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

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

June 6, 2024
8:30 a.m.

PHYSICAL MEETING LOCATION:
South Orange County Wastewater Authority
34156 Del Obispo Street
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 UNMUTE 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 UNMUTE 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
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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.

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5. CONSENT CALENDAR

A. Minutes of Board of Directors.....1

1. Board of Directors Meeting of May 2, 2024
2. Board of Directors Budget Workshop Meeting of May 16, 2024

ACTION The Board will be requested to approve the subject Minutes.

B. Minutes of PC 17 Committee 11

- PC 17 Committee Meeting of April 24, 2024

ACTION The PC 17 Board will be requested to approve the subject Minutes, and the Board will be requested to receive and file the subject Minutes.

C. Minutes of PC 2 Committee 12

- PC 2 Committee Meeting of May 15, 2024

ACTION The PC 2 Board will be requested to approve the subject Minutes, and the Board will be requested to receive and file the subject Minutes.

D. Minutes of Finance Committee..... 14

- Finance Committee Meeting of March 19, 2024

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

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- E. April 2024 Operations Report17
- 1. Monthly Operational Report
 - 2. SOCWA Ocean Outfall Discharges by Agency
 - 3. Beach Ocean Monitoring Report
 - 4. Recycled Water Report
 - 5. Pretreatment Report (April/May)
- ACTION The Board will be requested to receive and file subject reports as submitted.
- F. Capital Improvement Program Status Report (May)54
- ACTION Information item.
- G. Capital Improvement Construction Projects Progress and Change Order Report (May) [Project Committees 2, 5, 15 and 24]57
- ACTION Information item.
- H. House of Representatives (H.R.) 7944 Support Letter61
- ACTION Staff recommends that the Board of Directors authorize SOCWA's Board Chair to send the H.R. 7944 CASA Delegation Letter to the four (4) U.S. House of Representatives from California listed above.
- I. Blower #8 Overhaul at JBL [Project Committee 2]65
- ACTION Staff recommends that the PC 2 Board of Directors i) authorize the Acting General Manager/Director of Operations to contract with AERZEN USA Corporation for the overhaul of Blower #8 at JBL, at the cost of \$52,883.70, plus shipping costs, fees, and additional tax to be determined at the time the units are shipped, and ii) approve a \$5,000 project contingency for unknown conditions discovered during the teardown of the Blower.
- J. Resolution No. 2024-04: A Resolution of the Board of Directors of the South Orange County Wastewater Authority Approving New Employee Salary Ranges to the July 1, 2024 to June 30, 2025, Memorandum of Understanding ("MOU") between the South Orange County Wastewater Authority and the SOCWA Employee Association67
- ACTION Staff recommends that the Board of Directors Adopt Resolution No. 2024-04: A Resolution of the Board of Directors of the South Orange County Wastewater Authority (SOCWA) Approving New Employee Salary Ranges to the July 1, 2024, to June 30, 2025, Memorandum of Understanding ("MOU") between the South Orange County Wastewater Authority and the SOCWA Employee Association.

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- K. Resolution No. 2024-05: A Resolution of the Board of Directors of the South Orange County Wastewater Authority Approving New Employee Salary Ranges and the South Orange County Wastewater Authority Employee Manual for All SOCWA Employees94

ACTION Staff recommends that the Board of Directors Adopt Resolution No. 2024-05: A Resolution of the Board of Directors of the South Orange County Wastewater Authority (SOCWA) Approving New Employee Salary Ranges and the South Orange County Wastewater Authority Employee Manual for All SOCWA Employees.

6. ENGINEERING MATTERS

- A. Contract Award for Regional Treatment Plant (RTP) Primary and Aeration Areas Gratings and Gates Replacement Project [Project Committee 17] 226

ACTION Staff recommends that the PC 17 Board i) approve the contract to HDR for a total not to exceed \$232,330 and ii) approve a 5% contingency of \$11,617 for the RTP Primary and Aeration Areas Grating and Gates Project.

- B. Contract Award for J.B. Latham Treatment Plant (JBL) 2 Headworks Upgrade Design [Project Committee 2]330

ACTION Staff recommends that the PC 2 Board i) increase the project budget by \$30,000 for a total revised budget of \$230,000 and ii) award the contract to Dudek for a total not to exceed \$ 208,100 for the JBL Plant 2 Headworks Upgrades Project.

7. GENERAL MANAGER'S REPORT

- A. Selection of Officers for the Board of Directors - Fiscal Year (FY) 2024-25 418

ACTION Staff recommends that the SOCWA Board of Directors elect/appoint Officers to service the Authority during FY 2024-25.

