

**NOTICE OF REGULAR MEETING
OF THE
SOUTH ORANGE COUNTY WASTEWATER AUTHORITY
ENGINEERING COMMITTEE**

**April 13, 2023
8:30 a.m.**

NOTICE IS HEREBY GIVEN that a Regular Meeting of the South Orange County Wastewater Authority (SOCWA) Engineering Committee was called to be held on **April 13, 2023, at 8:30 a.m.** SOCWA staff will be present and conducting the meeting at the SOCWA Administrative Office located at 34156 Del Obispo Street, Dana Point, California.

THE SOCWA 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 ENGINEERING COMMITTEE IN CONNECTION WITH A MATTER SUBJECT FOR DISCUSSION OR CONSIDERATION AT AN OPEN MEETING OF THE ENGINEERING COMMITTEE 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 ENGINEERING COMMITTEE 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 ENGINEERING COMMITTEE 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.**

Join Zoom Meeting
<https://socwa.zoom.us/>

Meeting ID: 823 0355 3519
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+1 346 248 7799 US (Houston) +1 312 626 6799 US (Chicago)
Find your local number: <https://socwa.zoom.us/j/kbeNT1Vrac>

AGENDA

1. Call Meeting to Order
2. Public Comments

THOSE WISHING TO ADDRESS THE ENGINEERING COMMITTEE ON ANY ITEM LISTED ON THE AGENDA WILL BE REQUESTED TO IDENTIFY AT THE OPENING OF THE MEETING AND PRIOR TO THE CLOSE OF THE MEETING. THE AUTHORITY REQUESTS THAT YOU STATE YOUR NAME WHEN MAKING THE REQUEST IN ORDER THAT YOUR NAME MAY BE CALLED TO SPEAK ON THE ITEM OF INTEREST. THE CHAIR OF THE MEETING WILL RECOGNIZE SPEAKERS FOR COMMENT AND GENERAL MEETING DECORUM SHOULD BE OBSERVED IN ORDER THAT SPEAKERS ARE NOT TALKING OVER EACH OTHER DURING THE CALL.

PAGE NO.

3. Approval of Minutes.....1
 - a. Engineering Committee Minutes of November 10, 2023
 - b. Engineering Committee Minutes of January 12, 2023
 - c. Engineering Committee Minutes of February 9, 2023
 - d. Engineering Committee Minutes of March 9, 2023

Recommended Action: Staff requests that the Engineering Committee approve subject Minutes as submitted.
4. Operations Report.....27

Recommended Action: Information Item.
5. Dana Point Harbor Project Update [Project Committee 2]28

Recommended Action: Committee Discussion/Direction/Action
6. Ranch Filtration Plant NPDES Permitting Update [Project Committees 5].....29

Recommended Action: Committee Discussion/Direction/Action
7. Capital Improvement Construction Projects Progress and Change Order Report (April) [Project Committees 2, 15, & 17]30

Recommended Action: Information Item.
8. Coastal Treatment Plant (CTP) Funding Strategy and Implementation Plan Proposal [Project Committee 15] 41

Recommended Action: Committee Discussion/Direction/Action

PAGE NO.

9. Revised Draft Capital Improvement Program Budget for Fiscal Year 2023/2024..... 48

Recommended Action: Information Item.

Adjournment

I hereby certify that the foregoing Notice was personally emailed or mailed to each member of the SOCWA Engineering Committee at least 72 hours prior to the scheduled time of the Regular Meeting referred to above.

I hereby certify that the foregoing Notice was posted at least 72 hours prior to the time of the above-referenced Engineering Committee meeting at the usual agenda posting location of the South Orange County Wastewater Authority and at www.socwa.com.

Dated this 6th day of April 2023.



Danita Hirsh, Assistant Secretary
SOUTH ORANGE COUNTY WASTEWATER AUTHORITY

Agenda Item

3

Engineering Committee Meeting

Meeting Date: April 13, 2023

TO: Engineering Committee

FROM: David Baranowski, Director of Engineering

SUBJECT: Approval of Minutes

Overview

Minutes from the following meetings are included for review and approval by the Engineering Committee:

- November 10, 2022
- January 12, 2023
- February 9, 2023
- March 9, 2023

Recommended Action: Staff recommends that the Engineering Committee approve Minutes as submitted.

