PLEASE CONTACT THE SOUTH ORANGE COUNTY WASTEWATER AUTHORITY SECRETARY'S OFFICE AT (949) 234-5452 AT LEAST SEVENTY-TWO (72) HOURS PRIOR TO THE SCHEDULED MEETING TO REQUEST SUCH ACCOMMODATIONS. THIS AGENDA CAN BE OBTAINED IN ALTERNATE FORMAT UPON REQUEST TO THE SOUTH ORANGE COUNTY WASTEWATER AUTHORITY'S SECRETARY AT LEAST SEVENTY-TWO (72) HOURS PRIOR TO THE SCHEDULED MEETING. MEMBERS OF THE PUBLIC HAVE THE OPTION TO PARTICIPATE IN AND MAY JOIN THE MEETING REMOTELY VIA VIDEO CONFERENCE FOR VISUAL INFORMATION ONLY (USE ZOOM LINK BELOW) AND BY TELECONFERENCE FOR AUDIO PARTICIPATION (USE PHONE NUMBERS BELOW). THIS IS A PHONE-CALL MEETING AND NOT A WEB-CAST MEETING, SO PLEASE REFER TO AGENDA MATERIALS AS POSTED ON THE WEBSITE AT WWW.SOCWA.COM. ON YOUR REQUEST, EVERY EFFORT WILL BE MADE TO ACCOMMODATE PARTICIPATION. FOR PARTIES PARTICIPATING REMOTELY, PUBLIC COMMENTS WILL BE TAKEN DURING THE MEETING FOR ORAL COMMUNICATION IN ADDITION TO PUBLIC COMMENTS RECEIVED BY PARTIES PARTICIPATING IN PERSON. COMMENTS MAY BE SUBMITTED PRIOR TO THE MEETING VIA EMAIL TO ASSISTANT SECRETARY DANITA HIRSH AT DHIRSH@SOCWA.COM WITH THE SUBJECT LINE "REQUEST TO PROVIDE PUBLIC COMMENT." IN THE EMAIL, PLEASE INCLUDE YOUR NAME, THE ITEM YOU WISH TO SPEAK ABOUT, AND THE TELEPHONE NUMBER YOU WILL BE CALLING FROM SO THAT THE COORDINATOR CAN UN-MUTE YOUR LINE WHEN YOU ARE CALLED UPON TO SPEAK. THOSE MAKING PUBLIC COMMENT REQUESTS REMOTELY VIA TELEPHONE IN REAL-TIME WILL BE ASKED TO PROVIDE YOUR NAME, THE ITEM YOU WISH TO SPEAK ABOUT, AND THE TELEPHONE NUMBER THAT YOU ARE CALLING FROM SO THE COORDINATOR CAN UN-MUTE YOUR LINE WHEN YOU ARE CALLED UPON TO SPEAK. ONCE THE MEETING HAS COMMENCED, THE CHAIR WILL INVITE YOU TO SPEAK AND ASK THE COORDINATOR TO UN-MUTE YOUR LINE AT THE APPROPRIATE TIME.

AGENDA ATTACHMENTS AND OTHER WRITINGS THAT ARE DISCLOSABLE PUBLIC RECORDS DISTRIBUTED TO ALL, OR A MAJORITY OF, THE MEMBERS OF THE SOUTH ORANGE COUNTY WASTEWATER AUTHORITY BOARD OF DIRECTORS IN CONNECTION WITH A MATTER SUBJECT FOR DISCUSSION OR CONSIDERATION AT AN OPEN MEETING OF THE BOARD OF DIRECTORS ARE AVAILABLE FOR PUBLIC INSPECTION IN THE AUTHORITY ADMINISTRATIVE OFFICE LOCATED AT 34156 DEL OBISPO STREET, DANA POINT, CA ("AUTHORITY OFFICE") OR BY PHONE REQUEST MADE TO THE AUTHORITY OFFICE AT 949-234-5452. IF SUCH WRITINGS ARE DISTRIBUTED TO MEMBERS OF THE BOARD OF DIRECTORS LESS THAN SEVENTY-TWO (72) HOURS PRIOR TO THE MEETING, THEY WILL BE AVAILABLE IN THE RECEPTION AREA OF THE AUTHORITY OFFICE AT THE SAME TIME AS THEY ARE DISTRIBUTED TO THE BOARD OF DIRECTORS AND SENT TO ANY REMOTE PARTICIPANTS REQUESTING EMAIL DELIVERY OR POSTED ON SOCWA'S WEBSITE. IF SUCH WRITINGS ARE DISTRIBUTED IMMEDIATELY PRIOR TO, OR DURING, THE MEETING, THEY WILL BE AVAILABLE IN THE MEETING ROOM OR IMMEDIATELY UPON VERBAL REQUEST TO BE DELIVERED VIA EMAIL TO REQUESTING PARTIES PARTICIPATING REMOTELY.

THE PUBLIC MAY PARTICIPATE REMOTELY BY VIRTUAL MEANS. FOR AUDIO OF MEETING USE THE CALL IN PHONE NUMBERS BELOW AND FOR VIDEO USE THE ZOOM LINK BELOW.

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Revised Agenda

1. CALL TO ORDER
2. PLEDGE OF ALLEGIANCE
3. ORAL COMMUNICATIONS

Members of the public may address the board regarding an item on the agenda or may reserve this opportunity during the meeting at the time the item is discussed by the board. There will be a three-minute limit for public comments.

4. APPROVAL OF BOARD MEMBER REQUEST FOR REMOTE PARTICIPATION

ACTION Board Discussion/Direction and Action.

PAGE NO

5. CONSENT CALENDAR

- A. Minutes of Engineering Committee 1

1. Engineering Committee Meeting of November 10, 2022
2. Engineering Committee Meeting of January 12, 2023
3. Engineering Committee Meeting of February 9, 2023
4. Engineering Committee Meeting of March 9, 2023

ACTION The Board will be requested to receive and file subject Minutes.

- B. Financial Reports for the Month of January 2023 26

1. Summary of Disbursements for January 2023 (Exhibit A)
2. Schedule of Funds Available for Reinvestment (Exhibit B)
 - Local Agency Investment Fund (LAIF)
3. Schedule of Cash and Investments (Exhibit C)
4. Capital Schedule (Exhibit D)
 - Capital Projects – Graph (Exhibit D-1)
5. Budget vs. Actual Expenses:
 - Operations and Environmental Summary (Exhibit E-1)
 - Operations and Environmental by PC (E-1.2)
 - Residual Engineering, after transfer to Capital (Exhibit E-2)
 - Administration (Exhibit E-3)
 - Information Technology (IT) (Exhibit E-4)

ACTION The Finance Committee recommends that the Board of Directors ratify the January 2023 disbursements, \$ 2,326,317, for the period from January 1, 2023, through January 31, 2023, and to receive and file the January 2023 Financial Reports as submitted.

Revised Agenda

PAGE NO

C. Financial Reports for the Month of February 2023..... 46

1. Summary of Disbursements for January 2023 (Exhibit A)
2. Schedule of Funds Available for Reinvestment (Exhibit B)
 - Local Agency Investment Fund (LAIF)
3. Schedule of Cash and Investments (Exhibit C)
4. Capital Schedule (Exhibit D)
 - Capital Projects – Graph (Exhibit D-1)
5. Budget vs. Actual Expenses:
 - Operations and Environmental Summary (Exhibit E-1)
 - Operations and Environmental by PC (E-1.2)
 - Residual Engineering, after transfer to Capital (Exhibit E-2)
 - Administration (Exhibit E-3)
 - Information Technology (IT) (Exhibit E-4)

ACTION The Finance Committee recommends that the Board of Directors ratify the February 2023 disbursements, \$ 4,341,262, for the period from February 1, 2023, through February 28, 2023, and to receive and file the February 2023 Financial Reports as submitted.

D. FY2022-23 O&M Budget Update and Proposed Budget Amendments 66

ACTION The Finance Committee recommends that the Board of Directors amend the budget as follows for a total budget amendment amount of \$1,330,000.00:

- PC 2–JBL budget line items by \$410,000.
- PC 5–SJCOO budget line items by \$45,000.
- PC 15–CTP budget by \$70,000.
- PC 17–RTP budget by \$495,000.
- PC 24–ACOO budget by \$45,000.
- Administration budget by \$265,000.

E. Operations Report (March) 69

1. Monthly Operational Report
2. SOCWA Ocean Outfall Discharges by Agency
3. Quarterly Report on Key Operational Expenses
4. Beach Ocean Monitoring Report
5. Recycled Water Report
6. Pretreatment Report (March and April)

ACTION The Board will be requested to receive and file subject reports as submitted.

South Orange County Wastewater Authority
Board of Directors Meeting
May 4, 2023

Revised Agenda

	<u>PAGE NO</u>
F. Capital Improvement Program Status Report (April).....	119
ACTION Information item; receive and file.	
G. Capital Improvement Construction Projects Progress and Change Order Report (April) [Project Committee Nos. 2, 15, & 17].....	122
ACTION Staff recommends that the Board of Directors receive and file the report as an information item.	
H. Coastal Treatment Plant (CTP) Funding Strategy and Implementation Plan [Project Committee No. 15].....	133
ACTION The Engineering Committee recommends that the PC 15 Board of Directors approve the contract to Hazen and Sawyer in the amount of \$60,140 for the Coastal Treatment Plant Funding Strategy and Implementation Plan.	
I. Chlor-alkali Products Sodium Hypochlorite (Bleach) 6-month Contract Extension [Project Committee Nos. 2, 15, and 17]	141
ACTION Staff recommends that the Board of Directors authorize the General Manager to exercise the first of three (3) six 6-month renewals with Olin at the proposed pricing.	
J. Polymer Products Contract Extension [Project Committee Nos. 2, 15, and 17]	143
ACTION Staff recommends that the Board of Directors authorize the General Manager to exercise the third of three annual renewals with Polydyne, Inc. at the proposed pricing.	
K. Street Sweeping Service Inc. was acquired by Sweeping Corporation of America, Inc. [Project Committee Nos. 2, 15, and 17]	145
ACTION Information Item.	
L. Code Update to the ROMS-BEC Model – Contract Award to Michael Baker and Associates in an amount not to exceed \$90,000 [Project Committee Nos. 5 & 24]	146
ACTION Staff recommends that the Board of Directors authorize the Acting General Manager to enter into a contract with Michael Baker International (MBI) in an amount not to exceed \$90,000. Clean Water SoCal will contribute funds to MBI in the amount of \$5,000 to cover the difference in the attached scope of work that totals \$94,400.	

Revised Agenda

PAGE NO

M. San Juan Creek Ocean Outfall Permit Reopener for the Santa Margarita Water District (SMWD) Ranch Project..... 161

ACTION Information Item.

6. GENERAL MANAGER'S REPORTS

A. Discussion and action regarding Trabuco Canyon Water District's proposed Withdrawal from SOCWA and concurrent services agreement entitled, "SOCWA Withdrawal and Continued Services Agreement (TCWD-SOCWA)" 163

ACTION Staff recommends that the Board of Directors approve the TCWD Withdrawal from SOCWA and Continued Services Agreement (TCWD-SOCWA).

B. Discussion Regarding the Future Direction of South Orange County Wastewater Authority (SOCWA)

- a. Update on Tri-Agencies Joint Board Meeting
- b. Facilitated Discussion regarding the SOCWA governance

ACTION Information item.

C. General Counsel's Updates.....
5. JPA Revision Process (Standing item)

ACTION Board Discussion/Direction and Action.

D. General Manager's Status Report 174

ACTION Information Items, Board Discussion/Direction and Action.

E. Upcoming Meetings Schedule:

- May 4, 2023 – Board of Directors Regular Meeting
- May 4, 2023 – Board of Directors Special Facilitated Meeting
- May 9, 2023 – Executive Committee Meeting
- May 11, 2023 – Engineering Committee Meeting
- May 16, 2023 – Finance Committee Meeting
- May 18, 2023 – Board of Directors Special Meeting – Budget Workshop
- May 18, 2023 – Board of Directors Special Facilitated Meeting
- June 1, 2023 – Board of Directors Regular Meeting

ACTION Information Item.

South Orange County Wastewater Authority
Board of Directors Meeting
May 4, 2023

Revised Agenda

7. CLOSED SESSION

- A. Closed Session Pursuant to Government Code § 54957.6 Conference with Labor Negotiator:

Agency Designated Representative: Brad Neufeld of Varner & Brandt
Jim Burror, Acting General Manager/
Director of Operations

Employee Organization: SOCWA Employee's Association

- B. Closed Session Pursuant to Government Code § 54957.6 Conference with Labor Negotiator:

Agency Designated Representative: Brad Neufeld of Varner & Brandt
Unrepresented Employee: Acting General Manager/Director of
Operations

- C. Report out of Closed Session

8. OTHER MATTERS

Determine the need to take action on the following item(s) introduced by General Manager, which arose subsequent to the agenda being posted. [Adoption of this action requires a two-thirds vote of the Board, or if less than two-thirds are present, a unanimous vote.]

9. BREAK

10:00 a.m. Projected Start Time – SOCWA Board of Directors Facilitated Discussion

10. FACILITATED MEETING TO DISCUSS SOCWA GOVERNANCE

ACTION Board Discussion and Direction

ADJOURNMENT

THE NEXT SOCWA BOARD MEETING
MAY 18, 2023

**MINUTES OF REGULAR MEETING
OF THE
SOUTH ORANGE COUNTY WASTEWATER AUTHORITY
Engineering Committee**

November 10, 2022

The Regular Meeting of the South Orange County Wastewater Authority (SOCWA) Engineering Committee Meeting was held on November 10, 2022, at 8:30 a.m. via teleconferencing from the Administrative Offices located at 34156 Del Obispo Street, Dana Point, California. The following members of the Engineering Committee were present via Zoom Meeting:

DAVID SHISSLER	City of Laguna Beach
DAVE REBENS DORF	City of San Clemente
MIKE DUNBAR	Emerald Bay Service District
HANNAH FORD	El Toro Water District
ROD WOODS	Moulton Niguel Water District
DON BUNTS	Santa Margarita Water District
MARC SERNA	South Coast Water District
LORRIE LAUSTEN	Trabuco Canyon Water District

Absent:

KEVIN BURTON	Irvine Ranch Water District
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Staff Present:

BETTY BURNETT	General Manager
DAVID BARANOWSKI	Director of Engineering
JIM BURROR	Director of Operations
AMBER BAYLOR	Director of Environmental Compliance
RONI YOUNG	Associate Engineer
MARY CAREY	Finance Controller
JEANETTE COTINOLA	Procurement / Contracts Manager
DINA ASH	HR Administrator
KONSTANTIN SHILKOV	Senior Accountant
NADYN KIM	Accountant
ANNA SUTHERLAND	Accounts Payable
SEAN PEACHER	Safety Risk Manager
MATT CLARKE	IT Administrator
DANITA HIRSH	Executive Assistant

Also Present:

ADRIANA OCHOA	Procopio Law
TARYN KJOLSING	South Coast Water District
SHERRY WANNINGER	Moulton Niguel Water District
DAVE LARSEN	Moulton Niguel Water District

1. Call Meeting to Order

Mr. David Baranowski, Director of Engineering, called the meeting to order at 8:31 a.m.

2. Public Comments

None.

3. Approval of Minutes

a. Engineering Committee Meeting of September 8, 2022

ACTION

Motion was made by Ms. Ford and seconded by Mr. Serna to approve the Minutes as submitted.

Motion carried: Aye 5, Nay 0, Abstained 3, Absent 1
Director Shissler Abstain
Director Rebensdorf Abstain
Director Dunbar Abstain
Director Ford Aye
Director Burton Absent
Director Woods Aye
Director Serna Aye
Director Bunts Aye
Director Lausten Aye

b. Engineering Committee Meeting of October 13, 2022

ACTION

Motion was made by Mr. Shissler and seconded by Mr. Dunbar to approve the Minutes as submitted.

Motion carried: Aye 7, Nay 0, Abstained 1, Absent 1
Director Shissler Aye
Director Rebensdorf Aye
Director Dunbar Aye
Director Ford Aye
Director Burton Absent
Director Woods Aye
Director Serna Abstain
Director Bunts Aye
Director Lausten Aye

4. Operations Report

Mr. Burror, Director of Operations, gave an update on the recent rainfall in South County and its impact on the Plants with a fair amount of mud on the Coastal Treatment access road, raising some concern for potential mudslides in the burn areas in the park. He also reported that staff has been working with the Moulton staff in transitioning the operation of the AWT, noting he is in receipt and is currently reviewing the Guidelines Agreement to make sure it is up to date with current practices. An open discussion ensued.

This was an information item; no action was taken.

5. Wastewater Discharge Request to Santa Margarita Water District (SMWD) and City of San Clemente (CSC) Sewerage Facilities

Ms. Amber Baylor, Director of Environmental Compliance, stated the agenda item was specifically for the City of San Clemente and Santa Margarita Water District regarding

potential flows that would be accepted through SOCWA's Pretreatment ordinance. She summarized the discharge request for wastewater from the Prima Deshecha Landfill (PDL) Gas Condensate Treatment System (CTS). An open discussion ensued.

Ms. Baylor stated she would distribute the tables to the City of San Clemente and Santa Margarita and schedule meetings with staff and the Member Agencies so that everyone is on the same page. The Engineering Committee gave no additional direction.

This was an information item; no action was taken.

6. JB Latham Salt Loading Model Follow-up [Project Committee 2]

Ms. Baylor updated the Engineering Committee on the drivers of the Salt Study, Recycled Water vs. Potable Water Model inputs, and consideration of speciated TDS loading for cost allocation and future study. An open discussion ensued.

This was an information item; no action was taken.

7. Capital Improvement Construction Projects Progress and Change Order Report (September) [Project Committee Nos. 2, 15 & 17]

ACTION TAKEN

Motion was made by Mr. Bunts and seconded by Mr. Serna to approve Olsson Construction Change Order No. 63 for \$14,797.83, No. 64 for \$66,992.33, and No. 65 for \$32,709.94 for a total of \$114,500.10 with no additional day(s) for a revised contract value of \$18,488,244.24 for the JB Latham Package B Project.

Motion carried:	Aye 3, Nay 0, Abstained 0, Absent 0
	Director Woods Aye
	Director Bunts Aye
	Director Serna Aye

8. Regional Treatment Plant (RTP) Emergency Power System Information [Project Committee 17]

Mr. Baranowski presented to the Engineering Committee about the emergency power system at the Regional Treatment Plant. The presentation included a history of power system modifications, the current power system configuration, a summary of a recent study of standby generation options, and presented potential modification options staff are considering. An open discussion ensued.

This was an information item; no action was taken.

Adjournment

There being no further business, Mr. Baranowski adjourned the meeting at 9:40 a.m.

I HEREBY CERTIFY that the foregoing Minutes are a true and accurate copy of the Minutes of the Regular Meeting of the South Orange County Wastewater Authority Engineering Committee of November 10, 2022, and approved by the Engineering Committee and received and filed by the Board of Directors of the South Orange County Wastewater Authority.

Danita Hirsh, Assistant Secretary
SOUTH ORANGE COUNTY WASTEWATER AUTHORITY

**MINUTES OF REGULAR MEETING
OF THE
SOUTH ORANGE COUNTY WASTEWATER AUTHORITY
Engineering Committee**

January 12, 2023

The Regular Meeting of the South Orange County Wastewater Authority (SOCWA) Engineering Committee Meeting was held on January 12, 2023, at 8:30 a.m. via teleconferencing from the Administrative Offices located at 34156 Del Obispo Street, Dana Point, California. The following members of the Engineering Committee were present via Zoom Meeting:

DAVID SHISSLER	City of Laguna Beach
MIKE DUNBAR	Emerald Bay Service District [exited @ 9:31 a.m.]
DENNIS CAFFERTY	El Toro Water District
KEVIN BURTON	Irvine Ranch Water District
ROD WOODS	Moulton Niguel Water District
DON BUNTS	Santa Margarita Water District
MARC SERNA	South Coast Water District
LORRIE LAUSTEN	Trabuco Canyon Water District [arrived @ 8:45 a.m.]

Absent:

DAVE REBENS DORF	City of San Clemente
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Staff Present:

BETTY BURNETT	General Manager
DAVID BARANOWSKI	Director of Engineering
JIM BURROR	Director of Operations
AMBER BAYLOR	Director of Environmental Compliance
RONI YOUNG	Associate Engineer
MARY CAREY	Finance Controller
JEANETTE COTINOLA	Procurement / Contracts Manager
DINA ASH	HR Administrator
KONSTANTIN SHILKOV	Senior Accountant
NADYN KIM	Accountant
ANNA SUTHERLAND	Accounts Payable
MATT CLARKE	IT Administrator
DANITA HIRSH	Executive Assistant

Also Present:

EMILY CHAIDEZ	Procopio Law
TARYN KJOLSING	South Coast Water District
SHERRY WANNINGER	Moulton Niguel Water District
DAVE LARSEN	Moulton Niguel Water District
SAUNDRA JACOBS	Santa Margarita Water District
JESUS GARIBAY	Moulton Niguel Water District
BILL MOORHEAD	Moulton Niguel Water District

1. Call Meeting to Order

Mr. David Baranowski, Director of Engineering, called the meeting to order at 8:31 a.m.

2. Public Comments

None.

3. Operations Report

Mr. Burror, Director of Operations, reported on the emergency projects currently at all three plants managed by the Operations staff. He stated that there was a hot water line break at the JB Latham Plant (JBL), and a Eucalyptus tree fell at the Regional Treatment Plant (RTP), damaging a fence and impeding the Regional Park's corner. The Coastal Treatment Plant (CTP) has an Edison power issue, an emergency item that will be requested for approval later on the agenda. An open discussion ensued.

Ms. Amber Baylor, Director of Environmental Compliance, gave an updated report on the Harbor project and the Salt Nutrient Management Plan. An open Discussion ensued.

This was an information item; no action was taken.

4. Electric Fleet Vehicles

Mr. Baranowski gave an updated report on SOCWA's amended plans not to buy an electric vehicle. He requested feedback from the Committee members on their recommendations and plans for converting their vehicles from gas to electric at their agency. An open discussion ensued.

This was an information item; no action was taken.

Agendizing Emergency Action

Mr. Burror stated that under the rules of the State for municipal agencies, an emergency action could be brought to the agenda based on a two-thirds (2/3) committee vote. He stated that a large piece of equipment was damaged at the CTP (PC 15). He noted that it is unclear how the equipment was damaged, and the cost to replace it is over the General Managers' spending authority. He stated there is currently one in stock, and if ordered by the end of the week, it could ship in six (6) weeks. Mr. Burror requested that the PC 15 Engineering Committee, by a two-thirds (2/3) vote, allow adding the item to the agenda for a recommendation for Board approval with the consideration that the General Manager initiates immediate purchase to expedite the procurement of the item.

Ms. Burnett, General Manager, stated that due to the time restraints, staff is seeking concurrence of the PC 15 Engineering Committee to purchase the replacement equipment under the emergency spending authorization of the Uniform Purchasing Policy. She noted that because the purchase is over the spending authority of the General Manager, staff will move ahead and give a report to the Board Chair and notify the Board at the next Regular

ACTION TAKEN

Motion was made by Mr. Dunbar and seconded by Mr. Shissler to add the item to the agenda for discussion.

Motion carried: Aye 4, Nay 0, Abstained 0, Absent 0
 Director Dunbar Aye
 Director Woods Aye

Director Bunts	Aye
Director Serna	Aye

There was concurrence of the PC 15 Engineering Committee supporting the General Manager to make an emergency purchase under the Uniform Purchasing Policy to expedite the procurement of the equipment, notify the Board Chair, and request the Board to ratify the purchase at the next Regular meeting. Mr. Rod Woods, Moulton Niguel Water District, abstained.

5. Historical Recycled Water Development and State Opportunities

Ms. Baylor gave a presentation on the State Opportunities & Historical Recycled Water Development. See the attached presentation herewith.

This was an information item; no action was taken.

6. PC 2 Flow Budgeting [Project Committee 2]

Ms. Baylor requested a two-week study on the flow from the Oso Plant to the 3A Plant to determine if 1.4 MGD remains a constant for the residential and commercial areas. She noted that the study is of no cost and would help from a budgeting standpoint. An open discussion ensued.

Mr. Woods and Mr. Bunts concurred that there are other projects with higher priority and to hold off on the study for now.

This was an information item; no action was taken.

7. Capital Improvement Construction Projects Progress and Change Order Report (September) [Project Committees 2, 15 & 17]

ACTION TAKEN

Motion was made by Mr. Bunts and seconded by Mr. Woods to approve Olsson Construction Change Order Nos. 66 through 69 for a total of \$95,220.25 with no additional day(s) for a revised contract value of \$18,583,464.49 for the JB Latham Package B Project.

Motion carried:	Aye 3, Nay 0, Abstained 0, Absent 0
	Director Woods Aye
	Director Bunts Aye
	Director Serna Aye

8. JB Latham Treatment Plant Electrical System Upgrades Additional Design, Bidding, and Engineering Service During Construction(ESDC) [Project Committee 2]

ACTION TAKEN

Motion was made by Mr. Bunts and seconded by Mr. Woods to recommend that the PC 2 Board of Directors approve the contract to Hazen and Sawyer in the amount of \$112,620 for the additional design services and bidding and ESDC services in the amount of \$164,350 for a total of \$276,970 for the JB Latham Treatment Plant Electrical System Upgrades Project.

Motion carried:	Aye 3, Nay 0, Abstained 0, Absent 0
	Director Woods Aye
	Director Bunts Aye

Director Kjolsing Aye

9. Contract Award for Aliso Creek Ocean Outfall (ACCOO) Internal Seal Replacement Engineering Service During Construction [Project Committee 24]

ACTION TAKEN

Motion was made by Mr. Woods and seconded by Mr. Shissler to recommend that the PC 24 Board of Directors approve the contract to Black & Veatch in the amount of \$44,850 for the bidding and ESDC services for the ACCOO Internal Seal Replacement project.

Motion carried:	Aye 5, Nay 0, Abstained 0, Absent 1
	Director Shissler Aye
	Director Cafferty Aye
	Director Dunbar Absent
	Director Burton Aye
	Director Woods Aye
	Director Kjolsing Aye

10. Coastal Treatment Plant (CTP) Funding Strategy and Implementation Plan Proposal [Project Committee 15]

This agenda item was postponed until the next Engineering Committee meeting in February.

11. Update on the Fiscal Year 2022/2023 Budget

Mr. Baranowski gave an overview of the remainder of the budget year for Fiscal Year 2022/2023. An open discussion ensued.

This was an information item; no action was taken.

Adjournment

There being no further business, Mr. Baranowski adjourned the meeting at 10:09 a.m.

I HEREBY CERTIFY that the foregoing Minutes are a true and accurate copy of the Minutes of the Regular Meeting of the South Orange County Wastewater Authority Engineering Committee of January 12, 2023, and approved by the Engineering Committee and received and filed by the Board of Directors of the South Orange County Wastewater Authority.

Danita Hirsh, Assistant Secretary
SOUTH ORANGE COUNTY WASTEWATER AUTHORITY

State Opportunities & Historical Recycled Water Development

SOCWA ENGINEERING COMMITTEE | JANUARY 12, 2023

AGENDA ITEM 5

AMBER BAYLOR | JIM BURROR

Drivers & Purpose

Drivers:

CASA Regulatory Workgroup Priority Item

Governor Newsom's California Water Supply Strategy

Purpose:

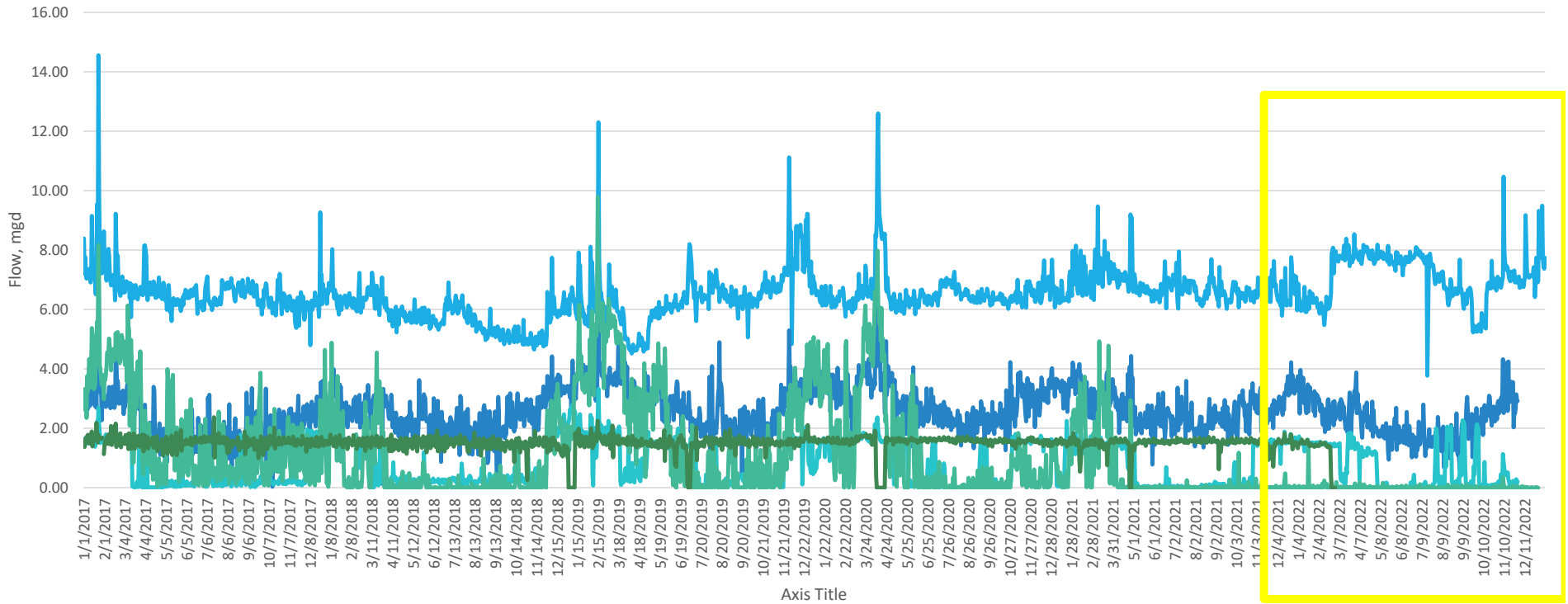
Assist agencies in permit streamlining through regional focus

Maximize beneficial uses at each outfall

Water Supply Task Force

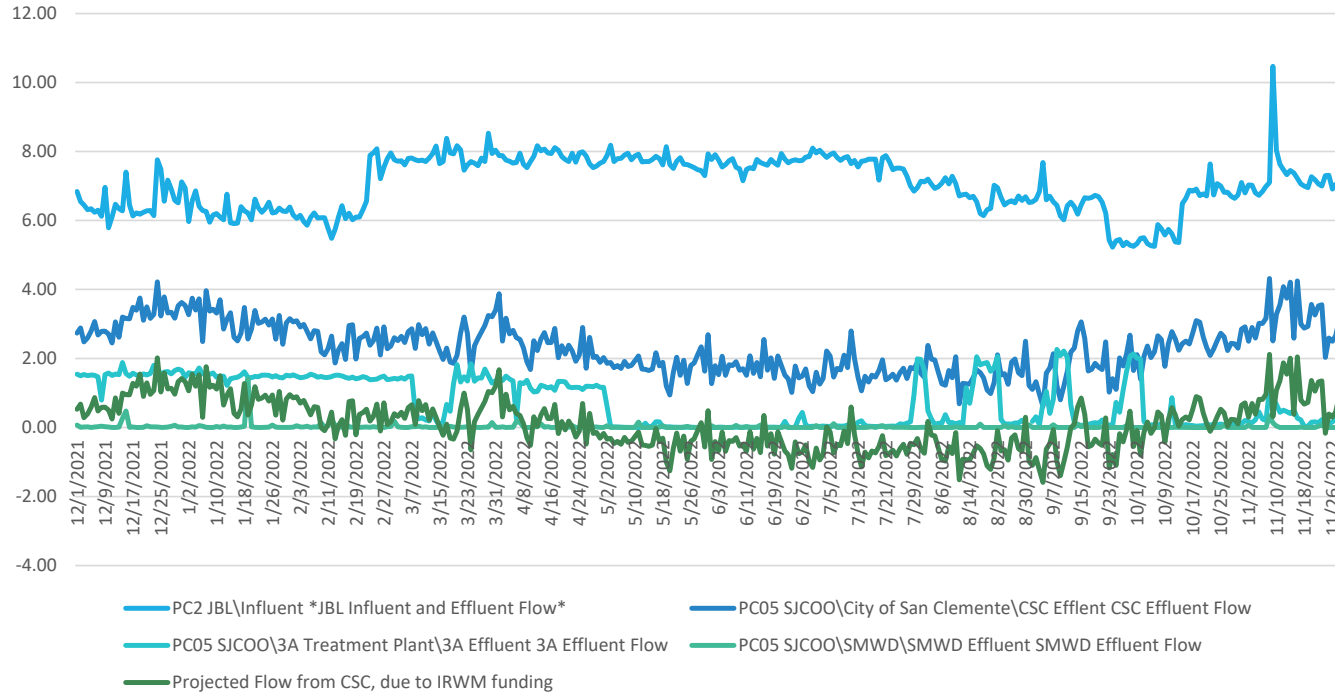
1. Assist the agencies who are currently executing projects to be operational in next 7 years to ensure no short term/imminent **permitting or funding** issues disrupt their timeline.
2. Assess opportunities for more recycling in consideration of a suite of obstacles including brine management, rates, land for siting, and the need to recapitalize existing infrastructure.

Available Effluent Flow to SJCOO 2017 to 2022



- 10533 PC2 JBL\Influent *JBL Influent and Effluent Flow*
- 10341 PC05 SJCOO\City of San Clemente\CSC Effluent CSC Effluent Flow
- 10335 PC05 SJCOO\3A Treatment Plant\3A Effluent 3A Effluent Flow
- 10342 PC05 SJCOO\SMWD\SMWD Effluent SMWD Effluent Flow
- 40360 Recycle\SMWD - OSO WRP Flow Oso Creek WRP

SJCOO 12 Month Effluent and Projected Flows



	JBL	CSC	3A	CWRP	Projected CSC due to IRWM
MG (Sum)	2570.89	844.75	274.46	8.18	41.75
AFY	7890	2592	842	25	128

Total available, estimated flow, based on permitted reports and IRWM funding.

2017 Carollo Recommendations

- Pilot test testing of cloth and media pressurized membranes performed in 2008.
- Cloth filters did not perform well.
- 2017 Recommendation of 6.2 mgd with microfiltration.
- **Goal** of 900mg/l chosen and Reverse osmosis selected as the technology to achieve goal, not regulatory requirement.
- **User** requirements to determine recycled water goal.

5.2.2 Previous Work

Several studies have been performed for SOCWA in regards to Title 22 treatment, beginning with CGVL Engineers in 2000. This work effort was ended when secondary effluent quality was deemed too poor and inconsistent for conventional processes to produce Title 22 effluent.

In 2006, CH2M HILL performed a study on technologies for advanced water treatment (AWT) and evaluated membrane bioreactors, cloth media filters, and pressurized membrane filters as potential technologies for producing Title 22 effluent. The study concluded that MBR technology would be too costly to implement at JBLTP and was not evaluated further. Both cloth media filtration and pressurized membrane filters were further evaluated due to similar cost and relatively small footprint. This study noted that little information existed at the time on how cloth media filters would perform at a facility operating under non-nitrifying solids retention times (SRTs). Subsequently, CH2M HILL recommended that pilot testing of cloth media and pressurized membrane filters be done at JBLTP.

Pilot tests were performed in 2008 and showed definitively that cloth media filters did not perform well at JBLTP. However, pressurized membranes worked well during pilot testing, which led to a second technical memo where CH2M HILL updated their 2006 study based on pilot testing results. This 2009 memo further investigated the feasibility of producing Title 22 effluent with pressurized membrane filters (microfiltration) with low-pressure, high-intensity ultraviolet (UV) disinfection. This effort was eventually ended due to projected costs.

5.2.3 Salt Issues

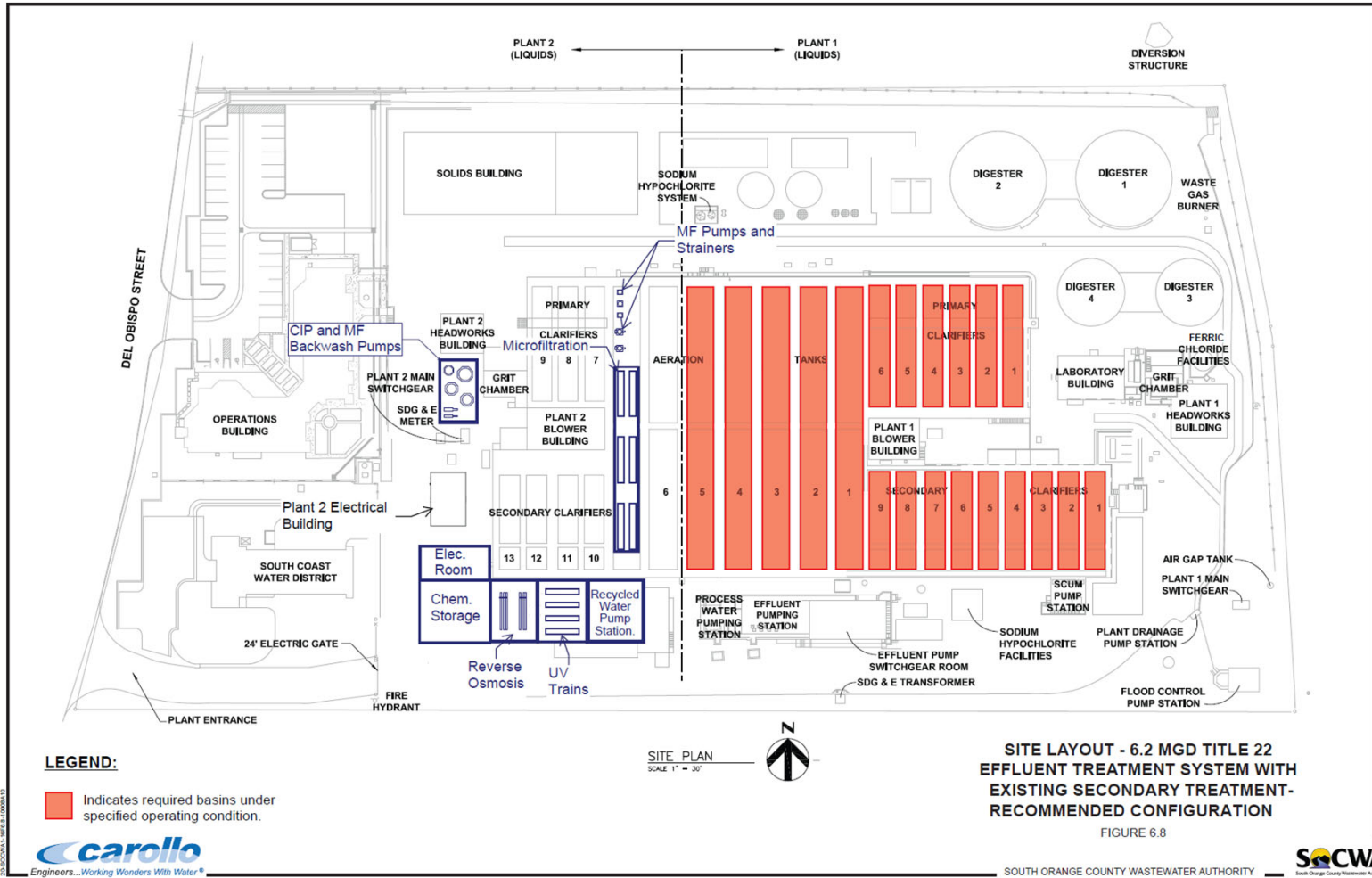
Previous work related to Title 22 effluent has not addressed the high total dissolved solids (TDS) in JBLTP's secondary effluent. Per SOCWA at the Effluent Management Meeting, Plant 1 typically produces secondary effluent with 1,000 mg/L to 1,100 mg/L TDS, and Plant 2 normally produces 2,000 mg/L TDS. For the purpose of this evaluation, SOCWA advised that a non-potable effluent goal of 900 mg/L TDS should be used for process evaluation. This goal necessitates the use of microfiltration/ultrafiltration (MF/UF) with side-stream reverse osmosis (RO) to reduce overall TDS in Title 22 effluent to 900 mg/L. Previous work by CH2M HILL at JBLTP has shown that cloth media filters perform poorly at JBLTP and were therefore excluded from possible Title 22 treatment trains. Sand filters are also excluded from consideration at JBLTP due to their large footprint.

5.3 TREATMENT REGULATIONS

Any future water reuse project must meet the applicable public health criteria for either non-potable and potable water reuse, depending on the selected reuse application. Further, any new water reuse project must not cause exceedances in the JBLTP's discharge permit.

March 2017
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5-2



2023/04/18 10:00 AM



NON-POTABLE TREATMENT TRAINS

Treatment Train	Cost	Performance	Notes
Cloth Filtration with Hypochlorite	Lowest cost, ~\$1M-\$2M/mgd	Needs high water quality feed to cloth filtration. Ammonia impacts performance	UV can be substituted for hypo for better disinfection at a similar cost
Deep Bed Filtration with UV	~\$1.5M-\$2.5M/mgd	Can handle wide range of water quality and meet permit	
Membrane Filtration with Ozone	\$2.5M-\$3.5M/mgd	Extremely robust, handles pathogens and trace pollutants	UV can be substituted for ozone, reducing cost but also reducing pollutant removal
Any Filtration with Pasteurization	Cost varies depending upon cost of power and availability of waste heat	Extremely robust for pathogens	

Design/Production Phase Cost

- \$2.5M-\$3.5M/mgd cost estimate in 2017.
- ~\$17.6M-24.6M for immediate production of recycled water.
- Engineering Cost estimate would need to be updated.

Projects for Discussion with Task Force

Ask of the Committee:

1. Learning curve big projects

JB Latham AWT Design & Funding History

2000 CGvL Preliminary Design

2001 CH2MHill AWT Advanced Wastewater Treatment Facilities Final Design

2006 CH2MHill Preliminary Design

2007 MND/EIR for AWT

2008 CH2MHill J.B. Latham Treatment Plant AWT Pilot Study

2008 J.B. Latham Treatment Plant AWT Facility State Revolving Fund Application Assistance

2009 Bid Package – Membrane System for the J.B. Latham Treatment Plant Advanced Wastewater Treatment Facility

2009 Bid Package – UV Disinfection System for the J.B. Latham Treatment Plant Advanced Wastewater Treatment Facility

2013 Facility Improvement Plan TM-7 Section 6.0 Advanced Water Treatment Plan

2017 JBLTP Package B Planning Technical Memorandum No. 1 Liquid Treatment Train Analysis

Thank you!

Amber Baylor

abaylor@socwa.com

949.234-5409

Jim Burror

jburror@socwa.com

949.234.5402

**MINUTES OF REGULAR MEETING
OF THE
SOUTH ORANGE COUNTY WASTEWATER AUTHORITY**

Engineering Committee

February 9, 2023

The Regular Meeting of the South Orange County Wastewater Authority (SOCWA) Engineering Committee Meeting was held on February 9, 2023, at 8:30 a.m. via teleconferencing from the Administrative Offices located at 34156 Del Obispo Street, Dana Point, California. The following members of the Engineering Committee were present via Zoom Meeting:

DAVID SHISSLER	City of Laguna Beach
KEVIN BURTON	Irvine Ranch Water District
ROD WOODS	Moulton Niguel Water District
DON BUNTS	Santa Margarita Water District
MARC SERNA	South Coast Water District
	[arrived @ 8:43 a.m.] [exited at 9:28 a.m.]
DAVE REBENS DORF	City of San Clement [arrived @ 8:48 a.m.]

Absent:

MIKE DUNBAR	Emerald Bay Service District
LORRIE LAUSTEN	Trabuco Canyon Water District
DENNIS CAFFERTY	El Toro Water District
	[Called in but unable to participate]

Staff Present:

DAVID BARANOWSKI	Director of Engineering
JIM BURROR	Director of Operations
AMBER BAYLOR	Director of Environmental Compliance
RONI YOUNG	Associate Engineer
MARY CAREY	Finance Controller
JEANETTE COTINOLA	Procurement / Contracts Manager
NADYN KIM	Accountant
ANNA SUTHERLAND	Accounts Payable
MATT CLARKE	IT Administrator
DANITA HIRSH	Executive Assistant

Also Present:

EMILY CHAIDEZ	Procopio Law
TARYN KJOLSING	South Coast Water District
SHERRY WANNINGER	Moulton Niguel Water District
DAVE LARSEN	Moulton Niguel Water District
SAUNDRA JACOBS	Santa Margarita Water District
MARK MCAVOY	City of Laguna Beach

1. Call Meeting to Order

Mr. David Baranowski, Director of Engineering, called the meeting to order at 8:31 a.m.

2. Public Comments

None.

3. Approval of Minutes

The Engineering Committee Minutes for November 10, 2022, will be brought back to the next meeting for approval.

4. Operations Report

Ms. Amber Baylor, Director of Environmental Compliance, reported that communications with the County of Orange consultants continue relating to the landfill condensate for PFAS entering the facilities. Staff will continue to engage with the consultants to raise their awareness of inconsistencies with their testing protocols as it relates to influent effluent testing. Ms. Baylor also reported on a meeting with the Burnam Wood project consultants in the harbor regarding the salt loading study at the J.B. Latham facility. An open discussion ensued.

Mr. Jim Burror, Interim General Manager/Director of Operations, reported on the Edison project at the Coast Treatment Plant. He stated the plant is still running on generators while Edison installs some of their equipment. An open discussion ensued.

This was an information item; no action was taken.

5. FY 2023-24 Flows and Solids Initial Budget

Mr. Baylor gave an updated report on the proposed flows and solids projected for FY 2023-2024. She requested feedback from the Committee be submitted by February 21, 2023. An open discussion ensued.

This was an information item; no action was taken.

6. Outfall Inspection Reports for Aliso Creek Ocean Outfall (ACOO) and San Juan Creek Ocean Outfall (SJCOO) [Project Committees 5 & 24]

Ms. Baylor reported on the results of Subsea Global Solutions (SGS) inspection report recommendations from November 2022. She stated the recommendations are a condition of the California State Lands Commission (SLC) leasing agreement for SOCWA. Ms. Baylor also stated at the Board of Directors' December 8, 2022, meeting, staff was directed to include funding in the FY 2023-2024 budget to comply with the SLC lease condition. An open discussion ensued.

This was an information item; no action was taken.

7. Contract Award for Regional Treatment Plant (RTP) Cogen Engine SCR Blower Installation [Project Committee 17]

ACTION TAKEN

Motion was made by Mr. Woods and seconded by Mr. Serna to recommend that the PC 17 Board of Directors award the contract to Western Energy in the amount of \$45,450.23 plus actual shipping costs, fees, and tax to be determined at the time of shipping for the installation of the Steuler blower modification on the RTP Cogen selective catalytic reducer (SCR); and establish a project contingency in the amount of \$5,000.00.

Motion carried: Aye 3, Nay 0, Abstained 0, Absent 2
Director Shissler Aye
Director Cafferty Absent
Director Dunbar Absent
Director Woods Aye
Director Serna Aye

8. Contract Award for J.B. Latham Treatment Plant (JBL) Cogen Engine SCR Blower Installation [Project Committee 2]

ACTION TAKEN

Motion was made by Mr. Bunts and seconded by Mr. Woods to recommend that the PC 2 Board of Directors award the contract to Western Energy in the amount of \$45,450.23 plus actual shipping costs, fees, and tax to be determined at the time of shipping for the installation of the Steuler blower modification on the JBL Cogen selective catalytic reducer (SCR); and establish a project contingency in the amount of \$5,000.00.

Motion carried: Aye 3, Nay 0, Abstained 0, Absent 0
Director Woods Aye
Director Bunts Aye
Director Serna Aye

9. Capital Improvement Construction Projects Progress and Change Order Report (February) [Project Committees 2, 15, & 17]

ACTION TAKEN

Motion was made by Mr. Bunts and seconded by Mr. Woods to approve Olsson Construction Change Orders 70 and 71 for a total of \$32,571.89, with no additional days, and a revised contract value of \$18,616,036.38 for the J.B. Latham Package B Project.

Motion carried: Aye 3, Nay 0, Abstained 0, Absent 0
Director Woods Aye
Director Bunts Aye
Director Serna Aye

10. Contract Award for J.B. Latham (JBL) Administration Building Roof Reconstruction Project [Project Committee 2]

ACTION TAKEN

Motion was made by Mr. Bunts and seconded by Mr. Serna to recommend that the PC 2 Board of Directors award the contract to A. Preman Roofing in the amount of \$93,985.00 for the J.B. Latham Administration Building Roof Reconstruction Project with a contingency of \$10,000.00.

Motion carried: Aye 3, Nay 0, Abstained 0, Absent 0
Director Woods Aye
Director Bunts Aye
Director Serna Aye

11. Coastal Treatment Plant (CTP) Funding Strategy and Implementation Plan Proposal
[Project Committee 15]

This agenda item was postponed until the next Engineering Committee meeting in March.