- B. Approval of FY 2024-25 Budget

As needed, the Acting General Counsel will cover the vote requirements for each area at the meeting immediately prior to the motion and vote on each item.

ACTION: The Finance Committee recommends that the Board of Directors consider the FY 2024-25 Budget as proposed.

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The FY 2024-25 Budget includes General Fund Expenses, Operating Expenses, and Capital Expenditures as proposed.

1. General Fund Budget

Approval of the FY 2024-25 General Fund Budget. Approval of the General Fund Budget authorizes the Acting General Manager to expend up to and not more than the total budget funds per the purchasing and/or emergency services policy; funding in excess of the authorized budget requires additional Board action; the Board approves the allocation of expenses with approval of the Budget.

2. Project Committee Operating Budgets

- a. Approval of the FY 2024-25 Administration Budget (inclusive of project committee administration expenses, residual engineering, and IT). Approval of the FY 2024-25 Administration Budget authorizes the Acting General Manager to expend up to and not more than the total budget funds per the purchasing and/or emergency services policy; funding in excess of the authorized budget requires additional Board action; the Board approves the allocation of expenses with approval of the Budget.
- b. Approval of the Project Committee ("PC") 2 Operations and Maintenance Budget (inclusive of Environmental Compliance, Safety, IT, UAL and OPEB) as proposed and PC 2 Capital Expenditures Budget (inclusive of large capital, non-capital/misc. engineering and small capital). Approval of the Project Committee ("PC") 2 Operations and Maintenance Budget and PC 2 Capital Expenditures Budget authorizes the Acting General Manager to expend up to and not more than the total budget funds per the purchasing and/or emergency services policy; funding in excess of the authorized budget requires additional Board action; the Board approves the allocation of expenses with approval of the Budget.
- c. Approval of the Project Committee ("PC") 17 Operations and Maintenance Budget (inclusive of Environmental Compliance, Safety, IT, UAL, and OPEB) and PC 17 Capital Expenditures Budget (inclusive of large capital, non-capital/misc. engineering and small capital). Approval of the Project Committee ("PC") 17 Operations and Maintenance Budget and PC 17 Capital Expenditures Budget authorizes the Acting General Manager to expend up to and not more than the total budget funds per the purchasing and/or emergency services policy; funding in excess of the authorized budget requires additional Board action; the Board approves the allocation of expenses with approval of the Budget.
- d. Approval of the Project Committee ("PC") 15 Operations and Maintenance Budget (inclusive of Environmental Compliance, Safety, IT, UAL, and OPEB) and PC 15 Capital Expenditures Budget (inclusive of large capital, non-capital/misc. engineering and small capital). Approval of the Project Committee ("PC") 15 Operations and Maintenance Budget and PC 15 Capital Expenditures Budget authorizes the Acting General Manager to expend up to and not more

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than the total budget funds per the purchasing and/or emergency services policy; funding in excess of the authorized budget requires additional Board action; the Board approves the allocation of expenses with approval of the Budget.

- e. Approval of the Project Committee ("PC") 5 Operations and Maintenance Budget (inclusive of Environmental Compliance, Safety, IT, UAL, and OPEB) and PC 5 Capital Expenditures Budget (inclusive of large capital and non-capital/misc. engineering). Approval of the Project Committee ("PC") 5 Operations and Maintenance Budget and PC 5 Capital Expenditures Budget authorizes the Acting General Manager to expend up to and not more than the total budget funds per the purchasing and/or emergency services policy; funding in excess of the authorized budget requires additional Board action; the Board approves the allocation of expenses with approval of the Budget.
- f. Approval of the Project Committee ("PC") 24 Operations and Maintenance Budget (inclusive of Environmental Compliance, Safety, IT, UAL, and OPEB) and PC 24 Capital Expenditures Budget (inclusive of large capital and non-capital/misc. engineering). Approval of the Project Committee ("PC") 24 Operations and Maintenance Budget and PC 24 Capital Expenditures Budget authorizes the Acting General Manager to expend up to and not more than the total budget funds per the purchasing and/or emergency services policy; funding in excess of the authorized budget requires additional Board action; the Board approves the allocation of expenses with approval of the Budget.
- g. Approval of the Project Committee ("PC") 21 (ETM) Operations and Maintenance Budget, UAL and OPEB, and PC 21 Capital Expenditures Budget (inclusive of large capital and non-capital/misc. engineering). Approval of the Project Committee ("PC") 21 (ETM) Operations and Maintenance Budget and PC 21 Capital Expenditures Budget authorizes the Acting General Manager to expend up to and not more than the total budget funds per the purchasing and/or emergency services policy; funding in excess of the authorized budget requires additional Board action; the Board approves the allocation of expenses with approval of the Budget.
- h. Approval of the Project Committee ("PC") 8 (Pretreatment) Operations and Maintenance Budget (inclusive of Environmental Compliance, Safety, UAL and OPEB). Approval of the Project Committee ("PC") 8 (Pretreatment) Operations and Maintenance Budget authorizes the Acting General Manager to expend up to and not more than the total budget funds per the purchasing and/or emergency services policy; funding in excess of the authorized budget requires additional Board action; the Board approves the allocation of expenses with approval of the Budget.
- i. Approval of the Project Committee ("PC") 2SO (PC12) Operations and Maintenance Budget (inclusive of Environmental Compliance, Safety, IT, UAL and OPEB). Approval of the Project Committee ("PC") 2SO (PC12) Operations and Maintenance Budget authorizes the Acting General Manager to expend up