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

Engineering Committee

DRAFT

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 REBENDSOLF	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 Board Secretary
SOUTH ORANGE COUNTY WASTEWATER AUTHORITY

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

DRAFT

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 Board 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:

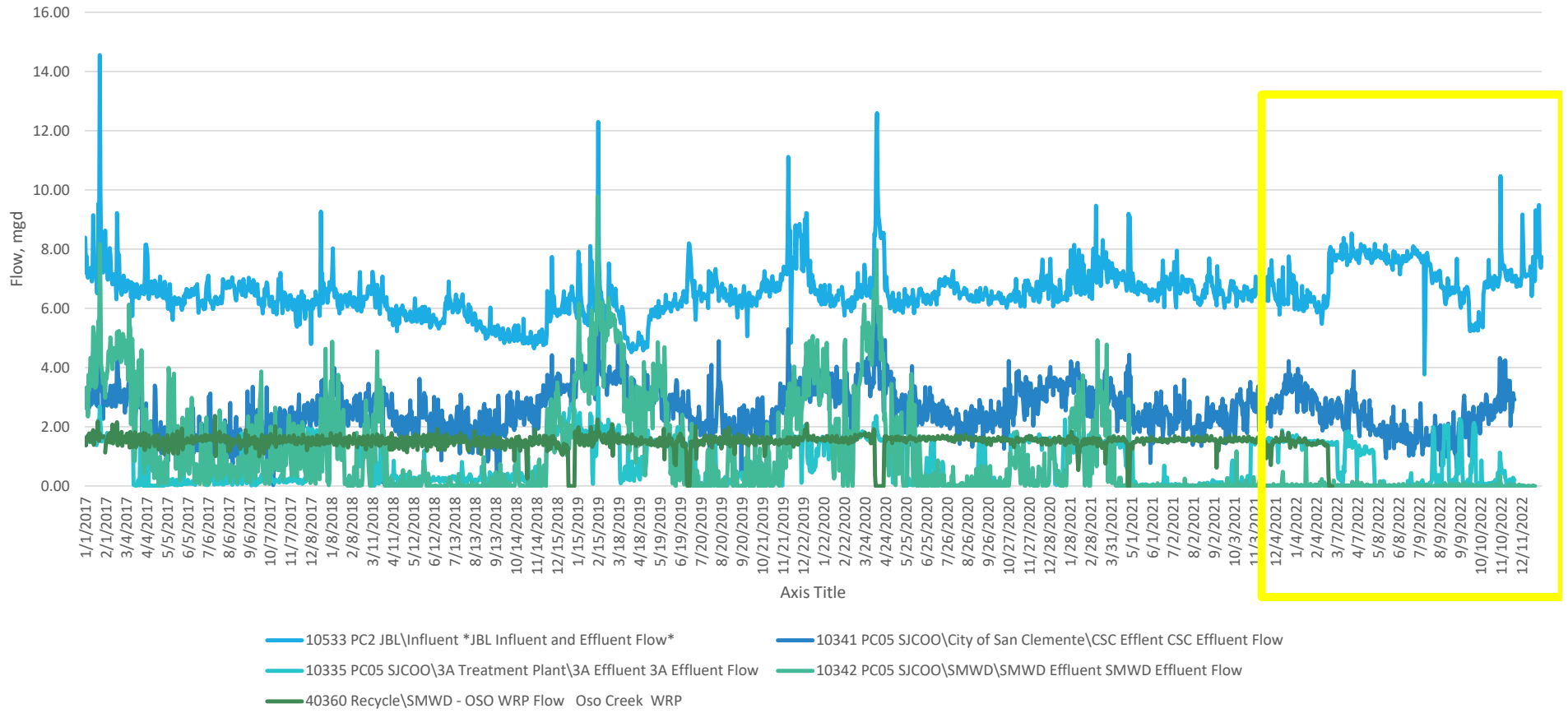
Assist agencies in permit streamlining through regional focus