12. Contract Award for the Coastal Treatment Plant (CTP) Drainage Pump Station Conceptual Design [Project Committee 15]

Staff was directed to provide more information and bring this agenda item back to the next Engineering Committee meeting in March.

Adjournment

There being no further business, Mr. Baranowski adjourned the meeting at 9:28 a.m.

I HEREBY CERTIFY that the foregoing Minutes are a true and accurate copy of the Minutes of the Regular Meeting of the South Orange County Wastewater Authority Engineering Committee of February 9, 2023, and approved by the Engineering Committee and received and filed by the Board of Directors of the South Orange County Wastewater Authority.

Danita Hirsh, Assistant Board Secretary
SOUTH ORANGE COUNTY WASTEWATER AUTHORITY

**MINUTES OF REGULAR MEETING
OF THE
SOUTH ORANGE COUNTY WASTEWATER AUTHORITY**

Engineering Committee

March 9, 2023

The Regular Meeting of the South Orange County Wastewater Authority (SOCWA) Engineering Committee Meeting was held on March 9, 2023, at 8:30 a.m. in-person and via teleconferencing from the Administrative Offices located at 34156 Del Obispo Street, Dana Point, California. The following members of the Engineering Committee were present:

DAVID SHISSLER	City of Laguna Beach
MIKE DUNBAR	Emerald Bay Service District [exited @ 9:26 a.m.]
DENNIS CAFFERTY	El Toro Water District
KEVIN BURTON	Irvine Ranch Water District [exited @ 10:10 a.m.]
ROD WOODS	Moulton Niguel Water District
DON BUNTS	Santa Margarita Water District [exited @ 10:10 a.m.]
MARC SERNA	South Coast Water District

Absent:

DAVE REBENS DORF	City of San Clemente
LORRIE LAUSTEN	Trabuco Canyon Water District

Staff Present:

DAVID BARANOWSKI	Director of Engineering
JIM BURROR	Director of Operations
AMBER BAYLOR	Director of Environmental Compliance
RONI YOUNG	Associate Engineer
JEANETTE COTINOLA	Procurement / Contracts Manager
ANNA SUTHERLAND	Accounts Payable
KONSTANTIN SHILKOV	Senior Accountant
MATT CLARKE	IT Administrator
DANITA HIRSH	Executive Assistant

Also Present:

ADRIANA OCHOA	Procopio Law
JESUS GARIBAY	Moulton Niguel Water District
SHERRY WANNINGER	Moulton Niguel Water District
DAVE LARSEN	Moulton Niguel Water District
SAUNDRA JACOBS	Santa Margarita Water District
ERICA CASTILLO	Santa Margarita Water District

1. Call Meeting to Order

Mr. David Baranowski, Director of Engineering, called the meeting to order at 8:33 a.m.

2. Public Comments

None.

3. Operations Report

Mr. Jim Burror, Interim General Manager/Director of Operations, reported that budget items had been submitted to the Finance Controller to prepare the next fiscal year's budget. Mr. Burror also stated the Coastal Treatment Plant is still running on the emergency generator power being supplied by Edison. An open discussion ensued.

Ms. Amber Baylor, Director of Environmental Compliance, provided an updated report on the Salt Nutrient Management Plant (SNMP).

This was an information item; no action was taken.

4. Capital Improvement Construction Projects Progress and Change Order Report (March) [Project Committees 2, 15, & 17]

ACTION TAKEN

Motion was made by Mr. Bunts and seconded by Mr. Serna to approve Olsson Construction Change Orders No. 72 for a total of \$10,831.51, with no additional days, and a revised contract value of \$18,626,867.89 for the J.B. Latham Package B Project.

Motion carried:	Aye 3, Nay 0, Abstained 0, Absent 0
	Director Woods Aye
	Director Bunts Aye
	Director Serna Aye

5. Contract Award for Coastal Treatment Plant (CTP) AWMA Road Guardrail Replacement Project [Project Committee 15]

ACTION TAKEN

Motion was made by Mr. Shissler and seconded by Mr. Serna to recommend that the PC 15 Board of Directors award the contract to Danny C. Hubbs in the amount of \$48,770 for the Coastal Treatment Plant AWMA Road Guardrail Replacement Project with project contingency of \$10,000.

Motion carried:	Aye 3, Nay 0, Abstained 1, Absent 0
	Director Shissler Aye
	Director Dunbar Aye
	Director Woods Abstain
	Director Serna Aye

6. Draft Capital Improvement Program (CIP) Budget for Fiscal Year 2023/2024

Mr. Baranowski presented the proposed CIP Budget for Fiscal Year 2023/24, attached herewith. An open discussion ensued.

This was an information item; no action was taken.

7. Contract Award for Regional Treatment Plant (RTP) Cogen Engine Black Start Operation [Project Committee 17]

ACTION TAKEN

Motion was made by Mr. Woods and seconded by Mr. Cafferty to recommend that the PC 17 Board of Directors award the contract to Western Energy in the amount of \$75,000 for the Cogen Engine Black Start Operation Upgrade Project.

Motion carried: Aye 4, Nay 0, Abstained 0, Absent 1
Director Shissler Aye
Director Cafferty Aye
Director Dunbar Absent
Director Woods Aye
Director Serna aye

8. Coastal Treatment Plant (CTP) Funding Strategy and Implementation Plant Proposal
[Project Committee 15]

Staff was directed to address this agenda item at the next Engineering Committee meeting in April.

9. Contract Award for Coastal Treatment Plant (CTP) Drainage Pump Station Conceptual Design [Project Committee 15]

ACTION TAKEN

Motion was made by Mr. Serna and seconded by Mr. Shissler to recommend that the PC 15 Board of Directors award the contract to Tetra Tech in the amount of \$176,000 for the Coastal Treatment Plant Drainage Pump Station Conceptual Design Project.

Motion carried: Aye 2, Nay 0, Abstained 1, Absent 1
Director Shissler Aye
Director Dunbar Absent
Director Woods Abstain
Director Serna Aye

Adjournment

There being no further business, Mr. Baranowski adjourned the meeting at 10:17 a.m.

I HEREBY CERTIFY that the foregoing Minutes are a true and accurate copy of the Minutes of the Regular Meeting of the South Orange County Wastewater Authority Engineering Committee of March 9, 2023, and approved by the Engineering Committee and received and filed by the Board of Directors of the South Orange County Wastewater Authority.

Danita Hirsh, Assistant Board Secretary
SOUTH ORANGE COUNTY WASTEWATER AUTHORITY

Agenda Item

5.B

Board of Directors Meeting

Meeting Date: May 4, 2023

TO: Board of Directors

FROM: Jim Burror, Acting General Manager/Director of Operations

STAFF CONTACT: Mary Carey, Finance Controller

SUBJECT: Financial Reports for the Month of January 2023

Summary/Discussion

The following selected financial reports are routinely provided monthly to the Finance Committee for recommendation to the Board of Directors to ratify Cash Disbursements and receive and file the remaining documents.

The reports included are as follows:

1. Summary of Disbursements for January 2023 (Exhibit A)
2. Schedule of Funds Available for Reinvestment (Exhibit B)
 - Local Agency Investment Fund (LAIF)
3. Schedule of Cash and Investments (Exhibit C)
4. Capital Schedule (Exhibit D)
 - Capital Projects – Graph (Exhibit D-1)
5. Budget vs. Actual Expenses:
 - Operations and Environmental Summary (Exhibit E-1)
 - Operations and Environmental by PC (E-1.2)
 - Residual Engineering, after transfer to Capital (Exhibit E-2)
 - Administration (Exhibit E-3)
 - Information Technology (IT) (Exhibit E-4)

Fiscal Impact

January 2023 cash disbursements were: \$ 2,326,317.

- Monthly disbursements are summarized in the attached Exhibit A.
- The attached Exhibits B, C, D, and E are informational reports only.

Recommended Action: The Finance Committee recommends that the Board of Directors ratify the January 2023 disbursements, \$ 2,326,317, for the period from January 1, 2023, through January 31, 2023, and to receive and file the January 2023 Financial Reports as submitted.

Exhibit A

**South Orange County Wastewater Authority
Summary of Disbursements for January 2023
Staff Recommendation of Fiscal Matters**

	<u>Actual</u>
General Fund	\$ (130,247)
PC 2 - Jay B. Latham Plant	(926,941)
PC 5 - San Juan Creek Ocean Outfall	(30,978)
PC 8 - Pretreatment Program	(13,910)
PC 12 SO - Water Reclamation Permits	(4,703.92)
PC 15 - Coastal Treatment Plant/AWT	(308,405)
PC 17 - Joint Regional Wastewater Reclamation	(869,047)
PC 21 - Effluent Transmission Main	(6,656)
PC 23 - North Coast Interceptor	-
PC 24 - Aliso Creek Ocean Outfall	(35,428)
Total	<u><u>\$ (2,326,317)</u></u>

**SOUTH ORANGE COUNTY WASTEWATER AUTHORITY
SCHEDULE OF FUNDS AVAILABLE FOR REINVESTMENT
as of January 31, 2023**

CASH IN BANK: (BEGINNING BAL.)	\$	1,898,647
L.A.I.F. FUNDS: (BEGINNING BAL.)		4,786,673
DEPOSITS, TRANSFERS & ADJUSTMENTS:		1,042,706
FUND REQUIREMENTS:		
BILLS FOR CONSIDERATION ¹		(2,326,317)
TOTAL CASH IN BANK	\$	5,401,709

¹ GL postings.

In accordance with Government Code 53646(c), since all funds are placed in the State LAIF, staff has included in the Financial Packet, the most current statement from the State LAIF, in lieu of the report required by Government Code 53646(b)(1).

In accordance with requirements of the Government Code and the "SOCWA Investment Policy", I hereby certify that:

- 1). All investment actions executed since the last report have been made in full compliance with the Investment Policy.

- 2). SOCWA does not have sufficient funds currently on hand to meet its expenditure obligations for the next six months (see note) due to the fact that SOCWA bills and receives operational funds on a quarterly basis only.

Betty Burnett
General Manager

Note: Operational funds are collected on a quarterly basis at the beginning of the quarter. Capital funds are collected on a quarterly basis in connection with projected needs. Member agencies have pledged to have funds available to meet all obligations.



PMIA/LAIF Performance Report as of 03/09/23



PMIA Average Monthly Effective Yields⁽¹⁾

February	2.624
January	2.425
December	2.173

Quarterly Performance Quarter Ended 12/31/22

LAIF Apportionment Rate ⁽²⁾ :	2.07
LAIF Earnings Ratio ⁽²⁾ :	0.00005680946709337
LAIF Fair Value Factor ⁽¹⁾ :	0.981389258
PMIA Daily ⁽¹⁾ :	2.29
PMIA Quarter to Date ⁽¹⁾ :	1.98
PMIA Average Life ⁽¹⁾ :	287

Pooled Money Investment Account Monthly Portfolio Composition ⁽¹⁾ 02/28/23 \$200.5 billion

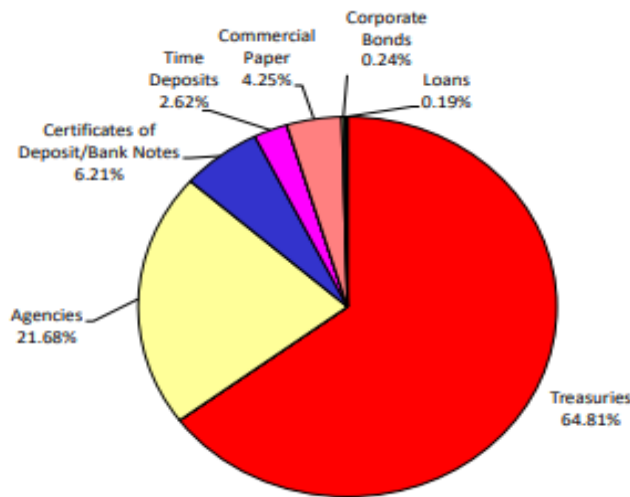


Chart does not include \$3,158,000.00 in mortgages, which equates to 0.002%. Percentages may not total 100% due to rounding.

Daily rates are now available here. [View PMIA Daily Rates](#)

Notes: The apportionment rate includes interest earned on the CalPERS Supplemental Pension Payment pursuant to Government Code 20825 (c)(1) and interest earned on the Wildfire Fund loan pursuant to Public Utility Code 3288 (a).

Source:

⁽¹⁾ State of California, Office of the Treasurer

⁽²⁾ State of California, Office of the Controller

Exhibit C

**South Orange County Wastewater Authority
Schedule of Cash and Investments
as of January 31, 2023**

MVA	\$ 4,249	(A)
A/P Checking	1,283,771	(B)
Payroll Checking	371,164	(C)
State LAIF	3,742,525	(D)
Total Cash in Bank¹	\$ 5,401,709	
Petty Cash	1,600	(E)
Total Operating Cash	\$ 5,403,309	
OPEB Trust	6,063,520	(F)
Total Cash and Investments	\$ 11,466,829	

¹Bank balance at the end of a month may differ from an accounting closing balance as there may be in-transit items that haven't cleared the bank.

Notes:

- (A) Interest bearing account; all cash receipts are deposited in this account and later moved to the LAIF account.
- (B) Accounts Payable Checks are drawn against this account; money is transferred to this account, as needed, from the LAIF account.
- (C) Payroll including payroll taxes and related liabilities are drawn against this account; money is transferred into this account, as needed, from the LAIF account.
- (D) California State Local Agency Investment Fund (LAIF) balance.
- (E) Cash on hand with GM's office and held by Chief Operators at each Treatment facility.
- (F) OPEB Trust Fund; these funds can only be used for Retiree Health Benefits.

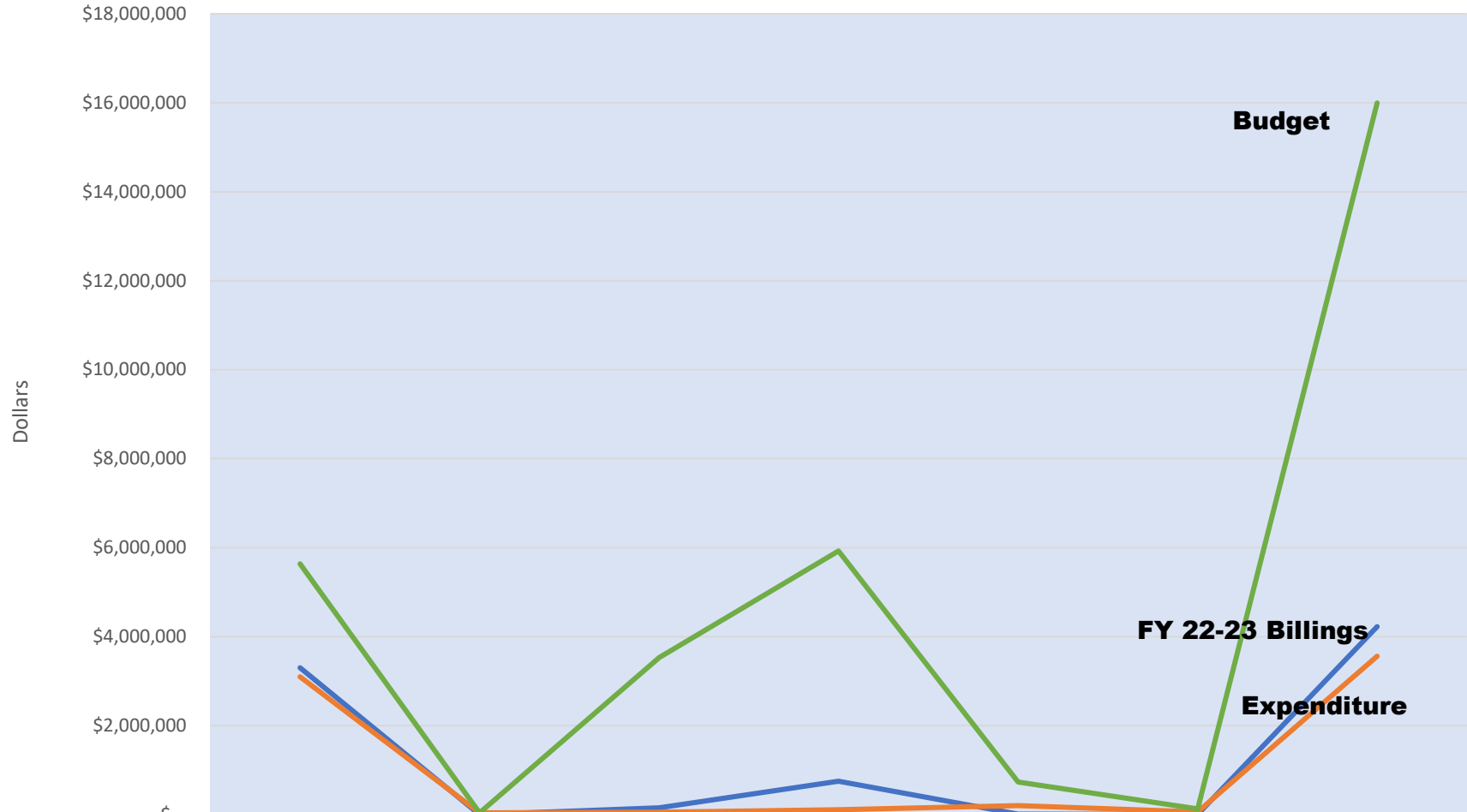
**South Orange County Wastewater Authority
Capital Projects Summaries
For the Period Ended January 31, 2023
(in dollars)**

FY 2022-23 Budget vs. Actual Spending								
<u>Description¹</u>	Capital Budget	Fiscal Year Spending	(Over)/ Under Budget	% Expended	Member Agency Billed	Member Agency Collections	Open Receivables	% Expended vs. Billed
PC 2-JB Latham	\$ 5,638,569	\$ 3,303,035	\$ 2,335,534	58.6%	\$ 3,095,405	\$ 3,095,405	\$ -	106.7%
PC 5-San Juan Creek Outfall	39,064	-	39,064	-	39,064	39,064	-	-
PC 15-Coastal	3,529,980	149,558	3,380,422	4.2%	56,250	56,250	-	265.9%
PC 17-Regional	5,928,616	753,167	5,175,449	12.7%	109,155	109,155	-	690.0%
PC 21 Effluent Transmission	732,810	13,203	719,607	1.8%	200,000	200,000	-	-
PC 24 Aliso Creek Outfall	127,065	6,131	120,934	4.8%	60,100	60,100	-	-
Total Large Capital	\$ 15,996,104	\$ 4,225,093	\$ 11,771,011	26.4%	\$ 3,559,974	\$ 3,559,974	\$ -	118.7%
Non-Capital Engineering	217,326	118,516	98,810	54.5%	75,000	75,000	-	158.0%
Non-Capital Misc Engineering	17,500	11,009	6,491	62.9%	-	-	-	-
Small Internal Capital	2,061,000	649,677	1,411,323	31.5%	1,545,750	1,545,750	-	42.0%
Total Capital	\$ 18,291,930	\$ 5,004,295	\$ 13,287,635	27.4%	\$ 5,180,724	\$ 5,180,724	\$ -	96.6%

¹All Project Committees had cash on hand at the end of FY 2021-22 to help cover the current year expenditures.

Large Capital Projects Fiscal Year '22-23 Budget vs. Year-to-Date Expenditures & Billings as of 1/31/2023

Exhibit D-1



	PC 2-JB Latham	PC 5-San Juan Creek Outfall	PC 15-Coastal	PC 17-Regional	PC 21 Effluent Transmission	PC 24 Aliso Creek Outfall	Total Large Capital
Spent - YTD 1/31/23	\$3,303,035	-	\$149,558	\$753,167	\$13,202.67	6,130.58	\$4,225,093
FY 22-23 Billings	\$3,095,405	39,064.00	\$56,250	\$109,155	200,000.00	60,100.00	\$3,559,974
Capital Budget FY 22-23	\$5,638,569	39,064.00	\$3,529,980	\$5,928,616	\$732,810	\$127,065	\$15,996,104

South Orange County Wastewater Authority
O & M & Environmental Safety Costs Summary¹
For the Period Ended January 31, 2023
(in dollars)

		FY 2022-23 Budget	Actual	(Over)/Under Budget	% Expended
Salary and Fringe					
-5000--**_**_**	Regular Salaries-O&M	4,931,084	2,631,496	2,299,588	53.4%
-5001--**_**_**	Overtime Salaries-O&M	73,524	90,981	(17,457)	123.7% (1)
-5306--**_**_**	Scheduled Holiday Work	86,468	54,890	31,578	63.5%
-5315--**_**_**	Comp Time - O&M	16,920	12,583	4,337	74.4% (1)
-5401--**_**_**	Fringe Benefits IN to PC's & Depts.	2,572,272	1,578,898	993,374	61.4% (7)
-5700--**_**_**	Standby Pay	70,000	39,780	30,220	56.8%
	Total Payroll Costs	7,750,268	4,408,628	3,341,640	56.9%
Other Expenses					
-5002--**_**_**	Electricity	1,253,828	715,389	538,439	57.1%
-5003--**_**_**	Natural Gas	268,200	346,904	(78,704)	129.3% (2)
-5004--**_**_**	Potable & Reclaimed Water	87,008	45,300	41,708	52.1%
-5005--**_**_**	Co-generation Power Credit	(1,050,004)	(649,505)	(400,499)	61.9%
-5006--**_**_**	Chlorine/Sodium Hypochlorite	554,000	306,599	247,401	55.3% (2)
-5007--**_**_**	Polymer Products	789,548	530,110	259,438	67.1% (2)
-5008--**_**_**	Ferric Chloride	688,256	579,001	109,255	84.1% (2)
-5009--**_**_**	Odor Control Chemicals	117,572	83,092	34,480	70.7% (2)
-5010--**_**_**	Other Chemicals - Misc.	2,004	-	2,004	-
-5011--**_**_**	Laboratory Services	65,724	28,439	37,285	43.3%
-5012--**_**_**	Grit Hauling	124,472	79,105	45,367	63.6%
-5013--**_**_**	Landscaping	219,008	112,223	106,785	51.2%
-5015--**_**_**	Management Support Services	501,512	94,695	406,817	18.9%
-5017--**_**_**	Legal Fees	23,688	30,352	(6,664)	128.1%
-5018--**_**_**	Public Notices/ Public Relations	3,732	-	3,732	-
-5019--**_**_**	Contract Services Misc.	320,996	177,873	143,123	55.4%
-5021--**_**_**	Small Vehicle Expense	23,104	19,290	3,814	83.5% (3)
-5022--**_**_**	Miscellaneous Expense	15,988	2,755	13,233	17.2%
-5023--**_**_**	Office Supplies - All	46,008	17,675	28,333	38.4%
-5024--**_**_**	Petroleum Products	34,000	17,666	16,334	52.0%
-5025--**_**_**	Uniforms	71,004	55,030	15,974	77.5%
-5026--**_**_**	Small Vehicle Fuel	22,764	9,893	12,871	43.5%
-5027--**_**_**	Insurance - Property/Liability	491,248	464,254	26,994	94.5% (3)
-5028--**_**_**	Small Tools & Supplies	80,600	35,385	45,215	43.9%
-5030--**_**_**	Trash Disposal	8,500	6,532	1,968	76.8%
-5031--**_**_**	Safety Program & Supplies	112,712	97,276	15,436	86.3%
-5032--**_**_**	Equipment Rental	7,004	10,313	(3,309)	147.2% (4)
-5033--**_**_**	Recruitment	2,316	3,016	(700)	130.2%
-5034--**_**_**	Travel Expense/Tech. Conferences	73,736	11,048	62,688	15.0%
-5035--**_**_**	Training Expense	73,052	31,101	41,951	42.6%
-5036--**_**_**	Laboratory Supplies	121,144	94,655	26,489	78.1%
-5037--**_**_**	Office Equipment	25,992	5,497	20,495	21.1%
-5038--**_**_**	Permits	593,908	549,934	43,974	92.6% (3)
-5039--**_**_**	Membership Dues/Fees	25,120	7,279	17,841	29.0%
-5044--**_**_**	Offshore Monitoring	80,000	64,189	15,811	80.2%
-5045--**_**_**	Offshore Biochemistry - 20B	30,004	-	30,004	-
-5046--**_**_**	Effluent Chemistry	44,992	37,394	7,598	83.1%
-5047--**_**_**	Access Road Expenses	45,000	-	45,000	-
-5048--**_**_**	Storm Damage	21,000	9,662	11,338	0.5%
-5049--**_**_**	Biosolids Disposal	1,568,996	1,074,941	494,055	68.5%
-5050--**_**_**	Contract Services Generators - 29A	28,008	6,751	21,257	24.1%
-5052--**_**_**	Janitorial Services	101,004	45,886	55,118	45.4%

South Orange County Wastewater Authority
O & M & Environmental Safety Costs Summary¹
 For the Period Ended January 31, 2023
 (in dollars)

	FY 2022-23 Budget	Actual	(Over)/Under Budget	% Expended	
-5053--**_**	Contract Serv - Digester Cleaning - 29E	60,000	33,762	26,238	56.3%
-5054--**_**	Diesel Truck Maint	41,996	24,494	17,502	58.3%
-5055--**_**	Diesel Truck Fuel	11,496	9,884	1,612	86.0% (2)
-5056--**_**	Maintenance Equip. & Facilities (Solids)	361,000	221,110	139,890	61.2%
-5057--**_**	Maintenance Equip. & Facilities (Liquids)	589,996	321,972	268,024	54.6%
-5058--**_**	Maintenance Equip. & Facilities (Common)	90,008	65,103	24,905	72.3% (5)
-5059--**_**	Maintenance Equip. & Facilities (Co-Gen)	715,996	631,813	84,183	88.2% (6)
-5060--**_**	Maintenance Equip. & Facilities (AWT)	88,000	44,740	43,260	50.8%
-5061--**_**	Mileage	3,652	2,418	1,234	66.2%
-5068--**_**	MNWD Potable Water Supplies & Svcs.	44,000	18,289	25,711	41.6%
-5076--**_**	SCADA Infrastructure	92,128	56,892	35,236	61.8%
-5077--**_**	IT Direct	45,004	41,822	3,182	92.9% (3)
-5105--**_**	Co-Generation Power Credit - Offset	1,050,000	649,505	400,495	61.9%
-5303--**_**	Group Insurance Waiver	18,000	9,388	8,612	52.2%
-5305--**_**	Medicare Tax Payments for Employees	2,388	1,522	866	63.7%
-5309--**_**	Operating Leases	28,004	9,924	18,080	35.4%
-5705--**_**	Monthly Car Allowance	35,400	18,538	16,862	52.4%
-5797--**_**	Verily Stipends - WastewaterSCAN Monitoring	-	(8,100)	8,100	0.0%
-5799--**_**	Zephyr Wall Costs Share-O&M	(14,000)	(14,000)	-	100.0%
-6500--**_**	IT Allocations in to PC's & Depts.	609,236	312,385	296,851	51.3%
	Total Other Expenses	11,589,052	7,608,456	3,980,596	65.7%
	Total O&M Expenses	19,339,320	12,017,084	7,322,236	62.1%

¹ This report intends to monitor the Annual Budget % Expended at the Project Committee and Functional Department levels.

The financial information contained in this report, in some cases, is based on the full accrual basis of accounting, whereby expenses are recognized in the period in which the liability is incurred, i.e., payroll and fringe benefits.

There are instances where we will include the total expense for the entire accounting fiscal year if the information is available, i.e., property and liability insurance premiums.

The audited financial statements for the fiscal year recognize all expenses on the full accrual basis of accounting.

- (1) Power emergencies to date between the three (3) Treatment Plants.
- (2) Chemical, fuel, and utilities increased with inflation and supply chain disruptions more than budgeted.
- (3) These are non-linear expenses that are primarily incurred in the first quarter of the Fiscal Year.
- (4) Several pieces are being rented due to delays associated with receiving newly purchased units.
- (5) JBL installed and replaced a failed welding fume hood. CTP implemented additional fire hardening recommendations from OCFA.
- (6) Completed both 30k and 40k Cogen services for the Fiscal Year.
- (7) The fringe rate was increased to 60% year-to-date from the budgeted 52.2 % based on an updated forecast; the change is primarily due to lower labor costs; there are openings in O&M and Engineering.

South Orange County Wastewater Authority
O&M Budget vs. Actual Comparison by PC¹
 For the Period Ended January 31, 2023
 (in dollars)

FY 2022-23 Budget	Actual	(Over)/Under Budget	% Expended
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02 - Jay B. Latham Plant

Salary and Fringe

02-5000-**-**_**	Regular Salaries-O&M	1,699,352	931,316	768,036	54.8%
02-5001-**-**_**	Overtime Salaries-O&M	27,144	35,949	(8,805)	132.4% (1)
02-5306-**-**_**	Scheduled Holiday Work	37,836	24,099	13,737	63.7%
02-5315-**-**_**	Comp Time - O&M	8,056	5,657	2,399	70.2% (1)
02-5401-**-**_**	Fringe Benefits IN to PC's & Depts.	886,460	558,789	327,671	63.0% (15)
02-5700-**-**_**	Standby Pay	26,000	15,243	10,758	58.6%
	Total Payroll Costs	2,684,848	1,571,053	1,113,795	58.5%

Other Expenses

02-5002-**-**_**	Electricity	534,828	390,129	144,699	72.9% (2)
02-5003-**-**_**	Natural Gas	165,128	160,968	4,160	97.5% (2)
02-5004-**-**_**	Potable & Reclaimed Water	26,004	16,447	9,557	63.2%
02-5006-**-**_**	Chlorine/Sodium Hypochlorite	9,000	19,565	(10,565)	217.4% (2)
02-5007-**-**_**	Polymer Products	319,544	193,433	126,111	60.5% (2)
02-5008-**-**_**	Ferric Chloride	255,252	172,691	82,561	67.7% (2)
02-5009-**-**_**	Odor Control Chemicals	23,568	18,908	4,660	80.2% (2)
02-5010-**-**_**	Other Chemicals - Misc.	1,000	-	1,000	-
02-5011-**-**_**	Laboratory Services	19,712	6,900	12,812	35.0%
02-5012-**-**_**	Grit Hauling	59,468	47,675	11,793	80.2% (2)
02-5013-**-**_**	Landscaping	77,004	36,153	40,851	46.9%
02-5015-**-**_**	Management Support Services	30,008	18,386	11,622	61.3%
02-5017-**-**_**	Legal Fees	4,996	13,633	(8,637)	272.9%
02-5019-**-**_**	Contract Services Misc.	82,000	66,674	15,326	81.3%
02-5021-**-**_**	Small Vehicle Expense	11,000	8,859	2,141	80.5% (3)
02-5022-**-**_**	Miscellaneous Expense	8,000	550	7,450	6.9%
02-5023-**-**_**	Office Supplies - All	29,000	8,385	20,615	28.9%
02-5024-**-**_**	Petroleum Products	11,000	6,261	4,739	56.9%
02-5025-**-**_**	Uniforms	34,008	24,796	9,212	72.9%
02-5026-**-**_**	Small Vehicle Fuel	10,004	4,104	5,900	41.0%
02-5027-**-**_**	Insurance - Property/Liability	167,039	161,680	5,359	96.8% (4)
02-5028-**-**_**	Small Tools & Supplies	38,000	13,270	24,730	34.9%
02-5030-**-**_**	Trash Disposal	3,000	1,087	1,913	36.2%
02-5031-**-**_**	Safety Program & Supplies	39,248	32,250	6,998	82.2%
02-5032-**-**_**	Equipment Rental	3,000	274	2,726	0.0%
02-5033-**-**_**	Recruitment	1,000	1,301	(301)	130.1%
02-5034-**-**_**	Travel Expense/Tech. Conferences	20,596	4,415	16,181	21.4%
02-5035-**-**_**	Training Expense	25,352	11,114	14,238	43.8%
02-5036-**-**_**	Laboratory Supplies	21,000	12,920	8,080	61.5%
02-5037-**-**_**	Office Equipment	13,000	418	12,582	3.2%
02-5038-**-**_**	Permits	26,500	19,800	6,700	74.7% (4)
02-5039-**-**_**	Membership Dues/Fees	5,808	2,662	3,146	45.8%
02-5049-**-**_**	Biosolids Disposal	687,000	350,989	336,011	51.1%
02-5050-**-**_**	Contract Services Generators - 29A	10,004	2,700	7,304	27.0%
02-5052-**-**_**	Janitorial Services	47,000	22,057	24,943	46.9%
02-5053-**-**_**	Contract Serv - Digester Cleaning - 29E	60,000	33,762	26,238	56.3%
02-5054-**-**_**	Diesel Truck Maint	21,996	11,486	10,510	52.2%
02-5055-**-**_**	Diesel Truck Fuel	2,996	3,455	(459)	115.3% (2)
02-5056-**-**_**	Maintenance Equip. & Facilities (Solids)	150,000	135,163	14,837	90.1% (5)
02-5057-**-**_**	Maintenance Equip. & Facilities (Liquids)	230,000	133,830	96,170	58.2%
02-5058-**-**_**	Maintenance Equip. & Facilities (Common)	29,000	31,863	(2,863)	109.9% (6)
02-5059-**-**_**	Maintenance Equip. & Facilities (Co-Gen)	277,000	149,889	127,111	54.1%

South Orange County Wastewater Authority
O&M Budget vs. Actual Comparison by PC¹
For the Period Ended January 31, 2023
(in dollars)

		FY 2022-23 Budget	Actual	(Over)/Under Budget	% Expended
02-5061-**-**-**	Mileage	2,148	1,040	1,108	48.4%
02-5076-**-**-**	SCADA Infrastructure	27,832	18,964	8,868	68.1%
02-5077-**-**-**	IT Direct	15,004	13,941	1,063	92.9% (4)
02-5303-**-**-**	Group Insurance Waiver	7,204	3,891	3,313	54.0%
02-5309-**-**-**	Operating Leases	22,000	9,924	12,076	45.1%
02-5705-**-**-**	Monthly Car Allowance	22,800	11,123	11,677	48.8%
02-5797-**-**-**	Verily Stipends - WastewaterSCAN Monitoring	-	(2,700)	2,700	100.0%
02-5799-**-**-**	Zephyr Wall Costs Share-O&M	(14,000)	(14,000)	-	100.0%
02-6500-**-**-**	IT Allocations in to PC's & Depts.	211,980	108,691	103,289	51.3%
	Total Other Expenses	3,884,031	2,501,776	1,382,255	64.4%
	Total Expenses	6,568,879	4,072,830	2,496,049	62.0%
05 - San Juan Creek Ocean Outfall					
Salary and Fringe					
05-5000-**-**-**	Regular Salaries-O&M	108,564	75,232	33,332	69.3%
05-5001-**-**-**	Overtime Salaries-O&M	72	206	(134)	286.6%
05-5306-**-**-**	Scheduled Holiday Work	440	88	352	20.0%
05-5401-**-**-**	Fringe Benefits IN to PC's & Depts.	56,628	45,139	11,489	79.7% (15)
	Total Payroll Costs	165,704	120,666	45,038	72.8%
Other Expenses					
05-5015-**-**-**	Management Support Services	125,004	32,829	92,175	26.3%
05-5017-**-**-**	Legal Fees	2,008	1,565	443	77.9%
05-5026-**-**-**	Small Vehicle Fuel	500	-	500	-
05-5027-**-**-**	Insurance - Property/Liability	18,420	17,191	1,229	93.3% (4)
05-5031-**-**-**	Safety Supplies	1,004	-	1,004	-
05-5034-**-**-**	Travel Expense/Tech. Conferences	5,592	1,358	4,234	24.3%
05-5035-**-**-**	Training Expense	2,500	-	2,500	-
05-5036-**-**-**	Laboratory Supplies	35,000	20,922	14,078	59.8%
05-5038-**-**-**	Permits	275,000	272,360	2,640	99.0% (4)
05-5039-**-**-**	Membership Dues/Fees	2,000	-	2,000	-
05-5044-**-**-**	Offshore Monitoring	40,000	34,054	5,946	85.1% (7)
05-5045-**-**-**	Offshore Biochemistry - 20B	15,004	-	15,004	-
05-5046-**-**-**	Effluent Chemistry	22,496	28,044	(5,548)	124.7% (8)
05-5058-**-**-**	Maintenance Equip. & Facilities (Common)	1,004	-	1,004	-
05-6500-**-**-**	IT Allocations in to PC's & Depts.	13,148	6,741	6,407	51.3%
	Total Other Expenses	558,680	415,065	143,615	74.3%
	Total Expenses	724,384	535,730	188,654	74.0%

South Orange County Wastewater Authority
O&M Budget vs. Actual Comparison by PC¹
For the Period Ended January 31, 2023
(in dollars)

		FY 2022-23 Budget	Actual	(Over)/Under Budget	% Expended
08 - Pre Treatment					
Salary and Fringe					
08-5000-**-**-**	Regular Salaries-O&M	116,396	59,534	56,862	51.1%
08-5401-**-**-**	Fringe Benefits IN to PC's & Depts.	60,716	35,721	24,995	58.8% (15)
	Total Payroll Costs	177,112	95,255	81,857	53.8%
Other Expenses					
08-5011-**-**-**	Laboratory Services	3,004	1,790	1,214	59.6%
08-5015-**-**-**	Management Support Services	20,004	-	20,004	-
08-5017-**-**-**	Legal Fees	2,672	605	2,067	22.6%
08-5018-**-**-**	Public Notices/ Public Relations	3,732	-	3,732	-
08-5021-**-**-**	Small Vehicle Expense - 31A	1,100	-	1,100	-
08-5022-**-**-**	Miscellaneous Expense	1,984	-	1,984	-
08-5026-**-**-**	Small Vehicle Fuel - 37A	1,256	-	1,256	-
08-5027-**-**-**	Insurance - Property/Liability	6,141	5,731	410	93.3% (4)
08-5028-**-**-**	Small Tools & Supplies	3,600	93	3,507	2.6%
08-5034-**-**-**	Travel Expense/Tech. Conferences	3,496	-	3,496	-
08-5035-**-**-**	Training Expense	2,000	267	1,733	-
08-5038-**-**-**	Permits and Fines	504	-	504	-
08-5039-**-**-**	Membership Dues/Fees	796	452	344	56.8%
08-6500-**-**-**	IT Allocations in to PC's & Depts.	14,092	7,227	6,865	51.3%
	Total Other Expenses	64,381	16,165	48,216	25.1%
	Total Expenses	241,493	111,420	130,073	46.1%
12 - Water Reclamation Permits					
Salary and Fringe					
12-5000-**-**-**	Regular Salaries-O&M	88,952	7,950	81,002	8.9%
12-5401-**-**-**	Fringe Benefits IN to PC's & Depts.	46,400	4,770	41,630	10.3% (15)
	Total Payroll Costs	135,352	12,721	122,631	9.4%
Other Expenses					
12-5014-**-**-**	Engineering - Misc.	-	-	-	-
12-5015-**-**-**	Management Support Services	164,996	(9,500)	174,496	-5.8%
12-5017-**-**-**	Legal Fees	2,000	-	2,000	-
12-5027-**-**-**	Insurance - Property/Liability	8,884	8,291	593	93.3% (4)
12-5034-**-**-**	Travel Expense/Tech. Conferences	4,796	606	4,190	12.6%
12-5038-**-**-**	Permits	22,508	24,687	(2,179)	109.7%
12-5039-**-**-**	Membership Dues/Fees	68	-	68	-
12-6500-**-**-**	IT Allocations in to PC's & Depts.	10,764	5,523	5,241	51.3%
	Total Other Expenses	214,016	29,608	184,408	13.8%
	Total Expenses	349,368	42,328	307,040	12.1%

South Orange County Wastewater Authority
O&M Budget vs. Actual Comparison by PC¹
 For the Period Ended January 31, 2023
 (in dollars)

FY 2022-23 Budget	Actual	(Over)/Under Budget	% Expended
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15 - Coastal Treatment Plant

Salary and Fringe

15-5000-**-**	Regular Salaries-O&M	954,888	523,218	431,670	54.8%
15-5001-**-**	Overtime Salaries-O&M	11,216	15,954	(4,738)	142.2% (1)
15-5306-**-**	Scheduled Holiday Work	15,672	7,742	7,930	49.4%
15-5315-**-**	Comp Time - O&M	1,996	3,378	(1,382)	169.3% (1)
15-5401-**-**	Fringe Benefits IN to PC's & Depts.	498,120	313,931	184,189	63.0% (15)
15-5700-**-**	Standby Pay	17,000	6,273	10,728	36.9%
	Total Payroll Costs	1,498,892	870,494	628,398	58.1%

Other Expenses

15-5002-**-**	Electricity	235,000	180,956	54,044	77.0% (2)
15-5003-**-**	Natural Gas	3,000	3,721	(721)	124.0%
15-5004-**-**	Potable & Reclaimed Water	25,004	12,973	12,031	51.9%
15-5006-**-**	Chlorine/Sodium Hypochlorite	90,000	60,612	29,388	67.3% (2)
15-5007-**-**	Polymer Products	1,000	-	1,000	-
15-5008-**-**	Ferric Chloride	70,000	81,691	(11,691)	116.7% (2)
15-5009-**-**	Odor Control Chemicals	52,004	27,920	24,084	53.7%
15-5011-**-**	Laboratory Services	20,000	6,408	13,592	32.0%
15-5012-**-**	Grit Hauling	21,004	11,886	9,118	56.6%
15-5013-**-**	Landscaping	57,000	35,864	21,136	62.9%
15-5015-**-**	Management Support Services	11,500	6,574	4,926	57.2%
15-5017-**-**	Legal Fees	5,000	1,565	3,435	31.3%
15-5019-**-**	Contract Services Misc.	110,000	51,938	58,062	47.2%
15-5021-**-**	Small Vehicle Expense - 31A	4,004	1,526	2,478	38.1%
15-5022-**-**	Miscellaneous Expense	1,000	276	724	27.6%
15-5023-**-**	Office Supplies - All	4,004	2,856	1,148	71.3%
15-5024-**-**	Petroleum Products	3,000	7,003	(4,003)	233.4% (9)
15-5025-**-**	Uniforms	9,000	6,806	2,194	75.6%
15-5026-**-**	Small Vehicle Fuel	2,000	1,688	312	84.4%
15-5027-**-**	Insurance - Property/Liability	72,916	68,050	4,866	93.3% (4)
15-5028-**-**	Small Tools & Supplies	9,000	4,581	4,419	50.9%
15-5030-**-**	Trash Disposal	2,996	2,320	676	77.4%
15-5031-**-**	Safety Supplies	32,804	24,297	8,507	74.1%
15-5032-**-**	Equipment Rental	1,000	-	1,000	-
15-5033-**-**	Recruitment	312	104	208	33.4%
15-5034-**-**	Travel Expense/Tech. Conferences	13,072	545	12,527	4.2%
15-5035-**-**	Training Expense	17,148	9,039	8,109	52.7%
15-5036-**-**	Laboratory Supplies	14,000	20,416	(6,416)	145.8% (10)
15-5037-**-**	Office Equipment	2,996	2,655	341	88.6%
15-5038-**-**	Permits	6,996	3,387	3,610	48.4%
15-5039-**-**	Membership Dues/Fees	4,800	1,263	3,537	26.3%
15-5047-**-**	Access Road Expenses	45,000	-	45,000	-
15-5048-**-**	Storm Damage	21,000	9,662	11,338	0.46
15-5050-**-**	Contract Services Generators	5,000	4,051	949	81.0% (4)
15-5052-**-**	Janitorial Services	12,004	7,438	4,566	62.0%
15-5054-**-**	Diesel Truck Maint - 31B	1,000	-	1,000	-
15-5055-**-**	Diesel Truck Fuel - 37B	500	755	(255)	1.51
15-5057-**-**	Maintenance Equip. & Facilities (Liquids)	144,996	63,256	81,740	43.6%
15-5058-**-**	Maintenance Equip. & Facilities (Common)	23,000	17,370	5,630	75.5% (11)
15-5060-**-**	Maintenance Equip. & Facilities (AWT)	38,000	22,164	15,836	58.3%
15-5061-**-**	Mileage	500	268	232	53.6%
15-5076-**-**	SCADA Infrastructure	32,296	18,964	13,332	58.7%

South Orange County Wastewater Authority
O&M Budget vs. Actual Comparison by PC¹
For the Period Ended January 31, 2023
(in dollars)

		FY 2022-23 Budget	Actual	(Over)/Under Budget	% Expended
15-5077-**-**-**	IT Direct	15,000	13,941	1,059	92.9% (4)
15-5303-**-**-**	Group Insurance Waiver	3,600	2,118	1,482	58.8%
15-5305-**-**-**	Medicare Tax Payments for Employees	2,240	1,522	718	68.0%
15-5705-**-**-**	Monthly Car Allowance	4,200	2,472	1,728	58.8%
15-5797-**-**-**	Verily Stipends - WastewaterSCAN Monitoring	-	(2,700)	2,700	100.0%
15-6500-**-**-**	IT Allocations in to PC's & Depts.	118,660	60,843	57,817	51.3%
	Total Other Expenses	1,368,556	861,044	507,512	62.9%
	Total Expenses	2,867,448	1,731,539	1,135,909	60.4%
17 - Joint Regional Wastewater Reclamation and Sludge Handling					
Salary and Fringe					
17-5000-**-**-**	Regular Salaries-O&M	1,844,716	966,952	877,764	52.4%
17-5001-**-**-**	Overtime Salaries-O&M	34,472	38,674	(4,202)	112.2% (1)
17-5306-**-**-**	Scheduled Holiday Work	32,244	22,782	9,462	70.7%
17-5315-**-**-**	Comp Time - O&M	6,868	3,548	3,320	51.7% (1)
17-5401-**-**-**	Fringe Benefits IN to PC's & Depts.	962,288	580,171	382,117	60.3% (15)
17-5700-**-**-**	Standby Pay	27,000	18,265	8,735	67.6%
	Total Payroll Costs	2,907,588	1,630,392	1,277,196	56.1%
Other Expenses					
17-5002-**-**-**	Electricity	484,000	144,304	339,696	29.8%
17-5003-**-**-**	Natural Gas	100,072	182,215	(82,143)	182.1% (2)
17-5004-**-**-**	Potable & Reclaimed Water	36,000	15,880	20,120	44.1%
17-5005-**-**-**	Co-generation Power Credit	(1,050,004)	(649,505)	(400,499)	61.9%
17-5006-**-**-**	Chlorine/Sodium Hypochlorite	455,000	226,422	228,578	49.8%
17-5007-**-**-**	Polymer Products	469,004	336,677	132,327	71.8% (2)
17-5008-**-**-**	Ferric Chloride	363,004	324,618	38,386	89.4% (2)
17-5009-**-**-**	Odor Control Chemicals	42,000	36,264	5,736	86.3% (2)
17-5010-**-**-**	Other Chemicals - Misc.	1,004	-	1,004	-
17-5011-**-**-**	Laboratory Services	23,008	13,342	9,666	58.0%
17-5012-**-**-**	Grit Hauling - 21A	44,000	19,545	24,456	44.4%
17-5013-**-**-**	Landscaping	85,004	40,206	44,798	47.3%
17-5015-**-**-**	Management Support Services	24,996	6,574	18,422	26.3%
17-5017-**-**-**	Legal Fees	5,004	11,418	(6,414)	228.2%
17-5019-**-**-**	Contract Services Misc.	110,000	59,260	50,740	53.9%
17-5021-**-**-**	Small Vehicle Expense	7,000	8,905	(1,905)	127.2% (3)
17-5022-**-**-**	Miscellaneous Expense	5,004	1,929	3,075	38.5%
17-5023-**-**-**	Office Supplies - All	13,004	6,433	6,571	49.5%
17-5024-**-**-**	Petroleum Products	20,000	4,402	15,598	22.0%
17-5025-**-**-**	Uniforms	27,996	23,428	4,568	83.7%
17-5026-**-**-**	Small Vehicle Fuel	9,004	4,101	4,903	45.5%
17-5027-**-**-**	Insurance - Property/Liability	199,964	186,620	13,344	93.3% (4)
17-5028-**-**-**	Small Tools & Supplies	30,000	17,441	12,559	58.1%
17-5030-**-**-**	Trash Disposal	2,504	3,124	(620)	124.8%
17-5031-**-**-**	Safety Supplies	38,652	40,728	(2,076)	105.4%
17-5032-**-**-**	Equipment Rental	3,004	10,039	(7,035)	334.2% (12)
17-5033-**-**-**	Recruitment	1,004	1,611	(607)	160.5%
17-5034-**-**-**	Travel Expense/Tech. Conferences	20,592	2,307	18,285	11.2%
17-5035-**-**-**	Training Expense	25,148	10,681	14,467	42.5%
17-5036-**-**-**	Laboratory Supplies	25,144	20,830	4,314	82.8%
17-5037-**-**-**	Office Equipment	9,996	2,424	7,572	24.2%
17-5038-**-**-**	Permits	15,000	2,199	12,801	14.7%
17-5039-**-**-**	Membership Dues/Fees	5,804	2,901	2,903	50.0%

South Orange County Wastewater Authority
O&M Budget vs. Actual Comparison by PC¹
For the Period Ended January 31, 2023
(in dollars)

		FY 2022-23 Budget	Actual	(Over)/Under Budget	% Expended
17-5049-**-**_**	Biosolids Disposal	881,996	723,952	158,044	82.1% (2)
17-5050-**-**_**	Contract Services Generators - 29A	13,004	-	13,004	-
17-5052-**-**_**	Janitorial Services	42,000	16,390	25,610	39.0%
17-5054-**-**_**	Diesel Truck Maint	19,000	13,007	5,993	68.5%
17-5055-**-**_**	Diesel Truck Fuel	8,000	5,674	2,326	70.9% (2)
17-5056-**-**_**	Maintenance Equip. & Facilities (Solids)	211,000	85,947	125,053	40.7%
17-5057-**-**_**	Maintenance Equip. & Facilities (Liquids)	215,000	124,886	90,114	58.1%
17-5058-**-**_**	Maintenance Equip. & Facilities (Common)	36,000	14,477	21,523	40.2%
17-5059-**-**_**	Maintenance Equip. & Facilities (Co-Gen)	438,996	481,924	(42,928)	109.8% (13)
17-5060-**-**_**	Maintenance Equip. & Facilities (AWT)	50,000	22,576	27,424	45.2%
17-5061-**-**_**	Mileage	1,004	1,110	(106)	110.6%
17-5068-**-**_**	MNWD Potable Water Supplies & Svcs.	44,000	18,289	25,711	41.6%
17-5076-**-**_**	SCADA Infrastructure	32,000	18,964	13,036	59.3%
17-5077-**-**_**	IT Direct	15,000	13,941	1,059	92.9% (4)
17-5105-**-**_**	Co-Generation Power Credit - Offset	1,050,000	649,505	400,495	61.9%
17-5303-**-**_**	Group Insurance Waiver	7,196	3,378	3,818	46.9%
17-5305-**-**_**	Medicare Tax Payments for Employees	148	-	148	-
17-5309-**-**_**	Operating Leases	6,004	-	6,004	-
17-5705-**-**_**	Monthly Car Allowance	8,400	4,943	3,457	58.8%
17-5797-**-**_**	Verily Stipends - WastewaterSCAN Monitoring	-	(2,700)	2,700	100.0%
17-6500-**-**_**	IT Allocations in to PC's & Depts.	226,420	116,093	110,327	51.3%
	Total Other Expenses	4,956,080	3,429,681	1,526,399	69.2%
	Total Expenses	7,863,668	5,060,073	2,803,595	64.3%
21 - Effluent Transmission Main					
Salary and Fringe					
21-5000-**-**_**	Regular Salaries-O&M	1,156	-	1,156	-
21-5401-**-**_**	Fringe Benefits IN to PC's & Depts.	600	-	600	-
	Total Payroll Costs	1,756	-	1,756	0.0%
Other Expenses					
21-5019-**-**_**	Contract Services Misc.	18,996	-	18,996	-
21-5027-**-**_**	Insurance - Property/Liability	-	-	-	-
	Total Other Expenses	18,996	-	18,996	0.0%
	Total Expenses	20,752	-	20,752	0.0%
24 - Aliso Creek Ocean Outfall					
Salary and Fringe					
24-5000-**-**_**	Regular Salaries-O&M	117,060	67,294	49,766	57.5%
24-5001-**-**_**	Overtime Salaries-O&M	620	198	422	32.0%
24-5306-**-**_**	Scheduled Holiday Work	276	178	98	64.6%
24-5401-**-**_**	Fringe Benefits IN to PC's & Depts.	61,060	40,377	20,683	66.1% (15)
	Total Payroll Costs	179,016	108,047	70,969	60.4%
Other Expenses					
24-5015-**-**_**	Management Support Services	125,004	39,830	85,174	31.9%
24-5017-**-**_**	Legal Fees	2,008	1,565	443	77.9%
24-5027-**-**_**	Insurance - Property/Liability	17,884	16,691	1,193	93.3% (4)
24-5031-**-**_**	Safety Supplies	1,004	-	1,004	-
24-5034-**-**_**	Travel Expense/Tech. Conferences	5,592	1,817	3,776	32.5%
24-5035-**-**_**	Training Expense	904	-	904	-

South Orange County Wastewater Authority
O&M Budget vs. Actual Comparison by PC¹
 For the Period Ended January 31, 2023
 (in dollars)

	FY 2022-23 Budget	Actual	(Over)/Under Budget	% Expended	
24-5036-**-**-**	Laboratory Supplies	26,000	19,567	6,433	75.3%
24-5038-**-**-**	Permits	247,400	227,502	19,898	92.0%
24-5039-**-**-**	Membership Dues/Fees	5,844	-	5,844	-
24-5044-**-**-**	Offshore Monitoring	40,000	30,134	9,866	75.3% (7)
24-5045-**-**-**	Offshore Biochemistry - 20B	15,000	-	15,000	-
24-5046-**-**-**	Effluent Chemistry	22,496	9,350	13,146	41.6%
24-5058-**-**-**	Maintenance Equip. & Facilities (Common) 41-C	1,004	1,394	(390)	138.8% (14)
24-6500-**-**-**	IT Allocations in to PC's & Depts.	14,172	7,268	6,904	51.3%
	Total Other Expenses	<u>524,312</u>	<u>355,117</u>	<u>169,195</u>	<u>67.7%</u>
	Total Expenses	<u>703,328</u>	<u>463,164</u>	<u>240,164</u>	<u>65.9%</u>
	Total O&M Expenses	<u>19,339,320</u>	<u>12,017,084</u>	<u>7,322,236</u>	<u>62.1%</u>

¹ This report intends to monitor the Annual Budget % Expended at the Project Committee and Functional Department levels.