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to and not more than the total budget funds per the purchasing and/or emergency services policy; funding in excess of the authorized budget requires additional Board action. Authorization includes the redistribution of the costs of PC 2SO (PC 12) among the member agencies to exclude El Toro Water District); the Board approves the allocation of expenses with approval of the Budget.

- j. The Board directs staff to prepare and distribute a final printed budget consistent with any additional changes presented and approved at the June 6, 2024, meeting.

C. FY 2023-24 Budget Update and Proposed Budget Amendments
[Project Committees 15 and 17].....419

ACTION Staff recommends that the Board of Directors i) approve a Budget amendment totaling \$65,000 for Project Committee 15 (CTP), and ii) approve a Budget amendment totaling \$290,000 for Project Committee 17 (RTP).

D. Discussion on the SCWD/SMWD Proposal Framework.....

- SCWD Proposal March 7, 2024 - PROPOSAL TO TRANSITION THE REGIONAL TREATMENT PLANT (RTP) TO MOULTON NIGUEL WATER DISTRICT (MNWD) & FACILITATE MNWD'S WITHDRAWAL FROM SOCWA [PC 2, 5, 8, 12, 15, 17, 21, 24]
- SMWD/SCWD Update [PC 2]

ACTION Board Discussion/Direction and Action.

E. FY 2023-24 Administration and General Fund Budget Update for Legal Expenses to Review the Draft MNWD Exit Agreements.....423

ACTION Staff recommends that the Board of Directors approve an amendment to the Administration Budget totaling \$15,000 for additional legal expenses to review the draft MNWD Exit Agreements..

F. Establishment of PC 10 Budgets for Legal Expenses to Prepare Quitclaim Documents to Transfer PC 10 Assets to the City of San Clemente in FY2023-24 and FY2024-25 [Project Committee 10].....424

ACTION Staff recommends that the PC10 Board establish budgets of \$5,000 for FY2023-24 and \$2,000 for FY2024-25 for legal expenses to prepare Asset Transfer Agreement documents to transfer PC10 assets to the City of San Clemente.

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- G. Resolution No. 2024-06: A Resolution of the Board of Directors of the South Orange County Wastewater Authority Re-Establishing Dates for the Regular Meetings of the Board of Directors July and December Board Meeting Dates.425

ACTION Staff recommends that the Board of Directors adopt Resolution 2024-06, A Resolution of the Board of Directors of the South Orange County Wastewater Authority Re-establishing Dates for the Regular Meetings of the Board of Directors, thereby changing the regular July and December Board Meeting Dates.

- H. General Counsel's Update.....
- JPA Revision Process (Standing item)
 - PC 10 Exit Agreement

ACTION Board Discussion/Direction and Action.

- I. Acting General Manager's Report430

ACTION Board Discussion/Direction and Action.

- J. Upcoming Meetings Schedule:
- June 6, 2024 – Board of Directors Regular Meeting
 - June 13, 2024 – Engineering Committee Meeting
 - June 18, 2024 – Finance Committee Meeting
 - July 11, 2024 – Board of Directors Meeting

ACTION Information Item.