Maximize beneficial uses at each outfall

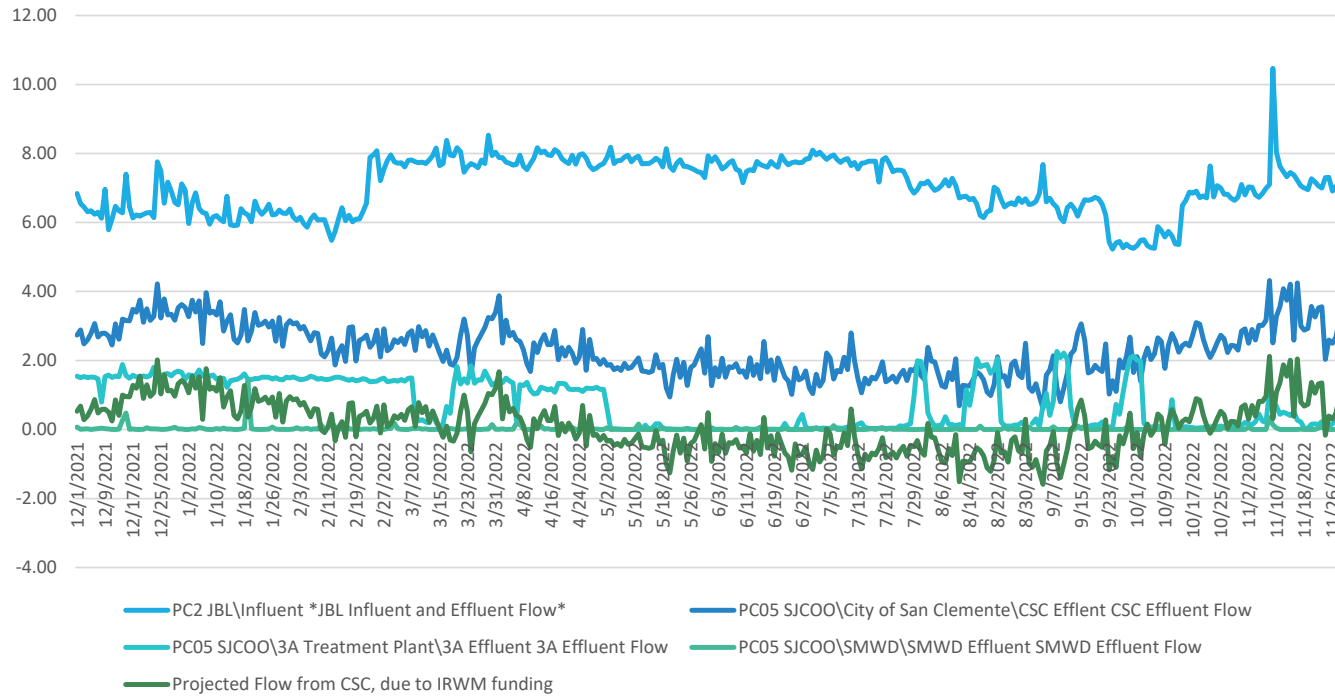
Water Supply Task Force

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



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

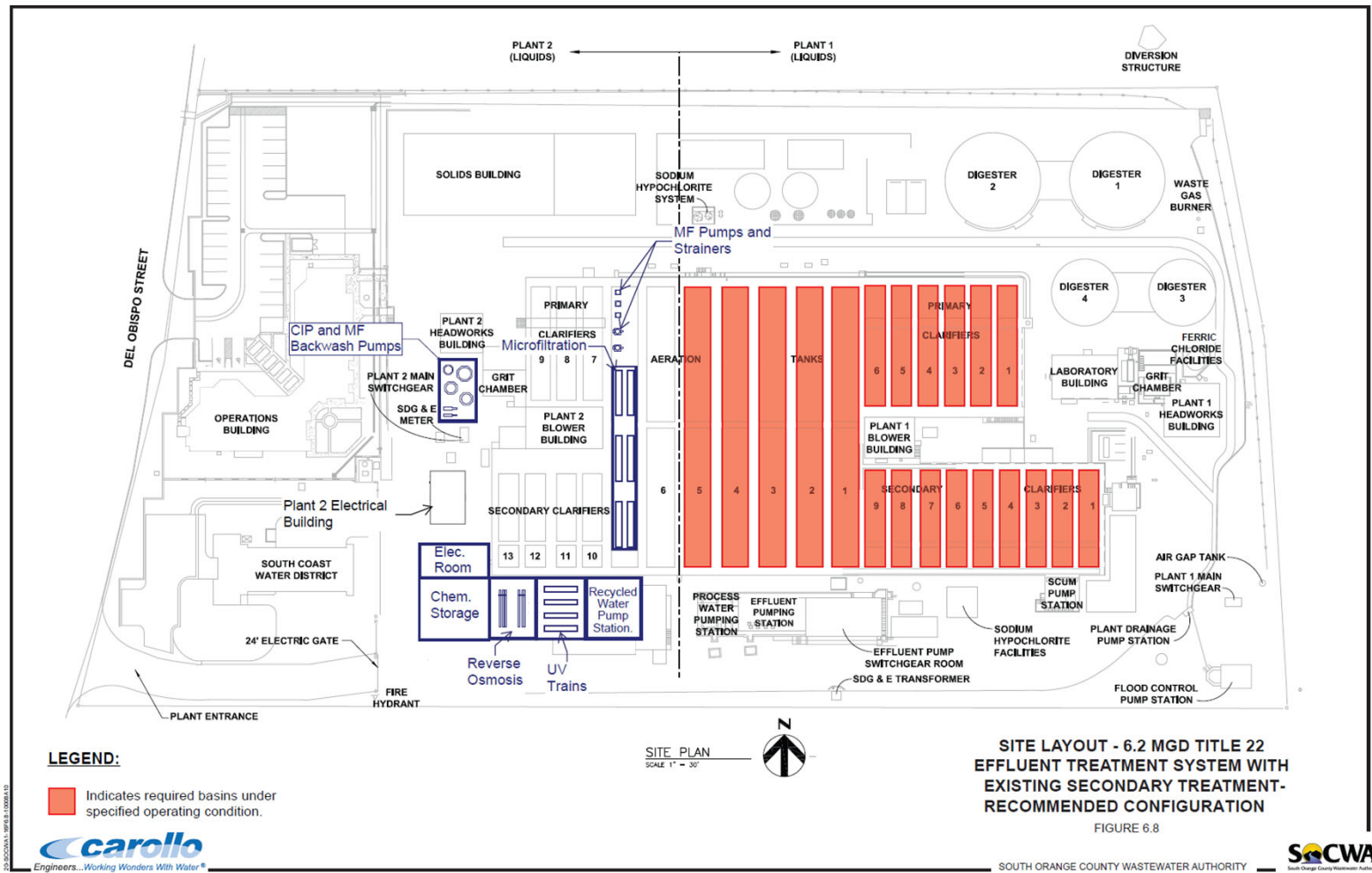
Previous work related to Title 22 effluent has not addressed the high total dissolved solids (TDS) in JBLTP's secondary effluent. Per SOCWA at the Effluent Management Meeting, Plant 1 typically produces secondary effluent with 1,000 mg/L to 1,100 mg/L TDS, and Plant 2 normally produces 2,000 mg/L TDS. 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



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

DRAFT

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
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
	[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

DRAFT

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

4

Engineering Committee Meeting

Meeting Date: April 13, 2023

TO: Engineering Committee

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

SUBJECT: Operations Report

Overview

Verbal update on operations and maintenance activities.

Recommended Action: Information Item.

Agenda Item

5

Engineering Committee Meeting

Meeting Date: April 13, 2023

TO: Engineering Committee

FROM: Amber Baylor, Director of Environmental Compliance

SUBJECT: Dana Point Harbor Project Update [Project Committee 2]

Overview

Staff will provide a verbal update on the Dana Point Harbor Revitalization Project.

Recommended Action: Committee Discussion/Direction/Action

Agenda Item

6

Engineering Committee Meeting

Meeting Date: April 13, 2023

TO: Engineering Committee

FROM: Amber Baylor, Director of Environmental Compliance

SUBJECT: Ranch Filtration Plant NPDES Permitting Update [Project Committee 5]

Overview

Staff will provide a verbal update on the NPDES permitting for the Ranch Filtration Plant.

Recommended Action: Committee Discussion/Direction/Action

Agenda Item

7

Engineering Committee Meeting

Meeting Date: April 13, 2023

TO: Engineering Committee

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 continues to work with the Construction Management team to close out all outstanding items.