The financial information contained in this report, in some cases, is based on the full accrual basis of accounting, whereby expenses are recognized in the period in which the liability is incurred, i.e., payroll and fringe benefits.

There are instances where we will include the total expense for the entire accounting fiscal year if the information is available, i.e., property and liability insurance premiums.

The audited financial statements for the fiscal year recognize all expenses on the full accrual basis of accounting.

South Orange County Wastewater Authority
O&M Budget vs. Actual Comparison by PC
For the Period Ended January 31, 2023

- (1) Power emergencies to date between the three (3) Treatment Plants.
- (2) Chemicals, fuel, and utilities increased with inflation and supply chain disruptions more than budgeted.
- (3) Several older vehicles are being maintained.
- (4) These are non-linear expenses that are primarily incurred in the first quarter of the Fiscal Year.
- (5) Staff is performing additional work in areas isolated by ongoing construction work that is not normally accessible for O&M work.
- (6) JBL installed and replaced a failed welding fume hood.
- (7) Additional cost due to permit required toxicity testing for three (3) new species screens.
- (8) New NPDES permit requirement for continuous TDS monitoring installation at M-001 sampler.
- (9) Refueling associated with several extended power outages.
- (10) Additional supplies for sampler maintenance and supply restocking.
- (11) CTP implemented additional fire hardening recommendations from OCFA.
- (12) Several pieces are being rented due to delays associated with receiving newly purchased units.
- (13) 30,000-hour Cogen Service Completed.
- (14) O&M staff implementing recommendations in the new NPDES Permit.
- (15) The fringe rate was increased to 60% year-to-date from the budgeted 52.2 % based on an updated forecast; the change is primarily due to lower labor costs; there are openings in O&M and Engineering.

**South Orange County Wastewater Authority
Budget vs. Actual Comparison - Engineering**

For the Period Ended January 31, 2023
(in dollars)

		FY 2022-23 Budget	Actual	(Over)/Under Budget	% Expended
Salary and Fringe					
01-5000-03-00-00	Regular Salaries-O&M	161,205	70,448	90,757	43.7%
01-5401-03-00-00	Fringe Benefits IN to PC's & Depts.	84,092	42,269	41,823	50.3% (1)
	Total Payroll Costs	245,297	112,716	132,581	46.0%
Other Expenses					
01-5022-03-00-00	Miscellaneous Expense	3,184	842	2,342	26.5%
01-5023-03-00-00	Office Supplies - All	208	59	149	28.5%
01-5031-03-00-00	Safety Supplies	306	-	306	-
01-5034-03-00-00	Travel Expense/Tech. Conferences	6,439	-	6,439	-
01-5035-03-00-00	Training Expense	2,244	-	2,244	-
01-5037-03-00-00	Office Equipment	408	-	408	-
01-5039-03-00-00	Membership Dues/Fees	1,377	204	1,173	14.8%
01-5061-03-00-00	Mileage	510	23	487	4.6%
01-5309-03-00-00	Operating Leases	9,300	9,589	(289)	103.1%
01-5705-03-00-00	Monthly Car Allowance	4,200	1,971	2,229	46.9%
01-5802-03-00-00	Shipping/Freight	312	-	312	-
01-6500-03-00-00	IT Allocations in to PC's & Depts.	52,639	26,990	25,649	51.3%
	Total Other Expenses	81,127	39,679	41,448	48.9%
	Total Engineering Expenses	326,424	152,395	174,029	46.7%

(1) The fringe rate was increased to 60% year-to-date from the budgeted 52.2 % based on an updated forecast; the change is primarily due to lower labor costs; there are openings in O&M and Engineering.

**South Orange County Wastewater Authority
Budget vs. Actual Comparison- Administration**

For the Period Ended January 31, 2023

(in dollars)

		FY 2022-23 Budget	Actual	(Over)/Under Budget	% Expended
Salary and Fringe					
01-6000-04-00-00	Regular Salaries-Admin or IT	974,150	539,943	434,206	55.4%
01-6001-04-00-00	Overtime Salaries-Admin or IT	10,000	14,813	(4,813)	148.1% (1)
01-6315-04-00-00	Comp Time - Admin	5,000	1,699	3,301	34.0%
01-6401-04-00-00	Fringe Benefits IN to ADMIN or IT	508,162	323,966	184,196	63.8% (3)
	Total Payroll Costs	1,497,312	880,422	616,890	58.8%
Other Expenses					
01-6018-04-00-00	Public Notices/Public Relations	3,270	-	3,270	-
01-6101-04-00-00	HR Recruitment & Employee Relations	29,190	8,894	20,296	30.5%
01-6102-04-00-00	Subscriptions	2,533	1,327	1,206	52.4%
01-6103-04-00-00	Contract Labor	30,000	5,059	24,941	16.9%
01-6200-04-00-00	Management Support Services	50,000	34,310	15,690	68.6%
01-6201-04-00-00	Audit	46,000	21,600	24,400	47.0%
01-6202-04-00-00	Legal	200,000	197,897	2,103	98.9%
01-6204-04-00-00	Postage	1,500	734	766	48.9%
01-6223-04-00-00	Office Supplies - Admin	4,294	1,754	2,540	40.8%
01-6224-04-00-00	Office Equipment Admin or IT	6,000	761	5,239	12.7%
01-6234-04-00-00	Memberships & Trainings	95,912	102,776	(6,864)	107.2% (2)
01-6239-04-00-00	Travel & Conference	25,000	8,294	16,706	33.2%
01-6241-04-00-00	Education Reimbursement	4,500	655	3,845	14.6%
01-6310-04-00-00	Miscellaneous	20,000	13,129	6,871	65.6%
01-6311-04-00-00	Mileage	569	494	75	86.8%
01-6317-04-00-00	Contract Services Misc	5,573	3,397	2,176	61.0%
01-6500-04-00-00	IT Allocations in to PC's & Depts.	117,968	60,486	57,482	51.3%
01-6601-04-00-00	Shipping/Freight	4,382	356	4,026	8.1%
01-6705-04-00-00	Monthly Car Allowance	12,000	7,062	4,938	58.8%
	Total Other Expenses	658,691	468,983	189,708	71.2%
Total Admin Expenses		2,156,003	1,349,405	806,598	62.6%

(1) Increased number of meetings.

(2) Inflationary impact on costs

(3) The fringe rate was increased to 60% year-to-date from the budgeted 52.2 % based on an updated forecast; the change is primarily due to lower labor costs; there are openings in O&M and Engineering.

South Orange County Wastewater Authority
Budget vs. Actual Comparison-IT
 For the Period Ended January 31, 2023
 (in dollars)

		FY 2022-23 Budget	Actual	(Over)/Under Budget	% Expended
Salary & Fringe					
01-6000-05-00-00	Regular Salaries-Admin or IT	106,310	61,650	44,660	58.0%
01-6401-05-00-00	Fringe Benefits IN to ADMIN or IT	55,456	36,990	18,466	66.7% (2)
	Total Salary & Fringe	161,766	98,640	63,126	61.0%
Other Expenses					
01-6028-05-00-00	Small Tools & Supplies	1,000	-	1,000	-
01-6035-05-00-00	Training Expense	3,000	-	3,000	-
01-6224-05-00-00	Office Equipment Admin or IT	600	-	600	-
01-6234-05-00-00	Memberships & Trainings	12,850	1,810	11,040	14.1%
01-6239-05-00-00	Travel & Conference	1,500	-	1,500	-
01-6300-05-00-00	Software Maintenance Agreements	60,433	32,013	28,420	53.0%
01-6301-05-00-00	Hardware Maintenance Agreements	14,186	10,252	3,934	72.3% (1)
01-6302-05-00-00	Cloud Subscriptions (Internet)	181,766	91,473	90,293	50.3%
01-6303-05-00-00	Telecommunications	164,582	86,210	78,372	52.4%
01-6305-05-00-00	IT Professional Services	53,500	17,481	36,019	32.7%
01-6306-05-00-00	Small Hardware Purchases (< \$5k)	28,900	13,559	15,341	46.9%
01-6307-05-00-00	Small Software Purchases & Licenses (<\$5k)	26,444	9,595	16,849	36.3%
01-6308-05-00-00	IT Memberships	160	-	160	-
01-6309-05-00-00	Operating Leases	64,173	37,504	26,669	58.4%
01-6310-05-00-00	Miscellaneous	5,000	-	5,000	-
01-6312-05-00-00	Computer & Photocopy Supplies	-	1,323	(1,323)	-
	Total Other Expenses	618,094	301,220	316,874	48.7%
	Total Expenses before Allocation	779,860	399,860	380,000	51.3%
IT Allocations (Out) to PC's & Depts					
01-6400-05-00-00	IT Allocations (OUT) to PC's & Depts.	(779,860)	(399,860)	(380,000)	51.3%
	Total IT Allocations (Out) to PC's & Depts	(779,860)	(399,860)	(380,000)	51.3%

(1) AVI SPL Maintenance for JBL Audio/Visual

(2) The fringe rate was increased to 60% year-to-date from the budgeted 52.2 % based on an updated forecast; the change is primarily due to lower labor costs; there are openings in O&M and Engineering.

Agenda Item

5.C.

Board of Directors Meeting

Meeting Date: May 4, 2023

TO: Board of Directors

FROM: Jim Burror, Acting General Manager/Director of Operations

STAFF CONTACT: Mary Carey, Finance Controller

SUBJECT: Financial Reports for the Month of February 2023

Summary/Discussion

The following selected financial reports are routinely provided monthly to the Finance Committee for recommendation to the Board of Directors to ratify Cash Disbursements and receive and file the remaining documents.

The reports included are as follows:

1. Summary of Disbursements for February 2023 (Exhibit A)
2. Schedule of Funds Available for Reinvestment (Exhibit B)
 - Local Agency Investment Fund (LAIF)
3. Schedule of Cash and Investments (Exhibit C)
4. Capital Schedule (Exhibit D)
 - Capital Projects – Graph (Exhibit D-1)
5. Budget vs. Actual Expenses:
 - Operations and Environmental Summary (Exhibit E-1)
 - Operations and Environmental by PC (E-1.2)
 - Residual Engineering, after transfer to Capital (Exhibit E-2)
 - Administration (Exhibit E-3)
 - Information Technology (IT) (Exhibit E-4)

Fiscal Impact

February 2023 cash disbursements were: \$ 4,341,262.

- Monthly disbursements are summarized in the attached Exhibit A.
- The attached Exhibits B, C, D, and E are informational reports only.

Recommended Action: The Finance Committee recommends that the Board of Directors ratify the February 2023 disbursements, \$ 4,341,262, for the period from February 1, 2023, through February 28, 2023, and to receive and file the February 2023 Financial Reports as submitted.

Exhibit A

**South Orange County Wastewater Authority
Summary of Disbursements for February 2023
Staff Recommendation of Fiscal Matters**

	Actual
General Fund	\$ (454,169)
PC 2 - Jay B. Latham Plant	(1,512,200)
PC 5 - San Juan Creek Ocean Outfall	(94,150)
PC 8 - Pretreatment Program	(31,300)
PC 12 SO - Water Reclamation Permits	(37,810.00)
PC 15 - Coastal Treatment Plant/AWT	(545,668)
PC 17 - Joint Regional Wastewater Reclamation	(1,552,727)
PC 21 - Effluent Transmission Main	(7,091)
PC 23 - North Coast Interceptor	-
PC 24 - Aliso Creek Ocean Outfall	(106,147)
Total	<u><u>\$ (4,341,262)</u></u>

**SOUTH ORANGE COUNTY WASTEWATER AUTHORITY
SCHEDULE OF FUNDS AVAILABLE FOR REINVESTMENT
as of February 28, 2023**

CASH IN BANK: (BEGINNING BAL.)	\$	1,659,184
L.A.I.F. FUNDS: (BEGINNING BAL.)		3,742,525
DEPOSITS, TRANSFERS & ADJUSTMENTS:		8,637,336
FUND REQUIREMENTS:		
BILLS FOR CONSIDERATION ¹		(4,341,262)
TOTAL CASH IN BANK	\$	9,697,783

¹ GL postings.

In accordance with Government Code 53646(c), since all funds are placed in the State LAIF, staff has included in the Financial Packet, the most current statement from the State LAIF, in lieu of the report required by Government Code 53646(b)(1).

In accordance with requirements of the Government Code and the "SOCWA Investment Policy", I hereby certify that:

- 1). All investment actions executed since the last report have been made in full compliance with the Investment Policy.

- 2). SOCWA does not have sufficient funds currently on hand to meet its expenditure obligations for the next six months (see note) due to the fact that SOCWA bills and receives operational funds on a quarterly basis only.

Betty Burnett
General Manager

Note: Operational funds are collected on a quarterly basis at the beginning of the quarter. Capital funds are collected on a quarterly basis in connection with projected needs. Member agencies have pledged to have funds available to meet all obligations.



PMIA/LAIF Performance Report as of 03/09/23



PMIA Average Monthly Effective Yields⁽¹⁾

February	2.624
January	2.425
December	2.173

Quarterly Performance Quarter Ended 12/31/22

LAIF Apportionment Rate ⁽²⁾ :	2.07
LAIF Earnings Ratio ⁽²⁾ :	0.00005680946709337
LAIF Fair Value Factor ⁽¹⁾ :	0.981389258
PMIA Daily ⁽¹⁾ :	2.29
PMIA Quarter to Date ⁽¹⁾ :	1.98
PMIA Average Life ⁽¹⁾ :	287

Pooled Money Investment Account Monthly Portfolio Composition ⁽¹⁾ 02/28/23 \$200.5 billion

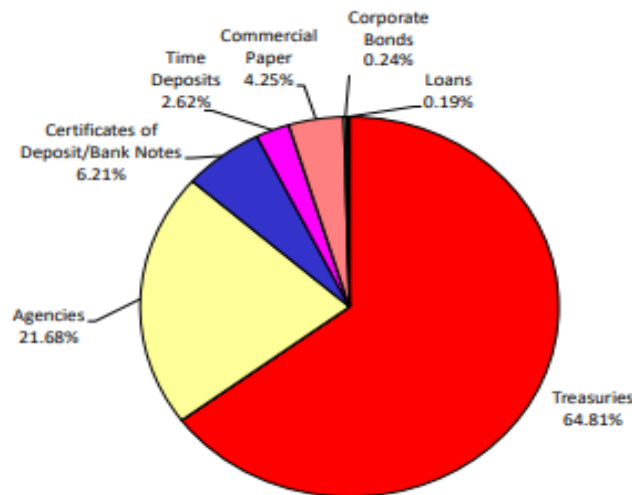


Chart does not include \$3,158,000.00 in mortgages, which equates to 0.002%. Percentages may not total 100% due to rounding.

Daily rates are now available here. [View PMIA Daily Rates](#)

Notes: The apportionment rate includes interest earned on the CalPERS Supplemental Pension Payment pursuant to Government Code 20825 (c)(1) and interest earned on the Wildfire Fund loan pursuant to Public Utility Code 3288 (a).

Source:

⁽¹⁾ State of California, Office of the Treasurer

⁽²⁾ State of California, Office of the Controller

Exhibit C

**South Orange County Wastewater Authority
Schedule of Cash and Investments
as of February 28, 2023**

MVA	\$ 2,513	(A)
A/P Checking	1,147,084	(B)
Payroll Checking	402,662	(C)
State LAIF	8,145,525	(D)
Total Cash in Bank¹	\$ 9,697,783	
Petty Cash	1,600	(E)
Total Operating Cash	\$ 9,699,383	
OPEB Trust	5,912,313	(F)
Total Cash and Investments	\$ 15,611,696	

¹Bank balance at the end of a month may differ from an accounting closing balance as there may be in-transit items that haven't cleared the bank.

Notes:

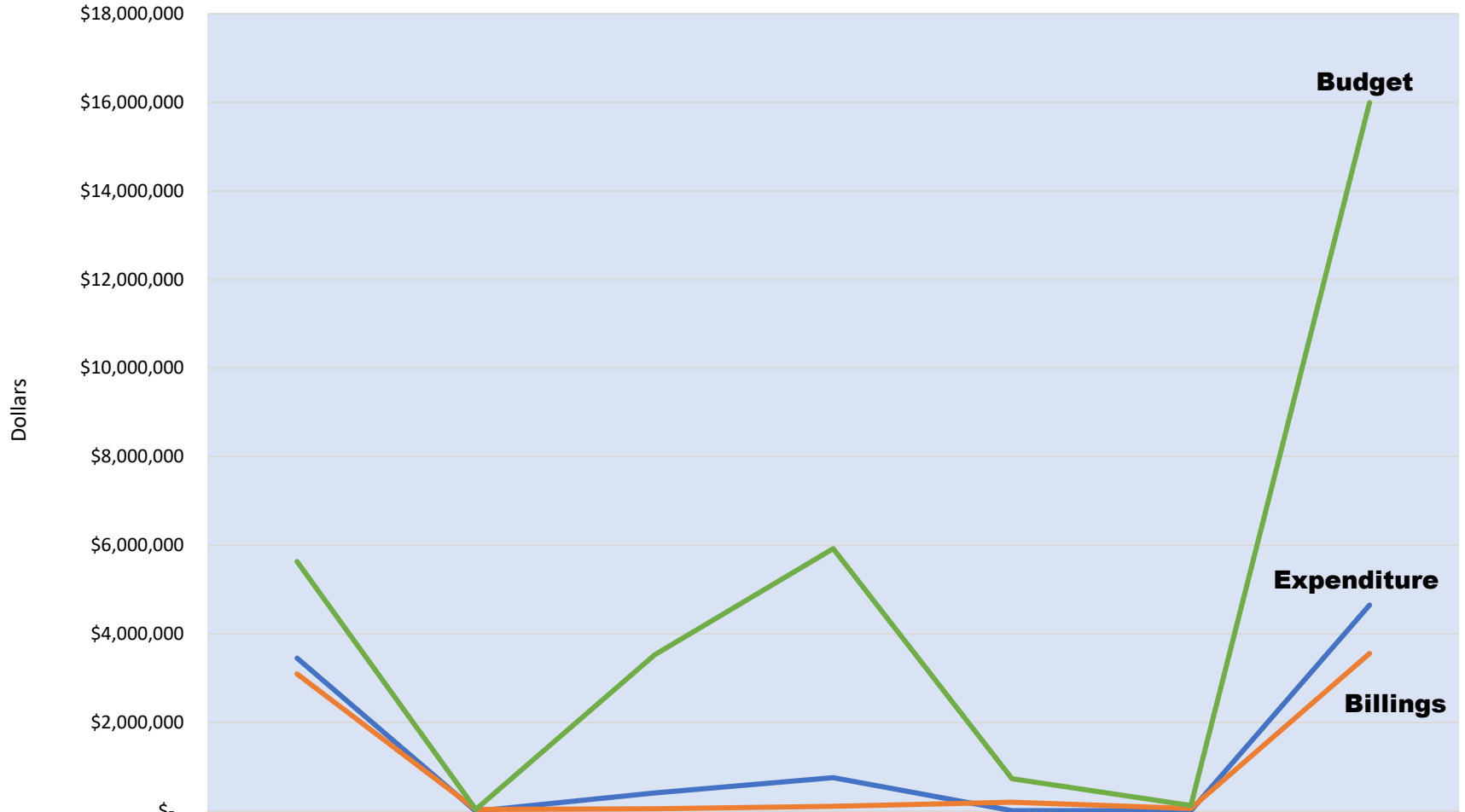
- (A) Interest bearing account; all cash receipts are deposited in this account and later moved to the LAIF account.
- (B) Accounts Payable Checks are drawn against this account; money is transferred to this account, as needed, from the LAIF account.
- (C) Payroll including payroll taxes and related liabilities are drawn against this account; money is transferred into this account, as needed, from the LAIF account.
- (D) California State Local Agency Investment Fund (LAIF) balance.
- (E) Cash on hand with GM's office and held by Chief Operators at each Treatment facility.
- (F) OPEB Trust Fund; these funds can only be used for Retiree Health Benefits.

**South Orange County Wastewater Authority
Capital Projects Summaries
For the Period Ended February 28, 2023
(in dollars)**

FY 2022-23 Budget vs. Actual Spending								
<u>Description¹</u>	Capital Budget	Fiscal Year Spending	(Over)/ Under Budget	% Expended	Member Agency Billed	Member Agency Collections	Open Receivables	% Expended vs. Billed
PC 2-JB Latham	\$ 5,638,569	\$ 3,455,573	\$ 2,182,996	61.3%	\$ 3,095,405	\$ 3,095,405	\$ -	111.6%
PC 5-San Juan Creek Outfall	39,064	-	39,064	-	39,064	39,064	-	-
PC 15-Coastal	3,529,980	412,927	3,117,053	11.7%	56,250	56,250	-	734.1%
PC 17-Regional	5,928,616	758,396	5,170,220	12.8%	109,155	109,155	-	694.8%
PC 21 Effluent Transmission	732,810	13,440	719,370	1.8%	200,000	200,000	-	-
PC 24 Aliso Creek Outfall	127,065	12,239	114,826	9.6%	60,100	60,100	-	-
Total Large Capital	\$ 15,996,104	\$ 4,652,574	\$ 11,343,530	29.1%	\$ 3,559,974	\$ 3,559,974	\$ -	130.7%
Non-Capital Engineering	217,326	124,978	92,348	57.5%	75,000	75,000	-	166.6%
Non-Capital Misc Engineering	17,500	11,009	6,491	62.9%	-	-	-	-
Small Internal Capital	2,061,000	773,844	1,287,156	37.5%	1,545,750	1,545,750	-	50.1%
Total Capital	\$ 18,291,930	\$ 5,562,405	\$ 12,729,525	30.4%	\$ 5,180,724	\$ 5,180,724	\$ -	107.4%

¹All Project Committees had cash on hand at the end of FY 2021-22 to help cover the current year expenditures.

Large Capital Projects Fiscal Year 2022-23 Budget vs. Exhibit D-1 Year-to-Date Expenditures & Billings as of 2/28/2023



	PC 2-JB Latham	PC 5-San Juan Creek Outfall	PC 15-Coastal	PC 17-Regional	PC 21 Effluent Transmission	PC 24 Aliso Creek Outfall	Total Large Capital
Spent - YTD 2/28/2023	\$3,455,573	\$-	\$412,927	\$758,396	\$13,440	\$12,239	\$4,652,574
FY 22-23 Billings	\$3,095,405	\$39,064	\$56,250	\$109,155	\$200,000	\$60,100	\$3,559,974
Capital Budget FY 22-23	\$5,638,569	\$39,064	\$3,529,980	\$5,928,616	\$732,810	\$127,065	\$15,996,104

South Orange County Wastewater Authority
O & M & Environmental Safety Costs Summary¹
For the Period Ended February 28, 2023
(in dollars)

		FY 2022-23 Budget	Actual	(Over)/Under Budget	% Expended
Salary and Fringe					
-5000--**_**	Regular Salaries-O&M	4,931,084	2,961,466	1,969,618	60.1%
-5001--**_**	Overtime Salaries-O&M	73,524	102,235	(28,711)	139.0% (1)
-5306--**_**	Scheduled Holiday Work	86,468	60,294	26,174	69.7%
-5315--**_**	Comp Time - O&M	16,920	17,368	(448)	102.6% (1)
-5401--**_**	Fringe Benefits IN to PC's & Depts.	2,572,272	1,776,880	795,392	69.1% (7)
-5700--**_**	Standby Pay	70,000	44,980	25,020	64.3%
	Total Payroll Costs	7,750,268	4,963,222	2,787,046	64.0%
Other Expenses					
-5002--**_**	Electricity	1,253,828	854,512	399,316	68.2%
-5003--**_**	Natural Gas	268,200	389,000	(120,800)	145.0% (2)
-5004--**_**	Potable & Reclaimed Water	87,008	52,210	34,798	60.0%
-5005--**_**	Co-generation Power Credit	(1,050,004)	(723,024)	(326,980)	68.9%
-5006--**_**	Chlorine/Sodium Hypochlorite	554,000	326,427	227,573	58.9% (2)
-5007--**_**	Polymer Products	789,548	696,414	93,134	88.2% (2)
-5008--**_**	Ferric Chloride	688,256	666,555	21,701	96.8% (2)
-5009--**_**	Odor Control Chemicals	117,572	96,378	21,194	82.0% (2)
-5010--**_**	Other Chemicals - Misc.	2,004	-	2,004	-
-5011--**_**	Laboratory Services	65,724	29,343	36,381	44.6%
-5012--**_**	Grit Hauling	124,472	95,344	29,128	76.6%
-5013--**_**	Landscaping	219,008	133,606	85,402	61.0%
-5015--**_**	Management Support Services	501,512	99,713	401,799	19.9%
-5017--**_**	Legal Fees	23,688	35,343	(11,655)	149.2%
-5018--**_**	Public Notices/ Public Relations	3,732	-	3,732	-
-5019--**_**	Contract Services Misc.	320,996	206,763	114,233	64.4%
-5021--**_**	Small Vehicle Expense	23,104	20,613	2,491	89.2% (3)
-5022--**_**	Miscellaneous Expense	15,988	3,031	12,957	19.0%
-5023--**_**	Office Supplies - All	46,008	19,043	26,965	41.4%
-5024--**_**	Petroleum Products	34,000	18,792	15,208	55.3%
-5025--**_**	Uniforms	71,004	62,537	8,467	88.1%
-5026--**_**	Small Vehicle Fuel	22,764	11,046	11,718	48.5%
-5027--**_**	Insurance - Property/Liability	491,248	464,254	26,994	94.5% (3)
-5028--**_**	Small Tools & Supplies	80,600	43,406	37,194	53.9%
-5030--**_**	Trash Disposal	8,500	6,832	1,668	80.4%
-5031--**_**	Safety Program & Supplies	112,712	104,935	7,777	93.1%
-5032--**_**	Equipment Rental	7,004	11,581	(4,577)	165.4% (4)
-5033--**_**	Recruitment	2,316	3,016	(700)	130.2%
-5034--**_**	Travel Expense/Tech. Conferences	73,736	11,646	62,090	15.8%
-5035--**_**	Training Expense	73,052	33,021	40,031	45.2%
-5036--**_**	Laboratory Supplies	121,144	100,215	20,929	82.7%
-5037--**_**	Office Equipment	25,992	5,497	20,495	21.1%
-5038--**_**	Permits	593,908	549,934	43,974	92.6% (3)
-5039--**_**	Membership Dues/Fees	25,120	7,977	17,143	31.8%
-5044--**_**	Offshore Monitoring	80,000	77,035	2,965	96.3%
-5045--**_**	Offshore Biochemistry - 20B	30,004	-	30,004	-
-5046--**_**	Effluent Chemistry	44,992	41,326	3,666	91.9%
-5047--**_**	Access Road Expenses	45,000	-	45,000	-
-5048--**_**	Storm Damage	21,000	9,662	11,338	0.5%
-5049--**_**	Biosolids Disposal	1,568,996	1,192,130	376,866	76.0%
-5050--**_**	Contract Services Generators - 29A	28,008	6,751	21,257	24.1%
-5052--**_**	Janitorial Services	101,004	52,787	48,217	52.3%

South Orange County Wastewater Authority
O & M & Environmental Safety Costs Summary¹
For the Period Ended February 28, 2023
(in dollars)

	FY 2022-23 Budget	Actual	(Over)/Under Budget	% Expended	
-5053--**_**	Contract Serv - Digester Cleaning - 29E	60,000	33,762	26,238	56.3%
-5054--**_**	Diesel Truck Maint	41,996	29,172	12,824	69.5%
-5055--**_**	Diesel Truck Fuel	11,496	10,572	924	92.0% (2)
-5056--**_**	Maintenance Equip. & Facilities (Solids)	361,000	238,088	122,912	66.0%
-5057--**_**	Maintenance Equip. & Facilities (Liquids)	589,996	381,958	208,038	64.7%
-5058--**_**	Maintenance Equip. & Facilities (Common)	90,008	69,977	20,031	77.7% (5)
-5059--**_**	Maintenance Equip. & Facilities (Co-Gen)	715,996	665,714	50,282	93.0% (6)
-5060--**_**	Maintenance Equip. & Facilities (AWT)	88,000	44,877	43,123	51.0%
-5061--**_**	Mileage	3,652	3,527	125	96.6%
-5068--**_**	MNWD Potable Water Supplies & Svcs.	44,000	18,734	25,266	42.6%
-5076--**_**	SCADA Infrastructure	92,128	56,892	35,236	61.8%
-5077--**_**	IT Direct	45,004	41,822	3,182	92.9% (3)
-5105--**_**	Co-Generation Power Credit - Offset	1,050,000	723,024	326,976	68.9%
-5303--**_**	Group Insurance Waiver	18,000	10,357	7,643	57.5%
-5305--**_**	Medicare Tax Payments for Employees	2,388	1,522	866	63.7%
-5309--**_**	Operating Leases	28,004	11,198	16,806	40.0%
-5705--**_**	Monthly Car Allowance	35,400	20,938	14,462	59.1%
-5797--**_**	Verily Stipends - WastewaterSCAN Monitoring	-	(13,500)	13,500	0.0%
-5799--**_**	Zephyr Wall Costs Share-O&M	(14,000)	(14,000)	-	100.0%
-6500--**_**	IT Allocations in to PC's & Depts.	609,236	353,322	255,914	58.0%
	Total Other Expenses	11,589,052	8,503,607	3,085,445	73.4%
	Total O&M Expenses	19,339,320	13,466,829	5,872,491	69.6%

¹ This report intends to monitor the Annual Budget % Expended at the Project Committee and Functional Department levels.

The financial information contained in this report, in some cases, is based on the full accrual basis of accounting, whereby expenses are recognized in the period in which the liability is incurred, i.e., payroll and fringe benefits.

There are instances where we will include the total expense for the entire accounting fiscal year if the information is available, i.e., property and liability insurance premiums.

The audited financial statements for the fiscal year recognize all expenses on the full accrual basis of accounting.

- (1) Power emergencies to date between the three (3) Treatment Plants.
- (2) Chemical, fuel, and utilities increased with inflation and supply chain disruptions more than budgeted.
- (3) These are non-linear expenses that are primarily incurred in the first quarter of the Fiscal Year.
- (4) Several pieces are being rented due to delays associated with receiving newly purchased units.
- (5) JBL installed and replaced a failed welding fume hood. CTP implemented additional fire hardening recommendations from OCFA.
- (6) Completed both 30k and 40k Cogen services for the Fiscal Year.
- (7) The fringe rate was increased to 60% year-to-date from the budgeted 52.2 % based on an updated forecast; the change is primarily due to lower labor costs; there are openings in O&M and Engineering.

South Orange County Wastewater Authority
O&M Budget vs. Actual Comparison by PC¹
 For the Period Ended February 28, 2023
 (in dollars)

FY 2022-23 Budget	Actual	(Over)/Under Budget	% Expended
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02 - Jay B. Latham Plant

Salary and Fringe

02-5000-**-**	Regular Salaries-O&M	1,699,352	1,042,244	657,108	61.3%
02-5001-**-**	Overtime Salaries-O&M	27,144	42,212	(15,068)	155.5% (1)
02-5306-**-**	Scheduled Holiday Work	37,836	26,583	11,253	70.3%
02-5315-**-**	Comp Time - O&M	8,056	6,897	1,159	85.6% (1)
02-5401-**-**	Fringe Benefits IN to PC's & Depts.	886,460	625,346	261,114	70.5% (15)
02-5700-**-**	Standby Pay	26,000	17,518	8,483	67.4%
	Total Payroll Costs	2,684,848	1,760,799	924,049	65.6%

Other Expenses

02-5002-**-**	Electricity	534,828	481,181	53,647	90.0% (2)
02-5003-**-**	Natural Gas	165,128	187,281	(22,153)	113.4% (2)
02-5004-**-**	Potable & Reclaimed Water	26,004	18,925	7,079	72.8%
02-5006-**-**	Chlorine/Sodium Hypochlorite	9,000	26,440	(17,440)	293.8% (2)
02-5007-**-**	Polymer Products	319,544	268,847	50,697	84.1% (2)
02-5008-**-**	Ferric Chloride	255,252	212,760	42,492	83.4% (2)
02-5009-**-**	Odor Control Chemicals	23,568	21,890	1,678	92.9% (2)
02-5010-**-**	Other Chemicals - Misc.	1,000	-	1,000	-
02-5011-**-**	Laboratory Services	19,712	7,079	12,633	35.9%
02-5012-**-**	Grit Hauling	59,468	58,065	1,403	97.6% (2)
02-5013-**-**	Landscaping	77,004	47,773	29,231	62.0%
02-5015-**-**	Management Support Services	30,008	20,392	9,616	68.0%
02-5017-**-**	Legal Fees	4,996	18,624	(13,628)	372.8%
02-5019-**-**	Contract Services Misc.	82,000	77,477	4,523	94.5%
02-5021-**-**	Small Vehicle Expense	11,000	8,895	2,105	80.9% (3)
02-5022-**-**	Miscellaneous Expense	8,000	623	7,377	7.8%
02-5023-**-**	Office Supplies - All	29,000	9,004	19,996	31.0%
02-5024-**-**	Petroleum Products	11,000	6,261	4,739	56.9%
02-5025-**-**	Uniforms	34,008	28,422	5,586	83.6%
02-5026-**-**	Small Vehicle Fuel	10,004	4,632	5,372	46.3%
02-5027-**-**	Insurance - Property/Liability	167,039	161,680	5,359	96.8% (4)
02-5028-**-**	Small Tools & Supplies	38,000	16,147	21,853	42.5%
02-5030-**-**	Trash Disposal	3,000	1,184	1,816	39.5%
02-5031-**-**	Safety Program & Supplies	39,248	34,820	4,428	88.7%
02-5032-**-**	Equipment Rental	3,000	274	2,726	0.09
02-5033-**-**	Recruitment	1,000	1,301	(301)	130.1%
02-5034-**-**	Travel Expense/Tech. Conferences	20,596	4,415	16,181	21.4%
02-5035-**-**	Training Expense	25,352	11,264	14,088	44.4%
02-5036-**-**	Laboratory Supplies	21,000	14,357	6,643	68.4%
02-5037-**-**	Office Equipment	13,000	418	12,582	3.2%
02-5038-**-**	Permits	26,500	19,800	6,700	74.7% (4)
02-5039-**-**	Membership Dues/Fees	5,808	2,741	3,067	47.2%
02-5049-**-**	Biosolids Disposal	687,000	387,613	299,387	56.4%
02-5050-**-**	Contract Services Generators - 29A	10,004	2,700	7,304	27.0%
02-5052-**-**	Janitorial Services	47,000	24,724	22,276	52.6%
02-5053-**-**	Contract Serv - Digester Cleaning - 29E	60,000	33,762	26,238	56.3%
02-5054-**-**	Diesel Truck Maint	21,996	15,179	6,817	69.0%
02-5055-**-**	Diesel Truck Fuel	2,996	3,799	(803)	126.8% (2)
02-5056-**-**	Maintenance Equip. & Facilities (Solids)	150,000	146,684	3,316	97.8% (5)
02-5057-**-**	Maintenance Equip. & Facilities (Liquids)	230,000	161,890	68,110	70.4%
02-5058-**-**	Maintenance Equip. & Facilities (Common)	29,000	36,374	(7,374)	125.4% (6)
02-5059-**-**	Maintenance Equip. & Facilities (Co-Gen)	277,000	169,102	107,898	61.0%

South Orange County Wastewater Authority
O&M Budget vs. Actual Comparison by PC¹
 For the Period Ended February 28, 2023
 (in dollars)

		FY 2022-23 Budget	Actual	(Over)/Under Budget	% Expended
02-5061-**-**-**	Mileage	2,148	1,203	945	56.0%
02-5076-**-**-**	SCADA Infrastructure	27,832	18,964	8,868	68.1%
02-5077-**-**-**	IT Direct	15,004	13,941	1,063	92.9% (4)
02-5303-**-**-**	Group Insurance Waiver	7,204	4,306	2,898	59.8%
02-5309-**-**-**	Operating Leases	22,000	11,198	10,802	50.9%
02-5705-**-**-**	Monthly Car Allowance	22,800	12,554	10,246	55.1%
02-5797-**-**-**	Verily Stipends - WastewaterSCAN Monitoring	-	(4,500)	4,500	100.0%
02-5799-**-**-**	Zephyr Wall Costs Share-O&M	(14,000)	(14,000)	-	100.0%
02-6500-**-**-**	IT Allocations in to PC's & Depts.	211,980	122,934	89,046	58.0%
	Total Other Expenses	3,884,031	2,921,402	962,629	75.2%
	Total Expenses	6,568,879	4,682,201	1,886,678	71.3%
05 - San Juan Creek Ocean Outfall					
Salary and Fringe					
05-5000-**-**-**	Regular Salaries-O&M	108,564	80,041	28,523	73.7%
05-5001-**-**-**	Overtime Salaries-O&M	72	296	(224)	410.4%
05-5306-**-**-**	Scheduled Holiday Work	440	88	352	20.0%
05-5401-**-**-**	Fringe Benefits IN to PC's & Depts.	56,628	48,025	8,603	84.8% (15)
	Total Payroll Costs	165,704	128,449	37,255	77.5%
Other Expenses					
05-5015-**-**-**	Management Support Services	125,004	32,970	92,035	26.4%
05-5017-**-**-**	Legal Fees	2,008	1,565	443	77.9%
05-5022-**-**-**	Miscellaneous Expense	-	36	(36)	100.0%
05-5026-**-**-**	Small Vehicle Fuel	500	-	500	-
05-5027-**-**-**	Insurance - Property/Liability	18,420	17,191	1,229	93.3% (4)
05-5031-**-**-**	Safety Supplies	1,004	-	1,004	-
05-5034-**-**-**	Travel Expense/Tech. Conferences	5,592	1,658	3,934	29.6%
05-5035-**-**-**	Training Expense	2,500	-	2,500	-
05-5036-**-**-**	Laboratory Supplies	35,000	21,890	13,110	62.5%
05-5038-**-**-**	Permits	275,000	272,360	2,640	99.0% (4)
05-5039-**-**-**	Membership Dues/Fees	2,000	-	2,000	-
05-5044-**-**-**	Offshore Monitoring	40,000	40,477	(477)	101.2% (7)
05-5045-**-**-**	Offshore Biochemistry - 20B	15,004	-	15,004	-
05-5046-**-**-**	Effluent Chemistry	22,496	29,745	(7,249)	132.2% (8)
05-5058-**-**-**	Maintenance Equip. & Facilities (Common)	1,004	-	1,004	-
05-6500-**-**-**	IT Allocations in to PC's & Depts.	13,148	7,624	5,524	58.0%
	Total Other Expenses	558,680	425,516	133,164	76.2%
	Total Expenses	724,384	553,966	170,418	76.5%

South Orange County Wastewater Authority
O&M Budget vs. Actual Comparison by PC¹
 For the Period Ended February 28, 2023
 (in dollars)

FY 2022-23 Budget	Actual	(Over)/Under Budget	% Expended
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08 - Pre Treatment

Salary and Fringe

08-5000-**-**-**	Regular Salaries-O&M	116,396	68,388	48,008	58.8%
08-5401-**-**-**	Fringe Benefits IN to PC's & Depts.	60,716	41,033	19,683	67.6% (15)
	Total Payroll Costs	177,112	109,421	67,692	61.8%

Other Expenses

08-5011-**-**-**	Laboratory Services	3,004	1,610	1,394	53.6%
08-5015-**-**-**	Management Support Services	20,004	-	20,004	-
08-5017-**-**-**	Legal Fees	2,672	605	2,067	22.6%
08-5018-**-**-**	Public Notices/ Public Relations	3,732	-	3,732	-
08-5021-**-**-**	Small Vehicle Expense - 31A	1,100	-	1,100	-
08-5022-**-**-**	Miscellaneous Expense	1,984	-	1,984	-
08-5026-**-**-**	Small Vehicle Fuel - 37A	1,256	-	1,256	-
08-5027-**-**-**	Insurance - Property/Liability	6,141	5,731	410	93.3% (4)
08-5028-**-**-**	Small Tools & Supplies	3,600	109	3,491	3.0%
08-5034-**-**-**	Travel Expense/Tech. Conferences	3,496	-	3,496	-
08-5035-**-**-**	Training Expense	2,000	917	1,083	-
08-5038-**-**-**	Permits and Fines	504	-	504	-
08-5039-**-**-**	Membership Dues/Fees	796	452	344	56.8%
08-6500-**-**-**	IT Allocations in to PC's & Depts.	14,092	8,174	5,918	58.0%
	Total Other Expenses	64,381	17,598	46,783	27.3%

Total Expenses

241,493	127,019	114,474	52.6%
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12 - Water Reclamation Permits

Salary and Fringe

12-5000-**-**-**	Regular Salaries-O&M	88,952	13,268	75,684	14.9%
12-5401-**-**-**	Fringe Benefits IN to PC's & Depts.	46,400	7,961	38,439	17.2% (15)
	Total Payroll Costs	135,352	21,229	114,123	15.7%

Other Expenses

12-5014-**-**-**	Engineering - Misc.	-	-	-	-
12-5015-**-**-**	Management Support Services	164,996	(9,500)	174,496	-5.8%
12-5017-**-**-**	Legal Fees	2,000	-	2,000	-
12-5027-**-**-**	Insurance - Property/Liability	8,884	8,291	593	93.3% (4)
12-5034-**-**-**	Travel Expense/Tech. Conferences	4,796	606	4,190	12.6%
12-5038-**-**-**	Permits	22,508	24,687	(2,179)	109.7% (4)
12-5039-**-**-**	Membership Dues/Fees	68	-	68	-
12-6500-**-**-**	IT Allocations in to PC's & Depts.	10,764	6,246	4,518	58.0%
	Total Other Expenses	214,016	30,331	183,685	14.2%

Total Expenses

349,368	51,561	297,807	14.8%
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South Orange County Wastewater Authority
O&M Budget vs. Actual Comparison by PC¹
 For the Period Ended February 28, 2023
 (in dollars)

FY 2022-23 Budget	Actual	(Over)/Under Budget	% Expended
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15 - Coastal Treatment Plant

Salary and Fringe

15-5000-**-**	Regular Salaries-O&M	954,888	589,424	365,464	61.7%
15-5001-**-**	Overtime Salaries-O&M	11,216	16,921	(5,705)	150.9% (1)
15-5306-**-**	Scheduled Holiday Work	15,672	7,742	7,930	49.4%
15-5315-**-**	Comp Time - O&M	1,996	4,250	(2,254)	212.9% (1)
15-5401-**-**	Fringe Benefits IN to PC's & Depts.	498,120	353,654	144,466	71.0% (15)
15-5700-**-**	Standby Pay	17,000	6,923	10,078	40.7%
	Total Payroll Costs	1,498,892	978,913	519,979	65.3%