K. CLOSED SESSION

- A. Closed Session Pursuant to Government Code § 54957.
- Public Employee Performance Evaluation
Title: Acting General Manager/Director of Operations

B. Report Out of Closed Session

L. OTHER MATTERS

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

M. ADJOURNMENT

THE NEXT SOCWA BOARD MEETING
July 11, 2024

**MINUTES OF REGULAR MEETING
OF THE
SOUTH ORANGE COUNTY WASTEWATER AUTHORITY
Board of Directors**

May 2, 2024

DRAFT

The Regular Meeting of the South Orange County Wastewater Authority (SOCWA) Board of Directors Meeting was held in person and via teleconference on May 2, 2024, at 8:30 a.m. at their Administrative Offices located at 34156 Del Obispo Street, Dana Point, California. The following members of the Board of Directors were present:

MIKE DUNBAR	Emerald Bay Service District	Director
KATHRYN FRESHLEY	El Toro Water District	Director
BOB WHALEN	City of Laguna Beach	Director
FRANK URY	Santa Margarita Water District	Director
MATT COLLINGS	Moulton Niguel Water District	Director
SCOTT GOLDMAN	South Coast Water District	Director
DAVE REBENS DORF	City of San Clemente	Director [arrived @ 8:40 a.m.]

Staff Present:

JIM BURROR	Acting General Manager/Director of Operations
AMBER BOONE	Director of Environmental Compliance
MARY CAREY	Finance Controller
DINA ASH	HR Administrator
RONI GRANT	Associate Engineer
KONSTANTIN SHILKOV	Senior Accountant
JACK BECK	Staff Accountant
ANNA SUTHERLAND	Accounts Payable
JEANETTE COTINOLA	Procurement/Contracts Manager
MATT CLARK	IT Administrator
DANITA HIRSH	Executive Assistant

Also Present:

ADRIANA OCHOA	Procopio Law	DON FROELICH	Moulton Niguel Water District
BRAD NEUFELD	Varner & Brandt LLP	ROD WOODS	Moulton Niguel Water District
RICK SHINTAKU	South Coast Water District	KARI VOZENILEK	Kidman Gagen Law, LLP
ROGER BUTOW	Clean Water Now (CWN)	DENNIS CAFFERTY	El Toro Water District
DUANE CAVE	Moulton Niguel Water District	KELSEY DECASAS	Moulton Niguel Water District
DAVID LARSEN	Moulton Niguel Water District	MIKE GASKINS	El Toro Water District
DREW ATWATER	Moulton Niguel Water District		

1. CALL TO ORDER

Chairman Collings called the meeting to order at 8:30 a.m.

2. PLEDGE OF ALLEGIANCE – Director Bob Whalen

3. ORAL COMMUNICATIONS

Public Speaker: Sandra Jacobs – Santa Margarita Water District

4. APPROVAL OF BOARD MEMBER REQUEST FOR REMOTE PARTICIPATION

None.

5. CONSENT CALENDAR

ACTION TAKEN

A motion was made by Director Goldman and seconded by Director Dunbar to approve the Consent Calendar agenda items 5A through 5J as submitted.

Motion carried:	Aye 6, Nay 0, Abstained 0, Absent 1
Director Dunbar	Aye
Director Freshley	Aye
Director Collings	Aye
Director Whalen	Aye
Director Ury	Aye
Director Goldman	Aye
Director Rebensdorf	Absent

(5A thru 5J)

- A. Minutes of Board of Directors Meeting for April 4, 2024
- B. Minutes of PC 2 Committee Meeting for April 10, 2024
- C. Minutes of Engineering Committee Meeting for March 14, 2024
- D. Cash Disbursements for the Month of February/March 2024 & Financial Reports for the Month of March 2024
Approved Action: The Board of Directors (i) receive and file the March 2024 Financial Reports and (ii) ratify the February 2024 disbursement for the period from February 1, 2024, through February 29, 2024, totaling \$2,363,742, and (iii) ratify the March 2024 disbursement for the period from March 1, 2024, through March 31, 2024, totaling \$1,765,334.
- E. March 2024 Operations Report
Approved Action: Information Item; received and filed.
- F. Capital Improvement Program Status Report (April)
Approved Action: Information Item.
- G. Capital Improvement Construction Projects and Change Order Report (April) [Project Committees 2, 5, 15 & 24]
Approved Action: Information Item.
- H. J.B. Latham Treatment Plant (JBL) Package B Construction Management Post-Construction Contract [Project Committee 2]
Approved Action: The PC 2 Board approved Contract amendment No. 3 to Butier Engineers in the amount of \$69,264 for a revised contract total of \$1,970,241 for the JBL Package B Construction Management Contract for post-construction work.
- I. Sodium Hypochlorite Contract Extension [Project Committees 2, 15, and 17]
Approved Action: The Board of Directors authorized the Acting General Manager/Director of Operations to exercise the third of three renewals for Bleach, increasing the third renewal to a twelve (12) month duration with Olin, Inc. at the current pricing, extending the term to May 31, 2025.
- J. Sodium Hydroxide Contract Extension [Project Committees 2, 15, and 17]
Approved Action: The Board of Directors authorized the Acting General Manager/Director of Operations to exercise the third of three renewals for increasing the third renewal to a twelve (12) month duration with Northstar Chemical, Inc. (a DBA of Pacific Star Chemical LLC) at the current pricing, extending the term to May 31, 2025.