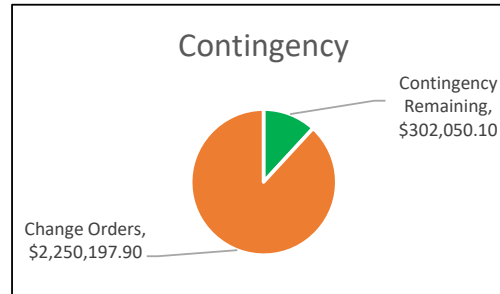
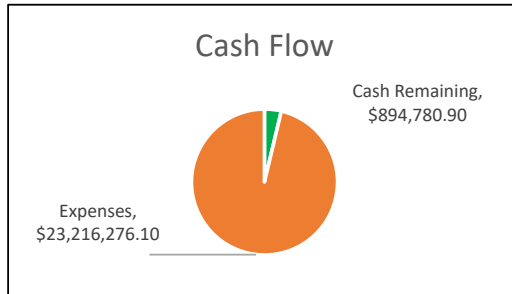
Recommended Action: Information Item.

Project Financial Status

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

Data Last Updated

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

<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>
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

8

Engineering Committee Meeting

Meeting Date: April 13, 2023

TO: Engineering Committee

FROM: David Baranowski, Director of Engineering

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

Overview

At the November 13, 2022, Special Meeting for PC 15, Hazen and Sawyer (Hazen) 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 does not specify a project or potential future project for funding. SOCWA has performed studies that have looked at a wide range of potential projects, including process changes and biosolids handling. Possible projects include:

- Conventional Activated Sludge with Biological Nutrient Removal
- Membrane Bioreactor
- Aerobic Granular Sludge
- AWT upgrade
- Solids handling capabilities

Staff requests feedback from the Committee about the proposal and how to proceed. Funds would need to be budgeted for the next fiscal year.

Recommended Action: Committee Discussion/Direction/Action



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						
		Project Director	Technical Advisors QA/QC	Project Manager	Admin. Support	Total Hours	Labor	Total
		Jones	Robertson	Hulette	Baruda			
		\$325	\$325	\$280	\$130			
							ODC	Total
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		(Estimate for per funding application/Final cost for each application to be approved via email prior to start of Task 2)						
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

9

Engineering Committee Meeting

Meeting Date: April 13, 2023

TO: Engineering Committee

FROM: David Baranowski, Director of Engineering

SUBJECT: Revised Draft Capital Improvement Program Budget for Fiscal Year 2023/2024

Overview

Staff will present the draft Capital Improvement Program budget for fiscal years 2023/2024 and 2024/2025. This is an update to the draft budget presented at the last meeting based on feedback during the meeting and subsequent meetings with members. The revised budget includes the budget for Small Capital projects. The following pages show the individual projects and costs that make up the budget for each Project Committee (PC).

Fiscal Impact

The draft CIP budget is shown in Table 1. This budget includes Large Capital, Non-Capital, and Small Capital projects.

Table 1 – Revised Draft CIP Budget

	FY 23/24	FY 24/25	2-Year Total
Revised Draft CIP Budget	\$12,013,000	\$17,788,000	\$29,801,000
<i>Large Capital Subtotal</i>	<i>9,415,000</i>	<i>15,155,000</i>	<i>24,570,000</i>
<i>Non-Capital Subtotal</i>	<i>585,000</i>	<i>620,000</i>	<i>1,205,000</i>
<i>Small Capital Subtotal</i>	<i>2,013,000</i>	<i>2,013,000</i>	<i>4,026,000</i>

Table 2 shows the allocation of these budgets by Member Agency.

Table 2 – Revised Draft CIP Budget Allocation

Member Agency	FY 23/24	FY 24/25	2-Year Total
City of Laguna Beach	\$1,562,114	\$2,194,003	\$3,756,117
City of San Clemente	41,550	174,510	216,060
Emerald Bay Service District	118,759	161,595	280,355
El Toro Water District	360,773	890,407	1,251,180
Irvine Ranch Water District	114,260	181,240	295,500
Moulton Niguel Water District	4,267,649	7,136,020	11,403,669
South Coast Water District	2,640,866	3,489,748	6,130,614
Santa Margarita Water District	2,907,028	3,560,477	6,467,505
Total	\$12,013,000	\$17,788,000	\$29,801,000

Budget Schedule

The budget is scheduled to be considered for approval at the June 1 Regular Board meeting. The following is a list of key dates remaining for the FY2023-24 CIP review and approval.