Other Expenses

15-5002-**-**	Electricity	235,000	209,440	25,560	89.1% (2)
15-5003-**-**	Natural Gas	3,000	3,721	(721)	124.0%
15-5004-**-**	Potable & Reclaimed Water	25,004	14,680	10,324	58.7%
15-5006-**-**	Chlorine/Sodium Hypochlorite	90,000	68,614	21,386	76.2% (2)
15-5007-**-**	Polymer Products	1,000	-	1,000	-
15-5008-**-**	Ferric Chloride	70,000	91,251	(21,251)	130.4% (2)
15-5009-**-**	Odor Control Chemicals	52,004	33,273	18,731	64.0%
15-5011-**-**	Laboratory Services	20,000	6,604	13,396	33.0%
15-5012-**-**	Grit Hauling	21,004	13,525	7,479	64.4%
15-5013-**-**	Landscaping	57,000	40,745	16,255	71.5%
15-5015-**-**	Management Support Services	11,500	6,960	4,540	60.5%
15-5017-**-**	Legal Fees	5,000	1,565	3,435	31.3%
15-5019-**-**	Contract Services Misc.	110,000	54,300	55,700	49.4%
15-5021-**-**	Small Vehicle Expense - 31A	4,004	2,405	1,599	60.1%
15-5022-**-**	Miscellaneous Expense	1,000	276	724	27.6%
15-5023-**-**	Office Supplies - All	4,004	3,008	996	75.1%
15-5024-**-**	Petroleum Products	3,000	7,003	(4,003)	233.4% (9)
15-5025-**-**	Uniforms	9,000	8,108	892	90.1%
15-5026-**-**	Small Vehicle Fuel	2,000	1,954	46	97.7%
15-5027-**-**	Insurance - Property/Liability	72,916	68,050	4,866	93.3% (4)
15-5028-**-**	Small Tools & Supplies	9,000	7,194	1,806	79.9%
15-5030-**-**	Trash Disposal	2,996	2,475	521	82.6%
15-5031-**-**	Safety Supplies	32,804	27,329	5,475	83.3%
15-5032-**-**	Equipment Rental	1,000	-	1,000	-
15-5033-**-**	Recruitment	312	104	208	33.4%
15-5034-**-**	Travel Expense/Tech. Conferences	13,072	545	12,527	4.2%
15-5035-**-**	Training Expense	17,148	9,639	7,509	56.2%
15-5036-**-**	Laboratory Supplies	14,000	21,480	(7,480)	153.4% (10)
15-5037-**-**	Office Equipment	2,996	2,655	341	88.6%
15-5038-**-**	Permits	6,996	3,387	3,610	48.4%
15-5039-**-**	Membership Dues/Fees	4,800	1,419	3,381	29.6%
15-5047-**-**	Access Road Expenses	45,000	-	45,000	-
15-5048-**-**	Storm Damage	21,000	9,662	11,338	0.46
15-5050-**-**	Contract Services Generators	5,000	4,051	949	81.0% (4)
15-5052-**-**	Janitorial Services	12,004	9,673	2,331	80.6%
15-5054-**-**	Diesel Truck Maint - 31B	1,000	13	987	0.01
15-5055-**-**	Diesel Truck Fuel - 37B	500	755	(255)	1.51
15-5057-**-**	Maintenance Equip. & Facilities (Liquids)	144,996	79,677	65,319	55.0%
15-5058-**-**	Maintenance Equip. & Facilities (Common)	23,000	17,370	5,630	75.5% (11)
15-5060-**-**	Maintenance Equip. & Facilities (AWT)	38,000	22,301	15,699	58.7%
15-5061-**-**	Mileage	500	301	199	60.1%
15-5076-**-**	SCADA Infrastructure	32,296	18,964	13,332	58.7%

South Orange County Wastewater Authority
O&M Budget vs. Actual Comparison by PC¹
 For the Period Ended February 28, 2023
 (in dollars)

		FY 2022-23 Budget	Actual	(Over)/Under Budget	% Expended
15-5077-**-**-**	IT Direct	15,000	13,941	1,059	92.9% (4)
15-5303-**-**-**	Group Insurance Waiver	3,600	2,395	1,205	66.5%
15-5305-**-**-**	Medicare Tax Payments for Employees	2,240	1,522	718	68.0%
15-5705-**-**-**	Monthly Car Allowance	4,200	2,795	1,405	66.5%
15-5797-**-**-**	Verily Stipends - WastewaterSCAN Monitoring	-	(4,500)	4,500	100.0%
15-6500-**-**-**	IT Allocations in to PC's & Depts.	118,660	68,816	49,844	58.0%
	Total Other Expenses	1,368,556	959,444	409,112	70.1%
	Total Expenses	2,867,448	1,938,357	929,091	67.6%
17 - Joint Regional Wastewater Reclamation and Sludge Handling					
Salary and Fringe					
17-5000-**-**-**	Regular Salaries-O&M	1,844,716	1,094,093	750,623	59.3%
17-5001-**-**-**	Overtime Salaries-O&M	34,472	42,430	(7,958)	123.1% (1)
17-5306-**-**-**	Scheduled Holiday Work	32,244	25,703	6,541	79.7%
17-5315-**-**-**	Comp Time - O&M	6,868	6,221	647	90.6% (1)
17-5401-**-**-**	Fringe Benefits IN to PC's & Depts.	962,288	656,456	305,832	68.2% (15)
17-5700-**-**-**	Standby Pay	27,000	20,540	6,460	76.1%
	Total Payroll Costs	2,907,588	1,845,443	1,062,145	63.5%
Other Expenses					
17-5002-**-**-**	Electricity	484,000	163,890	320,110	33.9%
17-5003-**-**-**	Natural Gas	100,072	197,998	(97,926)	197.9% (2)
17-5004-**-**-**	Potable & Reclaimed Water	36,000	18,605	17,395	51.7%
17-5005-**-**-**	Co-generation Power Credit	(1,050,004)	(723,024)	(326,980)	68.9%
17-5006-**-**-**	Chlorine/Sodium Hypochlorite	455,000	231,372	223,628	50.9%
17-5007-**-**-**	Polymer Products	469,004	427,567	41,437	91.2% (2)
17-5008-**-**-**	Ferric Chloride	363,004	362,544	460	99.9% (2)
17-5009-**-**-**	Odor Control Chemicals	42,000	41,215	785	98.1% (2)
17-5010-**-**-**	Other Chemicals - Misc.	1,004	-	1,004	-
17-5011-**-**-**	Laboratory Services	23,008	14,050	8,958	61.1%
17-5012-**-**-**	Grit Hauling - 21A	44,000	23,754	20,246	54.0%
17-5013-**-**-**	Landscaping	85,004	45,088	39,916	53.0%
17-5015-**-**-**	Management Support Services	24,996	6,960	18,036	27.8%
17-5017-**-**-**	Legal Fees	5,004	11,418	(6,414)	228.2%
17-5019-**-**-**	Contract Services Misc.	110,000	74,987	35,013	68.2%
17-5021-**-**-**	Small Vehicle Expense	7,000	9,313	(2,313)	133.0% (3)
17-5022-**-**-**	Miscellaneous Expense	5,004	2,096	2,908	41.9%
17-5023-**-**-**	Office Supplies - All	13,004	7,030	5,974	54.1%
17-5024-**-**-**	Petroleum Products	20,000	5,528	14,472	27.6%
17-5025-**-**-**	Uniforms	27,996	26,007	1,989	92.9%
17-5026-**-**-**	Small Vehicle Fuel	9,004	4,461	4,543	49.5%
17-5027-**-**-**	Insurance - Property/Liability	199,964	186,620	13,344	93.3% (4)
17-5028-**-**-**	Small Tools & Supplies	30,000	19,956	10,044	66.5%
17-5030-**-**-**	Trash Disposal	2,504	3,172	(668)	126.7%
17-5031-**-**-**	Safety Supplies	38,652	42,786	(4,134)	110.7%
17-5032-**-**-**	Equipment Rental	3,004	11,308	(8,304)	376.4% (12)
17-5033-**-**-**	Recruitment	1,004	1,611	(607)	160.5%
17-5034-**-**-**	Travel Expense/Tech. Conferences	20,592	2,307	18,285	11.2%
17-5035-**-**-**	Training Expense	25,148	11,201	13,947	44.5%
17-5036-**-**-**	Laboratory Supplies	25,144	22,287	2,857	88.6%
17-5037-**-**-**	Office Equipment	9,996	2,424	7,572	24.2%
17-5038-**-**-**	Permits	15,000	2,199	12,801	14.7%
17-5039-**-**-**	Membership Dues/Fees	5,804	3,364	2,440	58.0%

South Orange County Wastewater Authority
O&M Budget vs. Actual Comparison by PC¹
 For the Period Ended February 28, 2023
 (in dollars)

		FY 2022-23 Budget	Actual	(Over)/Under Budget	% Expended
17-5049-**-**_**	Biosolids Disposal	881,996	804,516	77,480	91.2% (2)
17-5050-**-**_**	Contract Services Generators - 29A	13,004	-	13,004	-
17-5052-**-**_**	Janitorial Services	42,000	18,390	23,610	43.8%
17-5054-**-**_**	Diesel Truck Maint	19,000	13,980	5,020	73.6%
17-5055-**-**_**	Diesel Truck Fuel	8,000	6,018	1,982	75.2% (2)
17-5056-**-**_**	Maintenance Equip. & Facilities (Solids)	211,000	91,404	119,596	43.3%
17-5057-**-**_**	Maintenance Equip. & Facilities (Liquids)	215,000	140,392	74,608	65.3%
17-5058-**-**_**	Maintenance Equip. & Facilities (Common)	36,000	14,840	21,160	41.2%
17-5059-**-**_**	Maintenance Equip. & Facilities (Co-Gen)	438,996	496,612	(57,616)	113.1% (13)
17-5060-**-**_**	Maintenance Equip. & Facilities (AWT)	50,000	22,576	27,424	45.2%
17-5061-**-**_**	Mileage	1,004	2,023	(1,019)	201.5%
17-5068-**-**_**	MNWD Potable Water Supplies & Svcs.	44,000	18,734	25,266	42.6%
17-5076-**-**_**	SCADA Infrastructure	32,000	18,964	13,036	59.3%
17-5077-**-**_**	IT Direct	15,000	13,941	1,059	92.9% (4)
17-5105-**-**_**	Co-Generation Power Credit - Offset	1,050,000	723,024	326,976	68.9%
17-5303-**-**_**	Group Insurance Waiver	7,196	3,655	3,541	50.8%
17-5305-**-**_**	Medicare Tax Payments for Employees	148	-	148	-
17-5309-**-**_**	Operating Leases	6,004	-	6,004	-
17-5705-**-**_**	Monthly Car Allowance	8,400	5,589	2,811	66.5%
17-5797-**-**_**	Verily Stipends - WastewaterSCAN Monitoring	-	(4,500)	4,500	100.0%
17-6500-**-**_**	IT Allocations in to PC's & Depts.	226,420	131,307	95,113	58.0%
	Total Other Expenses	4,956,080	3,781,558	1,174,522	76.3%
	Total Expenses	7,863,668	5,627,001	2,236,667	71.6%
21 - Effluent Transmission Main					
Salary and Fringe					
21-5000-**-**_**	Regular Salaries-O&M	1,156	-	1,156	-
21-5401-**-**_**	Fringe Benefits IN to PC's & Depts.	600	-	600	-
	Total Payroll Costs	1,756	-	1,756	0.0%
Other Expenses					
21-5019-**-**_**	Contract Services Misc.	18,996	-	18,996	-
21-5027-**-**_**	Insurance - Property/Liability	-	-	-	-
	Total Other Expenses	18,996	-	18,996	0.0%
	Total Expenses	20,752	-	20,752	0.0%
24 - Aliso Creek Ocean Outfall					
Salary and Fringe					
24-5000-**-**_**	Regular Salaries-O&M	117,060	74,008	43,052	63.2%
24-5001-**-**_**	Overtime Salaries-O&M	620	376	244	60.7%
24-5306-**-**_**	Scheduled Holiday Work	276	178	98	64.6%
24-5401-**-**_**	Fringe Benefits IN to PC's & Depts.	61,060	44,405	16,655	72.7% (15)
	Total Payroll Costs	179,016	118,968	60,048	66.5%
Other Expenses					
24-5015-**-**_**	Management Support Services	125,004	41,930	83,074	33.5%
24-5017-**-**_**	Legal Fees	2,008	1,565	443	77.9%
24-5027-**-**_**	Insurance - Property/Liability	17,884	16,691	1,193	93.3% (4)
24-5031-**-**_**	Safety Supplies	1,004	-	1,004	-
24-5034-**-**_**	Travel Expense/Tech. Conferences	5,592	2,116	3,476	37.8%
24-5035-**-**_**	Training Expense	904	-	904	-

South Orange County Wastewater Authority
O&M Budget vs. Actual Comparison by PC¹
 For the Period Ended February 28, 2023
 (in dollars)

	FY 2022-23 Budget	Actual	(Over)/Under Budget	% Expended	
24-5036-**-**-**	Laboratory Supplies	26,000	20,200	5,800	77.7%
24-5038-**-**-**	Permits	247,400	227,502	19,898	92.0%
24-5039-**-**-**	Membership Dues/Fees	5,844	-	5,844	-
24-5044-**-**-**	Offshore Monitoring	40,000	36,557	3,443	91.4% (7)
24-5045-**-**-**	Offshore Biochemistry - 20B	15,000	-	15,000	-
24-5046-**-**-**	Effluent Chemistry	22,496	11,581	10,915	51.5%
24-5058-**-**-**	Maintenance Equip. & Facilities (Common) 41-C	1,004	1,394	(390)	138.8% (14)
24-6500-**-**-**	IT Allocations in to PC's & Depts.	14,172	8,220	5,952	58.0%
	Total Other Expenses	524,312	367,756	156,556	70.1%
	Total Expenses	703,328	486,724	216,604	69.2%
	Total O&M Expenses	19,339,320	13,466,829	5,872,491	69.6%

¹ This report intends to monitor the Annual Budget % Expended at the Project Committee and Functional Department levels.

The financial information contained in this report, in some cases, is based on the full accrual basis of accounting, whereby expenses are recognized in the period in which the liability is incurred, i.e., payroll and fringe benefits.

There are instances where we will include the total expense for the entire accounting fiscal year if the information is available, i.e., property and liability insurance premiums.

The audited financial statements for the fiscal year recognize all expenses on the full accrual basis of accounting.

South Orange County Wastewater Authority
O&M Budget vs. Actual Comparison by PC
For the Period Ended February 28, 2023

- (1) Power emergencies to date between the three (3) Treatment Plants.
- (2) Chemicals, fuel, and utilities increased with inflation and supply chain disruptions more than budgeted.
- (3) Several older vehicles are being maintained.
- (4) These are non-linear expenses that are primarily incurred in the first quarter of the Fiscal Year.
- (5) Staff is performing additional work in areas isolated by ongoing construction work that is not normally accessible for O&M work.
- (6) JBL installed and replaced a failed welding fume hood.
- (7) Additional cost due to permit required toxicity testing for three (3) new species screens.
- (8) New NPDES permit requirement for continuous TDS monitoring installation at M-001 sampler.
- (9) Refueling associated with several extended power outages.
- (10) Additional supplies for sampler maintenance and supply restocking.
- (11) CTP implemented additional fire hardening recommendations from OCFA.
- (12) Several pieces are being rented due to delays associated with receiving newly purchased units.
- (13) 30,000-hour Cogen Service Completed.
- (14) O&M staff implementing recommendations in the new NPDES Permit.
- (15) The fringe rate was increased to 60% year-to-date from the budgeted 52.2 % based on an updated forecast; the change is primarily due to lower labor costs; there are openings in O&M and Engineering.

**South Orange County Wastewater Authority
Budget vs. Actual Comparison - Engineering**

For the Period Ended February 28, 2023
(in dollars)

		FY 2022-23 Budget	Actual	(Over)/Under Budget	% Expended
Salary and Fringe					
01-5000-03-00-00	Regular Salaries-O&M	161,205	80,919	80,286	50.2%
01-5401-03-00-00	Fringe Benefits IN to PC's & Depts.	84,092	48,552	35,540	57.7% (1)
	Total Payroll Costs	245,297	129,471	115,826	52.8%
Other Expenses					
01-5022-03-00-00	Miscellaneous Expense	3,184	891	2,293	28.0%
01-5023-03-00-00	Office Supplies - All	208	59	149	28.5%
01-5031-03-00-00	Safety Supplies	306	-	306	-
01-5034-03-00-00	Travel Expense/Tech. Conferences	6,439	-	6,439	-
01-5035-03-00-00	Training Expense	2,244	-	2,244	-
01-5037-03-00-00	Office Equipment	408	-	408	-
01-5039-03-00-00	Membership Dues/Fees	1,377	204	1,173	14.8%
01-5061-03-00-00	Mileage	510	23	487	4.6%
01-5309-03-00-00	Operating Leases	9,300	11,160	(1,860)	120.0%
01-5705-03-00-00	Monthly Car Allowance	4,200	2,294	1,906	54.6%
01-5802-03-00-00	Shipping/Freight	312	-	312	-
01-6500-03-00-00	IT Allocations in to PC's & Depts.	52,639	30,526	22,113	58.0%
	Total Other Expenses	81,127	45,159	35,968	55.7%
	Total Engineering Expenses	326,424	174,630	151,794	53.5%

(1) The fringe rate was increased to 60% year-to-date from the budgeted 52.2 % based on an updated forecast; the change is primarily due to lower labor costs; there are openings in O&M and Engineering.

**South Orange County Wastewater Authority
Budget vs. Actual Comparison- Administration**

For the Period Ended February 28, 2023

(in dollars)

		FY 2022-23 Budget	Actual	(Over)/Under Budget	% Expended
Salary and Fringe					
01-6000-04-00-00	Regular Salaries-Admin or IT	974,150	616,342	357,808	63.3%
01-6001-04-00-00	Overtime Salaries-Admin or IT	10,000	17,273	(7,273)	172.7% (1)
01-6315-04-00-00	Comp Time - Admin	5,000	1,699	3,301	34.0%
01-6401-04-00-00	Fringe Benefits IN to ADMIN or IT	508,162	369,805	138,357	72.8% (3)
	Total Payroll Costs	1,497,312	1,005,119	492,193	67.1%
Other Expenses					
01-6018-04-00-00	Public Notices/Public Relations	3,270	-	3,270	-
01-6101-04-00-00	HR Recruitment & Employee Relations	29,190	8,774	20,416	30.1%
01-6102-04-00-00	Subscriptions	2,533	1,435	1,098	56.6%
01-6103-04-00-00	Contract Labor	30,000	6,302	23,698	21.0%
01-6200-04-00-00	Management Support Services	50,000	40,520	9,480	81.0%
01-6201-04-00-00	Audit	46,000	22,600	23,400	49.1%
01-6202-04-00-00	Legal	200,000	260,752	(60,752)	130.4%
01-6204-04-00-00	Postage	1,500	752	748	50.1%
01-6223-04-00-00	Office Supplies - Admin	4,294	1,754	2,540	40.8%
01-6224-04-00-00	Office Equipment Admin or IT	6,000	4,427	1,573	73.8%
01-6234-04-00-00	Memberships & Trainings	95,912	102,971	(7,059)	107.4% (2)
01-6239-04-00-00	Travel & Conference	25,000	12,246	12,754	49.0%
01-6241-04-00-00	Education Reimbursement	4,500	655	3,845	14.6%
01-6310-04-00-00	Miscellaneous	20,000	15,208	4,792	76.0%
01-6311-04-00-00	Mileage	569	494	75	86.8%
01-6317-04-00-00	Contract Services Misc	5,573	3,847	1,726	69.0%
01-6500-04-00-00	IT Allocations in to PC's & Depts.	117,968	68,413	49,555	58.0%
01-6601-04-00-00	Shipping/Freight	4,382	1,029	3,353	23.5%
01-6705-04-00-00	Monthly Car Allowance	12,000	7,985	4,015	66.5%
	Total Other Expenses	658,691	560,163	98,528	85.0%
Total Admin Expenses		2,156,003	1,565,282	590,721	72.6%

(1) Increased number of meetings.

(2) Inflationary impact on costs

(3) The fringe rate was increased to 60% year-to-date from the budgeted 52.2 % based on an updated forecast; the change is primarily due to lower labor costs; there are openings in O&M and Engineering.

South Orange County Wastewater Authority
Budget vs. Actual Comparison-IT
 For the Period Ended February 28, 2023
 (in dollars)

		FY 2022-23 Budget	Actual	(Over)/Under Budget	% Expended
Salary & Fringe					
01-6000-05-00-00	Regular Salaries-Admin or IT	106,310	70,331	35,979	66.2%
01-6401-05-00-00	Fringe Benefits IN to ADMIN or IT	55,456	42,199	13,257	76.1% (2)
	Total Salary & Fringe	161,766	112,530	49,236	69.6%
Other Expenses					
01-6028-05-00-00	Small Tools & Supplies	1,000	-	1,000	-
01-6035-05-00-00	Training Expense	3,000	-	3,000	-
01-6224-05-00-00	Office Equipment Admin or IT	600	-	600	-
01-6234-05-00-00	Memberships & Trainings	12,850	1,810	11,040	14.1%
01-6239-05-00-00	Travel & Conference	1,500	-	1,500	-
01-6300-05-00-00	Software Maintenance Agreements	60,433	35,862	24,571	59.3%
01-6301-05-00-00	Hardware Maintenance Agreements	14,186	11,927	2,259	84.1% (1)
01-6302-05-00-00	Cloud Subscriptions (Internet)	181,766	100,487	81,279	55.3%
01-6303-05-00-00	Telecommunications	164,582	99,747	64,835	60.6%
01-6305-05-00-00	IT Professional Services	53,500	20,370	33,130	38.1%
01-6306-05-00-00	Small Hardware Purchases (< \$5k)	28,900	13,734	15,166	47.5%
01-6307-05-00-00	Small Software Purchases & Licenses (<\$5k)	26,444	11,310	15,134	42.8%
01-6308-05-00-00	IT Memberships	160	-	160	-
01-6309-05-00-00	Operating Leases	64,173	43,162	21,011	67.3%
01-6310-05-00-00	Miscellaneous	5,000	-	5,000	-
01-6312-05-00-00	Computer & Photocopy Supplies	-	1,323	(1,323)	-
	Total Other Expenses	618,094	339,731	278,363	55.0%
	Total Expenses before Allocation	779,860	452,261	327,599	58.0%
IT Allocations (Out) to PC's & Depts					
01-6400-05-00-00	IT Allocations (OUT) to PC's & Depts.	(779,860)	(452,261)	(327,599)	58.0%
	Total IT Allocations (Out) to PC's & Depts	(779,860)	(452,261)	(327,599)	58.0%

(1) AVI SPL Maintenance for JBL Audio/Visual

(2) The fringe rate was increased to 60% year-to-date from the budgeted 52.2 % based on an updated forecast; the change is primarily due to lower labor costs; there are openings in O&M and Engineering.

Agenda Item

5.D.

Board of Directors Meeting

Meeting Date: May 4, 2023

TO: Board of Directors

FROM: Jim Burror, Acting General Manager/Director of Operations

STAFF CONTACT: Mary Carey, Finance Controller

SUBJECT: FY2022-23 Budget Update and Proposed Budget Amendments

Summary/Discussion

The staff has been monitoring the progression of spending for FY2022-23. As noted by staff during the FY2022-23 Budget's approval, the PC budgets were very tight, and staff provided periodic updates on budget spending, unanticipated utility cost increases, new regulatory requirements, and other supply chain disruptions that impacted budgets. The staff has completed projected actuals for FY2022-23 and is requesting budget amendments for the PC-2 (JBL Treatment Plant), PC-5 (San Juan Creek Ocean Outfall), PC-15 (Coastal Treatment Plant), PC-17 (Regional Treatment Plant), PC-24 (Aliso Creek Ocean Outfall), and Administration.

Discussion/Analysis

Unanticipated and substantial utility cost increases, new regulatory requirements, and other supply chain disruptions have impacted budgets in FY2022-23. The Board of Directors has approved contract renewals with these increases too. The following is a summary of the increases:

- SCE (electricity) – 8% (45% increase since 2019)
- SDGE (electricity) – 10%
- Southern California Gas Company – 400% (in February) and 200% (in January)
- Ferric Chloride – 40%
- Polymer – 32%
- Biosolids – Rain-caused landfill closures limited SOCWA deliveries to its lowest cost management option (90 days and counting)
- SCE power outage at CTP – A four (4) month-long power outage at CTP has caused increased fuel costs at CTP. This is because SOCWA's backup generator is used when SCE misses fuel deliveries due to poor weather, during servicing/maintenance of SCE's onsite generator, and when SCE's generator equipment fails.
- Cogen – SCAQMD has delayed the review of cost-saving permit modifications by over 600 days. SOCWA did not budget for continued operations under the to-be-modified permit conditions at RTP.
- New regulatory requirements for additional plume modeling of both outfalls.
- Elevated levels of legal sending to support the ongoing discussions to modify the agency agreements and other unanticipated legal matters.

The SOCWA O&M staff continue working with all aspects of the plant operations to minimize these cost increase impacts. However, the sheer magnitude of the substantial increases could not be wholly offset.

PC-2 JBL Budget Amendment

A budget amendment of \$410,000 is proposed to address these increases. The proposed additional funding requested for PC-2 is as follows:

Budget line item	Budget line description	Requested budget increase
02-5002	Electricity	\$50,000
02-5003	Natural Gas	\$70,000
02-5008	Ferric Chloride	\$40,000
02-5007	Polymer	\$40,000
02-5012	Legal	\$30,000
02-5049	Biosolids Disposal	\$180,000
	Total	\$410,000

PC-5 SJCOO Budget Amendment

A budget amendment of \$45,000 is proposed to address these increases. The proposed additional funding requested for PC-5 is as follows:

Budget line item	Budget line description	Requested budget increase
05-5015	Management Support Services (OAH modeling)	\$45,000
	Total	\$45,000

PC-15 CTP Budget Amendment

A budget amendment of \$70,000 is proposed to address these increases. The proposed additional funding requested for PC-15 is as follows:

Budget line item	Budget line description	Requested budget increase
15-5008	Ferric Chloride	\$55,000
15-5024	Diesel Fuel	\$15,000
	Total	\$70,000

PC-17 RTP Budget Amendment

A budget amendment of \$495,000 is proposed to address these increases. The proposed additional funding requested for PC-17 is as follows:

Budget line item	Budget line description	Requested budget increase
17-5003	Natural Gas	\$135,000
17-5007	Polymer	\$30,000
17-5008	Ferric Chloride	\$30,000
17-5049	Biosolids Disposal	\$175,000
17-5059	Cogen O&M	\$125,000
	Total	\$495,000

PC-24 ACOO Budget Amendment

A budget amendment of \$45,000 is proposed to address these increases. The proposed additional funding requested for PC-24 is as follows:

Budget line item	Budget line description	Requested budget increase
24-5015	Management Support Services (OAH modeling)	\$45,000
	Total	\$45,000

Administration Budget Amendment

A budget amendment of \$265,000 is proposed to address these increases. The proposed additional funding requested for Administration is as follows:

Budget line item	Budget line description	Requested budget increase
01-6001	Overtime	\$20,000
01-6202	Legal	\$130,000
01-6200	Management Support Services – Board Facilitators	\$100,000
01-6200	Management Support Services - ADP	\$15,000
	Total	\$265,000

Prior Related Project Committee or Board Action(s)

None

Fiscal Impact

The total O&M proposed budget amendment is \$1,330,000.

SOCWA staff does not anticipate sending a fifth billing for this budget amendment. The final allocations and billing adjustments will be determined during the annual Use Audit process. Staff will continue to monitor the expenses and adjust as needed. There will be no additional billings to the Member Agencies

Recommended Action: The Finance Committee recommends that the Board of Directors amend the budget as follows for a total budget amendment amount of \$1,330,000.00:

- PC 2–JBL budget line items by \$410,000.
- PC 5–SJCOO budget line items by \$45,000.
- PC 15–CTP budget by \$70,000.
- PC 17–RTP budget by \$495,000.
- PC 24–ACOO budget by \$45,000.
- Administration budget by \$265,000.

Agenda Item

5.E.

Board of Directors Meeting

Meeting Date: May 4, 2023

TO: Board of Directors
FROM: Jim Burror, Acting General Manager/Director of Operations
SUBJECT: March 2023 Operations Report

Summary/Discussion

The following selected operational reports are provided monthly to the Board of Directors. The operational reports included are as follows:

1. Monthly Operational Report

This is a nine (9) page overview and comparison of owner use of facilities, including influent and recycled water production. The pages include ongoing calculations used by SOCWA for billing the agencies. Other items include important statistics for regulatory compliance, visits by the public to the treatment works, and other vendor interactions. The information is broken down by facility and by member agency.

2. SOCWA Ocean Outfall Discharges by Agency

This data shows how much water is being discharged into the ocean each month and for the last 12 months. This data is presented for the agencies planning reuse projects to better understand the potential to expand water reuse in their service area.

3. Quarterly Report on Key Operational Expenses

A seven (7) page overview of monthly expenses for key operational expenses with estimated projections for the Fiscal Year. The key parameters that are being tracked are Electricity, Odor Control, Polymer, Biosolids, Maintenance expenses (not including SOCWA staff labor), small capital purchases, and safety.

4. Beach Ocean Monitoring Report

5. Recycled Water Report

6. Pretreatment Report

Fiscal Impact

No change.

Recommended Action: Information Item; receive and file report.

Monthly Operational Report

SOCWA Operational Report March, 2023

Excursion, Complaint, and Violation Events

Events	CTP	RTP	JBL	Totals
Odor	0	0	0	0
Noise	0	0	0	0
Spills	0	0	0	0
Violations	0	0	0	0
Others	0	0	0	0

Plant Wastewater Billing Characteristics

Key Parameters	CTP	RTP	JBL TP1	JBL TP2	Totals
Influent (mgd) (1)	2.95	8.82	6.76	1.22	19.76
Effluent (mgd)	2.93	7.25	6.76	3.19	20.14
Peak Flow (mgd)	20.46	27.54	15.47	10.00	73.47
Influent BOD (mg/l)	328	267	311	427	
Influent TSS (mg/l)	441	317	371	458	
Effluent BOD (mg/l)	5.1	6.1	11.0	8.4	
Effluent TSS (mg/l)	4.5	8.3	14.5	11.2	
Effluent Turbidity (NTU)	2.0	3.2	7.0	4.6	

(1) CTP Influent value does not include AWT backwash in this table.

Recycled Water (AWT) Operations

Key Parameters	CTP	RTP	JBL	Totals
Average Flow (mgd)	0.10	1.57		1.67
Days of Operation (days)	6	25		
Total Flow (million gallons)	3.0	48.8		51.8
Plant Irrigation (million gallons)	0.01	0.04	0.02	
AWT Time Online (%)	98%			

Wastewater Unit Definitions

mgd = million gallons per day

mg/l = milligram per liter also known as parts per million

NTU = Nephelometric Turbidity Units

SOCWA Operational Report March, 2023 (cont'd)

Biosolids Management

Biosolids Management Site	CTP	RTP	JBL	Totals
Synagro Compost (tons)		82.2	0.0	82.2
Nursery Products (tons)		400.0	613.1	1,013.1
Prima Deshecha (tons)		114.4	96.1	210.5
Other: _____ (tons)		0.0	0.0	0.0
Total Processed (tons)		596.6	709.2	1,305.7

Summary of Maintenance Activities

Task Type	CTP	RTP	JBL	Totals
Preventative Maintenance	213	374	374	961
Corrective Maintenance	26	49	60	135

Site Visitors

Visitor Types	CTP	RTP	JBL	Totals
Regulatory	0	0	0	0
Member Agency	1	0	5	6
Residents	0	0	0	0
Others	5	7	13	25
Tours #/Visitors	1	0	0	1

Grit Disposal Management

Grit & Screenings	CTP	RTP	JBL	Totals
Simi Valley Landfill (tons)	9.6	34.7	NA	44.3

Chemical and Energy Utilization

Chemical/Utility	CTP	RTP	JBL	Totals
Ferric Chloride (tons)	NA	45.2	NA	45.2
Utility Power Purchase (kWh)	209,771	-16,057	181,242	374,956
Cogen Power (kWh)		623,412	458,762	1,082,174
Natural Gas (Dth)	32	NA	NA	32
Digester Gas to Engine (scfm)		10,226,469	5,554,954	15,781,423
Digester Gas to Boiler (scfm)		0		0
Digester Gas to Flares (scfm)		1,459	290,712	292,171
Digester Gas Power Savings		\$22,613		

NA = Not Available at the time this report was generated.

Wastewater Unit Definitions

kWh = kilowatt hours

Dth = Dekatherms

scfm = standard cubic feet per minute

SOCWA Operational Report March, 2023 (cont'd)

Agency Wastewater Flows to SOCWA by Facility (Including Internal Waste Streams Used for Billing)

Agency	CTP (mgd)	CTP (%)	RTP (mgd)	JBL (mgd)	JBL (%)	Total (mgd)
CLB	1.719	57.76%				1.72
EBS	0.070	2.35%				0.07
SCWD	1.187	39.89%		2.001	25.05%	3.19
MNWD	0.000	0.00%	8.82	1.400	17.53%	10.22
CSJC				2.511	31.44%	2.51
SMWD				2.075	25.98%	2.07
Total	2.976	100.00%	8.82	7.987	100.00%	19.78

Total Agency Outfall Flows by Outfall System-Billing Flows

Agency	SJCOO (mgd)	SJCOO (%)	SJCOO Meter (mgd)	ACOO (mgd)	ACOO (%)	Total (mgd)	Notes
CLB				1.72	8.94%	1.72	
EBS				0.07	0.36%	0.07	
SCWD	2.18	15.77%		1.12	5.80%	3.30	Includes Desalters
MNWD	3.12	22.52%		7.25	37.68%	10.36	
ETWD				4.13	21.48%	4.13	Direct Outfall Only
CSJC	2.51	18.15%				2.51	Includes Desalter
SMWD	2.25	16.25%				2.25	Includes Chiquita
CSC	3.78	27.30%				3.78	Direct Outfall Only
IRWD				4.95	25.75%	4.95	Direct Outfall Only
Total	13.83	100.00%	14.56	19.23	100.00%	33.07	

SOCWA Operational Report March, 2023 (cont'd)

FY Flow/Solids Summary-Billing

Project Committee No. 2 Liquids (JBL)

Agency	Own (mgd)	Own (%)	Budget (mgd)	Budget (%)	Month (mgd)(1)	Month (%)	FY Avg to Date (mgd)	FY Avg to Date (%)
CSJC	4.00	30.77%	2.210	26.25%	2.511	31.44%	2.19	29.39%
MNWD	3.00	23.08%	1.400	16.63%	1.400	17.53%	1.40	18.77%
SCWD	3.75	28.85%	1.610	19.12%	2.001	25.05%	1.71	22.95%
SMWD	2.25	17.31%	3.200	38.00%	2.075	25.98%	2.16	28.89%
Total	13.00	100.00%	8.420	100.00%	7.987	100.00%	7.46	100.00%

Project Committee No. 2 Solids (JBL)

Agency	Own (lbs/d)	Own (%)	Budget (lbs/d)	Budget (%)	Month (lbs/d)	Month (%)	36 Month Rol. Avg. (lbs/d) (2)	36 Month Rol. Avg. (%)
CSJC	11,572	30.00%	5,884	22.54%	6,056	27.14%	6,462	23.99%
MNWD	8,340	21.62%	6,169	23.63%	3,759	16.84%	6,021	22.35%
SCWD	7,715	20.00%	5,584	21.39%	6,932	31.06%	5,743	21.32%
SMWD	10,946	28.38%	8,473	32.45%	5,571	24.96%	8,717	32.35%
Total	38,573	100.00%	26,110	100.00%	22,318	100.00%	26,943	100.00%

Project Committee No. 5 - San Juan Creek Ocean Outfall (SJCOO)

Agency	Own (%)	Budget (mgd)	Budget (%)	Month (mgd)	Month (%)	FY Avg to Date (mgd)	FY Avg to Date (%)
CSC	16.63%	13.300	16.63%	3.777	27.30%	2.707	23.85%
CSJC	11.08%	8.860	11.08%	2.511	18.15%	2.399	21.14%
MNWD(3)	15.51%	12.410	15.51%	3.116	22.52%	2.149	18.94%
SCWD	12.46%	9.970	12.46%	2.182	15.77%	1.895	16.69%
SMWD	44.32%	35.460	44.33%	2.248	16.25%	2.200	19.38%
Total	100.00%	80.000	100.00%	13.834	100.00%	11.350	100.00%

(1) Influent billing meter summary:

- a. CSJC is metered daily in the collection system. The area-velocity meter has an accuracy of +/- 20%.
- b. MNWD is assumed to be 1.4 mgd unless Treatment Plant 3A is discharging to the sewer. If other discharges occur, they are estimated.
- c. SCWD flows are the summation of the DPSD and Victoria PS meters. The two metering systems have an accuracy of +/- 10%.
- d. The Oso Trabuco sewer is metered daily in the collection system. The flows from MNWD are subtracted from the metering data collected to determine SMWD's flows. The metering system in the collection system has an accuracy of +/- 20%.

(2) The 36-month average is the average of the past 36 months. The Use Audit is based on the last 3 Fiscal Years versus the average of the past 36 months.

(3) All monthly flow data for 3A is reported as part of MNWD's flow to the ocean outfall.

SOCWA Operational Report March, 2023 (cont'd)

FY Flow/Solids Summary-Billing (cont'd)

Project Committee No. 15 (CTP)

Agency	Own (mgd)	Own (%)	Budget (mgd)	Budget (%)	Month (mgd)	Month (%)	FY Avg to Date (mgd)	FY Avg to Date (%)
CLB	2.54	37.91%	1.496	55.22%	1.719	57.76%	1.468	53.90%
EBS	0.20	2.99%	0.060	2.21%	0.070	2.35%	0.060	2.20%
SCWD	2.00	29.85%	1.153	42.56%	1.187	39.89%	1.195	43.89%
MNWD	1.96	29.25%	0.000	0.00%	0.000	0.00%	0.000	0.00%
Total	6.70	100.00%	2.709	100.00%	2.976	100.00%	2.723	100.00%

Project Committee No. 17 Liquids (RTP)

Agency	Budget Liquids (mgd)	Budget Liquids (%)	Month Plant Influent (mgd)	Month Centrate (mgd)	Month Total (mgd)(1)	Month Total (%)	FY Avg to Date (mgd)	FY Avg to Date (%)
CLB	0.00716	0.0942%	0.0000	0.0126	0.0126	0.1413%	0.0129	0.1669%
EBS	0.00001	0.0001%	0.0000	0.0005	0.0005	0.0058%	0.0005	0.0068%
SCWD	0.00427	0.0562%	0.0000	0.0087	0.0087	0.0976%	0.0105	0.1369%
ETWD	0.01562	0.2055%	0.0000	0.0218	0.0218	0.2445%	0.0178	0.2306%
MNWD	7.57236	99.6439%	8.8206	0.0680	8.8886	99.5109%	7.6644	99.4588%
Total	7.59942	100.0000%	8.8206	0.1117	8.9323	100.0000%	7.7061	100.0000%

(1) Month total does not double count MNWD centrate. It is included in the Monthly Plant Influent too.

SOCWA Operational Report March, 2023 (cont'd)

FY Flow/Solids Summary (cont'd)

Project Committee No. 17 Solids (RTP)

Agency	Own (lbs/d)	Own (%)	Budget (lbs/d)	Budget (%)	Total Month (lbs)	Total Month (%)	FY Avg Total to Date (lbs)	FY Avg Total to Date (%)
CLB	5,605	11.22%	4,406	11.89%	122,131	11.30%	126,746	11.89%
EBSB	295	0.59%	177	0.48%	4,970	0.46%	5,206	0.49%
SCWD	4,480	8.96%	3,392	9.16%	84,333	7.80%	104,182	9.78%
ETWD	10,200	20.41%	5,305	14.32%	211,329	19.55%	173,793	16.31%
MNWD	29,395	58.82%	23,769	64.16%	657,961	60.88%	655,631	61.53%
Total	49,975	100.00%	37,049	100.00%	1,080,724	100.00%	1,065,558	100.00%

Project Committee No. 24 (ACOO)

Agency	Own (%)	Budget (mgd)	Budget (%)	Month Outfall Flow (mgd)	Month Outfall Flow (%)	FY Avg Outfall Flow (mgd)	FY Avg Outfall Flow (%)
CLB	11.00%	5.500	11.00%	1.719	8.94%	1.468	12.61%
EBSB	0.78%	0.390	0.78%	0.070	0.36%	0.060	0.52%
ETWD	16.30%	8.151	16.30%	4.131	21.48%	2.599	22.32%
IRWD	15.76%	7.880	15.76%	4.952	25.75%	3.005	25.81%
MNWD	43.85%	21.924	43.85%	7.247	37.68%	3.817	32.78%
SCWD	12.31%	6.155	12.31%	1.116	5.80%	0.695	5.96%
Total	100.00%	50.000	100.00%	19.234	100.00%	11.643	100.00%

SOCWA Operational Report March 2023 (cont'd)

Select Critical Equipment Repairs

JBL - PC2

Troubleshoot the emergency Godwin that was starting intermittently.
Relocated hot water loop chemical injection pot inaccessible for the new use requirements.
Replaced failing primary sludge grinder on the 9-side.
Repaired failed drain line on the 9-side grit auger.
Troubleshoot the Tank #1 Polymer Mixer that was making loud noises.
Replaced Process Water Pump #2 failed seal.
Replaced an electrical manhole cover that was corroded near the Solids Scrubber.
Troubleshoot 9-side Scrubber No. 1 Recirculation Pump No. 2 that failed.
Troubleshoot noisy and failing Secondary Tank 12-13 Drive.

CTP - PC15

Replaced failing Blower #1 tubing for the cooling system.
Replaced failed water pipe near Building #15.
Troubleshoot RAS Sump 7N that was not pumping in "Auto."
Continued to clear the access roads after each rain event and uncover SOCWA's buried assets.
Troubleshoot the malfunctioning access gates and replaced several failed traffic loops.
Cleared the clogged Scrubber drain system.
Troubleshoot the failing RAS#6 Pump.
Replaced failed Export Building sump pump.

RTP - PC17

Investigated a potential gas leak near the waste gas burner and scheduled an underground repair.
Replaced failing water supply piping for the Polymer Mixing system.
Replaced failed filter housing for supply fans 17F41301 and 17F41302.
Continued to mitigate past storm issues, including draining electrical vaults around the site.
Repaired leaking East RAS Bleach Pump #4.
Rebuilt failing Ferric Chloride Pump #2 pressure-reducing valve.
Repaired leaking Scrubber No. 2 Bleach Pump.

Support Services - ALL PC'S

Replaced failed auto-bleed on Cogen Engine air compressor at JBL.
Troubleshoot gas skid tripping offline at JBL.
Replaced failed NOx sensor on the cogen Engine at JBL.
Troubleshoot RSP Pump that was tripping offline, and the control panel was in error at JBL.
Troubleshoot the new control network that was losing connection with the fiber loop and updated network settings to stop the failures at JBL.
Troubleshoot 4-side Grit Pumps at JBL.

SOCWA Operational Report March 2023 (cont'd)

Select Critical Equipment Repairs (cont'd)

Support Services - ALL PC'S (cont'd)

Troubleshoot signal failure to SCADA from Effluent Pump #2 at JBL.
Troubleshoot the 9-side RAS TSS Meter in error at JBL.
Replaced failed Effluent Wet Well level sensor at JBL.
Replaced failed Vent Fan #1 in Building #35 at JBL.
Replaced failed Influent Wet Well level sensor at JBL.
Replaced failed Export Tank level sensor at CTP.
Replaced failing AWT Bleach sensors at CTP.
Replaced failing UPS for TC5 at CTP.
Replaced failed AWT Chlorine Mixer #3 motor at CTP.
Replaced and upgraded the failed RAS Pump VFD at CTP.
Recalibrated the Digester Gas Meter #2 that was reading incorrectly at RTP.
Repaired Cogen system Chiller #2 coolant leak and tripping pump at RTP.
Replaced failed temperature sensor for the Turblex Blower at RTP.
Troubleshoot the Bldg. #70 MCC Room Supply Fan at RTP.
Troubleshoot the Non-Potable Water Bleach Pump #2, which would not run in "Auto" at RTP.
Replaced failed Water Mix Valve Solenoid on Polymer Tank #2 for the 3WHP system at RTP.
Repaired failed rain seal for the NPW PLC at RTP.

Items with a (*) have been identified as preventable repairs.