6. ENGINEERING MATTERS

- A. Contract Award for Regional Treatment Plant (RTP) Flare System Upgrades
[Project Committee 17]

ACTION TAKEN

A motion was made by Director Collings and seconded by Director Dunbar to approve a contract to SCS/RMC for a total not to exceed \$74,470 and ii) approve a 20% contingency of \$14,894 for the RTP Flare System Upgrades Project.

Motion carried:	Aye 5, Nay 0, Abstained 0, Absent 0
	Director Dunbar Aye
	Director Freshley Aye
	Director Collings Aye
	Director Whalen Aye
	Director Goldman Aye

7. GENERAL MANAGER'S REPORT

- A. Appointment of Nominating Committee for Selection of Officers for the Board of Directors For Fiscal Year (FY) 2024-25

ACTION TAKEN

An open discussion ensued, and the decision was made to forego appointing a Nominating Committee and table the agenda item until the Board of Directors Regular Meeting in June, at which time the members of the Board would select Officers for the Fiscal Year 2024-25.

- B. J.B. Latham Treatment Plant (JBL) Overhaul Centrifuge #3 [Project Committee 2]

ACTION TAKEN

A motion was made by Director Goldman and seconded by Director Ury to award Change Order No. 1 in the amount of \$29,599.00 to Andrtiz, Inc. for a total contract of \$86,754.00, plus actual shipping costs, fees, and tax to be determined at the time of shipping for the overhaul of Centrifuge #3 at JBL.

Motion carried:	Aye 3, Nay 0, Abstained 0, Absent 0
	Director Collings Aye
	Director Ury Aye
	Director Goldman Aye

- C. Contract Award for J.B. Latham Treatment Plant, Coastal Treatment Plant, and Regional Treatment Plant SCADA Server Upgrades [Project Committees 2, 15, and 17]

ACTION TAKEN

An open discussion ensued, and the decision was made to table the agenda item until the Board of Directors Regular Meeting in June or July, allowing staff to obtain additional competitive proposals.

D. J.B. Latham (JBL), Cogen Engine Controller Panel Upgrade and Installation
[Project Committee 2]

ACTION TAKEN

A motion was made by Director Ury and seconded by Director Goldman to award a contract to Northeastern/Western Energy in the amount of \$47,047.86, plus actual shipping costs, fees, and tax to be determined at the time of shipping for the purchase and installation of a Di.ane XT4 Controller, and ii) establish a project contingency of \$5.000.

Motion carried:	Aye 3, Nay 0, Abstained 0, Absent 0
	Director Collings Aye
	Director Ury Aye
	Director Goldman Aye

E. Contract Award to Polydyne, Inc. for Polymer [Project Committees 2, 15 & 17]

ACTION TAKEN

A motion was made by Director Whalen and seconded by Director Dunbar to award a contract to Polydyne, Inc. for Polymer, at the rates shown above for a 1-year term plus applicable fees and taxes, with up to four (4) annual renewals and ii) authorize the General Manager to initiate the subsequent renewals with an increase of 10% or less.

Motion carried:	Aye 6, Nay 0, Abstained 0, Absent 0
	Director Dunbar Aye
	Director Freshley Aye
	Director Collings Aye
	Director Whalen Aye
	Director Ury Aye
	Director Goldman Aye

F. Discussion on the SCWD/SMWD Proposal Framework

- PC 15 Update carryover from October 24 Board Meeting
- SCWD Proposal March 7, 2024 - PROPOSAL TO TRANSITION THE REGIONAL TREATMENT PLANT (RTP) TO MOULTON NIGUEL WATER DISTRICT (MNWD) & FACILITATE MNWD'S WITHDRAWAL FROM SOCWA
- SMWD/SCWD Update [PC 2]

Director Collings gave a brief update on the events of the Project Committee 17 Joint Member meeting that occurred on May 1, 2024, with the City of Laguna Beach, Emerald Bay Service District, El Toro Water District, Moulton Niguel Water District, and South Coast Water District. An open discussion ensued.