- April 18 – Finance Special Committee Meeting (Budget Review Meeting)
- May 16 – Finance Committee Meeting
- May 18 – Board Budget Workshop
- June 1 – Board Meeting (Budget Consideration for Approval)

Recommended Action: Information Item.

PC	Facility	Year 1	Year 2	Total
LARGE CAP		\$9,415,000	\$15,155,000	\$24,570,000
PC-2	JBL	\$4,400,000	\$4,925,000	\$9,325,000
PC-15	CTP	2,925,000	3,805,000	6,730,000
PC-17	RTP	1,115,000	4,275,000	5,390,000
PC-5	SJCOO	250,000	1,000,000	1,250,000
PC-24	ACOO	500,000	1,050,000	1,550,000
PC-21	ETM	225,000	100,000	325,000
NON-CAP		585,000	620,000	1,205,000
SMALL CAP		2,013,000	2,013,000	4,026,000
	TOTAL	\$12,013,000	\$17,788,000	\$29,801,000

Member Agency	Year 1	Year 2	Total
CLB	\$1,562,114	\$2,194,003	\$3,756,117
CSC	41,550	174,510	216,060
EBSB	118,759	161,595	280,355
ETWD	360,773	890,407	1,251,180
IRWD	114,260	181,240	295,500
MNWD	4,267,649	7,136,020	11,403,669
SCWD	2,640,866	3,489,748	6,130,614
SMWD	2,907,028	3,560,477	6,467,505
TOTAL	\$12,013,000	\$17,788,000	\$29,801,000

J.B. Latham Treatment Plant (PC 2)
TOTALS
\$ 9,325,000
\$ 4,400,000
\$ 4,925,000

Existing Project ID	Project Name	Phase(s)	WW Code	Total	FY 2023/24 (Year 1)	FY 2024/25 (Year 2)
ONGOING PROJECTS, CONSTRUCTION PENDING						
3220	Facility Improvements B Liquids	Construction	L	\$ 700,000	\$ 700,000	
3231	Facility Improvements B Common	Construction	C	\$ 200,000	\$ 200,000	
3287	Facility Improvements B Solids	Construction	S	\$ 1,500,000	\$ 1,500,000	
32232C	Administration Building Roofing Reconstruction	Construction	C	\$ -	\$ -	
3252	Electrical System Upgrades	Construction	L	\$ 3,000,000	\$ 1,000,000	\$ 2,000,000
3234	Centrate Piping Reconstruction	Construction	S	\$ 150,000	\$ 150,000	
3216/3222	Energy Building Roof Upgrades	Construction	S	\$ 750,000		\$ 750,000
32231C	Process Water System Evaluation	Planning	C	\$ -		
32234L	Chlorine Contact Basin Isolation Gates	Construction	L	\$ 200,000		\$ 200,000
				\$ -		
2-YEAR BUDGET FORECAST						
	Effluent Pump Station Upgrades	Design	L	\$ 200,000	\$ 200,000	
		Construction	L	\$ 1,250,000		\$ 1,250,000
	Digester Gas and Flare Piping Improvements	Design	S	\$ 150,000	\$ 75,000	\$ 75,000
	Plant 2 Headworks Rehabilitation	Design	L	\$ 400,000	\$ 200,000	\$ 200,000
32231C	Scum Line Replacement	Design	L	\$ 25,000	\$ 25,000	
		Construction	L	\$ 100,000	\$ 100,000	
	Plant 2 Primary Clarifier Condition Assessment	Planning	L	\$ 50,000	\$ 50,000	
	Old Effluent Pump Station Demolition	Design	C	\$ 100,000		\$ 100,000
	Cogen 60k Overhaul	Construction	S	\$ 350,000		\$ 350,000
	SCADA Server Replacement	Construction	C	\$ 200,000	\$ 200,000	
				\$ -		

Coastal Treatment Plant (PC 15)**TOTALS****\$ 6,730,000****\$ 2,925,000****\$ 3,805,000**