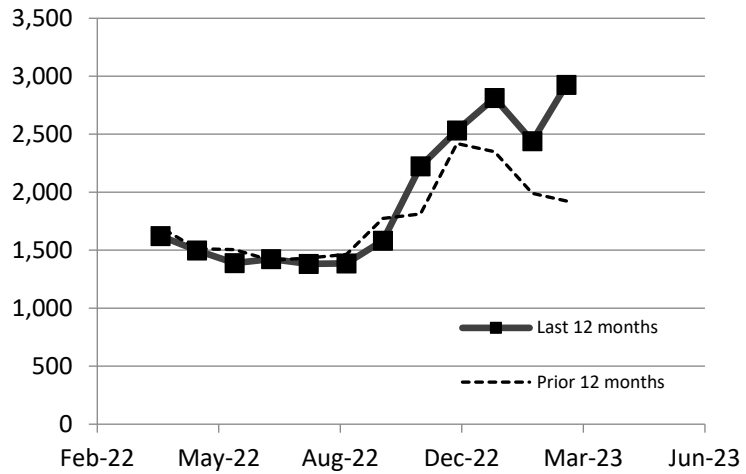
SOCWA Ocean Outfall Discharges by Agency

SOCWA Operational Report March, 2023 (cont'd)

Agency	SJCOO (mgd)	SJCOO (%)	ACOO (mgd)	ACOO (%)	Total (mgd)
CLB			1.72	8.94%	1.72
EBSD			0.07	0.36%	0.07
SCWD	2.18	15.77%	1.12	5.80%	3.30
MNWD	3.12	22.52%	7.25	37.68%	10.36
ETWD			4.13	21.48%	4.13
CSJC	2.51	18.15%			2.51
SMWD	2.25	16.25%			2.25
CSC	3.78	27.30%			3.78
IRWD			4.95	25.75%	4.95
Total	13.83	100.00%	19.23	100.00%	33.07
or Acre-Feet per year equivalent					37,036

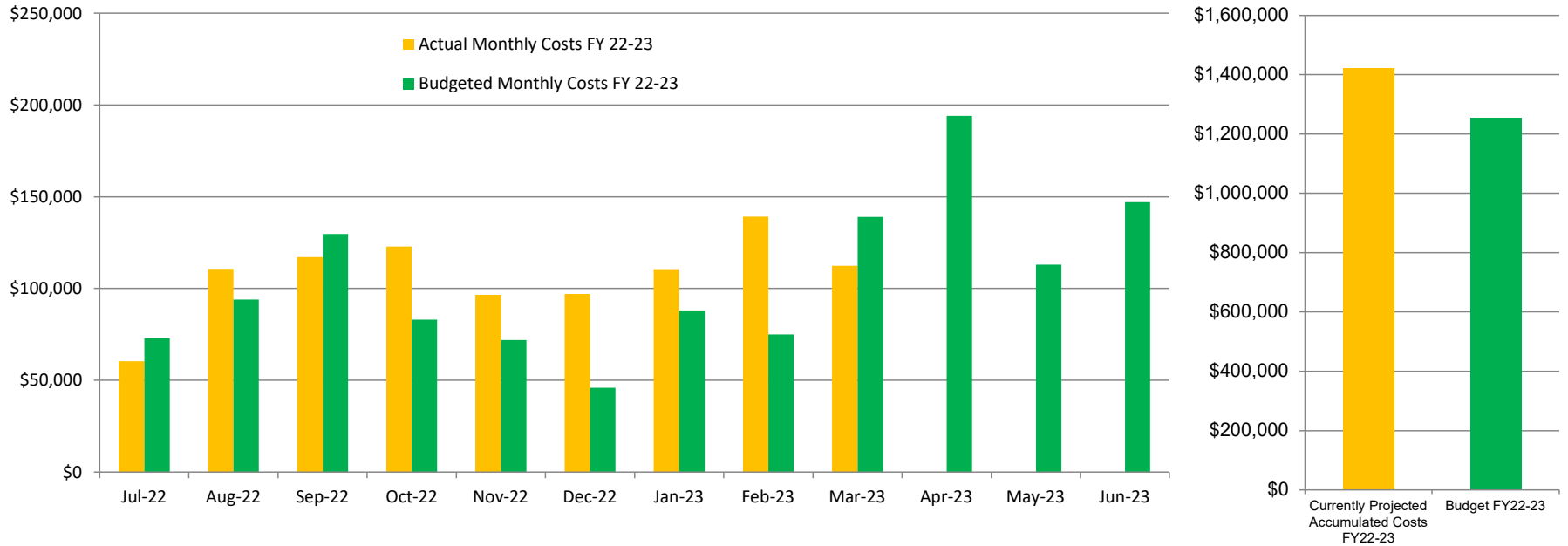
12-Month Running Total Discharge to Ocean Outfalls (AF)

Mar-23	2,926
Feb-23	2,440
Jan-23	2,812
Dec-22	2,532
Nov-22	2,224
Oct-22	1,582
Sep-22	1,386
Aug-22	1,382
Jul-22	1,422
Jun-22	1,389
May-22	1,498
Apr-22	1,622
Total	23,215



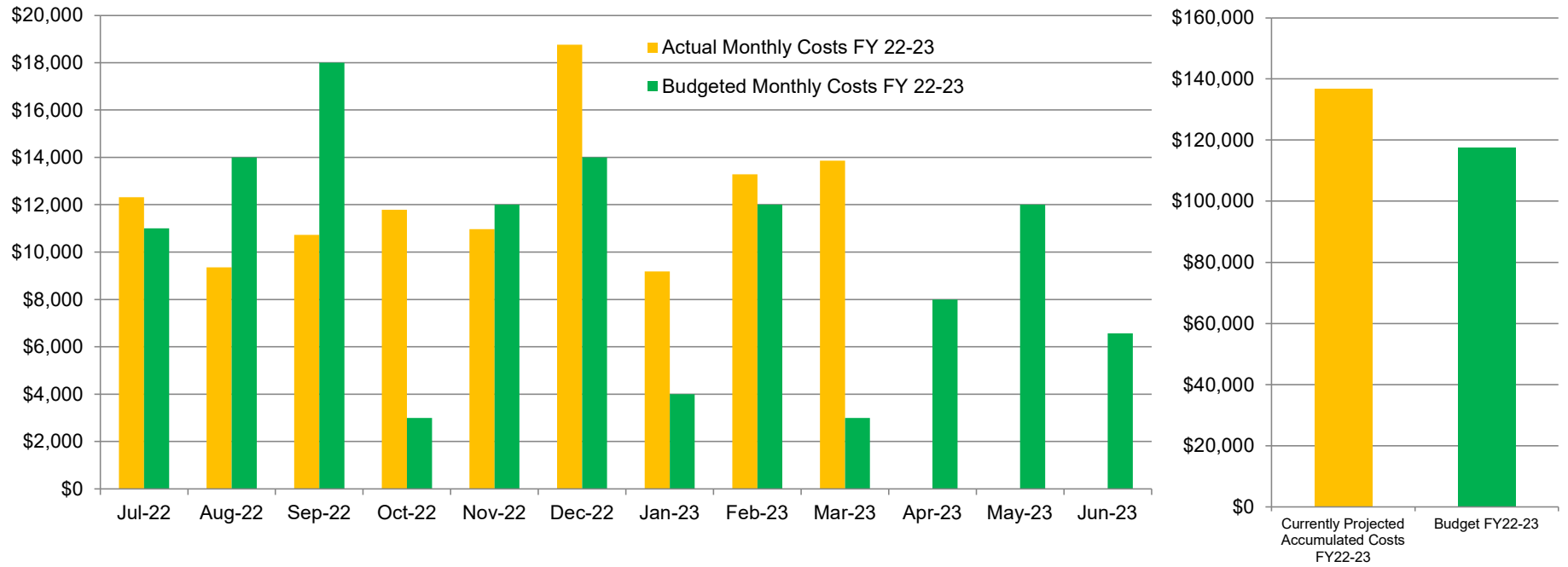
Quarterly Report on Key Operational Expenses

Electricity (5002) Costs



	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23	Currently Projected Accumulated Costs FY22-23	Budget FY22-23
Actual Monthly Costs FY 22-23	\$60,412	\$110,730	\$117,160	\$122,848	\$96,565	\$97,050	\$110,624	\$139,122	\$112,377				\$1,420,937	\$1,253,828
Budgeted Monthly Costs FY 22-23	\$73,000	\$94,000	\$129,780	\$83,000	\$72,000	\$46,000	\$88,000	\$75,000	\$139,000	\$194,000	\$113,048	\$147,000	Currently Projected Under(+)/Over (-) Budget	-\$167,109

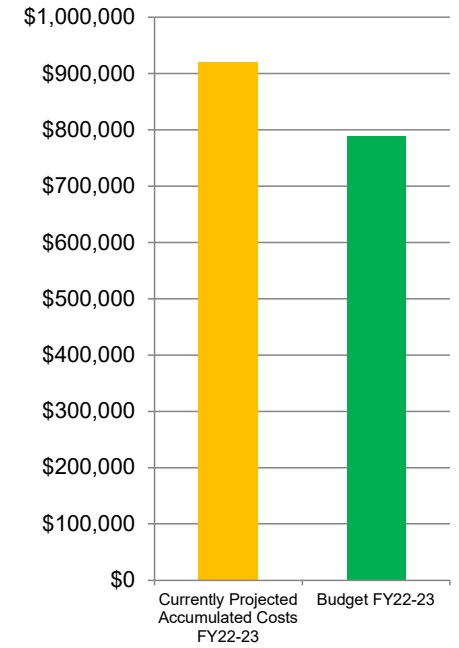
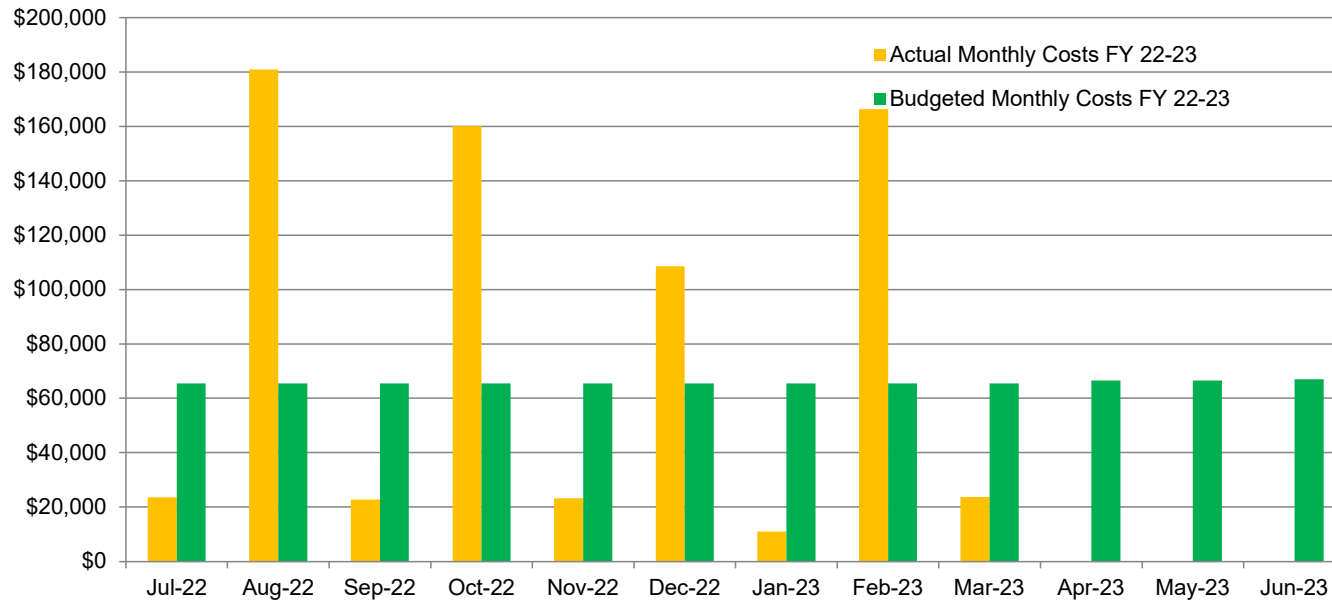
Odor Control (5009) Costs



	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23	Currently Projected Accumulated Costs FY22-23	\$136,805
Actual Monthly Costs FY 22-23	\$12,315	\$9,358	\$10,726	\$11,782	\$10,973	\$18,757	\$9,180	\$13,285	\$13,855				Budget FY22-23	\$117,572
Budgeted Monthly Costs FY 22-23	\$11,000	\$14,000	\$18,000	\$3,000	\$12,000	\$14,000	\$4,000	\$12,000	\$3,000	\$8,000	\$12,000	\$6,572	Currently Projected Under(+)/Over (-) Budget(1)	-\$19,233

(1) Actual costs are coming in higher than budgeted due to supply chain, commodity shortages and fuel increases driving experienced costs higher than anticipated.

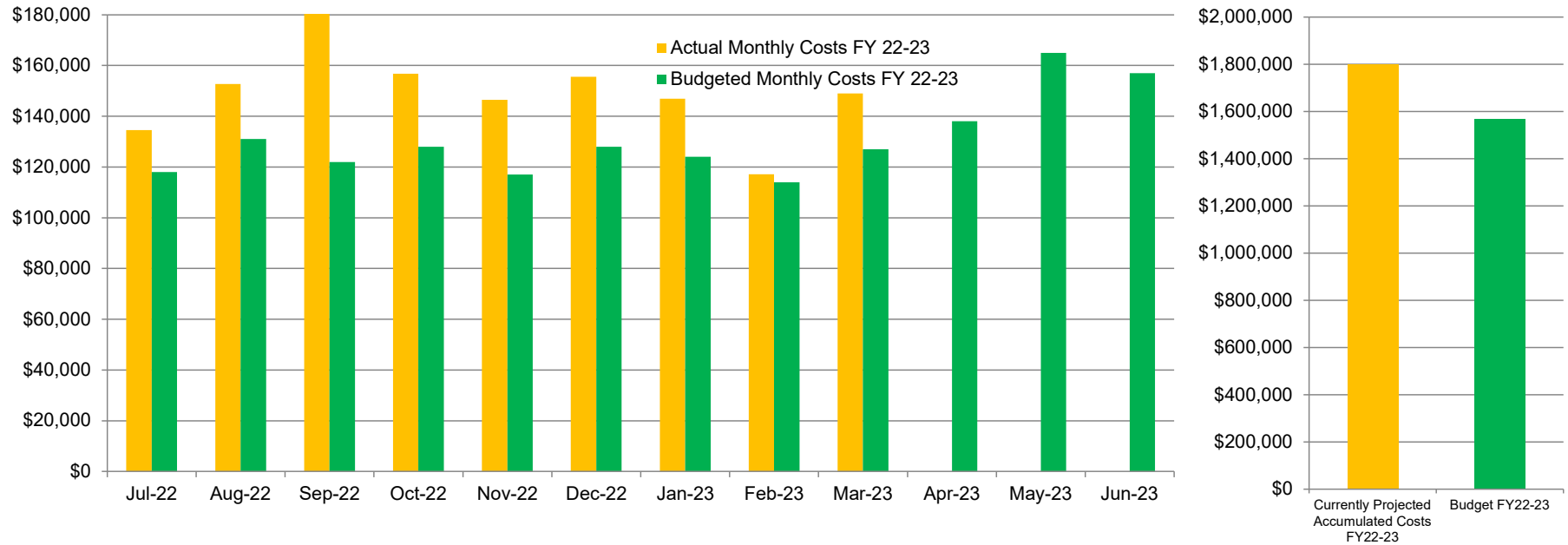
Polymer (5007) Costs



	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23	Currently Projected Accumulated Costs FY22-23	\$920,161
Actual Monthly Costs FY 22-23	\$23,617	\$180,928	\$22,797	\$160,034	\$23,193	\$108,516	\$11,026	\$166,304	\$23,699				Budget FY22-23	\$789,548
Budgeted Monthly Costs FY 22-23	\$65,500	\$65,500	\$65,500	\$65,500	\$65,500	\$65,500	\$65,500	\$65,500	\$65,500	\$66,500	\$66,500	\$67,048	Currently Projected Under(+)/Over (-) Budget(1)	-\$130,613

(1) Actual costs are coming in higher than budgeted due to supply chain, commodity shortages and fuel increases driving experienced costs higher than anticipated.

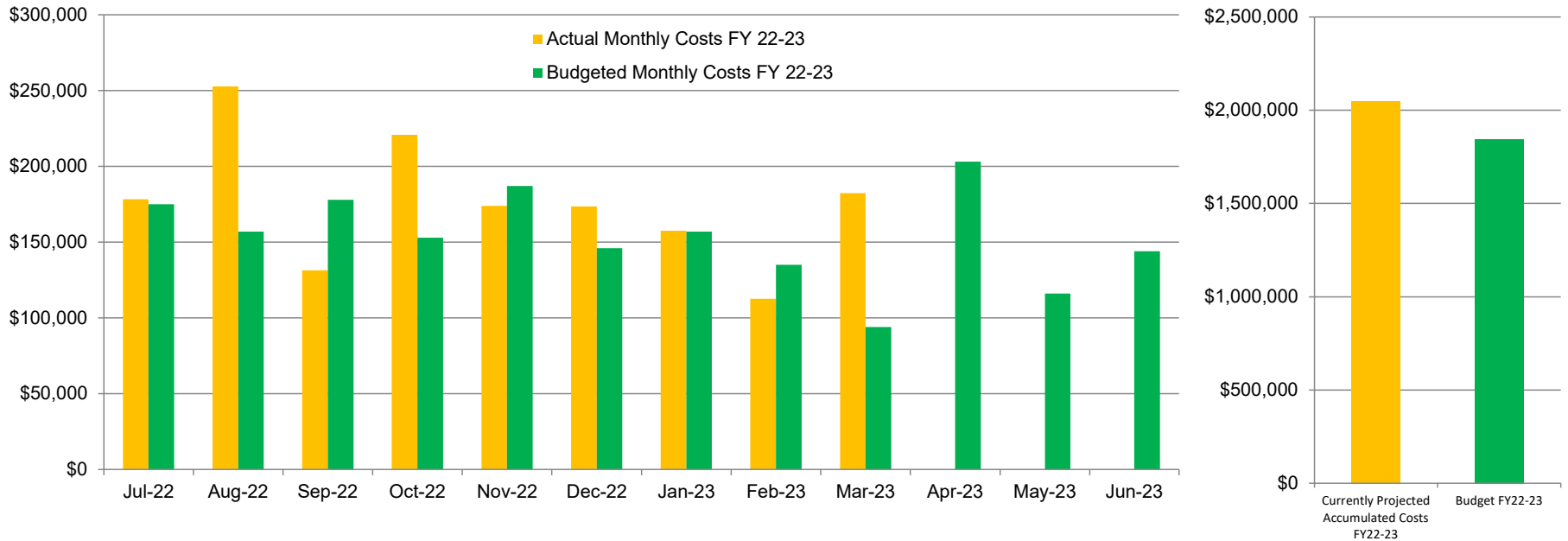
Biosolids (5049) Costs



	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23	Currently Projected Accumulated Costs FY22-23	\$1,801,104
Actual Monthly Costs FY 22-23	\$134,571	\$152,712	\$181,913	\$156,821	\$146,484	\$155,527	\$146,913	\$117,188	\$148,974				Budget FY22-23	\$1,568,996
Budgeted Monthly Costs FY 22-23	\$117,996	\$131,000	\$122,000	\$128,000	\$117,000	\$128,000	\$124,000	\$114,000	\$127,000	\$138,000	\$165,000	\$157,000	Currently Projected Under(+)/Over (-) Budget(1)	-\$232,108

(1) Actual costs are coming in higher than budgeted due to supply chain, commodity shortages and fuel increases driving experienced costs higher than anticipated.

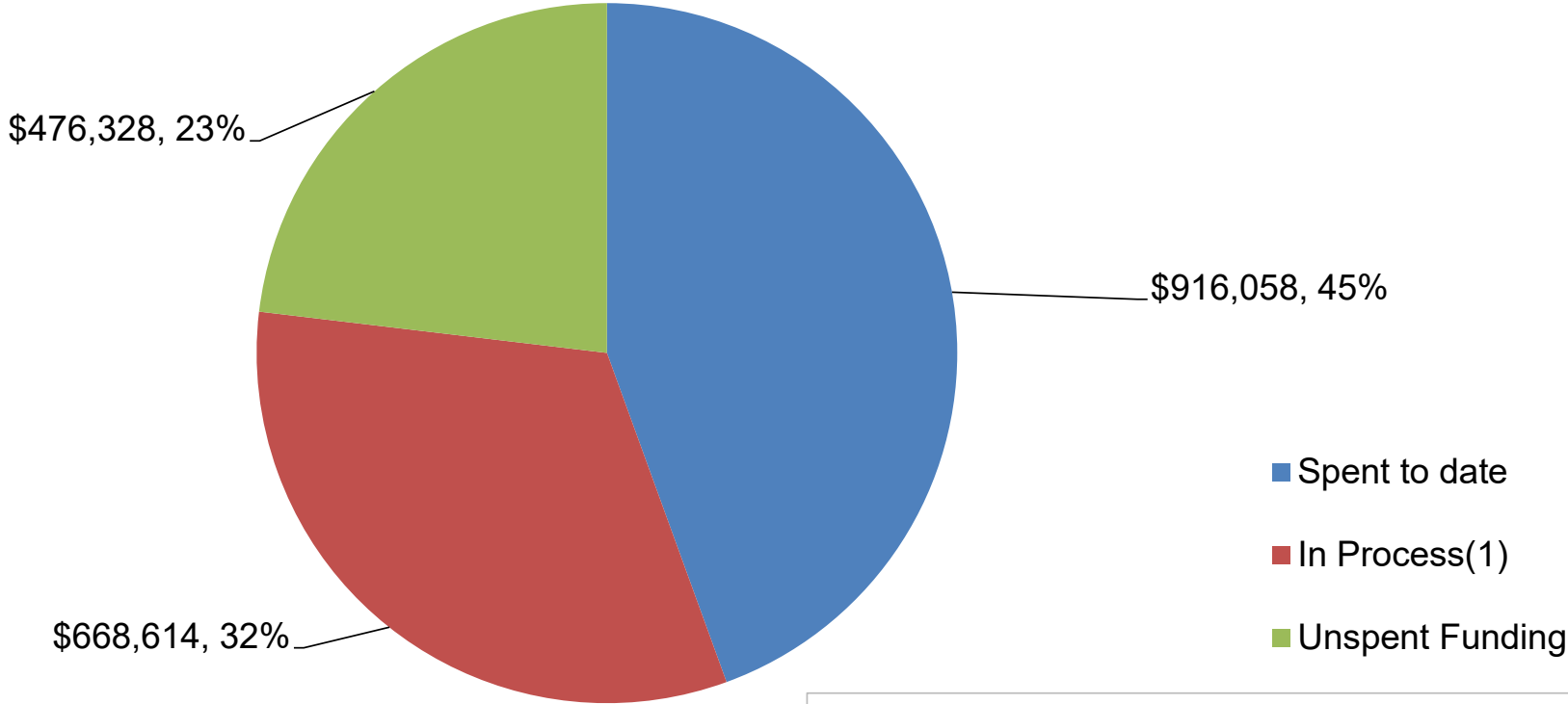
Maintenance Repair (5056 to 5060) Costs



	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23	Currently Projected Accumulated Costs FY22-23	\$2,045,998
Actual Monthly Costs FY 22-23	\$178,227	\$252,777	\$131,416	\$220,739	\$173,956	\$173,461	\$157,453	\$112,586	\$182,384				Budget FY22-23	\$1,845,000
Budgeted Monthly Costs FY 22-23	\$175,000	\$157,000	\$178,000	\$153,000	\$187,000	\$146,000	\$157,000	\$135,000	\$94,000	\$203,000	\$116,000	\$144,000	Currently Projected Under(+)/Over (-) Budget(1)	-\$200,998

(1) Actual costs are coming in higher than budgeted due to supply chain, commodity shortages and fuel increases driving experienced costs higher than anticipated.

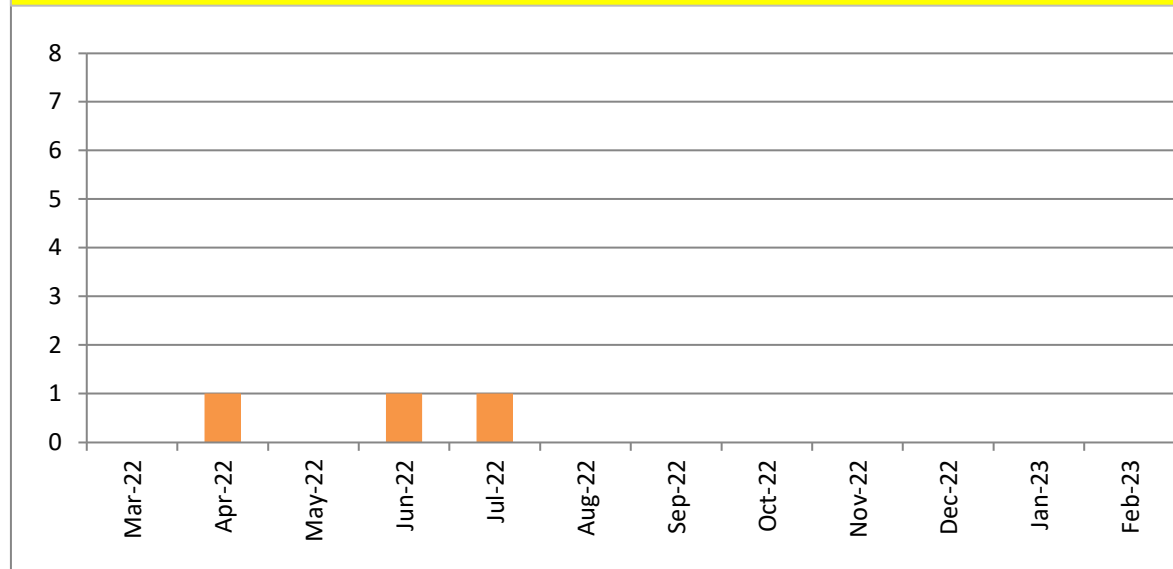
FY22-23 Small Internal Capital Costs



(1) In Process and Unspent purchases are being delayed due to ongoing supply

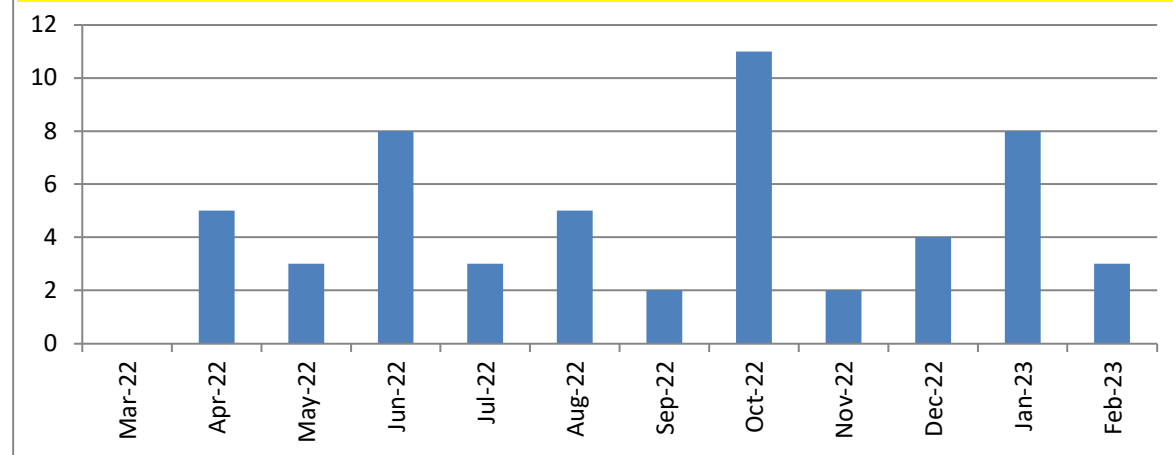
SOCWA SAFETY UPDATE - MARCH 2023

OSHA RECORDABLE INJURIES



	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23
OSHA RECORDABLE INJURIES	1	0	1	1	0	0	0	0	0	0	0	0

NEAR MISS REPORTS



	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23
NEAR MISS REPORTS	5	3	8	3	5	2	11	2	4	8	3	2

Updated: 4/3/2023

SAFETY TRAINING

TRAINING TOPIC	ATTENDANCE
Feb '23 - Annual Bloodborne Pathogens Training	80%
Dec '22 - Annual Defensive and Distracted Driver Training w/ CHP	90%
Nov '22 - Audiometric Hearing Testing, Confined Space Entry Rescue Training, and Supervisor Safety Training	95%
October '22 - Annual Respirator Fit Testing/Training and Medical Examination	100%
September '22 - CPR/First Aid/AED Training (Initial and Refresher)	90% (of all SOCWA Employees)
July '22 - Annual 8-HR HAZWOPER Refresher Training	95%
June '22 - Active Shooter/Workplace Violence Training and SPCCP Spill Training	95% (of all SOCWA Employees)
May '22 - Annual Fire Extinguisher Use Training (hands-on training)	90% (of all SOCWA Employees)
April '22 - Annual Heat Illness Training (completed remotely)	95% (of all SOCWA Employees)
Mar '22 - Annual Bloodborne Pathogen (BBP) Training, completed remotely	95% (of all SOCWA Employees)
Feb '22 - Initial Fall Protection Training, Initial Forklift Training, Silica Safety Training	100%
Oct '21 - Annual Hearing Testing, Wildfire Safety/Smoke Training, Respirator Fit Testing	100%
Sept '21 - Annual BBP Training and Lifting Safety Training (with CSRMA, remotely)	90%
Aug '21 - Confined Space Rescue Refresher and Electrical Safety in the Workplace	100%
July '21 - Annual 8-HR HAZWOPER Refresher Training & Initial CPR/First Aid/AED Training	95%
Feb '21 - Annual Fire Extinguisher Use Training / March '21 Annual Heat Illness Training	95%
Oct/Nov '20 - Forklift Training and Additional ICS Training	95%
Sept '20 - CPR/First Aid/AED Training (Refresher and Initial)	95% (of all SOCWA employees)
Oct '19 - Fall Protection Training, Additional ICS Training, and Spill Training	90%
Sept '19 - Wildland Fire Training and CPR/First Aid/AED Training	90%
Aug '19 - Initial Confined Space Entry Rescue and Additional Active Shooter Training	95%
March '19 - Annual Respirator Fit Testing and PPE Use Training	95%
Feb '19 - Annual Bloodborne Pathogens Training and Additional Arc Flash Training	95%
September '18 - Silica Safety Training / October '18 - Crane Safety	100%
Aug '18 - Fire Awareness Safety for Field Personnel and Lockout/Tagout Training	100% (all SOCWA employees)
Jan '18 - Respiratory PPE Training/Fit Testing and Additional ICS Training	90%
Sept '17 - Active Shooter/Workplace Violence Training	100%
May '17 - Safety Culture Training / July/Aug '17 - Spill Response Training (hands on)	100%
Mar '17 - Fall Protection Training and CPR/First Aid/AED Training	100%
Jan '17 - Lockout/Tagout Training and Confined Space Rescue Practice/Training	100%
Oct '16 - Confined Space Awareness/Entry Rescue Training and Forklift Training	100%
May '16 - Entry Level NIMS/ICS Training and Heat Illness Training	100%
Feb '16 - Biomechanics/Ergonomics Training (CSRMA) and Bloodborne Pathogen Training	100%
Oct '15 and Jan '16 - Initial Confined Space Entry Rescue Training (3-day trainings)	100%
Sept '15 - Pre-Storm Workshop, Arc Flash Training, and Forklift Training	100%
Aug '15 - Fire Prevention for Water Utility Field Staff and Disaster Cost Recovery Training	100%
July '15 - Initiate additional NIMS/ICS Training, Attend Water and Power Resiliency Workshop	Ongoing
June '15 - Initial Confined Space Awareness and Non-Entry Rescue Training	100%

Beach / Ocean Monitoring Report

ALISO CREEK OCEAN OUTFALL MONITORING REPORT

March 2023

DATE	IRWD LOS ALISOS WRP				EL TORO WRP				SOCWA REGIONAL PLANT				SOCWA COASTAL PLANT				IRWD IDP	IRWD SGU	SCWD ACWRF	ACOO FLOW	Rain Fall
	FLOW	TSS	cBOD	SS	FLOW	TSS	cBOD	SS	FLOW	TSS	cBOD	SS	FLOW	TSS	cBOD	SS	FLOW	FLOW	FLOW	MGD	inches
	MGD	mg/L	mg/L	ml/L	MGD	mg/L	mg/L	ml/L	MGD	mg/L	mg/L	ml/L	MGD	mg/L	mg/L	ml/L	MGD	MGD	MGD	MGD	
03/01/23	4.236	12.0	25.0	<0.3	4.119	18.3	7.0	<0.1	7.680	9.8	8.0	0.1	2.830	2.3	3.0	0.1	0.787	0.505	0.000	20.157	0.37
03/02/23	3.576	17.0	25.0	<0.3	3.974	17.0	6.3	<0.1	7.72	9.2	8.0	0.2	2.945	3.4	3.0	<0.1	0.787	0.516	0.000	19.518	0.00
03/03/23	3.673	13.0	25.0	<0.3	3.578	21.7	6.6	<0.1	6.690	8.4	7.0	0.2	2.738	6.8	4.0	<0.1	0.787	0.572	0.000	18.038	0.00
03/04/23	3.669	14.0		<0.3	3.854	29.3	7.2	<0.1	5.850	8.8	9.0		2.714	3.8	3.0		0.789	0.580	0.000	17.456	0.00
03/05/23	3.741	15.0	21.0	<0.3	3.656	18.0	7.0	<0.1	5.210	10.0	8.0	0.3	2.730	4.2	3.0	<0.1	0.788	0.570	0.000	16.695	0.03
03/06/23	3.602	12.0	23.0	<0.3	3.741	14.7		<0.1	5.320	9.8	6.0	0.2	2.714	4.4	6.0	<0.1	0.789	0.569	0.000	16.735	0.00
03/07/23	3.559	13.0	11.0	<0.3	3.744	8.3	4.2	<0.1	5.490	7.2	5.0	0.2	2.657	6.2	6.0	<0.1	0.789	0.531	0.000	16.770	0.00
03/08/23	3.296	14.0	12.0	<0.3	3.440	12.8	6.2	<0.1	5.310	8.0	6.0	0.2	2.617	5.8	4.0	<0.1	0.048	0.594	0.000	15.305	0.00
03/09/23	3.316	14.0	12.0	<0.3	3.663	9.0	4.0	<0.1	5.810	8.8	4.0	0.2	2.602	1.4	4.0	<0.1	0.000	0.593	0.000	15.984	0.00
03/10/23	3.364	23.0	14.0	<0.1	3.960	18.3	7.2	<0.1	5.220	9.2	5.0	0.2	2.615	9.2	7.0	<0.1	0.614	0.589	0.000	16.362	0.83
03/11/23	3.378	14.0		<0.1	4.111	16.8	6.6	<0.1	6.190	11.2	9.0		2.889	7.6	13.0		0.789	0.589	0.000	17.946	0.11
03/12/23	3.733	13.0	16.0	<0.1	3.137	25.7	8.0	<0.1	6.370	9.0	6.0	0.2	2.960	2.6	4.0	<0.1	0.756	0.562	0.000	17.518	0.00
03/13/23	3.946	12.0	19.0	<0.1	4.076	20.0		0.1	7.450	7.6	4.0	<0.1	2.691	3.2	4.0	0.1	0.789	0.586	0.000	19.538	0.00
03/14/23	3.982	18.0	15.0	<0.1	4.849	19.0	9.0	0.1	5.990	7.2	4.0	0.2	2.698	5.8	3.0	0.1	0.788	0.586	0.000	18.893	0.98
03/15/23	3.778	9.2	19.0	<0.1	5.253	19.8	11.5	0.3	7.910	7.8	3.0	0.2	3.095	2.6	3.0	0.1	0.789	0.527	0.000	21.352	1.88
03/16/23	5.197	13.0	41.0	<0.1	5.394	27.0	11.6	0.2	11.120	7.2	5.0	0.2	4.823	1.2	2.0	<0.1	0.780	0.000	0.000	27.314	0.01
03/17/23	3.718	13.0	12.0	<0.3	4.026	10.7	4.4	<0.1	9.040	7.4	7.0	0.1	3.247	6.0	6.0	<0.1	0.776	0.488	0.000	21.295	0.00
03/18/23	3.662	15.0		0.4	4.111	20.3	7.3	<0.1	8.720	6.8	9.0		3.054	5.0	11.0		0.776	0.592	0.000	20.915	0.00
03/19/23	3.661	21.0	12.0	<0.3	4.018	36.3	10.5	0.1	8.280	7.8	7.0	<0.1	2.932	4.8	3.0	<0.1	0.775	0.582	0.000	20.248	0.02
03/20/23	3.813	27.0	13.0	0.3	4.206	27.0		0.3	8.310	8.2	5.0	0.5	2.840	1.2	2.0	<0.1	0.776	0.579	0.000	20.524	0.11
03/21/23	3.616	17.0	19.0	<0.3	5.366	18.7	9.7	0.2	6.730	9.4	5.0	0.2	2.881	6.8	10.0	0.2	0.775	0.572	0.000	19.940	1.52
03/22/23	3.881	14.0	29.0	<0.1	4.579	21.7	8.9	0.1	9.620	8.8	6.0	0.1	3.612	1.8	4.0	<0.1	0.453	0.516	0.053	22.714	0.08
03/23/23	4.201	14.0	23.0	<0.1	4.616	25.0	7.0	0.2	8.630	7.6	4.0	<0.1	2.868	6.4	6.0	<0.1	0.583	0.484	0.147	21.529	0.11
03/24/23	3.661	15.0	22.0	<0.1	4.295	14.7	6.3	0.2	6.100	7.6	5.0	0.2	2.647	5.0	7.0	0.2	0.775	0.511	0.141	18.130	0.00
03/25/23	3.463	12.0		<0.1	3.258	14.0	5.5	0.2	8.480	8.4	6.0		2.757	6.6	7.0		0.775	0.575	0.131	19.439	0.00
03/26/23	3.132	13.0	11.0	<0.1	3.044	18.0	8.5	0.3	6.980	8.6	7.0	<0.1	2.713	2.8	4.0	<0.1	0.776	0.577	0.111	17.333	0.00
03/27/23	3.477	26.0	12.0	<0.1	4.950	19.7		0.1	5.570	10.6	5.0	<0.1	2.705	3.0		<0.1	0.765	0.576	0.136	18.179	0.00
03/28/23	4.047	13.0	22.0	<0.3	4.760	19.3	9.7	0.4	7.800	7.6	2.0	0.1	2.627	6.4	7.0	<0.1	0.457	0.582	0.134	20.407	0.00
03/29/23	3.763	11.0	25.0	0.3	4.194	20.0	10.4	0.3	7.760	7.0	4.0	0.1	2.620	2.2	2.0	<0.1	0.392	0.577	0.008	19.314	0.52
03/30/23	3.673	11.0	9.1	<0.3	4.096	25.3	10.3	0.1	8.790	5.4	4.0	0.2	3.174	5.0	6.0	<0.1	0.640	0.574	0.000	20.947	0.26
03/31/23	3.718	10.0	9.8	0.3	3.987	18.7	8.4	0.1	8.510	5.8	17.0	0.1	3.051	6.8	6.0	<0.1	0.788	0.579	0.000	20.633	0.00
AVG	3.727	14.8	18.4	<0.2	4.131	19.5	7.8	<0.2	7.247	8.3	6.1	<0.2	2.905	4.5	5.1	<0.1	0.682	0.543	0.028	19.262	
TOTAL	115.53				128.06				224.65				90.05				21.15	16.83	0.861	597.13	6.83

South Orange County Wastewater Authority-Aliso Creek Ocean Outfall

REPORT FOR: March 2023
 REPORT DUE: May 1 2023
 SAMPLE SOURCE: Surf zone
 TYPE OF SAMPLE: Grab

REPORT FREQUENCY: Monthly
 EXACT SAMPLE POINTS: As specified in Unified Monitoring Plan
 SAMPLES COLLECTED BY: SOCWA Lab
 SAMPLES ANALYZED BY: SOCWA Lab

Tidal Condition: High Tide 0444

Weather: Rain

COMMENTS:

STA#	DATE	TIME	Total Coliform	Fecal Coliform	Entero-coccus	Material of Sewage Origin		Oil & Grease	Odor	Water Color	H2O Temp(F)	Water Condition	Water Outlet	Birds
			CFU/100ml SM9222B	CFU/100ml SM9222D	CFU/100ml EPA 1600	Onshore	Offshore							
S3	03/01/23	07:55	100	10	10	None	None	None	None	Green		Clear		
S4	03/01/23	10:30	500	100	46	None	None	None	None	Green	56	Clear		
S5	03/01/23	10:10	600	150	56	None	None	None	None	Green		Slightly Turbid		
S6	03/01/23	09:50	500	150	64	None	None	None	None	Green		Slightly Turbid		
WEST	03/01/23	09:43	1000	60	98	None	None	None	None	Brown		Slightly Turbid	Flowing	
S7	03/01/23	09:35	600	250	130	None	None	None	None	Brown		Slightly Turbid		
S8	03/01/23	09:30	>=3200	480	170	None	None	None	None	Brown		Slightly Turbid		
S9	03/01/23	09:10	2300	150	100	None	None	None	None	Brown		Turbid		
ACM1	03/01/23	09:05	1400	80	7600	None	None	None	None	Brown		Turbid	Flowing	
S10	03/01/23	08:45	110	<10	10	None	None	None	None	Green		Slightly Turbid		
S11	03/01/23	08:35	210	10	<10	None	None	None	None	Green		Slightly Turbid		
S12	03/01/23	08:25	10	<10	<10	None	None	None	None	Green		Slightly Turbid		

RECEIVING WATER LIMITATIONS: Single Sample Maximum - Total coliform density shall not exceed 10,000 per 100ml; Fecal coliform density shall not exceed 400 per 100ml; Enterococcus density shall not exceed 104 per 100ml.

Unified Beach Monitoring

#2

South Orange County Wastewater Authority-Aliso Creek Ocean Outfall

REPORT FOR: March 2023

REPORT FREQUENCY: Monthly

REPORT DUE: May 1, 2023

EXACT SAMPLE POINTS: As specified in Unified Monitoring Plan

SAMPLE SOURCE: Receiving water surf zone

SAMPLES COLLECTED BY: SOCWA Lab

TYPE OF SAMPLE: Grab

SAMPLES ANALYZED BY: SOCWA Lab

Tidal Condition: High Tide 09:05

Weather: Clear

COMMENTS:

STA#	DATE	TIME	Total	Fecal	Entero-	Material of Sewage		Oil & Grease	Odor	Water Color	H2O Temp(F)	Water Condition	Water Outlet	Birds
			Coliform CFU/100ml SM9222B	Coliform CFU/100ml SM9222D	coccus CFU/100ml EPA 1600	Onshore	Offshore							
S3	03/06/23	07:45	<10	<10	10	None	None	None	None	Green	54	Clear		
S4	03/06/23	10:25	<10	<10	<10	None	None	None	None	Green		Clear		
S5	03/06/23	10:10	<10	<10	<10	None	None	None	None	Green		Clear		
S6	03/06/23	09:48	<10	<10	<10	None	None	None	None	Green		Slightly Turbid		
WEST	03/06/23	09:40	<10	<10	<10	None	None	None	None	Green		Slightly Turbid	Flowing	
S7	03/06/23	09:25	40	20	<10	None	None	None	None	Green		Clear		
S8	03/06/23	09:15	20	<10	<10	None	None	None	None	Green		Clear		
S9	03/06/23	08:55	60	<10	40	None	None	None	None	Green		Slightly Turbid		
ACM1	03/06/23	08:50	<100	<10	40	None	None	None	None	Green		Slightly Turbid	Flowing	
S10	03/06/23	08:30	30	<10	<10	None	None	None	None	Green		Clear		
S11	03/06/23	08:20	50	<10	<10	None	None	None	None	Green		Slightly Turbid		
S12	03/06/23	08:10	30	10	<10	None	None	None	None	Green		Slightly Turbid		

RECEIVING WATER LIMITATIONS: Single Sample Maximum - Total coliform density shall not exceed 10,000 per 100ml; Fecal coliform density shall not exceed 400 per 100ml; Enterococcus density shall not exceed 104 per 100m

South Orange County Wastewater Authority-Aliso Creek Ocean Outfall

REPORT FOR: March 2023
 REPORT DUE: May 1, 2023
 SAMPLE SOURCE: Receiving water surf zone
 TYPE OF SAMPLE: Grab

REPORT FREQUENCY: Monthly
 EXACT SAMPLE POINTS: As specified in Unified Monitoring Plan
 SAMPLES COLLECTED BY: SOCWA Lab
 SAMPLES ANALYZED BY: SOCWA Lab

Tidal Condition: Low Tide 815

Weather: Overcast

COMMENTS:

STA#	DATE	TIME	Total	Fecal	Entero-	Material of Sewage		Oil & Grease	Odor	Water Color	H2O Temp(F)	Water Condition	Water Outlet	Birds
			Coliform CFU/100ml SM9222B	Coliform CFU/100ml SM9222D	coccus CFU/100ml EPA 1600	Onshore	Offshore							
S3	03/13/23	07:34	60	<10	<2	None	None	None	None	Green	54	Clear		
S4	03/13/23	09:10	<10	<10	<2	None	None	None	None	Green		Clear		
S5	03/13/23	09:02	40	10	2	None	None	None	None	Green		Clear		
S6	03/13/23	08:50	110	10	2	None	None	None	None	Green		Clear		
WEST	03/13/23	08:47	120	10	<2	None	None	None	None	Green		Clear		
S7	03/13/23	08:42	90	<10	<2	None	None	None	None	Green		Clear		
S8	03/13/23	08:33	80	10	<2	None	None	None	None	Green		Clear		
S9	03/13/23	08:30	80	<10	2	None	None	None	None	Green		Clear		
ACM1	03/13/23	08:17	1000	<10	38	None	None	None	None	Brown		Slightly Turbid	Flowing	
S10	03/13/23	08:07	40	<10	<2	None	None	None	None	Blue		Clear		
S11	03/13/23	08:05	30	120	<2	None	None	None	None	Blue		Clear		
S12	03/13/23	08:00	10	10	2	None	None	None	None	Green		Clear		

RECEIVING WATER LIMITATIONS: Single Sample Maximum - Total coliform density shall not exceed 10,000 per 100ml; Fecal coliform density shall not exceed 400 per 100ml; Enterococcus density shall not exceed 104 per 100ml.

South Orange County Wastewater Authority-Aliso Creek Ocean Outfall

REPORT FOR: March 2023
 REPORT DUE: May 1, 2023
 SAMPLE SOURCE: Receiving water surf zone
 TYPE OF SAMPLE: Grab

REPORT FREQUENCY: Monthly
 EXACT SAMPLE POINTS: As specified in Unified Monitoring Plan
 SAMPLES COLLECTED BY: SOCWA Lab
 SAMPLES ANALYZED BY: SOCWA Lab

Tidal Condition: High Tide 08:52

Weather: Drizzle

COMMENTS: Duplicate at S-5

STA#	DATE	TIME	Total	Fecal	Entero-	Material of Sewage		Oil & Grease	Odor	Water Color	H2O Temp(F)	Water Condition	Water Outlet	Birds
			Coliform CFU/100ml SM9222B	Coliform CFU/100ml SM9222D	coccus CFU/100ml EPA 1600	Onshore	Offshore							
S3	03/20/23	07:40	100	10	8	None	None	None	None	Green	56	Slightly Turbid	Flowing	
S4	03/20/23	09:51	70	<10	6	None	None	None	None	Green		Slightly Turbid		
S5	03/20/23	09:37	90	20	8	None	None	None	None	Green		Slightly Turbid		
S6	03/20/23	09:20	50	<10	4	None	None	None	None	Green		Slightly Turbid		
WEST	03/20/23	09:14	360	70	130	None	None	None	None	Green		Slightly Turbid		
S7	03/20/23	09:07	60	<10	2	None	None	None	None	Green		Slightly Turbid		
S8	03/20/23	08:54	60	20	14	None	None	None	None	Green		Slightly Turbid		
S9	03/20/23	08:52	50	50	40	None	None	None	None	Green		Slightly Turbid		
ACM1	03/20/23	08:23	2100	110	90	None	None	None	None	Brown		Slightly Turbid		
S10	03/20/23	08:16	80	<10	4	None	None	None	None	Green		Slightly Turbid		
S11	03/20/23	08:11	240	100	50	None	None	None	None	Green		Slightly Turbid		
S12	03/20/23	08:03	50	20	4	None	None	None	None	Green		Slightly Turbid		

RECEIVING WATER LIMITATIONS: Single Sample Maximum - Total coliform density shall not exceed 10,000 per 100ml; Fecal coliform density shall not exceed 400 per 100ml; Enterococcus density shall not exceed 104 per 100ml.

South Orange County Wastewater Authority-Aliso Creek Ocean Outfall

REPORT FOR: March 2023
 REPORT DUE: May 1, 2023
 SAMPLE SOURCE: Receiving water surf zone
 TYPE OF SAMPLE: Grab

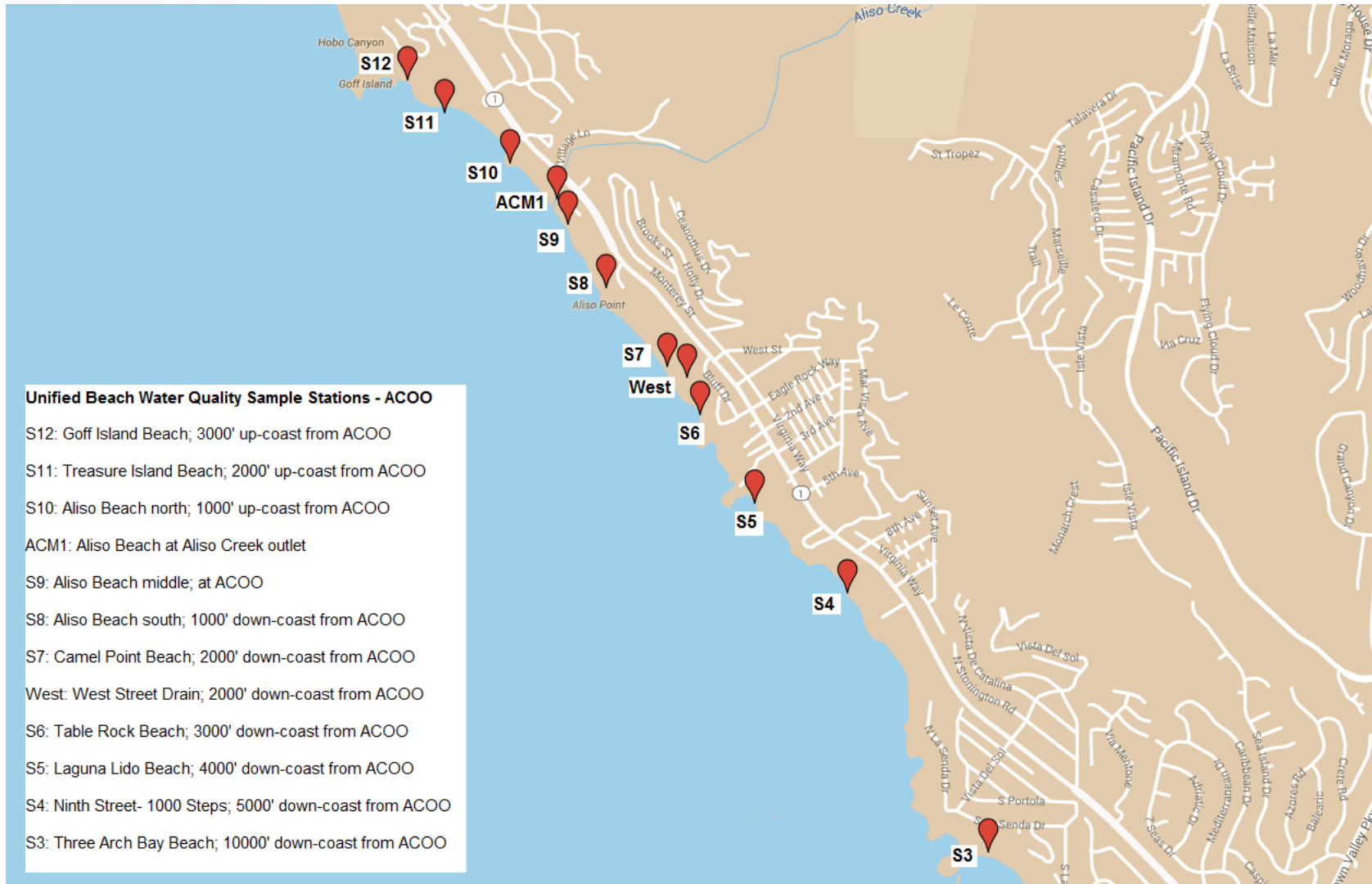
REPORT FREQUENCY: Monthly
 EXACT SAMPLE POINTS: As specified in Unified Monitoring Plan
 SAMPLES COLLECTED BY: SOCWA Lab
 SAMPLES ANALYZED BY: SOCWA Lab

Tidal Condition: High Tide 05:18
 Weather: Drizzle
 COMMENTS: Duplicate at S-5

STA#	DATE	TIME	Total Coliform	Fecal Coliform	Entero-coccus	Material of Sewage Origin		Oil & Grease	Odor	Water Color	H2O Temp(F)	Water Condition	Water Outlet	Birds
			CFU/100ml SM9222B	CFU/100ml SM9222D	CFU/100ml EPA 1600	Onshore	Offshore							
S3	03/30/23	07:45	150	<10	24	None	None	None	None	Green		Slightly Turbid		
S4	03/30/23	10:10	210	20	24	None	None	None	None	Green		Slightly Turbid		
S5	03/30/23	09:57	170	20	10	None	None	None	None	Green	56	Slightly Turbid		
S6	03/30/23	09:36	200	30	68	None	None	None	None	Green		Slightly Turbid		
WEST	03/30/23	09:29	500	<100	140	None	None	None	None	Green		Slightly Turbid	Flowing	
S7	03/30/23	09:20	100	10	24	None	None	None	None	Green		Slightly Turbid		
S8	03/30/23	09:19	120	100	20	None	None	None	None	Green		Slightly Turbid		
S9	03/30/23	09:15	80	<10	20	None	None	None	None	Green		Slightly Turbid		
ACM1	03/30/23	08:55	3000	300	310	None	None	None	None	Brown		Slightly Turbid	Flowing	
S10	03/30/23	08:31	60	10	20	None	None	None	None	Green		Slightly Turbid		
S11	03/30/23	08:26	130	<10	6	None	None	None	None	Green		Slightly Turbid		
S12	03/30/23	08:19	40	40	10	None	None	None	None	Green		Slightly Turbid		

RECEIVING WATER LIMITATIONS: Single Sample Maximum - Total coliform density shall not exceed 10,000 per 100ml; Fecal coliform density shall not exceed 400 per 100ml; Enterococcus density shall not exceed 104 per 100ml.

Unified Beach Water Quality Sample Station Map – Aliso Creek Ocean Outfall



Aliso Creek Ocean Outfall

Unified Beach Water Quality Monitoring Stations

SOCWA's NPDES discharge permit requires participation in the South Orange County Unified Beach Water Quality Monitoring Program. The monitoring stations below are tested by SOCWA at least once per week for Total and Fecal Coliform and Enterococcus Bacteria.

Station	Location
S3	Three Arch Bay Beach; 10,000' down-coast from ACOO
S4	Ninth Street-1000 Steps; 5,000' down-coast from ACOO
S5	Laguna Lido Beach; 4,000 down-coast from ACOO
West	West Street Drain; 2,000' down-coast from ACOO
S6	Table Rock Beach; 3,000' down-coast from ACOO
S7	Camel Point Beach; 2,000' down-coast from ACOO
S8	Aliso Beach south; 1,000' down-coast from ACOO
S9	Aliso Beach middle; at ACOO
ACM1	Aliso Beach at Aliso Creek Outlet
S10	Aliso Beach north; 1,000' up-coast of ACOO
S11	Treasure Island Beach; 2,000' up-coast of ACOC
S12	Goff Island Beach; 3,000' up-coast of ACOO

MONITORING REPORT

Off Shore Stations

South Orange County Wastewater Authority

DISCHARGE: Aliso Creek Ocean Outfall

REPORT FOR: March 2023

REPORT FREQUENCY: Monthly

REPORT DUE: May 1, 2023

SAMPLE SOURCE: Receiving water, nearshore and offshore

SAMPLING FREQUENCY: Monthly

EXACT SAMPLE POINTS: As specified in permit

TYPE OF SAMPLE: Grab

SAMPLES COLLECTED BY: Seaventures/SOCWA staff

SAMPLES ANALYZED BY: SOCWA Lab

Comments: High Tide 09:35

Sta No.	Sample Depth	Sample Date	Total Coliform CFU/100ml SM9222B	Fecal Coliform CFU/100ml SM9222D	Enterococcus CFU/100ml EPA 1600	Sample Time	Oil & Grease	Sewage Debris	0 - None 1 - Mild 2 - Moderate 3 - Severe
A-1	Surface	03/09/23	<2	<2	<2	07:59	0	0	
A-1	Mid depth	03/09/23	10	<10	<10				
A-2	Surface	03/09/23	<2	<2	<2	07:48	0	0	
A-2	Mid depth	03/09/23	<10	<10	<10				
A-3	Surface	03/09/23	<2	<2	<2	07:51	0	0	
A-3	Mid depth	03/09/23	<10	<10	<10				
A-4	Surface	03/09/23	<2	<2	<2	08:34	0	0	
A-4	Mid depth	03/09/23	<10	<10	<10				
A-5	Surface	03/09/23	<2	<2	<2	07:55	0	0	
A-5	Mid depth	03/09/23	10	<10	<10				
B-1	Surface	03/09/23	<2	<2	<2	07:36	0	0	
B-1	Mid depth	03/09/23	<10	10	<10				
B-2	Surface	03/09/23	<2	<2	<2	08:10	0	0	
B-2	Mid depth	03/09/23	<10	10	<10				
N1	Surface	03/09/23	2	<2	<2	08:24	0	0	
N2	Surface	03/09/23	<2	2	<2	08:22	0	0	
N3	Surface	03/09/23	<2	<2	<2	08:21	0	0	
N4	Surface	03/09/23	2	<2	2	08:20	0	0	
N5	Surface	03/09/23	<2	<2	<2	08:20	0	0	
N6	Surface	03/09/23	<2	<2	<2	08:19	0	0	
N7	Surface	03/09/23	<2	<2	<2	08:17	0	0	

REQUIREMENT: (1) Floating particulates and grease and oil shall not be visible. (2) The discharge of wasteshall not cause aesthetically undesirable discoloration of the ocean surface.

**Compliance Summary Report
Aliso Creek Ocean Outfall 2023**

ACOO Permit Order No. R9-2022-0006							
Agency - Facility	Violation Date	Constituent	Effluent Limit Violation	Units	Permit Limit	Reported Value	Potential Fine
No violations during this monitoring period.							



SOCWA and MEMBER AGENCY FACILITIES
ACOO Spill / Overflow Report Log - 2023
Order No. R9-2022-0006 ~ NPDES Permit No. CA0107611

Reporting Agency	Responsible Agency	Estimated Volume (Gallons)	Type of Discharge	Location/Comments	Receiving Waters	Date Reported To State	Date Resolved
No spills during this monitoring period.							

SAN JUAN CREEK OCEAN OUTFALL MONITORING REPORT

March 2023

DATE	J.B. LATHAM FACILITY				SAN CLEMENTE WRP				SMWD CHIQUITA WRP				3-A PLANT				CSJC	SCWD	SJCOO	Rain
	FLOW MGD	TSS mg/L	cBOD mg/L	SS ml/L	FLOW MGD	TSS mg/L	cBOD mg/L	SS ml/L	FLOW MGD	TSS mg/L	cBOD mg/L	SS ml/L	FLOW MGD	TSS mg/L	cBOD mg/L	SS ml/L	Desalter FLOW MGD	Desalter FLOW MGD	FLOW MGD	Fall inches
03/01/23	9.110	8.0	8.3	0.2	4.097	5.4	8.0	<0.1	0.000				1.841	15.6	11.5	<0.1	0.000	No Flow	14.500	0.37
03/02/23	9.580	8.7	6.7	<0.1	4.200	5.8	8.0	<0.1	0.007	1.7	1.7	<0.1	1.628	11.6	8.6	<0.1	0.000	0.195	15.720	0.00
03/03/23	8.850	8.0	12.3	<0.1	3.555	4.8	4.0	<0.1	0.000				1.512	13.2	10.8	ND	0.000	0.192	14.270	0.00
03/04/23	8.590	9.2	11.9		3.413		9.0		0.000				1.550				0.000	0.180	13.710	0.00
03/05/23	8.400	8.3	12.7	<0.1	3.477				0.000				1.567				0.000	0.178	13.460	0.03
03/06/23	8.490	9.8	9.3	<0.1	3.577	8.0	8.0	<0.1	0.000				1.487	17.4	10.0	<0.1	0.000	0.178	13.610	0.00
03/07/23	8.370	8.3	5.7	<0.1	2.945	6.8	9.0	<0.1	0.000				1.421	11.2	10.0	<0.1	0.000	0.189	12.850	0.00
03/08/23	8.150	9.6	8.0	<0.1	3.154	6.7	7.0	<0.1	0.009	1.1	2.1	<0.1	1.387	19.0	10.2	<0.1	0.000	0.193	13.160	0.00
03/09/23	8.130	11.1	7.6	<0.1	3.272	6.2	7.0	<0.1	0.000				1.391	10.0	8.8	<0.1	0.000	0.183	13.350	0.00
03/10/23	7.960	10.7	8.7	0.1	2.988	5.6	6.0	<0.1	0.000				1.631	7.6	6.8	0.1	0.000	0.179	12.770	0.83
03/11/23	9.540	15.9	12.3		3.919		8.0		0.000				1.577				0.000	0.172	14.960	0.11
03/12/23	9.010	15.1	15.8	<0.1	3.659				0.000				1.562				0.000	0.179	14.620	0.00
03/13/23	8.790	38.3	18.2	0.2	3.602	7.2	8.0	0.1	0.000				1.533	18.2	11.0	<0.1	0.000	0.179	14.060	0.00
03/14/23	8.540	23.6	11.3	0.1	3.596	6.0	7.0	<0.1	0.011	2.2	6.2	<0.1	2.280	16.0	11.8	<0.1	0.000	0.183	13.640	0.98
03/15/23	12.220	46.7	18.6	0.6	4.822	8.0	8.0	0.1	1.670	1.4	3.0	<0.1	2.443	15.4	9.4	<0.1	0.000	0.180	19.320	1.88
03/16/23	13.630	30.2		0.1	5.759	7.2	6.0	<0.1	0.006	5.2	2.2	<0.1	1.932	12.4	8.4	<0.1	0.000	0.179	25.230	0.01
03/17/23	9.830	10.2	8.2	<0.1	4.098	3.7	4.0	<0.1	0.000				1.830	10.0	8.4	0.1	0.000	0.198	16.600	0.00
03/18/23	9.090	9.7	10.0		3.776		7.0		0.000				1.789				0.000	0.194	15.200	0.00
03/19/23	8.810	16.4	11.7	<0.1	3.612				0.087	0.7	6.6	<0.1	1.684				0.000	0.193	14.650	0.02
03/20/23	8.840	23.0	26.7	<0.1	3.559	7.3	6.0	<0.1	0.078	2.1	7.4	<0.1	1.764	18.2	8.8	<0.1	0.000	0.185	14.620	0.11
03/21/23	9.270	8.2	7.0	<0.1	3.837	7.1	6.0	0.2	1.361	2.9	5.2	<0.1	2.363	17.4	12.5	<0.1	0.000	0.178	15.210	1.52
03/22/23	12.380	10.5	6.7	<0.1	4.631	6.9	6.0	<0.1	1.353	8.0	2.3	<0.1	1.968	13.4	9.1	<0.1	0.000	0.180	21.980	0.08
03/23/23	10.890	9.0	6.0	0.2	4.026	7.7	7.0	<0.1	0.148	3.6	3.2	<0.1	1.809	16.4	10.2	<0.1	0.000	0.199	19.130	0.11
03/24/23	10.130	7.7	5.3	0.1	3.928	5.4	5.0	<0.1	0.045	4.6	2.7	<0.1	1.736	9.2	8.4	<0.1	0.000	0.194	16.620	0.00
03/25/23	9.270	8.3	7.7		3.435		7.0		0.024	1.9	7.8	<0.1	1.625				0.000	0.194	15.150	0.00
03/26/23	8.930	7.7	9.3	<0.1	3.985				0.167	1.3	8.2	<0.1	1.666				0.000	0.193	14.540	0.00
03/27/23	8.940	11.0	9.3	<0.1	3.535	6.4	6.0	<0.1	0.002	8.2	7.1	<0.1	1.630	14.8	8.0	<0.1	0.000	0.194	14.770	0.00
03/28/23	8.700	7.4	9.7	0.1	3.625	7.4	7.0	<0.1	0.000				1.568	10.2	8.0	<0.1	0.000	0.198	13.990	0.00
03/29/23	8.460	8.3	5.3	<0.1	3.221	7.1	7.0	<0.1	0.414	4.9	2.4	0.1	1.746	14.4	11.6	<0.1	0.000	0.178	13.750	0.52
03/30/23	9.910	8.3	7.0	<0.1	3.938	7.3	7.0	<0.1	0.000				1.624	11.0	8.5	<0.1	0.000	0.189	16.260	0.26
03/31/23	9.410	6.7	6.3	<0.1	3.854	6.2	6.0	<0.1	0.002	1.8	2.5	<0.1	1.641	11.8	10.2	<0.1	0.000	0.194	15.230	0.00
AVG	9.362	13.4	10.1	<0.1	3.777	6.5	6.8	<0.1	0.174	3.2	4.4	<0.1	1.716	13.7	9.6	<0.1	0.000	0.181	15.385	
TOTAL	290.220				117.095				5.384				53.185				0.000	5.600	476.930	6.83

South Orange County Wastewater Authority-San Juan Creek Ocean Outfall

REPORT FOR: March 2023
 REPORT DUE: May 1, 2023
 SAMPLE SOURCE: Receiving water surf zone
 TYPE OF SAMPLE: Grab

REPORT FREQUENCY: Monthly
 EXACT SAMPLE POINTS: As specified in Unified Monitoring Plan
 SAMPLES COLLECTED BY: SOCWA Lab
 SAMPLES ANALYZED BY: SOCWA Lab

Tidal Condition: High Tide 832
 Weather: Clear
 COMMENTS:

STATION #	DATE	TIME	Total Coliform	Fecal Coliform	Enterococcus	Material of Sewage Origin		Oil & Grease	Odor	Water Color	H2O Temp(F)	Water Condition	Water Outlet	Birds
			CFU/100ml SM9222B	CFU/100ml SM9222D	CFU/100ml EPA 1600	Onshore	Offshore							
S0	03/07/23	08:05	80	40	20	None	None	None	None	Blue		Clear		
S1	03/07/23	08:10	40	200	36	None	None	None	None	Blue	53	Clear		
S2	03/07/23	09:08	40	<20	60	None	None	None	None	Blue		Clear		
DSB5	03/07/23	09:15	2200	200	280	None	None	None	None	Blue		Clear	Flowing	
S3	03/07/23	08:20	40	<20	6	None	None	None	None	Blue		Clear		
DSB4	03/07/23	08:22	40	<20	<2	None	None	None	None	Blue		Clear		
S5	03/07/23	08:37	20	<20	2	None	None	None	None	Blue		Clear		
DSB1	03/07/23	08:34	20	<20	<2	None	None	None	None	Blue		Clear		
SJC1	03/07/23	08:15	300	<100	100	None	None	None	None	Blue		Clear	Flowing	

RECEIVING WATER LIMITATIONS: Single Sample Maximum - Total coliform density shall not exceed 10,000 per 100ml; Fecal coliform density shall not exceed 400 per 100ml; Enterococcus density shall not exceed 104 per 100ml.

South Orange County Wastewater Authority-San Juan Creek Ocean Outfall

REPORT FOR: March 2023
 REPORT DUE: May 1, 2023
 SAMPLE SOURCE: Receiving water surf zone
 TYPE OF SAMPLE: Grab

REPORT FREQUENCY: Monthly
 EXACT SAMPLE POINTS: As specified in Unified Monitoring Plan
 SAMPLES COLLECTED BY: SOCWA Lab
 SAMPLES ANALYZED BY: SOCWA Lab

Tidal Condition: Low Tide 1006
 Weather: Overcast
 COMMENTS:

STATION #	DATE	TIME	Total Coliform	Fecal Coliform	Entero-coccus	Material of Sewage Origin		Oil & Grease		Water Color	H2O Temp(F)	Water Condition	Water Outlet	Birds
			CFU/100ml SM9222B	CFU/100ml SM9222D	CFU/100ml EPA 1600	Onshore	Offshore	Grease	Odor					
S0	03/14/23	09:55	200	60	<20	None	None	None	None	Brown	56	Slightly Turbid		
S1	03/14/23	10:05	100	20	<20	None	None	None	None	Green		Slightly Turbid		
S2	03/14/23	09:25	6800	600	520	None	None	None	None	Brown		Turbid		
DSB5	03/14/23	09:15	4400	280	300	None	None	None	None	Brown		Turbid		
S3	03/14/23	10:20	100	<20	<20	None	None	None	None	Green		Slightly Turbid		
DSB4	03/14/23	10:25	300	<20	40	None	None	None	None	Green		Slightly Turbid		
S5	03/14/23	10:35	200	<20	<20	None	None	None	None	Green		Slightly Turbid		
DSB1	03/14/23	10:40	100	20	<20	None	None	None	None	Green		Slightly Turbid		
SJC1	03/14/23	09:40	7300	200	600	None	None	None	None	Brown		Turbid	Flowing	

RECEIVING WATER LIMITATIONS: Single Sample Maximum - Total coliform density shall not exceed 10,000 per 100ml; Fecal coliform density shall not exceed 400 per 100ml; Enterococcus density shall not exceed 104 per 100ml.

South Orange County Wastewater Authority-San Juan Creek Ocean Outfall

REPORT FOR: March 2023
 REPORT DUE: May 1, 2023
 SAMPLE SOURCE: Receiving water surf zone
 TYPE OF SAMPLE: Grab

REPORT FREQUENCY: Monthly
 EXACT SAMPLE POINTS: As specified in Unified Monitoring Plan
 SAMPLES COLLECTED BY: SOCWA Lab
 SAMPLES ANALYZED BY: SOCWA Lab

Tidal Condition: High Tide 09:25

Weather: Partly Cloudy

COMMENTS:

STATION #	DATE	TIME	Total Coliform	Fecal Coliform	Entero-coccus	Material of Sewage Origin		Oil & Grease		Water Color	H2O Temp(F)	Water Condition	Water Outlet	Birds
			CFU/100ml SM9222B	CFU/100ml SM9222D	CFU/100ml EPA 1600	Onshore	Offshore	Grease	Odor					
S0	03/21/23	13:05	4000	700	1700	None	None	None	None	Brown		Turbid		
S1	03/21/23	13:15	6000	1200	1600	None	None	None	None	Brown		Turbid		
S2	03/21/23	12:45	19000	12000	11000	None	None	None	None	Brown		Turbid		
DSB5	03/21/23	12:20	29000	8000	12000	None	None	None	None	Brown		Turbid	Flowing	
S3	03/21/23	13:25	8000	1000	1300	None	None	None	None	Brown		Turbid		
DSB4	03/21/23	13:30	1000	900	800	None	None	None	None	Brown		Turbid		
S5	03/21/23	13:40	3000	400	800	None	None	None	None	Brown		Turbid		
DSB1	03/21/23	13:50	1000	500	1300	None	None	None	None	Brown	57	Turbid		
SJC1	03/21/23	12:50	39000	22000	12000	None	None	None	None	Brown		Turbid	Flowing	

RECEIVING WATER LIMITATIONS: Single Sample Maximum - Total coliform density shall not exceed 10,000 per 100ml; Fecal coliform density shall not exceed 400 per 100ml; Enterococcus density shall not exceed 104 per 100ml.

South Orange County Wastewater Authority-San Juan Creek Ocean Outfall

REPORT FOR: March 2023
 REPORT DUE: May 1, 2023
 SAMPLE SOURCE: Receiving water surf zone
 TYPE OF SAMPLE: Grab

REPORT FREQUENCY: Monthly
 EXACT SAMPLE POINTS: As specified in Unified Monitoring Plan
 SAMPLES COLLECTED BY: SOCWA Lab
 SAMPLES ANALYZED BY: SOCWA Lab

Tidal Condition: Low Tide 10:44

Weather: Clear

COMMENTS:

STATION #	DATE	TIME	Total Coliform	Fecal Coliform	Entero-coccus	Material of Sewage Origin		Oil & Odor		Water	H2O	Water	Water	Birds
			CFU/100ml SM9222B	CFU/100ml SM9222D	CFU/100ml EPA 1600	Onshore	Offshore	Grease	Odor	Color	Temp(F)	Condition	Outlet	
S0	03/28/23	09:18	40	<20	<20	None	None	None	None	Green		Slightly Turbid		
S1	03/28/23	09:15	20	<20	<20	None	None	None	None	Green	52	Slightly Turbid		
S2	03/28/23	09:40	600	100	100	None	None	None	None	Brown		Turbid		
DSB5	03/28/23	09:55	3000	100	200	None	None	None	None	Brown		Turbid		
S3	03/28/23	09:05	40	20	20	None	None	None	None	Green		Slightly Turbid		
DSB4	03/28/23	09:00	<20	<20	<20	None	None	None	None	Green		Slightly Turbid		
S5	03/28/23	08:55	60	<20	<20	None	None	None	None	Green		Slightly Turbid		
DSB1	03/28/23	08:45	<20	<20	<20	None	None	None	None	Green		Slightly Turbid		
SJC1	03/28/23	09:25	1200	200	200	None	None	None	None	Brown		Turbid	Flowing	

RECEIVING WATER LIMITATIONS: Single Sample Maximum - Total coliform density shall not exceed 10,000 per 100ml; Fecal coliform density shall not exceed 400 per 100ml; Enterococcus density shall not exceed 104 per 100ml.



San Juan Creek Ocean Outfall

Unified Beach Water Quality Monitoring Stations

SOCWA's NPDES discharge permit requires participation in the South Orange County Unified Beach Water Quality Monitoring Program. The monitoring stations below are tested by SOCWA at least once per week for Total and Fecal Coliform and Enterococcus Bacteria.

Station	Location
DSB 5	Doheny Beach – North Creek Outlet 1500' up-coast from SJCOO
S2	Doheny Beach- Midway between Jetty and San Juan Creek
SJC1	San Juan Creek Mouth – up-coast from SJCOO
S0	Doheny Beach at Outfall; surf line over SJCOO
S1	Doheny Beach Campground; 1,000' down-coast from SJCOO
DSB 4	Doheny State Beach; 1,900' down-coast from SJCOO
S3	South Day Use; 2000' down-coast from SJCOO
S5	Doheny Beach near overpass; 3000' down-coast from SJCOO
DSB 1	End of Doheny State Beach; 3500' down-coast from SJCOO

MONITORING REPORT

Offshore

South Orange County Wastewater Authority

DISCHARGE: San Juan Creek Ocean Outfall

REPORT FOR: March 2023

REPORT FREQUENCY: Monthly

REPORT DUE: May 1, 2023

SAMPLE SOURCE: Receiving water, nearshore and offshore

SAMPLING FREQUENCY: Monthly

EXACT SAMPLE POINTS: As specified in permit

TYPE OF SAMPLE: Grab

SAMPLES COLLECTED BY: Seaventures/SOCWA staff

SAMPLES ANALYZED BY: SOCWA Lab

Comments: High Tide 09:35

Station No.	Sample Depth	Sample Date	Total Coliform CFU/100ml SM9222B	Fecal Coliform CFU/100ml SM9222D	Enterococcus CFU/100ml EPA 1600	Sample Time	Oil & Grease	Sewage Debris	
A-1	Surface	03/09/23	<2	<2	<2	09:30	0	0	0 - None
A-1	Mid depth	03/09/23	30	<10	<10				1 - Mild
A-2	Surface	03/09/23	<2	<2	<2	09:38	0	0	2 - Moderate
A-2	Mid depth	03/09/23	20	10	10				3 - Severe
A-3	Surface	03/09/23	<2	<2	<2	09:42	0	0	
A-3	Mid depth	03/09/23	10	<10	<10				
A-4	Surface	03/09/23	<2	<2	<2	09:48	0	0	
A-4	Mid depth	03/09/23	<10	<10	<10				
A-5	Surface	03/09/23	<2	<2	<2	09:44	0	0	
A-5	Mid depth	03/09/23	300	140	30				
B-1	Surface	03/09/23	<2	<2	<2	08:26	0	0	
B-1	Mid depth	03/09/23	90	20	<10				
B-2	Surface	03/09/23	<2	<2	<2	09:58	0	0	
B-2	Mid depth	03/09/23	<10	<10	<10				
N1	Surface	03/09/23	<2	<2	<2	09:17	0	0	
N2	Surface	03/09/23	<2	<2	<2	09:14	0	0	
N3	Surface	03/09/23	2	<2	<2	09:12	0	0	
N4	Surface	03/09/23	8	<2	<2	09:07	0	0	
N5	Surface	03/09/23	6	2	2	09:05	0	0	
N6	Surface	03/09/23	8	<2	<2	09:03	0	0	

REQUIREMENT: (1) Floating particulates and grease and oil shall not be visible. (2) The discharge of waste shall not cause aesthetically undesirable discoloration of the ocean surface.

**Compliance Summary Report
San Juan Creek Ocean Outfall 2023**

SJCOO Permit Order No. R9-2022-0005

Agency	Violation Date	Constituent	Effluent Limit Violation	Units	Permit Limit	Reported Value	Potential Fine
No monitoring violations during this period.							

**SOCWA and MEMBER AGENCY FACILITIES
 SJCOO Spill / Overflow Report Log - 2023
 Order No. R9-2022-0005 ~ NPDES Permit No. CA0107417**

Reporting Agency	Responsible Agency	Estimated Volume (Gallons)	Type of Discharge	Location/Comments	Receiving Waters	Date Reported To State	Date Resolved
No spills during this monitoring period.							

SOCWA Service Area
Recycled Water Production (ac-ft)
2023

Agency	Facility or Region	Jan '23	Feb '23	Mar '23	Apr '23	May '23	Jun '23	Jul '23	Aug '23	Sep '23	Oct '23	Nov '23	Dec '23	Annual Totals
CSJC 1	3-A Plant/MNWD	.00	.00	-1.79										-1.79
CSJC 2	Chiquita/SMWD	.29	4.74	.71										5.74
CSJC 3	Non-Domestic Well	10.40	27.80	5.70										43.90
ETWD	Region 8	16.43	40.04	12.22										68.69
IRWD														
4	IRWD - 8	21.73	53.01	10.23										84.97
4	IRWD - 9	8.13	22.80	2.69										33.62
SCWD	SOCWA CTP	5.64	44.41	9.09										59.14
MNWD	JRP	174.19	247.35	149.73										571.27
	3-A Plant	130.46	6.55	.00										137.01
5	CTP	1.07	4.00	.00										5.07
SMWD	Oso Creek													
	Chiquita	546.20	452.32	555.10										1553.62
	Nichols	1.50	1.35	1.52										4.37
TCWD	RRWRP	56.19	37.03	34.85										128.07
TOTALS		972.20	941.41	780.04										2693.66

- 1 Denotes transfer of recycled water from MNWD (3A Plant) for use in the CSJC service area. Not counted as additional production.
- 2 Denotes recycled water purchased from SMWD Chiquita-WRP used in the CSJC service area. Not counted as additional production.
- 3 Denotes nondomestic groundwater produced from wells used for landscape irrigation.
- 4 IRWD production is from recycled water production, nonpotable water wells, and surface water impoundments
- 5 Denotes transfer of recycled water from SCWD (SOCWA CTP) for use in the MNWD service area. Not counted as additional production.

Note: All of ETWD reclaimed water produced and used in Region 8.

NR = No Report

Recycled Water Report

SOUTH ORANGE COUNTY WASTEWATER AUTHORITY

QUARTERLY RECYCLED WATER MONITORING

Monitoring Period Ending: Mar 31, 2023

Constituent	Units	12-month Avg Maximum Permit Limit	TCWD 12-month Average	SMWD Oso 12-month Average	SMWD Chiquita 12-month Average	SMWD Nichols 12-month Average	MNWD-3A 12-month Average	MNWD-RTP 12-month Average	SCWD-CTP 12-month Average

TDS	mg/L	1000	1083.00	Offline	943.00	865.00	1163.00	1307.00	1053.00
Chloride	mg/L	375	246.00	Offline	216.00	229.00	231.00	277.00	314.00
Sulfate	mg/L	400	394.00	Offline	276.00	234.00	393.00	373.00	368.00
Sodium	mg/L	None	56.00	Offline	168.00	175.00	-	198.00	195.00
Alkalinity	mg/L	None	-	Offline	-	-	-	296.00	205.00
Adjusted SAR	Ratio	None	4.95	Offline	5.28	5.28	4.05	4.68	4.73
Iron	mg/L	0.3	.01	Offline	.11	.01	.16	.24	.15
Manganese	mg/L	0.05	.01	Offline	.04	.01	0.08	.11	.08
MBAS	mg/L	0.5	ND	Offline	ND	ND	ND	ND	ND
Boron	mg/L	0.75	.32	Offline	.32	.30	.37	.29	.35
Fluoride	mg/L	None	.65	Offline	.66	.96	.74	.74	.93
Total Organic Carbon	mg/L	None	5.50	Offline	12.90	8.30	1.90	10.40	7.80

*** The CTP 12-month permit limits are listed below:

TDS 1200 mg/L
Chloride 400 mg/L
Sulfate 500 mg/L

SOCWA Service Area
Recycled Water Production (ac-ft)
2023

Agency	Facility or Region	Jan '23	Feb '23	Mar '23	Apr '23	May '23	Jun '23	Jul '23	Aug '23	Sep '23	Oct '23	Nov '23	Dec '23	Annual Totals
CSJC 1	3-A Plant/MNWD	.00	.00	-1.79										-1.79
CSJC 2	Chiquita/SMWD	.29	4.74	.71										5.74
CSJC 3	Non-Domestic Well	10.40	27.80	5.70										43.90
ETWD	Region 8	16.43	40.04	12.22										68.69
IRWD														
4	IRWD - 8	21.73	53.01	10.23										84.97
4	IRWD - 9	8.13	22.80	2.69										33.62
SCWD	SOCWA CTP	5.64	44.41	9.09										59.14
MNWD	JRP	174.19	247.35	149.73										571.27
	3-A Plant	130.46	6.55	.00										137.01
5	CTP	1.07	4.00	.00										5.07
SMWD	Oso Creek													
	Chiquita	546.20	452.32	555.10										1553.62
	Nichols	1.50	1.35	1.52										4.37
TCWD	RRWRP	56.19	37.03	34.85										128.07
TOTALS		972.20	941.41	780.04										2693.66

- 1 Denotes transfer of recycled water from MNWD (3A Plant) for use in the CSJC service area. Not counted as additional production.
- 2 Denotes recycled water purchased from SMWD Chiquita-WRP used in the CSJC service area. Not counted as additional production.
- 3 Denotes nondomestic groundwater produced from wells used for landscape irrigation.
- 4 IRWD production is from recycled water production, nonpotable water wells, and surface water impoundments
- 5 Denotes transfer of recycled water from SCWD (SOCWA CTP) for use in the MNWD service area. Not counted as additional production.

Note: All of ETWD reclaimed water produced and used in Region 8.

NR = No Report

Pretreatment Report

Agenda Item

5.E.

Legal Counsel Review: No

Meeting Date: May 4, 2023

TO: Board of Directors

FROM: Jim Burror, Acting General Manager/Director of Operations

STAFF CONTACT: Katie Greenwood, Source Control Manager

SUBJECT: Monthly Pretreatment Report – March and April 2023
San Juan Creek Ocean Outfall
NPDES Permit #CA0107417 Order # R9-2022-0005
Aliso Creek Ocean Outfall
NPDES Permit #CA0107611 Order # R9-2022-0006

Summary of Program Activities

Staff continues to utilize the CA Manufacturers Directory, submitted will serve notices, and business licensing data to identify industrial users (IUs) and update each member agency (MA) industrial waste survey (IWS) spreadsheet. Additionally, Dental Users continue to submit One-Time Compliance Reports and Staff is noting as received. Please see “Summary of IWS Activities” table below.

The dry weather season officially started April 15th and dry weather diversion connections are allowed to be re-opened and connected to sewer facilities. The City of Dana Point has confirmed that its diversions will not be opened until mid-May. All other diversions are expected to be opened by the end of April.

Permit Related Activities

The following Wastewater Discharge (WD) Permits, Special Wastewater Discharge (SWD) Permits, Nuisance Water-Special Wastewater Discharge (NSWD) Permits, Non-Industrial Wastewater Discharge (NIWD) forms, and BMP letters were issued or are in the process of being drafted for issuance:

CSC/SMWD – Prima Deshecha Landfill (PDL) – On February 14, 2022, SOCWA received a WD Permit Application submitted on behalf of Orange County Waste & Recycling (OCWR) for proposed discharge from a treatment system for landfill gas condensate stream produced at PDL. A final project treatment design was submitted to SOCWA on October 11, 2022. Staff presented a summary report to the SOCWA Engineering Committee during the November 10, 2022, meeting. Additionally, CSC and SOCWA Staff met with the applicant on March 8, 2023, to further discuss pilot study results and regulatory concerns. Staff have drafted a final response letter pending approval of CSC and SMWD Staff.

SCWD – NSWD Permit No. SCWD-N4-010 for Three Arch Bay – Staff are working with SCWD and Three Arch Bay Staff to add and reflect two new dry weather diversion connection points. Due to Staff turnover, SCWD and Three Arch Bay has temporarily placed connection of the two

diversions on hold. As of April 1, 2023, the two new connection points have not been fully constructed. Once finalized, SCWD will amend the existing Agreement or create a new Agreement between SCWD and Three Arch Bay and then a new Permit will be created, or the existing Permit modified.

SCWD - Burnham-Ward Properties LLC - The County of Orange - Dana Point Harbor Revitalization Project – On July 26, 2022, Staff received a SWD Permit Application to discharge water encountered during construction activities over a three-year period. SOCWA provided a response letter to the application on September 19, 2022, stating concerns and a request for additional documentation and monitoring data. SOCWA and SCWD Staff met on-site with project contractor Staff from Snyder Langston and Rain for Rent on January 10, 2023, to evaluate the monitoring well sample locations and discuss the proposed plan for discharge to the sewer. In response to SOCWA's request, the applicant submitted additional monitoring data on January 31, 2023. And, on February 8, 2023, SOCWA met in-person with the applicant and contracted Staff to discuss alternative discharge options such as direct discharge and the risks associated with both sewer and direct discharge to the harbor. Additionally, SOCWA relayed the need to further study the impact to its JBL facility, as recommended by the Carollo JBL TP Salt Study, and figure treatment costs should discharge to the sewer commence. The applicant agreed to pay for the additional study and sign a commitment letter stating such.

MNWD – Confluent Medical Technologies located at 27721 La Paz Rd Ste. A, Laguna Niguel, CA 92677. On March 17, 2023, Staff received a permit application for discharge of quench water associated with an extrusion process. Staff inspected the process on March 28, 2023, and determined that the effluent is subject to 40 CFR Part 463 – Plastics Molding and Forming Point Source Category, Subpart A – Contact Cooling. There are no pretreatment standards for this category. However, an EPA memo issued on December 5, 2022, names the Plastics Molding and Forming Category as a known discharge of PFAS and recommends PFAS pollution prevention and source reduction through permit prescribed BMPs and requirements and quarterly monitoring for 40 PFAS parameters. Therefore, Staff is drafting a BMP based permit for MNWD's consideration to regulate the site more easily as needed.

MNWD – Mission Viejo County Club – On March 28, 2023, SOCWA received a SWD Permit Application for a fabricated RO treatment plant for removing TDS from secondary effluent, supplied by MNWD, for reuse as golf-course irrigation water. SOCWA Staff are currently evaluating the application and have requested additional information from the applicant. Staff are expecting to issue a Class IV SWD Permit to allow the discharge of brine and cleaning-in-place (CIP) wastewater associated with the RO treatment plant.

SOCWA – SWD Permit No. SOCWA-4-006-05-24 - On April 6, 2023, IRWD submitted a dewatering SWD Permit Application for groundwater discharges associated with a required sewer improvement construction project. Staff have drafted a SWD Permit to be issued mid-May.

Trainings and Committee Meetings Attended

SOCWA Staff continue to attend monthly OC Strike Force Meetings to receive and share legal information related to environmental cases and incidents throughout the county.

On April 19, 2023, Staff attended one day of the CWEA Annual Conference in San Diego to attend sessions related to treatment for PFAS and Contaminants of Emerging Concern (CECs).

On April 21, 2023, Staff virtually attended a NIOSH Board of Scientific Counselors meeting and discussion related to PFAS Research, Exposure Prevention.

Summary of IWS Activities in SOCWA's Service Area - YTD through April 20, 2023

MA IUs	Events	Permits	NIWD	BMPs	FSEs	OSEs	DSEs	Closed	Enforcement	Total IUs
CLB (S)	0	3	2	5	8	110	15	0	0	143
CSC (S)	0	10	35	18	181	1265	37	1	1	1546
CSJC (S)	23	3	27	59	139	1681	28	8	0	1937
ETWD (M)	0	3	88	0	262	131	50	0	0	487
EBSD (U)	0	1	0	0	0	0	0	0	0	1
IRWD (S)	0	4	51	21	63	914	18	0	0	1071
MNWD (S)	38	6	120	38	643	2121	149	8	0	3077
SMWD (S)	15	6	19	20	215	825	52	2	0	1137
SCWD (S)	0	8	33	7	148	186	15	0	0	397
TCWD (S)	2	0	11	0	7	33	2	0	0	51
SOCWA (S)	0	3	1	0	0	0		0	0	4
Totals	78	47	387	168	1666	7266	366	19	1	9851

(S) = SOCWA conducts PT program
 (M) = MA conducts PT program /w SOCWA
 (U) = Urban Diversion Only

NIWD = Non-industrial Waste Discharger
 BMP = Best Management Practices
 FSE = Food Service Establishment

YTD = Year to Date
 OSE = Other Surveyed Establishment
 DSE = Dental Surveyed Establishment

Agenda Item

5.F.

Board of Directors Meeting

Meeting Date: May 4, 2023

TO: Board of Directors

FROM: Jim Burror, Acting General Manager/Director of Operations

STAFF CONTACTS: David Baranowski, Director of Engineering

SUBJECT: Capital Improvement Program Status Report (*April*)

The status of the SOCWA Capital Improvement Program is presented in the tables on the following pages. Below are updates for the month of April for the major construction projects currently underway at SOCWA facilities.

J.B. Latham Package B

Plant 1 Basin Repairs, DAF Rehabilitation, Energy Building seismic retrofit, and minor rehabilitation of Digester 4:

The project is nearing completion. The contractor has demobilized. Staff is working with the Construction Management team to close out all outstanding items.

Environmental Mitigation for the Coastal Treatment Plant Sludge Force Main Replacement Project

Restoration and improvements around Aliso Creek as required by the construction permits for the replacement of the force main from the Coastal Treatment Plant to the Regional Treatment Plant:

The area disturbed by construction has been reseeded with native species and is being monitored by a team of biologists. Weeds are being removed that could hinder native plant growth. Staff has begun working with an environmental consultant, Dudek, on the planning of the mitigation work that is required by project permits.

The rain events earlier this year resulted in significant mud flows covering the trail adjacent to the Coastal fire burn area. Staff is in contact with OC Parks and OC Public Works as they try to stabilize the burned hillside. Beyond the burn area, the rains provided much needed water for the rest of the hydroseed. Native vegetation is beginning to establish itself within the site.

Recommended Action: Information Item.

SOCWA CIP Workplan

Project Number	Project Name	Revised FY 23 Spending Forecast	Status	FY 2022/2023				FY 2023/2024			
				Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
PC 2 - J.B. Latham Treatment Plant											
3220/32212L	Facility Improvements B	\$ 2,574,581	Construction nearing completion	C	C	C					
3215/3252/ 32231L	Electrical System Upgrades	\$ 250,000	Design underway	D	D	D	D	B&A	C	C	C
3222/3234	Centrate Piping Reconstruction	\$ 112,074	Design underway	D	D	D	D	B&A	C	C	
32234L	Chlorine Contact Basin Isolation Gates and Structural Rehab	\$ 100,000						D	D	B&A	C
32226L/32235L/ 3253	Effluent Pump Station Upgrades	\$ 158,750					D	D	B&A	C	C
32232C	Administration Building Roof Reconstruction	\$ 100,000				B&A	C	C			
32233S	Scum Line Replacement	\$ 25,000					D	D	B&A	C	
32231C	Process Water Repiping	\$ 50,000					P	P	P	D	D
3216/32225S	Energy Building Upgrades	\$ 125,000				P	D	D	B&A	C	C
PC 5 - San Juan Creek Ocean Outfall											
36221O	Surge System Air Valve Replacement	\$ 39,064	Coordinating with Ops					P	P	C	C
PC 15 - Coastal Treatment Plant											
3541-000	Export Sludge System Construction (2020)	\$ -	Pipe complete and mitigation work ongoing	ENV	ENV	ENV	ENV	ENV	ENV	ENV	ENV
35228L	Aeration System Upgrades	\$ 50,000	Diffusers delivered	D	D	D	D	B&A	C	C	C
3525	Personnel Building Reconstruction	\$ 308,632	Design underway	D	D	D	D	B&A	C	C	
35221L	Auxiliary Blower Building Roof	\$ 50,000					D	B&A	C	C	
3522AL	Drainage Pump Station	\$ 125,000	Design underway				D	D	D	D	D
35238L	Odor Control Scrubber/Foul Air System Reconstruction	\$ 100,000					P	P	D	D	B&A
35238L	Relocate Influent Flow Meters	\$ 25,000	Work completed by Ops			C					
PC 17 - Regional Treatment Plant											
3722AL/C/S	MCC A, C, G, H Replacement	\$ 107,156	Design underway	D	D	D	D	D	D	D	D
3758/3759	AWT No.2 Reconstruction (2020)	\$ -	MNWD to manage construction	D	D	D	D				
47224C	Consequence of Failure Analysis	\$ 75,000	Study underway	P	P	P	P				
3742	Aeration System Upgrades	\$ 52,000					P	P	P		

SOCWA CIP Workplan

Project Number	Project Name	Revised FY 23 Spending Forecast	Status	FY 2022/2023				FY 2023/2024			
				Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
PC 21 - Effluent Transmission Main											
3107 (B/C/D)/ 3108 (E)	Air Valve Replacement Construction (D) (2021)	\$ 200,000	Design underway	D	D	D	D	D	B&A	C	C
3101/31221B	Trail Bridge Crossing (D)	\$ -	Planning/design underway	P	P	P	P	P	P	P	P
PC 24 - Aliso Creek Ocean Outfall											
3480	Internal Seal Replacement	\$ 60,100	Design underway	D	D	D	B&A	C	C		

- P** Planning
- CA** Condition Assessment
- ENV** Environmental/Permitting
- D** Design
- B&A** Bidding and Award
- C** Construction
- P** Procurement

Agenda Item

5.G.

Board of Directors Meeting

Meeting Date: May 4, 2023

TO: Board of Directors

FROM: David Baranowski, Director of Engineering

SUBJECT: Capital Improvement Construction Projects Progress and Change Order Report (*April*) [Project Committee Nos. 2, 15 & 17]

Overview

Active Construction Project Updates:

Attached are the updated CIP reports. Please note that there are no new change orders.

The Package B project is nearly complete. Staff continue to work with the Construction Management team to close out all outstanding items.

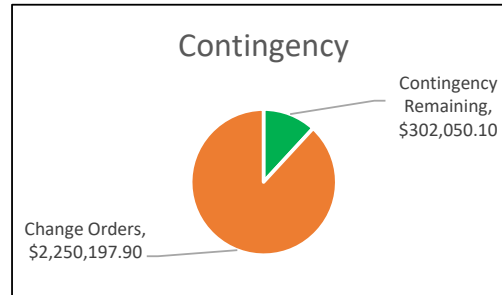
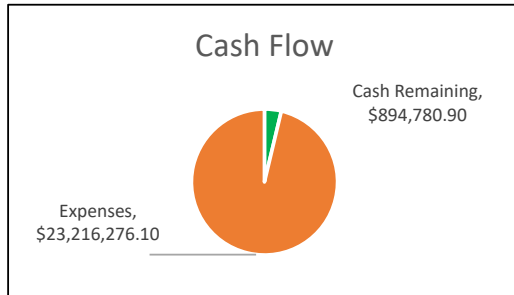
Recommended Action: Information Item.