Existing Project ID	Project Name	Phase(s)	WW Code	Total	FY 2023/24 (Year 1)	FY 2024/25 (Year 2)
ONGOING PROJECT, CONSTRUCTION PENDING						
35228L	Aeration Diffusers	Construction	L	\$ 1,250,000	\$ 1,250,000	
3525	Personnel Building Improvements	Construction	L	\$ 400,000	\$ 400,000	
35221L	Auxiliary Blower Building Roof	Construction	L	\$ 50,000	\$ 50,000	
2-YEAR BUDGET FORECAST						
3522AL	Drainage Pump Station Rehabilitation	Planning	L	\$ -	\$ -	
		Design	L	\$ 200,000	\$ 200,000	
		Construction	L	\$ 1,500,000		\$ 1,500,000
	Grating Replacement on Aeration/Secondary Deck	Design	L	\$ 50,000	\$ 50,000	
		Construction	L	\$ 200,000		\$ 200,000
	Environmental Mitigation (Export Sludge Force Main)	Design	L	\$ 200,000	\$ 200,000	
		Permitting	L	\$ 100,000	\$ 50,000	\$ 50,000
		Construction	L	\$ 500,000		\$ 500,000
35235L	Foul Air/Odor Scrubber Improvements	Planning	L	\$ -		
		Design	L	\$ 250,000	\$ 100,000	\$ 150,000
		Construction	L	\$ 500,000		\$ 500,000
	West Primary Sludge Skimmers and Launderers/Weirs	Design	L	\$ 150,000	\$ 150,000	
		Construction	L	\$ 500,000		\$ 500,000
	Aeration Blower System Upgrades	Planning	L	\$ -	\$ -	
		Design	L	\$ 200,000	\$ 75,000	\$ 125,000
	AWMA Road Repairs	Construction	L	\$ 400,000	\$ 200,000	\$ 200,000
	Grit Chamber Rehab	Planning	L	\$ 30,000		\$ 30,000
	DAFT Stairs and Catwalk Replacement	Design	L	\$ 25,000		\$ 25,000
	Site Drainage Improvements	Design	L	\$ 25,000		\$ 25,000
	SCADA Server Replacement	Construction	L	\$ 200,000	\$ 200,000	

Regional Treatment Plant (PC 17)
TOTALS
\$ 5,390,000
\$ 1,115,000
\$ 4,275,000

Existing Project ID	Project Name	Phase(s)	WW Code	Total	FY 2023/24 (Year 1)	FY 2024/25 (Year 2)
ONGOING PROJECT, CONSTRUCTION PENDING						
37236S & 3742	MCC Replacements/Power System Improvements	Design	C	\$ 400,000	\$ 200,000	\$ 200,000
	Aeration Blower Study	Planning	L	\$ -	\$ -	
				\$ -		
2-YEAR BUDGET FORECAST						
	Digester Gas System Improvements	Design	S	\$ 200,000	\$ 200,000	
		Construction	S	\$ 500,000		\$ 500,000
	Digester 1 Piping Replacement	Design	S	\$ 250,000	\$ 250,000	
		Construction	S	\$ 1,500,000		\$ 1,500,000
	Grit and Primary Grating and Gate Replacement	Design	L	\$ 150,000	\$ 150,000	
		Construction	L	\$ 500,000		\$ 500,000
	Aeration Influent/Effluent Gate Replacements	Design	L	\$ 100,000	\$ 100,000	
		Construction	L	\$ 500,000		\$ 500,000
	Effluent Pond and Chlorine Contact Tank Gate Replacements	Design	L	\$ 100,000		\$ 100,000
	Flare Improvements	Planning	S	\$ 50,000		\$ 50,000
	Ferric Chloride PS Replacement	Design	L	\$ 75,000		\$ 75,000
	RAS Wet Well Gate Replacement	Design	L	\$ 50,000		\$ 50,000
	SET Piping Reconfiguration	Design	S	\$ 50,000		\$ 50,000
	Odor Scrubber 1 Replacement	Planning	S	\$ 15,000	\$ 15,000	
		Design	S	\$ 300,000		\$ 300,000
3750-000	Dewatering Room Floor Sealing	Design	S	\$ -	\$ -	
		Construction	S	\$ 100,000		\$ 100,000
	Cogen 60k Overhaul	Construction	S	\$ 350,000		\$ 350,000
	SCADA Server Replacement	Construction	C	\$ 200,000	\$ 200,000	

San Juan Creek Ocean Outfall (PC 5)