Project Financial Status

Data Last Updated

Project Committee	2
Project Name	Package B
Project Description	Plant 1 basin repairs, DAF rehabilitation, Energy Building seismic retrofit and minor rehabilitation, Digester 4 rehabilitation

March 28, 2023



Cash Flow

Collected	\$ 24,111,057.00
Expenses	\$ 23,216,276.10

Project Completion

Schedule	100%
Budget	97%

Contracts

Company	PO No.	Original	Change Orders*	Amendments	Total	Invoiced
Olsson	13497	\$ 17,325,000.00	\$ 1,301,867.89		\$ 18,626,867.89	\$ 18,486,864.83
Butier	13647	\$ 895,727.00		\$ 1,005,251.00	\$ 1,900,978.00	\$ 1,874,037.00
Carollo	13616	\$ 846,528.00		\$ 616,037.00	\$ 1,462,565.00	\$ 1,287,240.86
TetraTech	13605	\$ 94,000.00		\$ -	\$ 94,000.00	\$ 93,884.70
Ninyo & Moore	14279	\$ 49,399.00		\$ 30,000.00	\$ 79,399.00	\$ 50,166.27
ADS Environmental	16452	\$ 107,200.00	\$ -		\$ 107,200.00	\$ 59,625.00
Hallsten	16578	\$ 251,422.00	\$ 16,715.25		\$ 268,137.25	\$ -
Dudek	17401	\$ 48,360.00		\$ -	\$ 48,360.00	\$ 35,960.00
		\$ 19,617,636.00	\$ 1,318,583.14	\$ 1,651,288.00	\$ 22,587,507.14	\$ 21,887,778.66

*Values include change orders to be reviewed by Engineering Committee and deductive change orders

Contingency

Area	Project Code	Amount **	Change Orders	Total Remaining	Percent Used
Liquids	3220-000	\$ 969,679.00	\$ 868,639.46	\$ 101,039.54	89.6%
Common	3231-000	\$ 38,120.00	\$ 3,305.76	\$ 34,814.24	8.7%
Solids	3287-000	\$ 1,544,449.00	\$ 1,378,252.68	\$ 166,196.32	89.2%
		\$ 2,552,248.00	\$ 2,250,197.90	\$ 302,050.10	88.2%

** Amount reflects contingency for Construction Contracts only

Summary of New Change Orders

Change Order No	MNWD	SCWD	SMWD	\$ Amount
Grand Total				

Change Orders and Amendments

Change Order No.	Vendor Name	Project ID	Description	Status Date	Days	Amount
Approved by Board of Directors					191	\$ 1,318,583.14
1	Olsson	3287-000	Addition of Loop Piping to the Existing Hot Water Lines Adjacent to Digester 3	12/12/2019	0	\$ 4,725.00
2	Olsson	3287-000	Asbestos Gaskets in Boiler hazardous disposal	6/4/2020	0	\$ 6,343.10
3	Olsson	3287-000	Add Analog Infrastructure and Cabling	6/4/2020	11	\$ 37,969.60
4	Olsson	3287-000	Digester 4 Coating Additional Sealant	6/4/2020	3	\$ 24,001.54
5	Olsson	3220-000	Valve Handwheel Ergonomic extension	8/6/2020	28	\$ 16,370.30
6	Olsson	3287-000	Change to DeZurik Plug Valves to match existing	8/6/2020	90	\$ 41,993.87
7	Olsson	3287-000	Digester 4 Additional Concrete Repair	8/6/2020	3	\$ 7,412.74
8	Olsson	3287-000	Repair Existing Damaged Electrical Box	8/6/2020	0	\$ (1,829.00)
9	Olsson	3220-000	Change the Telescoping Valve Boxes and Piping from Carbon Steel to Stainless Steel	8/6/2020	0	\$ 18,677.63

<u>Change Order No.</u>	<u>Vendor Name</u>	<u>Project ID</u>	<u>Description</u>	<u>Status Date</u>	<u>Days</u>	<u>Amount</u>
10	Olsson	3287-000	Duct bank J Interferences	12/17/2020	18	\$ 73,639.42
11	Olsson	3220-000	Blasting of Existing Influent Pipe Spools	12/17/2020	5	\$ 20,868.52
12	Olsson	3220-000	Duct bank K Interferences	12/17/2020	0	\$ 15,567.08
13	Olsson	3287-000	Digester 3/4 PLC Relocation	12/17/2020	14	\$ 41,367.51
14	Olsson	3287-000	Digester 4 Additional Tank Repair	12/17/2020	18	\$ 33,642.75
15	Olsson	3220-000	Duct bank O Interferences	12/17/2020	0	\$ 1,686.88
16	Olsson	3287-000	Digester 3/4 Control Building Roof Replacement	2/4/2021	0	\$ 42,780.00
17	Olsson	3287-000	MCC-D1 Modifications due to Change in Motor Size	5/6/2021	0	\$ 34,392.02
18	Olsson	3287-000	Integrator Additional Site Visits	5/6/2021	0	\$ 7,571.97
19	Olsson	3287-000	Multi-zone air conditioning unit in the Cogen MCC Room and Office	6/3/2021	0	\$ 29,417.20
20	Olsson	3220-000	Overhead Walkway Removal at Plant 1 Secondary Basins 5 through 9	6/3/2021	0	\$ 62,113.50
21	Olsson	3287-000	Cogeneration PLC Modifications and Integration	6/3/2021	0	\$ 42,922.67
22	Olsson	3220-000	Plant 1 Secondary Basins UV Rated Wear Strips	9/2/2021	0	\$ 28,965.33

<u>Change Order No.</u>	<u>Vendor Name</u>	<u>Project ID</u>	<u>Description</u>	<u>Status Date</u>	<u>Days</u>	<u>Amount</u>
23	Olsson	3287-000	MCC-F1 Design Change	9/2/2021		\$ 481,290.42
24	Olsson	3287-000	DAF 2 Investigation Work and Inspection Blast	10/7/2021		\$ 67,838.71
25	Olsson	3287-000	New Fiber Conduit in West Blower Building	10/7/2021		\$ 4,957.71
26	Olsson	3220-000	Plant 1 Primary Basin Conduit Obstruction	10/7/2021		\$ 8,444.20
27	Olsson	3220-000	Plant 1 Influent Channel Additional Coating between Primary Basins 5 and 6	10/7/2021		\$ 15,469.98
28	Olsson	3287-000	MCC-F1 Lighting Changes	10/7/2021		\$ 7,843.04
29	Olsson	3287-000	Digester 3 Ground Rod	10/14/2021		\$ 7,269.16
30	Olsson	3220-000	New Fiber Conduits at East Electrical and Storm Water Buildings	10/14/2021		\$ 8,045.43
31	Olsson	3220-000	Plant 2 Primary Influent Channel Repair Credit	12/9/2021		\$ (15,903.00)
32	Olsson	3220-000	Plant 1 and 2 Telescoping Valve Pipe Supports	12/9/2021		\$ 6,132.27
33	Olsson	3287-000	4" Gas Line Routing Modifications	12/9/2021		\$ 18,146.07
34	Olsson	3287-000	Gas Mixer Conduit Conflict	12/9/2021		\$ 12,383.89
35	Olsson	3220-000	P1 Primary Tanks 5 and 6 Temporary Power	3/10/2022		\$ 7,256.05

<u>Change Order No.</u>	<u>Vendor Name</u>	<u>Project ID</u>	<u>Description</u>	<u>Status Date</u>	<u>Days</u>	<u>Amount</u>
36	Olsson	3220-000	P1 Primary Tanks Skimmers Starter Modification	3/10/2022		\$ 45,374.13
37	Olsson	3220-000	P1 Primary Tanks Hopper Wall Coating	3/10/2022		\$ 34,505.41
38	Olsson	3220-000	P1 Effluent Channel Conduit Conflict	3/10/2022		\$ 9,274.98
39	Olsson	3220-000	P1 Primary Tanks Torque Limit Switch	3/10/2022		\$ 7,149.86
40	Olsson	3287-000	Multi-zone air conditioning unit in the Cogen MCC Room and Office	3/10/2022		\$ (2,309.09)
41	Olsson	3287-000	DAFT 2 Repair	3/10/2022		\$ 59,403.53
42	Olsson	3287-000	Digesters 1 and 2 Heat Exchanger Layout Reconfiguration Electrical	6/2/2022	1	\$ 12,885.18
43	Olsson	3287-000	Digester 3 Heat Exchanger Hot Water Loop Tie-In	6/2/2022		\$ 2,774.58
44	Olsson	3220-000	Plant 1 Primary Basin 1 Shutdown Repair Work	6/2/2022		\$ 1,009.86
45	Olsson	3287-000	Replace Compressor Line and Valve at Digester 4	6/2/2022		\$ 10,762.85
46	Olsson	3220-000	Plant 2 Influent Gates Removal and Concrete Demo	6/2/2022		\$ 5,389.66
47	Olsson	3287-000	DAFT 2 Launder Support Detail	6/9/2022		\$ 45,682.30
48	Olsson	3220-000	Plant 1 Primary Basins 1, 2, 5 and 6 Coating Removal	6/9/2022		\$ 111,101.16

<u>Change Order No.</u>	<u>Vendor Name</u>	<u>Project ID</u>	<u>Description</u>	<u>Status Date</u>	<u>Days</u>	<u>Amount</u>
49	Olsson	3220-000	Plant 1 Primary Basins 1, 2, 5 and 6 Existing Equipment Removal and Reinstallation	6/9/2022		\$ 71,864.17
50	Olsson	3287-000	Digester Mixing Pumps Control Programming Change	8/4/2022		\$ 4,397.77
51	Olsson	3220-000	Plant 1 Primary Basins Skimmers I/O Connection and Programming Change	8/4/2022		\$ 14,237.83
52	Olsson	3287-000	Fiber Patch Cables to Connect the Centrifuge PLC to the Centrifuge Patch Panel	8/4/2022		\$ 3,755.90
53	Olsson	3220-000	Plant 1 Primary Basins 3 and 4 Coating Removal	8/4/2022		\$ 43,222.24
54	Olsson	3220-000	Plant 1 Secondary Basins Concrete Structural and Basins 2 and 3 Drive Plate Rework	8/4/2022		\$ 20,860.16
55	Olsson	3220-000	Plant 2 Primary Basins Repair and Rehab of Head-Shaft Bearings	8/4/2022		\$ 4,618.44
56	Olsson	3231-000	Board SOCWA Front Office with Plywood to Cover Windows	8/4/2022		\$ 3,305.76

<u>Change Order No.</u>	<u>Vendor Name</u>	<u>Project ID</u>	<u>Description</u>	<u>Status Date</u>	<u>Days</u>	<u>Amount</u>
57	Olsson	3220-000	Seal the Openings at Plant 1 Primary Influent and Effluent Channels	8/4/2022		\$ 25,491.03
58	Olsson	3220-000	Plant 1 Primary Basins 3 and 4 Existing Equipment Removal and Reinstallation	9/1/2022		\$ 26,498.32
59	Olsson	3220-000	Plant 1 Secondary Basins Existing Embedded Metal Plates	9/1/2022		\$ 4,290.48
60	Olsson	3220-000	Plant 2 Primary Baffle Frame Replacement	9/1/2022		\$ 18,291.57
61	Olsson	3287-000	Digester hatch connection, temperature guage adjustment, and potholing	11/3/2022		\$ 9,971.62
62	Olsson	3220-000	Plant 1 Primary and Secondary Basins crack injection, concrete repair, channel cleaning, solids removal	11/3/2022		\$ 146,734.55
63	Olsson	3287-000	Boiler Room Modifications	12/8/2022		\$ 14,797.83
64	Olsson	3287-000	DAFT 1 Repair	12/8/2022		\$ 66,992.33
65	Olsson	3220-000	Secondary Clarifier Telescoping Valve Modifications (Design Error)	12/8/2022		\$ 32,709.94
66	Olsson	3287-000	Digester Control Buildings Modifications	2/2/2023		\$ 9,746.81

<u>Change Order No.</u>	<u>Vendor Name</u>	<u>Project ID</u>	<u>Description</u>	<u>Status Date</u>	<u>Days</u>	<u>Amount</u>
67	Olsson	3220-000	Plant 1 and 2 Field Obstructions	2/2/2023		\$ 8,871.74
68	Olsson	3287-000	MCC-F1 Site Modifications	2/2/2023		\$ 57,233.12
69	Olsson	3287-000	DAFT and TWAS area additional slab modification and piping material change	2/2/2023		\$ 19,368.58
70	Olsson	3287-000	DAFT 1 Area Reconfiguration	3/2/2023		\$ 3,046.43
71	Olsson	3287-000	Digester 2 Hot Water Loop Change	3/2/2023		\$ 29,525.46
72	Olsson	3220-000	Plant 1 Seal Influent Channel Openings and Helical Drives Temporary Covers	4/6/2023		\$ 10,831.51
Duduct-Common	Olsson	3231-000	Energy Building Monorail System Descope (F1-F4)	8/4/2022		\$ (70,585.34)
Duduct-Liquids	Olsson	3220-000	Effluent Pump Station Descope (A1-A6)	8/4/2022		\$ (483,605.73)
Duduct-Solids	Olsson	3287-000	Energy Building Modifications Descope (G1-G2, & H1-H2)	8/4/2022		\$ (357,382.60)
HAL 01	Hallsten	3220-000	Cover Layout Modifications	8/4/2022		\$ 16,715.25
Approved by Board of Directors (Amendments)						\$ 1,651,288.00
1CM Common	Butier	3231-000	CM Change Order No. 1	7/13/2021		\$ 48,995.00
1CM Liquids	Butier	3220-000	CM Change Order No. 1	7/13/2021		\$ 294,125.00
1CM Solids	Butier	3287-000	CM Change Order No. 1	7/13/2021		\$ 269,595.00
1ESDC Common	Carollo	3231-000	ESDC Change Order No. 1	6/3/2021		\$ 18,210.00
1ESDC Liquids	Carollo	3220-000	ESDC Change Order No. 1	6/3/2021		\$ 109,256.00

<u>Change Order No.</u>	<u>Vendor Name</u>	<u>Project ID</u>	<u>Description</u>	<u>Status Date</u>	<u>Days</u>	<u>Amount</u>
1ESDC Solids	Carollo	3287-000	ESDC Change Order No. 1	6/3/2021		\$ 100,151.00
1G Common	Ninyo & Moore	3231-000	Geotechnical Services Change Order No. 1	2/3/2022		\$ 5,400.00
1G Liquids	Ninyo & Moore	3220-000	Geotechnical Services Change Order No. 1	2/3/2022		\$ 12,300.00
1G Solids	Ninyo & Moore	3287-000	Geotechnical Services Change Order No. 1	2/3/2022		\$ 12,300.00
2CM Liquids	Butier	3220-000	CM Change Order No 2	5/12/2022		\$ 196,268.00
2CM Solids	Butier	3287-000	CM Change Order No. 2	5/12/2022		\$ 196,268.00
2ESDC Common	Carollo	3231-000	ESDC Change Order No. 2	12/9/2021		\$ 11,075.00
2ESDC Liquids	Carollo	3220-000	ESDC Change Order No. 2	12/9/2021		\$ 196,440.00
2ESDC Solids	Carollo	3287-000	ESDC Change Order No. 2	12/9/2021		\$ 180,905.00
Potential Change						\$ 258,000.00
PCO 005	Olsson	3287-000	TWAS Slab Modifications	3/9/2023		\$ 50,000.00
PCO 038	Olsson	3287-000	Existing Valves at Digester 4 Heat Exchanger	(blank)		\$ 5,000.00
PCO 047	Olsson	3287-000	Digester 3/4 Control Building Tee Replacement	(blank)		\$ 5,000.00
PCO 054	Olsson	3220-000	Plant 1 Primary Effluent Channel Wall Corrosion	(blank)		\$ 5,000.00
PCO 055	Olsson	3287-000	Additional Concrete Repair behind Digesters 1 & 2	(blank)		\$ 7,500.00
PCO 057	Olsson	3220-000	Recoating of Basin Drive Shaft Steel Plates	(blank)		\$ 10,000.00
PCO 058	Olsson	3220-000	Aluminum Kickplate at Aeration Basins	(blank)		\$ 5,000.00

<u>Change Order No.</u>	<u>Vendor Name</u>	<u>Project ID</u>	<u>Description</u>	<u>Status Date</u>	<u>Days</u>	<u>Amount</u>
PCO 061	Olsson	3220-000	Steel Plate Coating and Blasting Extra Work	(blank)		\$ 7,000.00
PCO 063	Olsson	3220-000	Concrete Repair at Secondary Basin Drive Units	(blank)		\$ 8,000.00
PCO 064	Olsson	3220-000	Effluent Channel FA Duct Footing Conflicts	(blank)		\$ 5,000.00
PCO 068	Olsson	3287-000	Chopper Pump Impeller Issues	(blank)		\$ 5,000.00
PCO 070	Olsson	3220-000	Tread Plate-Slide Gate Conflicts at Effluent Channel	(blank)		\$ 5,000.00
PCO 071	Olsson	3220-000	Effluent Channel Unforeseen Existing Conduit	(blank)		\$ 5,000.00
PCO 072	Olsson	3287-000	Existing Conflicts at DAFT 2 Stairs	(blank)		\$ 2,000.00
PCO 075	Olsson	3220-000	Bypass Pumping Plan Issues	(blank)		\$ 100,000.00
PCO 083	Olsson	3220-000	Replacing the P1 Head Shaft Plate	(blank)		\$ 5,000.00
PCO 095	Olsson	3287-000	Foul Air Rerouting at DAFT 2	9/2/2021		\$ 5,000.00
PCO 106	Olsson	3287-000	DAFT 2 Isolation Valve	(blank)		\$ 5,000.00
PCO 109	Olsson	3220-000	P1P Influent Channel Scum Gate Openings	(blank)		\$ 2,500.00
PCO 121	Olsson	3287-000	DAFT 1 Additional Repair - Flange	(blank)		\$ 3,000.00
PCO 140	Olsson	3287-000	DAFT 1-TWAS Changes	(blank)		\$ 10,000.00
PCO 143	Olsson	3287-000	Revisions to DG Line	(blank)		\$ 3,000.00
Grand Total					191	\$ 3,227,871.14

Agenda Item

5.H.

Board of Directors Meeting

Meeting Date: May 4, 2023

TO: Board of Directors

FROM: Jim Burror, Acting General Manager/Director of Operations

STAFF CONTACTS: David Baranowski, Director of Engineering

SUBJECT: Coastal Treatment Plant (CTP) Funding Strategy and Implementation Plan [Project Committee No. 15]

Summary

This agenda item is to approve a contract for Hazen and Sawyer to provide a Fundings Strategy and Implementation Plan for the Coastal Treatment Plant.

Background

At the November 13, 2022, Special Meeting for PC 15, Hazen and Sawyer gave a presentation about their approach to identifying and obtaining funding sources. Hazen submitted the attached proposal to provide a comprehensive funding strategy and implementation plan for the Coastal Treatment Plant. The proposed fee is \$60,140.

The proposal is not specific to a particular SOCWA project. SOCWA has performed studies that have looked at a wide range of potential projects, including process changes and biosolids handling, which could be incorporated in the project.

Project Scope

The overall purpose of the project is to develop a comprehensive funding strategy and implementation plan. The scope of work for the project includes:

- Identifying potential funding options
- Developing a funding strategy plan
- Producing draft applications
- Coordinating with funding agencies

The project is expected to take 4 months.

Cost Allocation

The cost allocation for the project is shown in Table 1.

Table 1 – Cost Allocation by Member Agency

Agency	Allocation
City of Laguna Beach	\$22,799.34
Emerald Bay Service District	\$1,795.22
Moulton Niguel Water District	\$17,593.19
South Coast Water District	\$17,952.24
Total	\$60,140.00

The budget for this project is included in the next fiscal year budget.

Prior Related Project Committee or Board Action (s)

This item was reviewed by the Engineering Committee on April 13, 2023.

Recommended Action: The Engineering Committee recommends that the PC 15 Board of Directors approve the contract to Hazen and Sawyer in the amount of \$60,140 for the Coastal Treatment Plant Funding Strategy and Implementation Plan.



Hazen and Sawyer
 7700 Irvine Center Drive, Suite 200
 Irvine, CA 92618 • 949.951.8549

January 5, 2023

Mr. David Baranowski
 Project Manager
 South Orange County Wastewater Authority (SOCWA)
 34156 Del Obispo Street
 Dana Point, CA 92629

Re: Coastal Treatment Plant – Funding Strategy and Implementation Plan

Dear David:

Thank you for arranging our presentation before SOCWA’s PC-15 Committee Meeting recently. We very much appreciate the opportunity to present our experience and qualifications in assisting our water agency clients in obtaining funding for projects like the future improvements needed at your Coastal Treatment Plant. As requested by the Committee, here is our proposal to provide a comprehensive funding strategy and implementation plan.

Firm Experience

Hazen is a proven, experienced, and responsive team. Our funding experts have developed infrastructure funding solutions totaling over \$4.1B over the last 10 years for utilities across the country. Hazen’s comprehensive approach to funding assistance for grant and favorable financing programs has enabled other utilities to effectively obtain water and wastewater infrastructure funding assistance from over 30 unique funding programs across the country. Hazen has been assisting utilities with the identification of projects eligible for various local, state, and federal funding sources. Likewise, we have experience helping our municipal clients prioritize projects to optimize use of new and evolving funding programs to maximize available funding efforts in securing this funding, and importantly, ensuring clients meet all grant administration criteria. To provide the best information to clients and ensure the highest opportunity for success, Hazen draws upon our extensive experience engaging program staff, developing a detailed understanding of funding programs’ current priorities, and assisting utilities in determining which capital projects best fit various funding program opportunities.

Snapshot of the Proposed Hazen’s Funding Team’s Successful Funding Efforts

Project Name and Location	Total Funding
Nature-based Mitigation to Adapt in an Era of Megafire, Sonoma County, CA	\$37,000,000
Groundwater Supply Treatment, East Orange Water Commission, NJ	\$9,600,000
NYC Wastewater Resiliency Plan, NYCDEP, NY	\$350,000,000
Nutrient Reduction Project, South Central Wastewater Authority, VA	\$195,000,000
West Hickman WWTP Wet Weather Storage Tank, Lexington-Fayette Urban County Government, KY	\$66,000,000

Job no. 20007-006

Winsor Water treatment Plan Rehabilitation, City of North Miami, FL	\$20,000,000
Multiple Consent Decree Projects, City of Raleigh, NC	\$181,000,000
Neuse River RRF Bioenergy Recovery Program, City of Raleigh, NC	\$50,000,000
WWTP Improvements, City of Bedford Heights, OH	\$44,000,000
Brook Hollow Interceptor, Dallas Water Utilities, TX	\$22,000,000
WTP Upgrade Phase I, Greenville Utilities Commission, NC	\$69,000,000

Our team has been instrumental in providing the technical support and program development necessary for local governments and utilities to submit competitive grant proposals, including highly competitive programs such as FEMA’s Building Resilient Infrastructure and Communities (BRIC) program. Members of our team secured over \$64 million in FEMA Hazard Mitigation Program Grants to offset impacts related to natural hazards and were successful in securing a \$37 million dollar FEMA BRIC grant, which remains the nation's largest FEMA grant to mitigate impacts from wildfire.

Hazen is particularly adept at developing successful applications for new funding opportunities, ensuring that utility partners are immediately able to take advantage of available programs and do not miss potential opportunities. One example of this success is the EPA administered WIFIA program, which was established in 2017. To provide the best information to clients and ensure the highest opportunity for success, Hazen immediately engaged WIFIA program staff, developed a detailed understanding of program priorities, and assisted clients in determining which capital projects best fit the program priorities. Hazen’s proven approach has helped clients receive WIFIA funding in each of the four years the program has existed, with approvals ranging from \$29 million to over \$400 million and totaling \$1.4 billion. We are also assisting clients in leveraging new and evolving funding water, wastewater, and resiliency opportunities presented by the enactment of the Bipartisan Infrastructure Law (BIL), including additional grant-like money through the Department of Water Resources (DWR), the Federal Emergency Management Agency (FEMA) and the State Water Resources Control Board State Revolving Fund (SRF) programs.

Hazen’s team has an extensive history of managing and administering grants. Our team’s experience and expertise include a solid understanding of local, state, and federal programs requirements (i.e., Code of Federal Regulations Title 44 Section 200 (2CFR200) and Section 404). Our team recognizes that sound project monitoring will improve the efficiency of project implementation and the obligations associated with the funding process. As part of our standard procedures, Hazen’s team can upon request, monitor and evaluate the progress of any funded project in accordance with the approved statement of work and budget, administrative requirements of 2CFR200 and any applicable state requirements.

Experience of Project Manager

Lisa Hulette, MBA, PMP will serve in the role of Project Manager. Lisa brings more than 20 years of leadership in the non-profit and public sectors with proven experience at leveraging multi-pronged, well-funded efforts designed to broaden support and create collaboration among diverse stakeholders. She is an expert fundraiser and has led teams that secured over \$350 million in public and private funds for water resource planning, stream restoration, hazard mitigation and land conservation projects throughout California.

Prior to joining Hazen and Sawyer, Ms. Hulette was the Lead Program Manager and Designer for the \$37 million FEMA Building Resilient Infrastructure and Communities (BRIC) grant awarded to Sonoma

County by United States President Biden on June 30, 2021, during a press conference. This is the largest wildfire project the federal government has funded to date and provides the foundation for FEMA's wildfire mitigation program. In addition to the FEMA BRIC award, Ms. Hulette was the lead in securing \$64 million from FEMA's Hazard Mitigation Grant Program to reduce risk from natural disasters in Sonoma County. In addition to hazard mitigation project design and facilitation, she has advanced several successful legislative actions to successfully streamline permitting for watershed restoration projects at the state level and managed a wide variety of projects from initial planning, through design, construction, and operation.

Approach

Hazen will work closely with the South Orange County Water Authority (SOCWA) to provide a comprehensive funding strategy and implementation plan to plot a course to obtain and administer the best available funding opportunities. To do this, we will identify multiple potential funding options to provide the flexibility necessary to adapt to emerging funding programs, leverage existing programs, and to maximize the return on SOCWA's capital investment. Hazen will provide SOCWA with comprehensive funding consulting services aimed at maximizing grant opportunities to minimize the financial burden on SOCWA. Hazen will leverage both our in-house engineering expertise and knowledge of funding programs to ensure project planning, design, and implementation can be integrated to balance funding program priorities with project and schedule objectives.

Hazen uses the steps below to in our approach to identify and secure infrastructure funding for water utilities:

1. Strategize applicable, available, achievable, funding options

An initial evaluation of SOCWA's current funding priorities will create a foundation for grant funding research and identification of feasible opportunities. Hazen will work closely with SOCWA to first develop an overall strategy to weigh the benefits and risks of all viable sources of grant funding and financing identified during the strategizing phase. This step will include analysis of the total program cost (e.g., including any federal cross cutter requirements), cashflow modeling, and comparing changes to rates under various funding scenarios. Understanding that SOCWA's goals – and funding opportunities – may shift over the course of the contract, this strategy will be revisited and revised, as needed, to remain a relevant guide.

2. Inform CIP design decisions to maximize available funding sources and amounts

Hazen will use the outcomes of step 1 to inform any project design elements that will make a project or program more competitive for identified funding strategies. This step will also account for established application cycles of each grant program, and how they relate to existing or planned projects.

3. Conform to all funding agency requirements

To ensure successful funding application efforts, Hazen will coordinate closely with SOCWA staff, our insight and knowledge of funding program "language," and our multidisciplinary staff to develop funding applications that fully integrate design, schedule, permitting, and stakeholder considerations.

4. Secure funds by developing competitive proposals/grant applications

Based on our experience establishing relationships with funding agency staff (and existing knowledge of local, state, and federal programs), Hazen will work diligently to prepare successful grant applications that strike the balance between technical rigor and narrative building.

The discrete tasks we anticipate undertaking for this effort are described below.

Task 1 – Funding Strategy Plan Development

Hazen will identify potential funding opportunities through iBank, SRF, WIFI, DWR, the Bureau of Reclamation, FEMA and any additional programs such as those related to BIL. The funding strategy will evaluate the benefit of each feasible funding alternative while considering impacts on schedule and total project costs of additional State and Federal processes and compliance requirements. Consideration will be given to the benefit of combining or separating projects or groups of projects for funding strategy purposes. An implementation plan will be developed based upon the evaluation. This task includes:

- Conducting an initial meeting to establish projects goals, schedule requirements, and financial capability.
- Based upon input from SOCWA, developing a funding strategy that will provide a plan for securing state and federal funding that identifies each potential source, application requirements and deadlines, and a submittal schedule to maximize funds with the greatest benefit to SOCWA.
- Preparing a memorandum detailing the results of the analysis and presenting the information to SOCWA.
- Up to three meetings and one presentation of the funding strategy.

Task 2 - Funding Application & Grant Writing Services.

Hazen’s proposal development services are built on the highest quality research, writing, and problem-solving skills. Hazen backs its program planning and design capacity with solid financial and budgeting skills, resulting in final products that communicate compelling visions and well-conceived budgets. Hazen organizes projects around agreed upon schedules with built-in milestones for conceptual, programmatic, and financial review and approval. Hazen’s comprehensive proposal development sequence will involve the key steps listed below:

- Prepare a detailed proposal development checklist and work plan that: a) describes key proposal development activities such as document development, review, and feedback, b) outlines a timeline for completion, and c) identifies responsible parties.
- Ensure required system registrations such as Grants.gov and other submission platforms used by federal and state funders.
- Establish and schedule regular meetings with an application team that includes key Hazen and SOCWA staff. The first meeting of this Team will be a strategy session to review the funding opportunity, review and refine the work plan, and discuss the proposed approach to responding to proposal requirements.
- Develop a concept paper and concept budget in collaboration with relevant SOCWA staff. This step is particularly useful for projects involving multiple partners. Depending on the complexity and timeline of the individual grant proposal, this step may be abbreviated or skipped.
- Work with SOCWA staff to produce successive drafts of the project narrative, budget, attachments, and forms. Application attachments may include letters of support or commitment, memoranda of understanding or other partnership agreements, logical models, management plans, etc.

Task 3 – Agency Coordination and General Support

- Coordinate with identified funding agencies to solicit early buy-in and support of application materials.
- Perform follow-up activities including sharing submission confirmation and updating SOCWA with any follow-up items.
- Hazen is also available to provide more targeted proposal development services as desired or requested by SOCWA. For example, Hazen can assist with kickoff activities such as developing a work plan, checklist of application components, and a proposal narrative outline based on the

RFP guidance and/or review application drafts both for quality and technical completeness. This flexibility may help maximize SOCWA's return on investment in Hazen funding services.

Task 4 – Project Management

- Administrative duties and meetings to ensure project execution
- Monthly progress reports
- Invoicing and budget management

Estimated Fees

The attached table presents our estimated level-of-effort and fee to conduct the above tasks. The total not-to-exceed fee for the proposed scope of work is \$60,140.

Estimated Schedule

Hazen estimates that we can complete the above scope of work within 4 months after receiving the Notice to Proceed from SOCWA.

We sincerely appreciate the opportunity to submit this proposal. If you should have any questions or wish to discuss our proposal, please contact me at DRJones@HazenandSawyer.com or (916) 769-8753. Thank you.

Sincerely,



Dave Jones, PE
Vice President

Enclosure

South Orange County Wastewater Authority	Funding Strategy Plan - Fee Estimate							
							Total	
	Project Director	Technical Advisors QA/QC	Project Manager	Admin. Support	Total Hours	Labor		
	Jones	Robertson	Hulette	Baruda			ODC	Total
	\$325	\$325	\$280	\$130				
TASK 1 - Funding Strategy Development								
1.1 Conduct project kick-off meeting	2	1	4	0	7	\$ 2,095		\$2,095
1.2 Identify potential funding opportunities	0	0	2	4	6	\$ 1,080		\$1,080
1.3 Conduct comparison of funding opportunities specific to project	1	1	5	0	7	\$ 2,050		\$2,050
1.4 Prepare memo summarizing comparison	1	1	4	2	8	\$ 2,030		\$2,030
1.5 Meet with SOCWA to review memo	2	0	4	0	6	\$ 1,770		\$1,770
1.6 Develop draft funding strategy	2	1	8	2	13	\$ 3,475		\$3,475
1.7 Prepare memo on funding strategy	1	1	4	2	8	\$ 2,030		\$2,030
1.8 Meet with SOCWA to discuss memo	2	0	4	0	6	\$ 1,770		\$1,770
1.9 Finalize funding strategy memo	2	1	5	2	10	\$ 2,635		\$2,635
SUBTOTAL TASK 1	13	6	40	12	71	\$ 18,935	\$0	\$18,935
TASK 2 - Funding Application and Grant Writing Services	<i>(Estimate for per funding application/Final cost for each application to be approved via email prior to start of Task 2)</i>							
2.1 Prepare funding proposal development checklist and work plan	0	0	1	3	4	\$ 670		\$670
2.2 Confirm required system registrations	0	0	1	2	3	\$ 400		\$400
2.3 Conduct strategy session to refine work plan	2	2	6	2	12	\$ 3,240		\$3,240
2.4 Develop concept paper and budget	2	1	6	4	13	\$ 3,175		\$3,175
2.5 Produce successive drafts of funding application(s). Assume 4 drafts.	4	4	32	8	48	\$ 12,600		\$12,600
SUBTOTAL TASK 2	8	7	46	19	80	\$20,085	\$0	\$20,085
TASK 3 - Agency Coordination and General Support								
3.1 Coordinate with funding agencies	0	0	4	0	4	\$ 1,120		\$1,120
3.2 Perform follow-up activities	1	1	2	1	5	\$ 1,340		\$1,340
SUBTOTAL TASK 3	1	1	6	1	9	\$ 2,460	\$ -	\$ 2,460
TASK 9 - Meetings and Project Management								
1.1 Administrative Duties	0	0	12	12	24	\$ 4,920		\$4,920
1.2 Monthly Progress Reports (assume 3 reports)	2	0	6	6	14	\$ 3,110		\$3,110
1.3 Project Progress Meetings (assume 4 meetings)	4	0	8	4	16	\$ 4,060	\$1,000	\$5,060
1.4 Budget and Schedule Management	2	0	12	12	26	\$ 5,570		\$5,570
SUBTOTAL TASK 9	8	0	38	34	80	\$ 17,660	\$1,000	\$18,660
TOTAL	30	14	130	66	240	\$ 59,140	\$ 1,000	\$ 60,140

Agenda Item

5.1.

Budgeted: Yes
Budget amount: \$671,572
Line Item: PC 2, 15, and 17 - Line Items 5006 and 5009
Legal Counsel Review: No
Meeting Date: May 4, 2023

TO: Board of Directors

FROM: Jim Burror, Acting General Manager/Director of Operations

SUBJECT: Chlor-alkali Products Sodium Hypochlorite (Bleach) 6-month Contract Extension [Project Committee Nos. 2, 15, and 17]

Summary

In September 2022, SOCWA requested proposals to supply and deliver chlor-alkali products for use at the South Orange County Wastewater Authority (SOCWA), City of San Clemente (CSC), Moulton Niguel Water District (MNWD), Santa Margarita Water District (SMWD), Trabuco Canyon Water District (TCWD), El Toro Water District (ETWD), and Irvine Ranch Water District (IRWD) with the intent of securing a new contract.

The best-value contract approved for sodium hypochlorite (bleach) was only for six-month due to market and global supply chain volatility.

Discussion/Analysis

There are up to three (3) 6-month extensions to purchase bleach remaining under the existing contract with Olin. Olin has offered pricing for the next 6-month period with an 11% increase for the largest bulk purchases and up to 12.8% for small quantities.

Prior Related Project Committee or Board Action(s)

In September 2022, the Board authorized the General Manager to enter into a contract with Olin for sodium hypochlorite products for six months with up to three (3) additional six (6) month renewals.

Fiscal Impact

Pricing for the next 6-month period will increase by 11% for the largest bulk purchases and up to 12.8% for small quantities.

Recommended Action: Staff recommends that the Board of Directors authorize the General Manager to exercise the first of three (3) six 6-month renewals with Olin at the proposed pricing.

/attachment: Olin Proposal dated April 4, 2023

April 4, 2023

Jeanette Cotinola, CPCM
Procurement/Contracts Manager
South Orange County Wastewater Authority
34156 Del Obispo St.
Dana Point, CA 92629
Email: jcotinola@socwa.com

Re: Sodium Hypochlorite 2023 Semi-Annual Pricing - SOCWA Coop

Dear Jeanette,

Olin sincerely thanks the South Orange County Wastewater Authority and coop member agencies for your business. As requested, Olin offers the following semi-annual pricing for the next semi-annual supply term.

Chlorine and bleach availability both remain in short supply this year heading into summer and some local suppliers have failed to meet critical supply contracts this past year. Olin has consistently met our obligations to our customers even as supply-chain costs have risen this past year. Chemical manufacturing has also increased (see PPI index). Energy (natural gas) costs for manufacturing in CA and fuel costs for transportation have also increased significantly again this year (see attached PG&E and EIA data). Olin has honored our firm price commitment to SOCWA and request cost relief this next semi-annual contract term to recover recent and additional anticipated increases in 2023. New pricing below would be effective July 1, 2023 thru Dec. 31, 2023 as follows:

Sodium Hypochlorite, 12.5% (\$/gal.)

<u>Min. delivery quantities</u>	<u>2023 Semi-annual Pricing</u>
500 – 1,000 gals.	\$3.09
1,001 – 2,000 gals.	\$2.82
2,001 – 3,000 gals.	\$2.65
3,001 – 4,000 gals.	\$2.49
4,001 – 4,800 gals.	\$2.35
> 4,800 gals.	\$2.22

Sodium Hypochlorite, 5.25%

Min. ≥4,800 gals.	\$1.30
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Olin continues to try and be as fair and reasonable as possible and we still remain very competitively priced to local market conditions (see recent 2023 Muni bid prices). Please respond with your decision by 4/25 so we may lock in our vendors and protect the SOCWA coop group from any further potential market changes.

Olin sincerely appreciates being your supplier and we look forward to another year working with SOCWA. Please contact Chuck Hogan or myself at 209.221.8265 if you have any questions.

Regards,



John M. Schabacker
Business Director

CC: Chuck Hogan, Account Manager
Jim Burror, Director Operations

Attachments :

Agenda Item

5.J.

Budgeted: Yes
Budget amount: \$747,004
Line Item: PC 2, 15, and 17 - Line Item 5007
Legal Counsel Review: No
Meeting Date: May 4, 2023

TO: Board of Directors

FROM: Jim Burror, Acting General Manager/Director of Operations

SUBJECT: Polymer Products Contract Extension [Project Committee Nos. 2, 15, and 17]

Summary

The Polymer chemical contract with Polydyne, Inc. expires on June 2, 2023. This chemical is necessary for separating water from solids during solids processing in the wastewater treatment process. SOCWA staff is currently negotiating with Polydyne Inc. to exercise the final of three (3) optional annual renewals remaining under the existing contract awarded in 2019.

Discussion/Analysis

It has been reported to SOCWA staff that general inflation has impacted Polydyne's costs. Thus, Polydyne is requesting an increase of 4.98% in pricing for SOCWA and the member agencies.

The list of polymers used include: WE-1476, WE-1748, WE-2067, WE-1460, WE-1695, WE-2067, WE-1731, WE-2002, C-6260, C-6276, C-9455, C-6258, LA-2911, C-2005, C-1000, and Flosperse SC 122CM.

Prior Related Project Committee or Board Action(s)

June 2022 – The Board of Directors authorized the General Manager to exercise the second contract extension.

Fiscal Impact

Pricing for the next 12-month period will increase by 4.98%.

Recommended Action: Staff recommends that the Board of Directors authorize the General Manager to exercise the third of three annual renewals with Polydyne, Inc. at the proposed pricing.

/attachment: Polydyne, Inc. (SNF) Proposal dated April 13, 2023



April 13, 2023

Ms. Jeanette Cotinola, CPCM
South Orange County Wastewater Authority (SOCWA)
34156 Del Obispo Street
Dana Point, CA 92629

Subject: Polymer Supply Contract Extension Offer

Dear Ms. Cotinola:

The above-referenced Agreement between SOCWA and Polydyne Inc. is set to expire on May 31, 2022. At this time, Polydyne Inc. would like to offer the Authority the option to renew this Agreement for an additional year with a reasonable price adjustment. Attached for your review, please find the most recent BLS Consumer Price Index (Series ID: CUUR0000SA0), which reflects an increase of 4.98%.

Therefore, effective June 1, 2023, through May 31, 2024, we propose to supply as follows:

Product	Package	Price
CLARIFLOC WE-1476, WE-1748 WE-2067	Bulk (>40,000 Lbs.)	\$1.80/Lb.*
CLARIFLOC WE-1476, WE-1460, WE-1695, WE-2067, WE-2405	Bulk (<40,000 Lbs.)	\$1.92/Lb.*
CLARIFLOC WE-1731, WE-2002	2,300 Lb. Totes	\$1.33/Lb.*
CLARIFLOC C-6260, WE-1748, C-6276	2,300 Lb. Totes	\$1.86/Lb.*
CLARIFLOC C-9455, C-6258	2,300 Lb. Totes	\$1.80/Lb.*
CLARIFLOC C-6260	450 Lb. Drums	\$2.22/Lb.*
CLARIFLOC LA-2911	Bulk (>30,000 Lbs.)	\$0.28/Lb.*
	Bulk (<30,000 Lbs.)	\$0.28/Lb.*
CLARIFLOC C-2005	450 Lb. drums	\$0.75/Lb.*
	Bulk (17,000 Lbs.)	\$0.62/Lb.*
CLARIFLOC C-1005	Bulk	\$0.59/Lb.*
	2,300 Lb. Totes	\$0.66/Lb.*
CLARIFLOC C-1000	LTL Bulk/2,300 Lb. Totes	\$0.64/Lb.*
FLOSPERSE SC 122CM	Totes or Drums	\$1.48/Lb.*

*Any applicable tax is not included and will be added on invoice as separate line item.

We thank you for your business and consideration of this proposal. If this offer is acceptable, please send a notification via email to: bids@polydyneinc.com. If you have any questions, please feel free to contact Olawale "Wale" Igbekoyi, Technical Sales Representative at (661) 803-2466. We look forward to continuing our valued partnership.

Best regards,

Boyd Stanley
Sr. Vice President

Attachments

Agenda Item

5.K.

Budgeted: Yes

Budget amount: NA

Line Item: PC2, 15 &17 Lines 5019

Meeting Date: May 4, 2023

TO: Board of Directors

FROM: Jim Burror, Acting General Manager/Director of Operations

SUBJECT: Street Sweeping Service, Inc. was acquired by Sweeping Corporation of America, Inc. [Project Committee Nos. 2, 15, and 17]

Summary

This is an informational item to notify the SOCWA Board of Directors that Street Sweeping Service, Inc. was acquired by Sweeping Corporation of America, Inc.

Discussion/Analysis

Street Sweeping Service, Inc. is a vendor SOCWA uses for weekly street sweeping at the three treatment plants. Sweeping Corporation of America, Inc. has acquired Street Sweeping Service, Inc., and SOCWA will continue to use the new company for street sweeping services.

This agenda item is to notify the SOCWA Board Members of this change and are advised accordingly.

Prior Related Project Committee or Board Action(s)

None

Fiscal Impact

None

Recommended Action: Information Item.

Agenda Item

5.L.

Budgeted: No

Budget amount: \$90,000

Line Item: 05/24-5015-02

Legal Counsel Review: No

Meeting Date: May 4, 2023

TO: Board of Directors

FROM: Jim Burror, Acting General Manager/Director of Operations

STAFF CONTACTS: Amber Baylor, Director of Environmental Compliance

SUBJECT: Code Update to the ROMS-BEC Model – Contract Award to Michael Baker and Associates in an amount not to exceed \$90,000 [Project Committees No. 5 & 24]

Summary

SOCWA staff have been working with the Southern California Coastal Water Research Project (SCCWRP) since 2016 on the ROMS-BEC model for plume tracking purposes. The ROMS-BEC model is being socialized for use in upcoming policy directions at the San Diego Regional Water Quality Control Board and the State Water Resources Control Board. The use of this model is a high priority for industry advocacy groups, including CASA and Clean Water SoCal. Clean Water SoCal is contributing \$5,000 for the validation of data sets from the wastewater ocean dischargers as a companion to this code update.

Discussion/Analysis

At the June 2022 SOCWA Board meeting, the Board provided funding for a technology review of the ROMS-BEC code for use in plume tracking applications for compliance with permit requirements included in both the San Juan Creek and the Aliso Creek Ocean Outfall NPDES permit, adopted on March 9, 2022. The technology review was performed by Michael Baker International (MBI) by chief scientist Dr. Scott Jenkins who previously developed ROMS-BEC models for the Navy in the 1990s. Dr. Jenkins found 2 needed updates to the ROMS-BEC code to better characterize the interface of plume discharges at the outfalls and the uptake of nutrients due to light scattering in the Ocean.

The technical report produced by MBI was provided to the SDRWQCB and SCCWRP in a formal comment for inclusion into the workplan and future modeling efforts. SOCWA staff met with SDRWQCB Board members and SCCWRP staff in December 2022 to discuss the needed updates. The SDRWQCB gave direction to SOCWA staff to work with SCCWRP staff to include these updates. SCCWRP has indicated that, due to a lack of resources, those code updates could not be included at this time. SOCWA staff recommends including the code updates to assist SCCWRP in the resolution of the model that is specific to the outfalls so that the inputs can be properly calibrated to the SOCWA outfalls data.

Through this code update, a model run will be performed on the Oceanside littoral cell to ascertain the differences in the model outputs. In parallel, SOCWA staff will work with SCCWRP to include

the model code updates in the next available model run that is coupled to the ROMS model, which needs supercomputer access.

Advisory Committee Review

SOCWA staff requested a budget amendment at the April 18, 2023, Finance Committee meeting, and this budget request in the total of \$45,000 for PC 5 and \$45,000 for PC24. The Finance Committee recommended approval of the budget amendment to the SOCWA Board of Directors. To cover the difference in the approved adjusted budget and the MBI Contract, Clean Water SoCal will contribute \$5,000 to this effort for the validation of data sets from the wastewater ocean dischargers.

Fiscal Impact

Budget amendments to PC5 & PC24 in the amount of \$45,000 for each outfall, respectively.

Recommended Action: Staff recommends that the Board of Directors authorize the Acting General Manager to enter into a contract with Michael Baker International (MBI) in an amount not to exceed \$90,000. Clean Water SoCal will contribute funds to MBI in the amount of \$5,000 to cover the difference in the attached scope of work that totals \$94,400.

/Attachment(s) Michael Baker International Scope of Work

25 April 2023

To: Amber Baylor
Director of Environmental Compliance
South Orange County Wastewater Authority (SOCWA)

From: Scott Jenkins, Ph.D., and Makrom Shatila, P.E.
Michael Baker International

Subject: Proposal to Remediate Flaws in the ROMS-BEC Codes

Ms. Baylor:

It is our pleasure for Michael Baker International (Michael Baker) to provide you with this proposal illustrating our technical approach, scope, and fee to remediate flaws in the Southern California Coastal Water Research Project's (SCCWRP) Regional Ocean Modeling System / Biogeochemical Elemental Cycling (ROMS-BEC) model.

Introduction:

Michael Baker was recently contracted by SOCWA to evaluate the efficacy of the source codes of the SCCWRP variant of the ROMS-BEC model, cf. Jenkins and Shatila, (2022). That evaluation included 231 .F-codes written in Fortran 90 and 57 .h-header codes written in C and revealed two (2) fatal flaws in the ROMS-BEC source codes, both of which impart a bias in the modeled results that over-stimulate algal photosynthetic and growth rates, ultimately causing plankton blooms that induce ocean acidification and hypoxia (OAH) through the decay (RedOx) processes following bloom die-off. The two (2) fatal flaws are:

- 1) The SCCWRP variant of ROMS-BEC omits back-scattering in the formulation of light attenuation throughout the water column. In coastal waters, back scattering by tiny suspended particulate (particle sizes in the range of $0.1 \mu\text{m} \leq D \leq 1 \mu\text{m}$) accounts for 70% to 80% of total light attenuation, while absorption attenuates only the remaining 20% to 30% of the downwelling irradiance. Consequently, omission of back scattering in the formulation of available light leads to a deeper photic zone with higher light intensity at any given depth, both of which result in higher photosynthetic rates and growth rates than would otherwise be predicted if back-scattering had been included.
- 2) The schematization of the dilution of effluent discharges from ocean outfalls is corrupted in the SCCWRP variant of ROMS-BEC by assuming a fixed, time-invariant mixing volume which never occurs in nature. The mixing volume of a prototypic scale outfall plume in nature varies continuously over time in response to the vertical variations in temperature/salinity profiles, winds, waves, currents and outfall specific parameters, such as discharge rates, diffuser length, numbers and size of discharge ports; none of which the assumed fixed, time-invariant ROMS-BEC formulation of the mixing volume can replicate or even adequately approximate. Consequently,

the SCCWRP variant of ROMS-BEC under predicts the dilution that occurs in the modeled outfall plumes, which in turn, leads to higher undiluted nitrate and ammonia concentrations in the outfall plumes that over stimulate the modeled plankton growth rates. When combined with the fatal flaw (1) above, this particular ROMS-BEC flaw leads directly toward implicating ocean outfalls as the cause of plankton blooms and OAH.

These flaws in the codes of the SCCWRP variant of the ROMS-BEC model were presented at the November 14, 2022 SCAP meeting for the Ocean Outfall Owner Environmental Compliance Summit and again to the San Diego Regional Water Quality Control Board (RWQCB) on December 8, 2022, following the latest SCCWRP update on their validation efforts of the ROMS-BEC model. After listening to both presentations, Dr. Henry Abarbanel (RWQCB Chairman) and Dr. Betty Olson (RWQCB Director) encouraged SCCWRP modelers and SOCWA consultants to work together to correct these flaws in the ROMS-BEC codes and to report code revision progress back to the RWQCB during their February 2023 monthly hearing. In response to these requests from the RWQCB, Michael Baker is pleased to submit the following proposal to amend the codes of the ROMS-BEC model in cooperation / coordination with SCCWRP modelers.

Technical Approach:

The source codes of the SCCWRP variant of the ROMS-BEC model are written in *tungsten* Intel Fortran-90 using the MPI/Pro compiler. Dr. Scott Jenkins (Technical Manager for Michael Baker International) is fluent in *tungsten* Intel Fortran-90, and was co-author of one of the first ROMS-BEC models developed by the US Navy in the 1990's to predict optical properties (e.g., *diffuse attenuation coefficients* and *volume scattering functions*) of the coastal ocean water mass in order to support imagery of underwater targets using multi-spectral scanners flown aboard air-born and space-born platforms (cf. Hammond, et al, 1995). Dr. Jenkins will write the Fortran-90 amendments to the source codes of the SCCWRP variant of ROMS-BEC model in order to correct flaws #1 & #2 identified in the previous section. In addition, Dr. Jenkins will provide proxy data sets on suspended particle number concentrations from Hammond, et al, (1995) needed to beta-test those code amendments. The actual beta test-runs of the revised ROMS-BEC codes will be performed by SCCWRP on their platforms.

To understand our approach to correcting flaw #1, we begin with recognizing that photosynthesis, phytoplankton growth rates, and biomass are controlled by the availability of nutrients (principally nitrates and ammonia) and solar irradiance in a specific band of the visible light spectra, at wave lengths between $\lambda = 400$ nm and $\lambda = 700$ nm, referred to as photosynthetically available radiation (PAR). Mie Theory (cf. Mie, 1908) teaches that downwelling solar irradiance, PAR_z , decays exponentially with depth, z , in the water column from a maximum level at the sea surface, PAR_0 , according to:

$$PAR_z = PAR_0 \exp[-C_d z] \quad (1)$$

where C_d is the *diffuse attenuation coefficient*. The diffuse attenuation coefficient C_d is a complex function of both the size and concentration of suspended particulate in the water column, including both inorganic sediment particles and organic particulate such as plankton and detritus, as well as dissolved

organic matter (DOM), in particular, colored dissolved organic matter (CDOM). The problem with the PAR formulation in the ROMS-BEC codes (cf. the highlighted code lines in **APPENDIX A**) is that PAR attenuates with depth only by the effects of absorption by seawater and absorption by phytoplankton according to:

$$\text{PAR}_z = \text{PAR}_0 * \exp(-\text{abs}(z_r(i,j,k)) * (\text{kwater} + \text{kphyto} * \text{Phyt}(k))) \quad (2)$$

where $\text{Phyt}(k)$ is the instantaneous phytoplankton concentration; kwater is the absorption coefficient of pure seawater that is assumed to be a constant, $\text{kwater} = 0.04$ per meter of depth; $\text{kphyto} * \text{Phyt}(k)$ is the absorption coefficient of phytoplankton taken as $0.03[\text{Phyt}(k)]$ per meter of depth, and $\text{kwater} + \text{kphyto} * \text{Phyt}(k) = a$ is the total absorption coefficient. Therefore, the absorption coefficient becomes a highly simplified default version of the attenuation coefficient, with no terms to account for back scattering. The light limiting effects on photosynthesis and plankton growth rates in the SCCWRP variant of ROMS-BEC occur entirely through absorption in the PAR band by seawater and by the resident plankton population itself. This over-simplified formulation in non-Navy ROMS-BEC codes originated with Fasham, et al. (1990) and has been adopted without modification by a certain niche of ROMS-BEC modelers ever since, (e.g., Uchiyama et al., 2014; Deutsch et al., 2021; Kessouri et al., 2021 a & b). To correct this oversimplification, will amend the portion of ROMS-BEC code listed in **APPENDIX A**, to include the complete representation of the diffuse attenuation coefficient, as given by Morel and Loisel (1998) according to:

$$C_d = \frac{a}{\cos \Omega} \left[1 + \frac{b}{aB_0} \int_0^\theta \beta(N, k, \theta) d\theta \right]^{0.5} \quad (3)$$

$$\text{where: } B_0 = \int_0^\pi \beta(N_0, k_0, \theta) d\theta \text{ at } z = 0$$

Here, Ω is the angle of down-welling light relative to the unit sea surface normal vector; a is the *absorption coefficient*; b is the *scattering coefficient*; and $\beta(k, N, \theta)$ is the *volume scattering function* normalized to spherical suspended particulate with non-dimensional particle diameter, $k = D / 2\lambda$, where D is the physical particle diameter, and $N = f(D, z)$ is the particle number concentration (numbers of scattering and absorbing particles per unit volume), which is a function of depth and particle diameter; θ is the scattering (solid) angle in steradians; and B_0 is the total volume scattering function at the sea surface, integrated over all possible scattering directions between fully back scattered ($\theta = 0$) and fully forward scattered ($\theta = \pi$). Omission of back scattering in the formulation of available PAR leads to a deeper photic zone with higher PAR intensity at any given depth, both of which result in higher photosynthetic rates and growth rates than would otherwise be predicted if back-scattering had been included. Consequently, plankton photosynthetic rates and growth rates are over-stimulated by the presence of nutrients at depths where there would otherwise be insufficient PAR for any photosynthesis or growth to occur.

To support beta testing of amended ROMS-BEC codes according to equation (3), including the *scattering coefficient*, b , and the *volume scattering function*, $\beta(k, N, \theta)$, Michael Baker will provide proxy data on suspended sediment (particle) concentrations and particle size distributions of the suspended particulate

(both organic and inorganic) that were measured in coastal waters off Oceanside, CA using a *laser particle sizer*. The most efficient scattering and absorbing particles at PAR wave lengths are in the size regime of sub-micron, clay, fine silt, and nano-plankton particulate, for which the particle number concentration varies with particle diameter and depth according to a hyperbolic distribution (Bader, 1970; Kirk, 1983) given by:

$$N = f(D, z) = N_1(z) D^{-\gamma} \text{ where } 0.7 \leq \gamma \leq 6.0 \quad (4)$$

In this hyperbolic distribution, $N_1(z)$ is the particle number concentration in the smallest size decade, which varies with depth, and typically represents particle sizes in the range of $0.1 \mu\text{m} \leq D \leq 1 \mu\text{m}$; while γ is the slope of the particle size distribution on a logarithmic scale.

To correct flaw #2, Michael Baker will amend the algorithms for the shape functions in the ROMS-BEC code that define mixing volumes around the ocean outfalls so that these mixing volumes will vary in time in response to the vertical variations in temperature/salinity profiles, winds, waves, currents and outfall specific parameters such as discharge rates, diffuser length, numbers and size of discharge ports. The present formulation for the mixing volume in the ROMS-BEC codes is lifted from Uchiyama et al., (2014); and is parameterized by the product of two shape functions:

1. $A(x,y)$ which specifies the horizontal footprint of the plume.
2. $H(z)$ which specifies the vertical shape of the plume.

The shape function $A(x,y)$ merely specifies the number of horizontal grid cells that are assumed to enclose the plume. That means the horizontal footprint of the plume is an assemblage of 300 m squares. All of the observations of outfall plume footprints in nature (as well as in laboratory miniatures) are either elliptic, tear-dropped or other assortments of complex curvilinear shapes. The vertical shape function, $H(z)$, in the ROMS-BEC codes was based on a Gaussian functional identical to that in equation (5) of Uchiyama et al. (2014), which uses two (2) parameters that were assumed to be the same for all outfalls, i.e., an erroneous assumption that one size fits all, that is further compounded by the fact that the vertical cross-section of a prototype outfall plume does not follow a Gaussian distribution. Michael Baker will correct these code faults by embedding the source code for the EPA certified UM3 (Plumes 20) outfall dilution model inside the ROMS-BEC code, where it will be used as a shape function calculator for $A(x,y)$ and $H(z)$ at each time step. The UM3 (Plumes 20) dilution model is open source code written in Fortran, allowing it to be readily adapted to the ROMS-BEC Fortran-90 code, and will give it the ability to adjust the size and shape of the mixing volume to variations in temperature/salinity profiles, winds, waves, currents as well as individual outfall specific parameters such as discharge rates, diffuser length, numbers and size of discharge ports, as demonstrated by the UM3 (Plumes 20) calculations of the mixing volume of the San Elijo Ocean Outfall (SEOO) shown in **Figure 1**.

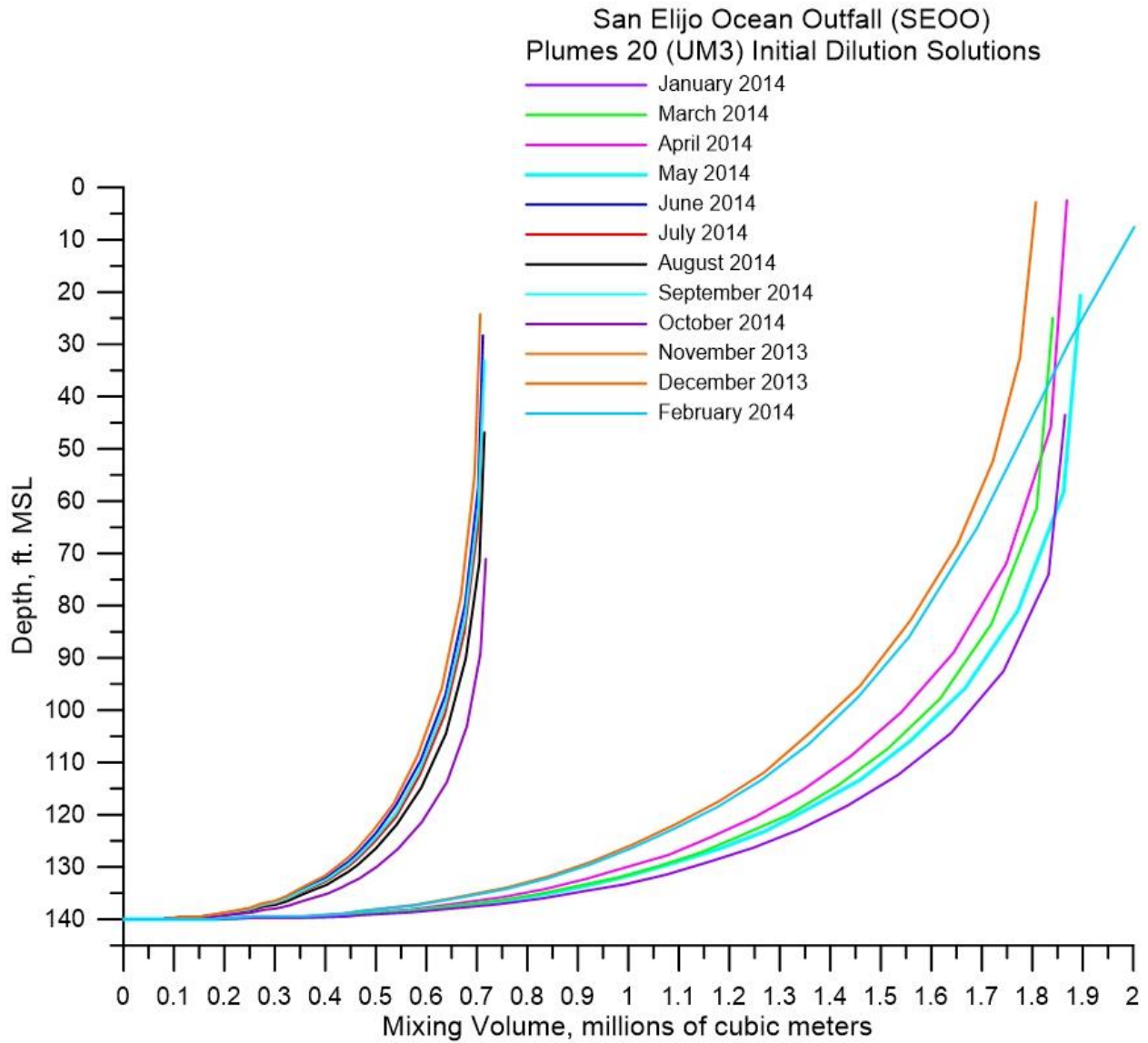


Figure 1: Plumes 20 (UM3) solutions for the variations in mixing volume of the SEOO in response to seasonal variations in temperature/salinity profiles, winds, waves, currents, discharge rates. Note that the vertical variation in the size of the mixing volume is not Gaussian as assumed in the present formulation of the SCCWRP variant of the ROMS-BEC.

There is also concern over the accuracy of the nutrient input data used in the ROMS-BEC simulations of net primary production (NPP) of plankton biomass and nitrification of coastal waters that was reported in Kessouri et al., (2021b). Excessive nitrification and plankton blooms can be provoked in ROMS-BEC simulations not only by over estimating PAR and under estimating the dilutions in idealized outfall mixing volumes, but also by mis-representation of the nitrate and ammonia loading (millimoles per unit volume) discharged from the outfalls of Publicly Owned Treatment Works (POTW). Amber Baylor of SOCWA performed a batch check on discharge data for the San Juan Creek and Aliso Creek Ocean Outfalls referenced in Kessouri et al., (2021b) and obtained from Sutula, et al., (2021) and discovered the discharge data was not SOCWA outfall data. The explanation given by SCCWRP was that the data had been averaged; but the question remains, how was it averaged (ensemble vs. running mean) and over what period of record. The discharge data in Sutula, et al., 2021 covered a period of record from 1971 through 2021, but the ROMS-BEC simulations in Kessouri et al., (2021b) utilized only the most recent subset of that period of record, 1997-2021, while SOCWA treatment processes have been upgraded a number of times since 1971. If the input data used to generate the nitrification and plankton NPP results in Kessouri et al., (2021b) was based on ensemble averaging across the entire period of record, 1971-2021, then those results will be biased by earlier, less advanced treatment process practices.

Scope of Work & Fee:

The following Scope of Work (SOW) tasks and associated fees were established, based on the technical challenges listed in the previous section.

Task 1 – Amend the ROMS-BEC Code for PAR Attenuation to Include Complete Mei-Scattering Physics:

Michael Baker (Dr. Jenkins) will write Fortran-90 amendments to the latest version of source codes of the SCCWRP variant of ROMS-BEC model in order to incorporate Mei-scattering algorithms in the ROMS-BEC calculations of the diffuse attenuation coefficient for downwelling photosynthetically available radiation (PAR). These new algorithms will include calculus for the scattering coefficient and the volume scattering function.

Labor:

Makrom Shatila, P.E., PM (QA/QC):	4 hrs @ \$225/hr = \$ 900
Scott Jenkins, Ph.D., Technical Manager:	60 hrs @ \$275/hr = \$16,500
Total Task 1 Cost:	= \$17,400

Task 2 – Amend the ROMS-BEC Code for Mixing Volume to Incorporate UM3 Shape Function Calculator:

Michael Baker will obtain source code for the Plumes-20 (UM3) outfall dilution model from Dr. Walter Frick of US EPA or from Daniel Ellis of the SWRCB staff. Michael Baker (Dr. Jenkins) will write Fortran-90 amendments to the latest version of source codes of the SCCWRP variant of ROMS-BEC model in order to incorporate the Plumes 20 (UM3) model as a shape function calculator for prescribing a time-varying

outfall mixing volumes in response to variations in temperature/salinity profiles, winds, waves, currents and discharge rates, as well as outfall specific parameters such as, diffuser length, numbers and size of discharge ports.

Labor:

Makrom Shatila, P.E., PM (QA/QC):	6 hrs @ \$225/hr = \$ 1,350
Scott Jenkins, Ph.D., Technical Manager:	80 hrs @ \$275/hr = \$22,000
Total Task 2 Cost:	= \$23,350

Task 3 – Validate ROMS-BEC Input Data Base for POTW Discharges:

The ROMS-BEC input data for POTW discharge flow rates, nitrogen compounds, and other related discharge parameters will be downloaded from the Zenodo site of Sutula et al., (2021) at:

<https://zenodo.org/record/4448224#.ZEgUz3bMKUk>

This input data set covers the period of record 1971 - 2021, but only the subset record 1997 - 2021 was used in the ROMS-BEC publication by Kessouri et al., (2021b). In addition, there is an additional input data set specific to the Oxnard, LACSD, Hyperion, OCSD, and San Diego Ocean Outfalls. This latest SCCWRP input data set is referred to as the *R-generated* discharge data available at the following SCCWRP link at:

https://drive.google.com/drive/folders/1I2tQOo1vA7Co3PUqpfJFKBXh_EEqrntz?usp=sharing

This R-generated data set covers a period of record from 1998 - 2017. These two (2) SCCWRP data sets will be compared against a State Water Board data set assembled from NPDES monitoring reports for nineteen (19) POTWs in the SCB that will be downloaded from the California Integrated Water Quality System (CIWQS) at:

<https://www.waterboards.ca.gov/ciwqs/>

The objective of these comparisons will be to assess whether there are inconsistencies between the baseline NPDES monitoring data from CIWQS versus the two (2) SCCWRP input data sets that were reportedly used in the ROMS-BEC simulations. The source of any inconsistencies discovered during these data base comparisons will be investigated with special attention given to types of averaging, normalized departures from the mean, temporal misalignment, cherry-picking, and other possible sources of statistical manipulation. The response of the amended ROMS-BEC model code (developed under Tasks 1 & 2 above) to the SCCWRP vs. CIWQS input data sets will be investigated in the Beta-Test evaluations under Task 4 below.

Labor:

Makrom Shatila, P.E., PM (QA/QC):	2 hrs @ \$225/hr = \$ 450
Scott Jenkins, Ph.D., Technical Manager:	60 hrs @ \$275/hr = \$16,500
Total Task 3 Cost:	= \$16,950

Task 4 – Provide and Format ROMS-BEC Compatible Proxy Databases for Beta Testing Code

Revisions:

Michael Baker will provide proxy data bases in ROMS-BEC compatible input formats for suspended particle number concentrations and particle size distributions measured during the 1993-95 Navy water clarity field studies off Oceanside California, in order to beta-test Task 1 and Task 2 code revisions to the ROMS-BEC model. The actual beta test runs of the revised ROMS-BEC codes will be performed by SCCWRP modelers.

Labor:

Makrom Shatila, P.E., PM (QA/QC):	4 hrs @ \$225/hr = \$ 900
Scott Jenkins, Ph.D., Technical Manager:	40 hrs @ \$275/hr = \$11,000
Total Task 4 Cost:	= \$11,900

Task 5 – Code Revision Report:

Michael Baker will prepare and submit to SOCWA and SCCWRP a code revision report detailing amendments to the ROMS-BEC codes produced under Task 1 and Task 2, as well as supporting background information on the measurements of the proxy data bases produced under Task 3.

Labor:

Makrom Shatila, P.E., PM (QA/QC):	12 hrs @ \$225/hr = \$ 2,700
Scott Jenkins, Ph.D., Technical Manager:	50 hrs @ \$275/hr = \$13,750
Total Task 5 Cost:	= \$ 13,700

Task 6 – Meetings, Presentations, and Project Management:

Upon request from SCCWRP, Michael Baker will provide as needed interface support and guidance to SCCWRP modelers throughout the code revision, and integration processes that will occur under Tasks 1-3 above. Upon request of SOCWA, Michael Baker will attend and present up to two (2) meetings of the San Diego RWQCB to present briefings on the progress and outcome of the ROMS-BEC code revisions proposed under Tasks 1-3 above.

Labor:

Makrom Shatila, P.E., Project Manager:	20 hrs @ \$225/hr = \$4,500
Scott Jenkins, Ph.D., Technical Manager:	24 hrs @ \$275/hr = \$6,600
Total Task 6 Cost:	= \$11,100

Total Proposal Fee for Tasks 1-6 = \$94,400

Performance Conditions:

Successful performance of the proposed tasks is conditional on Michael Baker receiving cooperation from SCCWRP in providing most recent versions of the ROMS-BEC source codes in readable formats that are compatible with the MPI/Pro compiler or some other commercially available compiler that SCCWRP may be presently using.

References:

- Deutsch, C., Frenzel, H., McWilliams, J. C., Renault, L., Kessouri, F., Howard, E., et al. (2021). Biogeochemical variability in the California Current System. *Progress in Oceanography*, 102565.
- Hammond, R. R., S. A. Jenkins, J. S. Cleveland, J. C. Talcott, A. L. Heath, J., Wasyl, S. G. Goosby, K. F. Schmitt & L. A. Leven, 1995, "Coastal water clarity modeling feasibility study," SAIC, Technical Report 01-1349-03-4841-000, 491 pp.
https://www.researchgate.net/publication/235097558_Coastal_Water_Clarity_Modeling_Feasibility_Study
- Fasham, M., Ducklow, H., and S. McKelvie, 1990, "A nitrogen-based model of plankton dynamics in the oceanic mixed layer", *Jour. Marine Res.*, vol 48, p. 591-639.
- Jenkins, S.A. and M. Shatila, "Analysis of Limitations of SCCWRP Variant ROMS-BEC Model Source Code", submitted to South Orange County Wastewater Authority, submitted by Michael Baker International, 31 October 2022, 20 pp.
- Kessouri, F., McLaughlin, K., Sutula1, M., Bianchi D. , Ho, M., McWilliams, J., Renault, L, Molemaker, J., Deutsch, C., and A. Leinweber, 2021a, "Coastal eutrophication drives acidification, oxygen loss, and ecosystem change in a major oceanic upwelling system", *Proceedings of the National Academy of Science*, vol. 118, No. 21, 8 pp., doi.org/10.1073/pnas.2018856118
- Kessouri, F., McLaughlin, K., Sutula1, M., Bianchi D. , Ho, M., McWilliams, J., Renault, L , Molemaker, J., Deutsch, C., and A. Leinweber, 2021b, "Configuration and validation of an oceanic physical and biogeochemical model to investigate coastal eutrophication in the Southern California Bight", *Journal of Advances in Modeling Earth Systems*, vol. 13, 34 pp., doi.org/10.1029/2020MS002296
- Mie, Gustav (1908). "Beiträge zur Optik trüber Medien, speziell kolloidaler Metallösungen". *Annalen der Physik*. 330 (3): 377-445. Bibcode:1908AnP...330..377M. doi:10.1002/andp.19083300302. English translation
- Sutula, M., Ho, M., Sengupta, A., Kessouri, F., McLaughlin, K., McCune, K., & Bianchi, D. (2021). A baseline of terrestrial freshwater and nitrogen fluxes to the Southern California Bight, USA. Zenodo. <https://doi.org/10.5281/zenodo.4448224>
- Uchiyama, Y., Idica, E. Y., McWilliams, J. C., & Stolzenbach, K. D. (2014). Wastewater effluent dispersal in Southern California bays. *Continental Shelf Research*, 76, 36–52.

APPENDIX A: Examples of Problematic ROMS-BEC Code

```

mod_string_utility.f90                                0000644 0001752 0001752
00000004137 12323346012 015364 0
ustar frenzel          cdeutsch
! hf: downloaded Oct 28, 2013 from
! http://coding.derkeiler.com/Archive/Fortran/comp.lang.fortran/2005-03/0762.html
! Original source:
! Figure 3.5B, pg 80, "Upgrading to Fortran 90", by Cooper Redwine,
! 1995 Springer-Verlag, New York.

```

Page 104:

```

biology.F                                             0000644 0001752 0001752 00000037034
12161200113 012660 0                                ustar frenzel
cdeutsch
#include "cppdefs.h"
#ifdef BIOLOGY

    subroutine biology_tile (istr,iend,jstr,jend)
!
! Compute biological forcing functions as defined by the Fasham et
! al. [JMR, 48, 591-639, 1990]. This routine was originated by John
! Moisan and adapted for 3D code by MANU Sept. 8 98. It computes
! r.h.s. terms associated with biological conversions. In this
! particular implementation we have: NO3, NH4, Detritus,
! PHYTOplankton and ZOOplankton.
!
    implicit none
    integer istr,iend,jstr,jend
#include "param.h"
#include "grid.h"
#include "ocean3d.h"
#include "scalars.h"
    real solar, albedo, trans, PARO_max, kwater, kphyto, alpha,
    & K_NO3, K_NH4, phi, mu_40, mu_43, gmax, K_Phyt,
    & beta, mu_30, mu_32, mu_50, mu_52, mu_53, pi,
    & deg2rad, ccf1, ccf2, ccf3, ccf4
    parameter (
    & solar = 1353., ! the solar max is from Brock, 1981
    & albedo = 0.04, ! albedo of the ocean surface.
    & trans = 0.8, ! fraction of total radiation
    &          ! transmitted through atmosphere
!

```

```

! Potosynthetic Available Radiation (PAR) at the sea surface (without
! correction due to ellipticity of the Earth orbit, absorbtion by the
! effect of solar altitude and atmospheric clouds, see below; 0.43
! here is the estimated PAR fraction of the total solar radiation
!
& PAR0_max = solar*trans*0.43*(1.-albedo),
!
! Parameters as in Table 1; Fasham et al. [JMR, 48, 591-639, 1990]
!
& kwater = 0.04, ! light attenuation due to sea water [m-1]
& kphyto = 0.03, ! light attenuation by Phytoplankton
!           [(m^2 mMol N)-1]
& alpha = 0.025, ! initial slope of the P-I curve
!           [(W m-2)-1 d-1]
& K_NO3 = 0.5, ! half-saturation for Phytoplankton NO3
!           uptake [mMol N m-3]
& K_NH4 = 0.5, ! half-saturation for Phytoplankton NH4
!           uptake [mMol N m-3]
& phi = 1.5, ! Phytoplankton ammonium inhibition
!           parameter [(mMol N)-1]

& mu_40 = 0.018, ! Phyto loss to sink rate[d-1]
& mu_43 = 0.072, ! Phyto mortality to Detritus rate d-1]
& gmax = 0.75, ! maximum Zooplankton growth rate [d-1]
& beta = 0.75, ! Zooplankton assimilation efficiency of
!           Zooplankton [n.d.]
& K_Phyt = 1.0, ! Zooplankton half-saturation conts. for
&           ! ingestion [d-1]
& mu_50 = 0.025, ! Zooplankton loss to sink [d-1]
& mu_52 = 0.1, ! Zooplankton specific excretion rate [d-1]
& mu_53 = 0.025, ! Zooplankton mortality to Detritus [d-1]

& mu_30 = 0.02, ! Detrital loss to sink rate [d-1]
& mu_32 = 0.03, ! Detrital breakdown to NH4 rate [d-1]

& ccf1 = 0.6071538329, ! Set OSW Papa CLOUD
& ccf2 = 1.187075734, ! correction coefficients
& ccf3 = 0.7726212144,
& ccf4 = -0.2782480419,

& pi = 3.14159265358979323846,
& deg2rad= 2.*pi/360.)

```

page 108-110:

```

! Extract biological variables from tracer arrays; place them into
! scratch variables; restrict their values to be positive definite.
!
do k=1,N
  NO3_bak(k) =max(t(i,j,k,nnew,iNO3_),0.) ! Nitrate
  NH4_bak(k) =max(t(i,j,k,nnew,iNH4_),0.) ! Ammonium
  Det_bak(k) =max(t(i,j,k,nnew,iDet_),0.) ! Detritus
  Phyt_bak(k)=max(t(i,j,k,nnew,iPhyt),0.) ! Phytoplankton
  Zoo_bak(k) =max(t(i,j,k,nnew,iZoo_),0.) ! Zooplankton

  NO3(k) = NO3_bak(k)
  NH4(k) = NH4_bak(k)
  Det(k) = Det_bak(k)
  Phyt(k) = Phyt_bak(k)
  Zoo(k) = Zoo_bak(k)
enddo

!
! Calculate aJ (here: cos_Znt -- cos of solar zenith angle)
!
  cff=deg2rad*latr(i,j)
  cos_Znt=cos_Thr*cos_dec*cos(cff)+sin_dec*sin(cff)
  if (cos_Znt.gt.0.) then
    PAR0=PAR0_ell*cos_Znt*(1.-ccf1+ccf2*cos_Znt)
    & *(1.-cloud*( ccf3+ccf4*sqrt(1.-cos_Znt*cos_Znt)))
    do k=1,N
      ! From Eppley, d-1:
      Vp=0.851*1.066**t(i,j,k,nnew,itemp) ! Vp=2.9124317 at
      ! t=19.25 degrees
      PARz=PAR0*exp(-abs(z_r(i,j,k))*(kwater+kphyto*Phyt(k)))
      aJ(k)=Vp*alpha*PARz/sqrt(Vp*Vp+alpha*alpha*PARz*PARz)
    enddo
  else
    do k=1,N
      aJ(k)=0. ! <-- during the night
    enddo
  endif

  DO ITER=1,3 !--> Start internal iterations to achieve
! nonlinear backward-implicit solution.
! NO3 uptake by Phyto [1-4]
!
do k=1,N
  cff=dt_bio*Phyt(k)*aJ(k)*exp(-phi*NH4(k))/(K_NO3+NO3(k))
  NO3(k)=NO3_bak(k)/(1.+cff)
  Phyt(k)=Phyt_bak(k)+cff*NO3(k)
enddo
!

```

```
! NH4 uptake by Phyto [2-4]
!  
  do k=1,N  
    cff=dt_bio*Phyt(k)*aJ(k)/(K_NH4+NH4(k))  
    NH4(k)=NH4_bak(k)/(1.+cff)  
    Phyt(k)=Phyt(k)+cff*NH4(k)  
  enddo
```

Agenda Item

5.M.

Board of Directors Meeting

Meeting Date: May 4, 2023

TO: Board of Directors

FROM: Jim Burror, Acting General Manager/Director of Operations

STAFF CONTACTS: Amber Baylor, Director of Environmental Compliance

SUBJECT: Ranch Water Filtration Plant NPDES Permitting Update
[Project Committee No. 5]

Overview

Staff provided an update to the Engineering Committee on April 13, 2023, on the status of the NPDES permitting for the Ranch Water Filtration Plant. The update included a description from staff of how the Ranch Water Filtration Plant (RWFP) can be included in the San Juan Creek Ocean Outfall (SJCOO) through an amendment process. Don Bunts, the project proponent from the Santa Margarita Water District, provided an engineering update to the status and timing of the facility, a brief facility description, the co-location of the facility with the Chiquita Water Reclamation Plant, and an update on the timing that would be needed to facilitate the discharge requirement.

Project Committee 5 Engineering Committee members agreed to direct SOCWA staff to draft a letter of intent as requested by the San Diego Regional Water Quality Control Board (SDRWQCB) and provide that letter to the SOCWA Board for review and signature. The draft letter is attached. SOCWA staff will submit the letter to the SDRWQCB after the Board meeting and will work with SDRWQCB staff on any follow-up items needed to complete the discharge request.

Recommended Action: Information item.



South Orange County Wastewater Authority

May 4, 2023

David Gibson
California Regional Water Quality Control Board
San Diego Region
2375 Northside Dr., Suite 100
San Diego, CA. 92108

SUBJECT: Permitted Discharge Update to NPDES Order No. R9-2022-0005

Dear Mr. Gibson:

SOCWA is writing to request the addition of a permitted discharge for NPDES permit No. R9-2022-0005. This letter of intent is requesting an amendment to the current NPDES permit to occur within the next twelve to eighteen months. The requested permitted discharge owner is the Santa Margarita Water District (SMWD). SMWD is requesting the discharge permit be collocated at the Chiquita Water Reclamation Plant (CWRP), discharge point M-001B.

The requested new discharge is in alignment with two policy goals of the SMWD's Board of Directors. The first policy goal is the SMWD Board has adopted a policy to eliminate discharge to the San Juan Creek Ocean Outfall (SJCOO) from CWRP. SMWD is already achieving this goal with an average mean flow to the outfall of 0.03mgd from when this decision was made. The CWRP discharge is permitted up to an average of 9.0mgd or 10,000-acre feet per year. This policy goal is in alignment with accommodating ample capacity to handle the discharge of the Ranch Water Filtration Plant (WFP) to the Chiquita Land Outfall and the San Juan Creek Ocean Outfall without violating California antidegradation laws. The second policy goal is SMWD's strategic goal to locally produce 30% of its drinking water. The Ranch WFP will deliver up to 5,000-acre feet of domestic water locally while maintaining compliance with the Ocean Plan. The brine discharge from the facility will still maintain the buoyant plume discharge in the San Juan Creek Ocean Outfall, even with the addition of the Doheny Desal Project.

The SOCWA Board has reviewed this request and is supportive of this amendment to the SJCOO NPDES permit. SOCWA staff will work with Permit Engineers at the San Diego Regional Water Quality Control Board to provide additional facility descriptions, water quality data, and other required information to amend the permit as requested by SDRWQCB staff. SOCWA appreciates the ability to work with the Regional Board on this update to a new permitted discharge which will increase the ability for beneficial reuse and increase local supplies.

Sincerely,

Matt Collings, SOCWA Board Chair
& Jim Burror, Acting General Manager

34156 Del Obispo Street · Dana Point, CA 92629 · Phone: (949) 234-5400 · Fax: (949) 489-0130 · Website: www.socwa.com

A public agency created by: CITY OF LAGUNA BEACH • CITY OF SAN CLEMENTE • CITY OF SAN JUAN CAPISTRANO • EL TORO WATER DISTRICT • EMERALD BAY SERVICE DISTRICT
IRVINE RANCH WATER DISTRICT • MOULTON NIGUEL WATER DISTRICT • SANTA MARGARITA WATER DISTRICT • SOUTH COAST WATER DISTRICT • TRABUCO CANYON WATER DISTRICT

Agenda Item

6.A.

Budgeted: NA

Budget amount: NA

Line Item: NA

Legal Counsel Review: Yes

Meeting Date: May 4, 2023

TO: Board of Directors

FROM: Jim Burror, Acting General Manager/Director of Operations

SUBJECT: Discussion and action regarding Trabuco Canyon Water District's proposed withdrawal from SOCWA and concurrent services agreement entitled, "SOCWA Withdrawal and Continued Services Agreement (TCWD-SOCWA)"

Summary

The Trabuco Canyon Water District (TCWD) proposes to withdraw its membership with South Orange County Wastewater Authority (SOCWA). TCWD is currently a member of Project Committee (PC) 12. PC12 handles the activities of the joint recycled water permit compliance, monitoring, and reporting. As part of the withdrawal, TCWD will pay for its share of the current and long-term unfunded pension liability (UAL) and other post-employment benefits (OPEB) obligations from its historic participation at SOCWA.

TCWD intends to obtain and manage its own recycled water permit from state/regional regulators. However, until they receive their permit, they will contract with SOCWA for services required under the SOCWA Recycled Water permit. TCWD will also contract with SOCWA for the ongoing obligations required in the region's Salt and Nutrient Management Plan (SMNP).

Discussion/Analysis

The individual member agency Boards also need to approve this Agreement to withdraw. An update on TCWD's efforts to receive these approvals will be given at the Board meeting. The Agreement is expected to become effective June 30, 2023.

Prior Related Project Committee or Board Action(s)

None

Fiscal Impact

The General Fund will be reallocated to the member agencies minus TCWD. The FY2022-23 General Fund Budget for TCWD was \$11,237.

Recommended Action: Staff recommends that the Board of Directors approve the TCWD Withdrawal from SOCWA and Continued Services Agreement (TCWD-SOCWA).

/attachment: SOCWA Withdrawal and Concurrent Temporary Recycled Water Permit Services Agreement

SOCWA Withdrawal and Continued Services Agreement (TCWD-SOCWA)

This SOCWA Withdrawal and Continued Services Agreement (“**Agreement**”) is dated _____, 2023 (“**Effective Date**”) and is between Trabuco Canyon Water District (“**TCWD**”), the South Orange County Wastewater Authority (“**SOCWA**”), and each of SOCWA’s other **Member Agencies** as that term is defined below.

A. Overview. The *Joint Exercise of Powers Agreement Creating South Orange County Wastewater Authority* (“**SOCWA**”) dated July 1, 2001 (the “**Joint Powers Agreement**”) created a joint powers agency made up of several wastewater service providers within the San Juan Creek and/or Aliso Creek watershed. The nine current members of SOCWA are the City of Laguna Beach, the City of San Clemente, El Toro Water District, Emerald Bay Services District, Irvine Ranch Water District, Moulton Niguel Water District, Santa Margarita Water District, South Coast Water District, and TCWD (collectively, the “**Member Agencies**”). SOCWA owns and operates wastewater treatment facilities, transmission mains, and outfalls on behalf of its Member Agencies, and facilitates a recycled water reuse permit compliance, monitoring, and reporting program.

B. TCWD Project Committee Participation. Where a SOCWA activity, project, or facility involves less than all of SOCWA’s Member Agencies, the affected Member Agencies form a “**Project Committee**” (or “**PC**”) that is responsible for overseeing that activity, project, or facility. TCWD is currently a member of PC 12 (formerly known as PC No. 2SO), which handles the activity of joint recycled water permit compliance, monitoring, and reporting for four of the Member Agencies: TCWD, Moulton Niguel Water District, Santa Margarita Water District, and South Coast Water District. The SOCWA recycled water permit, Order No. 97-52, covers TCWD’s Robinson Ranch Water Recycling Plant and related recycled water distribution and use system. TCWD’s recycled water program is the smallest of the members, representing approximately 6% of the total SOCWA-permitted service area recycled water by volume.

C. TCWD Intent to Obtain Independent Recycling Permit. TCWD intends to ultimately obtain and manage its own recycled water permit from state/regional regulators, instead of participating in the joint recycled water permitting services offered by SOCWA¹. TCWD is advised that obtaining an independent permit may take up to 12-18 months.

D. TCWD Withdrawal from SOCWA. Upon obtaining an independent recycled water permit, TCWD will no longer benefit from most SOCWA activities, projects, or facilities. TCWD currently represents less than 1% of the total revenues and budget of SOCWA². TCWD has determined that, because >99% of the budget of SOCWA is not related to TCWD’s operations, that it would be in the best interests of both SOCWA and TCWD for TCWD to withdraw as a member of SOCWA. TCWD will satisfy its actuarial liability arising out of unfunded pension obligations (“**UAL**”) and other post-employment benefits (“**OPEB**”) obligations from its historic participation in PC 12 by making a lump sum payment equivalent to the actuarially-determined liability as provided in this Agreement.

¹ Three other SOCWA Member Agencies have independent recycled water permits: the City of San Clemente, El Toro Water District, and Irvine Ranch Water District. The latter two are former members of PC 12.

² TCWD represented only 0.25% of SOCWA’s budget in 2022-23 (\$61,528 out of \$23,670,816), and is projected to be only 0.18% of SOCWA’s budget in 2023-34 (\$44,780 out of \$24,641,183).

E. Interim Recycled Water Permitting Services. Given the uncertain time frame for TCWD to obtain an independent recycled water permit, and in order to facilitate the orderly transition from joint recycled water permitting under SOCWA to an independent recycled water permit, the parties intend for TCWD to immediately withdraw from SOCWA, and concurrently provide for SOCWA to continue to provide limited other services including participation in bulk purchasing and a salt and nutrient management plan, and in the medium-term to perform recycled water permit services for TCWD under contract instead of under the JPA until TCWD's independent permit is issued. This will avoid the potential for TCWD to have obtained an independent permit while still being a SOCWA member.

F. Purposes. The Parties intend by this Agreement to provide for (i) TCWD's withdrawal as a member agency from SOCWA; (ii) TCWD's payment of all UAL/OPEB liabilities associated with TCWD's historic membership in SOCWA; (iii) SOCWA's temporary continued provision of recycled water permitting services; and (iv) SOCWA's continued provision of certain other special services on a contract basis.

The Parties therefore agree as follows:

1. **JPA Withdrawal.**

1.1 As of the Effective Date, TCWD is no longer a member of SOCWA and therefore no longer a member of the SOCWA Board of Directors, Project Committee 12, or any other committee. The remaining Member Agencies consent to this withdrawal according to the terms and conditions of this Agreement.

1.2 The JPA is hereby amended to remove TCWD as a member of SOCWA or a party to the JPA.

1.3 TCWD shall pay to SOCWA all amounts owing to SOCWA that were incurred during its membership in SOCWA within 45 days after receipt of a closing invoice from SOCWA, subject to Section 9 (Liability; Indemnity).

2. **Effective Date.** This Agreement will become effective on the last date this Agreement is executed by SOCWA and the Member Agencies. Regardless of the Effective Date, TCWD shall pay its SOCWA fourth quarter invoice for fiscal year 2022-23.

3. **Interim Recycled Water Permitting Services.** Concurrently with TCWD's withdrawal, SOCWA shall provide recycled water permit compliance, monitoring, and reporting services ("**RW Services**") to TCWD pursuant to this Agreement. SOCWA shall perform the RW Services to the same level, to the same extent, and using the same standard of care as those RW Services were provided to TCWD prior to TCWD's withdrawal. SOCWA shall provide the RW Services from the Effective Date until TCWD gives 30 days' notice to SOCWA that TCWD no longer requires SOCWA's RW Services.

4. **Salt and Nutrient Management Plan Services.** Concurrently with TCWD's withdrawal, SOCWA shall provide services related to development and approval of a Salt and Nutrient Management Plan ("**SNMP**") or other special studies related to production and distribution of recycled water³ ("**SNMP Services**"). SOCWA shall provide the SNMP Services

³ For example, State Water Resources Control Board 13-267 investigative orders.

from the Effective Date until TCWD and SOCWA mutually agree in writing that SOCWA shall no longer provide SNMP Services.

5. **Costs, Invoicing and Payment.** All general references to “**Services**” in this Agreement include both RW Services and SNMP Services. SOCWA shall invoice TCWD, on no less than a quarterly basis, for all of SOCWA’s costs to provide the Services to TCWD. The costs will be allocated to TCWD based on SOCWA’s budgeted direct costs, and on a time and materials basis according to the rates set forth in Exhibit 1 (these rates include reasonable overhead and administrative costs). The rates set forth in Exhibit 1 may be reviewed annually and revised to reflect increases in labor or other costs. If SOCWA desires to revise or increase its rates, SOCWA shall deliver with 30 days’ notice a proposed revised Exhibit 1; which notice must identify the effective date of the new rates. TCWD will have 30 days from the date notice is delivered to object to the rate increase; if TCWD does not object, the new rates will become effective. If TCWD objects to the proposed new rates, TCWD and SOCWA shall meet and confer to discuss further. The Parties shall negotiate in good faith and TCWD shall not unreasonably refuse to increase time and materials contract service rates. In no event will SOCWA be prevented from increasing its time and material contract service rates by five percent (5%) or less annually. In no event will SOCWA be allowed to increase its time and material contract service rates by more than five percent (5%) without TCWD’s consent. TCWD shall pay SOCWA’s invoices for all Services under this Agreement by no later than 30 days’ after receipt of SOCWA’s invoice.

6. **UAL/OPEB Liability.** In recognition of TCWD's duty to pay to SOCWA the proportional amount of any UAL/OPEB public retirement system liability allocable to TCWD as of the Effective Date, TCWD shall pay to SOCWA within 45 days after the Effective Date the total amount of \$20,813, as the amount of such liability calculated by SOCWA’s actuaries through June 30, 2023 as the anticipated Effective Date, or such amount as re-calculated for a later Effective Date, in full and final settlement of all outstanding UAL/OPEB liability to SOCWA, and upon receipt of that payment, TCWD will be deemed to have satisfied its UAL/OPEB obligations and SOCWA will be deemed to have released and discharged TCWD from any further liability for SOCWA's UAL/OPEB obligations.

7. **No JPA Costs.** After the Effective Date, TCWD will not have any responsibility to contribute toward any operational, maintenance, capital, or general fund costs incurred by SOCWA or its Member Agencies, except those costs directly arising out of or relating to the Services, which will be proportional to the services received and identified in the annual use audit as part of the PC 12 costs (and include reasonable overhead and administration costs). If SOCWA does not adopt an annual use audit or budget, then the previous year's annual use audit figures will be used and later reconciled upon adoption of a use audit or budget.

8. **SOCWA Bulk Purchases.** TCWD is currently a party to multiple contracts with SOCWA and other Member Agencies for bulk purchasing of services and supplies. SOCWA shall make best efforts to continue to allow for TCWD to participate in joint purchasing agreements offered to Member Agencies for chemicals, solids hauling, and other services that SOCWA negotiates with third party vendors. TCWD shall pay to SOCWA its proportional share of the estimated procurement costs for any such contract, based on the formula described in Exhibit 1.

9. **Liability; Indemnity.**

9.1 SOCWA shall indemnify, defend, and hold harmless TCWD from:

A. Any claims, legal, regulatory, enforcement, or administrative actions (“**Claims**”) arising out of or relating to the debts, liabilities, operations, obligations, or facilities owned or operated by SOCWA or any of its Project Committees (except PC 12) that arise on or after the Effective Date. The parties do not intend to release TCWD from its proportional liability for any Claims relating to TCWD’s participation in SOCWA or PC 12 prior to the Effective Date.

B. Any Claims arising out of or related to SOCWA’s Services on or after the Effective Date, except such Claims arising out of any acts or omissions of TCWD.

9.2 TCWD shall indemnify, defend, and hold harmless SOCWA from:

A. Any Claims that are directly attributable to TCWD’s participation in PC 12 prior to the Effective Date.

B. Any Claims that are the result of TCWD’s own acts or omissions that arise on or after the Effective Date.

C. TCWD’s share of any Claims that arise while TCWD is a permittee under the SOCWA recycled use permit and that are shared liabilities deemed the responsibility of all permittees, except those Claims related to SOCWA Services under Section 9.1(B) above.

10. **Effect on Prior Rights.** The terms of this Agreement govern the parties and supersede all contrary terms in prior agreements between the parties, including but not limited to the Joint Powers Agreement.

11. **Miscellaneous.**

11.1 *Integration, Amendment.* This Agreement represents the entire understanding of the parties as to TCWD’s withdrawal from SOCWA and concurrent interim contracting for the Services. To the extent that it contradicts or varies from this Agreement, no prior oral or written understanding will be of any force or effect with respect to the matters covered by this Agreement. This Agreement cannot be modified except in a writing approved and executed by all applicable parties.

11.2 *Governing Law.* This Agreement is governed by the laws of the State of California and will be construed as if drafted by all parties.

11.3 *Third Parties.* This Agreement does not create any third-party beneficiary or any rights in any person or party other than the parties.

11.4 *Signing Authority.* Each Party represents and warrants that each person or persons executing this Agreement on its behalf is duly authorized to do so by the respective Party and that this Agreement binds the parties.

11.5 *Notices.* Any written notice required by this Agreement must be made by U.S. mail or by reliable overnight courier and delivered to the following address, together with a courtesy copy by email:

To TCWD: Trabuco Canyon Water District
32003 Dove Canyon Dr.
Trabuco Canyon, CA 92679
Attn: General Manager
cc: by email to fpaludi@tcwd.ca.gov

With a Courtesy Copy by email to:
ccollins@hansonbridgett.com

To SOCWA and the other Member Agencies:

South Orange County Wastewater Authority
34156 Del Obispo Street
Dana Point CA 92629
Attn: General Manager

Any party may, by written notice to the others, designate a different address or addressee, which will be substituted immediately for that specified above.

11.6 *Severability*. If any provision of this Agreement, for any reason, is held to be invalid, illegal, or unenforceable in any respect, that invalidity, illegality, or unenforceability will not affect any other provision of this Agreement, but this Agreement will be construed as if the invalid, illegal, or unenforceable provision had never been set forth, and the remainder will be enforceable to the fullest extent permitted by law to effectuate the original intent of the Parties.

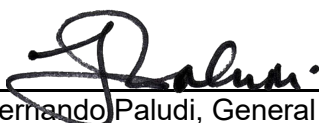
11.7 *Successors & Assigns*. The terms of this Agreement are binding upon and will inure to the benefit of and be enforceable by the respective successors and assigns of the parties.

11.8 *Counterparts*. This Agreement may be executed in counterparts, each of which is an original, but all of which together will constitute one and the same instrument.

The parties are signing this Agreement as of the Effective Date.

TRABUCO CANYON WATER DISTRICT

Dated: April 4, 2023

By: 
Fernando Paludi, General Manager

Approved as to Form:
Hanson Bridgett, LLP

By: 
District Counsel

[additional signature pages follow]

**SOUTH ORANGE COUNTY WASTEWATER
AUTHORITY**

Dated: _____

By: _____

Print Name:

Title:

Approved as to Form:

By: _____
Authority Counsel

[member agency consents follow]

SOCWA MEMBER AGENCIES' CONSENT

The Member Agencies of SOCWA hereby consent to the SOCWA Withdrawal and Continued Services Agreement. This consent is expressly conditioned upon and subject to the condition that such consent is not and shall not be construed as a waiver or release of any liability, obligation or contribution to which TCWD would otherwise be obligated if it had not withdrawn from SOCWA or any project committee of SOCWA and which arise out of, or relate in any way to any and all acts and/or failures to act preceding the date of TCWD's withdrawal from SOCWA. This consent is given on the express condition that TCWD accepts and agrees to this condition.

City of Laguna Beach

Dated: _____ By: _____
Print Name:
Title:

Approved as to Form:

By: _____
City Attorney

City of San Clemente

Dated: _____ By: _____
Print Name:
Title:

Approved as to Form:

By: _____
City Attorney

El Toro Water District

Dated: _____ By: _____
Dennis Cafferty, General Manager

Approved as to Form:

By: _____
District Counsel

Emerald Bay Services District

Dated: _____ By: _____

Print Name:
Title:

Approved as to Form:

By: _____
District Counsel

Irvine Ranch Water District

Dated: 6 APRIL 2023 By:  _____

Paul A. Cook, General Manager

Approved as to Form:

By:  _____
District Counsel

Moulton Niguel Water District

Dated: _____ By: _____

Print Name:
Title:

Approved as to Form:

By: _____
District Counsel

Santa Margarita Water District

Dated: _____ By: _____

Dan Ferons, General Manager

Approved as to Form:

By: _____
District Counsel

South Coast Water District

Dated: _____

By: _____
Rick Shintaku, General Manager

Approved as to Form:

By: _____
District Counsel

Accepted

Trabuco Canyon Water District

Dated: April 4, 2023

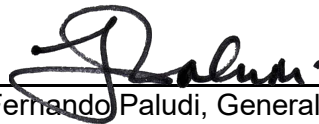
By: 
Fernando Paludi, General Manager

Exhibit 1

Time and Materials Contract Services

Example Only		
A Cost-of-Service fully loaded rate will be used to value the labor costs of future services to Member agencies		
Hours	Hourly Labor Rate	\$ Amount
10.0	\$100.00	\$1,000.00
Fringe	52.2%	522.00
Labor and Fringe		\$1,522.00
Overhead	29.80%	298.05
O&M Costs		\$1,820.05
Admin	15.3%	278.47
Total Costs		\$2,098.52
Hourly Bill Rate		\$209.85

Materials–All Direct Costs will be invoiced based on participation.

Non-SOCWA Agencies' Proposed Contract Participation

- This includes staff labor (fully burdened) and legal counsel costs
 - Staff activities include:
 - Preparing/updating the RFP documents (including getting updated agency information, updating sections for new laws, reviewing and updating contract conditions, and/or adding more specificity to address vendor management issues)
 - Activities during the proposal period (job walks, responding to questions, interviews, proposal reviews, documenting the RFP process, BOFA's, etc.)
 - Preparing and presenting SOCWA Board materials
 - Executing contracts
 - No bid protest costs assumed
- No individual procurement cost tracking by SOCWA staff
- No Use Audit proposed for true up
- CPI LA-OC inflation adjustment from year 0 date
- SOCWA staff has estimated the cost for each major contract procurement at \$10,000
- \$10,000 would be divided by the number of RFP participants
 - For example:
 - \$10,000 with 8 participants (similar to the bleach RFP)
 - Each agency's costs would be \$1,250 (\$10,000 / 8)
 - Non-SOCWA agencies would be billed \$1,250

Agenda Item

6.D.

Board of Directors Meeting

Meeting Date: May 4, 2023

TO: Board of Directors
FROM: Jim Burror, Acting General Manager/Director of Operations
SUBJECT: General Manager's Status Report

ADMINISTRATION

Member Agency Requests

The General Manager is directed, as of the May 10, 2022, Executive Committee Meeting, to include a summary of Member Agency Requests in the GM Report. The following requests of SOCWA staff have been received and responded to:

- SOCWA staff attended several Weekly Three Agencies Staff meetings with MNWD, SMWD, SCWD at SCWD Offices.
- SOCWA Chair and Vice Chair:
 - The SOCWA Chair and Vice Chair held their third meeting with all the SOCWA staff at an All Hands meeting to provide an update and ask questions about the Blueprint proposal, the process(es) they were using for reviewing the Blueprint proposal, and potential timelines for the review process.
- SOCWA staff attended several meetings with the agencies on the State's Ocean Protection Council and So Cal Coastal Water Research Project Findings on Ocean Acidification.
- Trabuco County Water District:
 - SOCWA staff continued to meet with TCWD staff on the termination and services contracting agreement.

ENVIRONMENTAL COMPLIANCE

Unified Beach Monitoring Program Update

SOCWA hosted the Unified Beach Monitoring Program meeting with interagency technical staff of Orange County Health Care Agency, Orange County Public Works, the San Diego Regional Water Quality Control Board (SDRWQCB), City of Laguna Beach, City of Dana Point, City of San Clemente, and nongovernmental organizations (NGOs), including Clean Water Now, Heal the Bay, and Surfrider were invited to participate. Staff from Moulton Niguel Water District, Orange County Sanitation District, and academic representatives were also in attendance. Annual progress monitoring of the sample sites across SDRWQCB jurisdiction in Orange County 9 was presented by OCHCA. A review of the sample results and site access was conducted, compliant with the Unified Program. SOCWA provided an update to the sampling plan for rapid indicator testing and will follow-up with interested parties on this joint study.

2024 Integrated Report Comments

SOCWA staff provided a comment letter on the use of the ROMS-BEC model in a gap analysis for developing water quality objectives in the upcoming update to the 2024 Integrated Report. That comment letter is attached. Please note that due to the size of the attachments in the letter, the attachments were not included for brevity in the SOCWA Board packet.

OPERATIONS

OPERATION AND MAINTENANCE

Advanced Clean Fleets (ACF) Regulations Starting 1-1-2024

The ACF regulation will require that 50 percent of new vehicle additions to state and local government fleets are to be Zero emissions Vehicles (ZEV) starting January 1, 2024, increasing to 100 percent of new vehicle additions starting January 1, 2027. The ACF regulation will allow existing drayage trucks with Internal Combustion Engines (ICE) to operate for a minimum time period, would require all new trucks placed in drayage service after 2024 to be ZEVs, and would require all trucks conducting drayage operations to be ZEVs by 2035. Drayage trucks are on-road, heavy-duty trucks that transport containerized bulk or break-bulk goods (Biosolids).

New 4-Side Primary Covers Project Completed

The covers ordered nearly two (2) years ago were delivered and installed at JBL. The photos below show the newly installed covers and a sample of a corroded structural member from the old covers.