TOTALS

\$ 1,250,000

\$ 250,000

\$ 1,000,000

Existing Project ID	Project Name	Phase(s)	WW Code	Total	FY 2023/24 (Year 1)	FY 2024/25 (Year 2)
2-YEAR BUDGET FORECAST						
New	SJCOO Outfall Ballast Repairs	Design	SJCOO	\$ 250,000	\$ 250,000	
		Construction	SJCOO	\$ 1,000,000		\$ 1,000,000
				\$ -		

Aliso Creek Ocean Outfall (PC 24)
TOTALS
\$ 1,550,000
\$ 500,000
\$ 1,050,000

Existing Project ID	Project Name	Phase(s)	WW Code	Total	FY 2023/24 (Year 1)	FY 2024/25 (Year 2)
2-YEAR BUDGET FORECAST						
3480	ACOO Internal Seal Replacement	Construction	ACOO	\$ 250,000	\$ 250,000	
New	ACOO Outfall Ballast Repairs	Design	ACOO	\$ 250,000	\$ 250,000	
		Construction	ACOO	\$ 1,000,000		\$ 1,000,000
	ACOO Sample Station and Flow Meter Upgrade	Planning	ACOO	\$ 50,000		\$ 50,000

Effluent Transmission Main (PC 21)**TOTALS****\$ 325,000****\$ 225,000****\$ 100,000**

Existing Project ID	Project Name	Phase(s)	WW Code	Total	FY 2023/24 (Year 1)	FY 2024/25 (Year 2)
ONGOING PROJECT, CONSTRUCTION PENDING						
3101	Trail Bridge Crossing	Planning	ETM-D	\$ 150,000	\$ 150,000	
3107 & 3108	ETM Air Valve Replacements	Design	ETM	\$ 75,000	\$ 75,000	
3107 & 3108	ETM Air Valve Replacements	Construction	ETM	\$ 100,000	\$ -	\$ 100,000

Non-Capital Projects (All PCs)
TOTALS
\$ 1,205,000
\$ 585,000
\$ 620,000

Existing Project ID	Project Name	Phase(s)	WW Code	Total	FY 2023/24 (Year 1)	FY 2024/25 (Year 2)
MULTI-PLANT						
	Asset Management Improvements	Planning	ALL	\$ 150,000	\$ 75,000	\$ 75,000
	Fall Protection Assessment Update	Planning	ALL	\$ 50,000	\$ 50,000	
	Engineering Team Staff Augmentation *	Planning	ALL	\$ 175,000	\$ 175,000	
	Ten Year Plan Update	Planning	ALL	\$ 250,000		\$ 250,000
				\$ -		
JBL						
	Influent Flow Metering Study	Planning	JBL-L	\$ 50,000		\$ 50,000
	Safety Improvements	Design/Construction	JBL-C	\$ 20,000	\$ 10,000	\$ 10,000
	Safety Improvements	Design/Construction	JBL-L	\$ 20,000	\$ 10,000	\$ 10,000
	Safety Improvements	Design/Construction	JBL-S	\$ 20,000	\$ 10,000	\$ 10,000
				\$ -		
RTP						
	Arc Flash 5-year Update	Planning	RTP-C	\$ 15,000	\$ 15,000	
	Laboratory Upgrade Study	Planning	RTP-C	\$ 200,000	\$ 200,000	
	Safety Improvements	Design/Construction	RTP-C	\$ 20,000	\$ 10,000	\$ 10,000
	Safety Improvements	Design/Construction	RTP-L	\$ 20,000	\$ 10,000	\$ 10,000
	Safety Improvements	Design/Construction	RTP-S	\$ 20,000	\$ 10,000	\$ 10,000
	BioSpark Gas Conditioning System Performance Study	Planning	RTP-S	\$ 75,000		\$ 75,000
	Influent Flow Metering Study	Planning	RTP-L	\$ 50,000		\$ 50,000
				\$ -		
CTP						
	Safety Improvements	Design/Construction	CTP-L	\$ 20,000	\$ 10,000	\$ 10,000
				\$ -		
SJCOO						
	SJCOO Sample Station Safety Evaluation	Planning	SJCOO	\$ 50,000		\$ 50,000
				\$ -		

* Cost will be distributed based on projects assigned