This was an information item; no actions were taken.

G. General Counsel's Updates

Ms. Adriana Ochoa, General Counsel, reported on 2024 legislative updates affecting the water and wastewater industry, which were discussed at the CASA Attorneys Committee meeting she recently attended. Her report included summaries of the following bills: SB903 relating to PFAS, SB1210 which primarily affects Municipal Utility Districts but could affect the water and wastewater industries down the road, AB2257 which is an ACWA Bill relating to property-related water and sewer fees and assessments, SB1072 which is a proposed bill that would preclude refunds under Proposition 218, AB817 is a Brown Act Bill relating to teleconferencing allowing for subsidiary bodies to conduct meetings virtually, AB 2302 is a proposed bill that addresses the number of meetings you can attend remotely based on the number of meetings held per month, and AB 2715 would authorize the use of law enforcement for cybersecurity threats. Finally, Ms. Ochoa advised the Board that the EPA designated PFAS/PFOA as hazardous substances under CERCLA, which will become effective 60 days after publication in the Federal Register. An open discussion ensued.

This was an information item; no action was taken.

H. Acting General Manager's Report

Mr. Jim Burror, Acting General Manager/Director of Operations, reported on the Ocean Outfall Ballast Repairs, stating the project would be completed by the end of the following week. He also stated proposals for the Laboratory Rehabilitation project, which affects all member agencies. Staff will propose alternative ways of allocating costs for consideration on the project in place of the standard agreement cost allocations. An open discussion ensued.

Ms. Amber Boone, Director of Environmental Compliance, gave an update on the Salt Nutrient Management Plan, noting the 30-day public comment period ends on May 6, 2024. She thanked Clean Water SoCal (formerly SCAP) and Mr. Roger Butow of Clean Water Now for their continued support. An open discussion ensued.

Public Speaker: Roger Butow – Clean Water Now (CWN)

This was an information item; no action was taken.

I. Upcoming Meetings Schedule:

- May 2, 2024 – Board of Directors Regular Meeting
- May 9, 2024 – Engineering Committee Meeting
- May 14, 2024 – Executive Committee Meeting - Canceled
- May 16, 2024 – Board of Directors Budget Workshop Meeting
- May 21, 2024 – Finance Committee Meeting
- June 6, 2024 – Board of Directors Regular Meeting

Mr. Burror stated an additional meeting was scheduled for May 15, at 10:30 a.m. for a Project Committee 2 J.B. Latham Plant Tour, and Director Collings stated a Board of Directors Closed Session meeting was also added to the schedule for June 3, 2024, at 1:00 p.m. Both meetings were scheduled after the agenda had been posted.

This was an information item; no action was taken.

The Board of Directors convened to Closed Session at 9:31 a.m.
The Board of Directors reconvened to the Open Session at 10:12 a.m.

8. CLOSED SESSION

- A. A Closed Session Conference was held with Legal Counsel on an Anticipated Litigation (Gov. Code 54956.9(d)(2)) – One potential matter.
- B. A Closed Session Conference was held with Legal Counsel on an Existing Litigation (Gov. Code 54956.9(d)(1)) – *CSI Electrical Contractors, Inc. v. Olsson Construction, Inc., et al.*
 - Orange County Superior Court Case No. 30-2024-01379217-CU-CO-CJC
- C. A Closed Session Conference was held with Labor Negotiator (Gov. Code 54957.6)
 - Agency Designated Representatives:
 - Brad Neufeld of Varner & Brandt
 - Jim Burror, Acting General Manager/Director of Operations
- D. Report Out of Closed Session – Chairman Collings stated there were no reportable actions.

9. OTHER MATTERS

None.

ADJOURNMENT

There being no further business, Director Collings adjourned the meeting at 10:13 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 Board of Directors on May 2, 2024, and approved by the Board of Directors of the South Orange County Wastewater Authority.

Danita Hirsh, Assistant Secretary
SOUTH ORANGE COUNTY WASTEWATER AUTHORITY

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

**Board of Directors
Budget Workshop**

DRAFT

May 16, 2024

The Special Meeting of the South Orange County Wastewater Authority (SOCWA) Board of Directors Budget Workshop Meeting was held in person and via teleconference on May 16, 2024, at 8:30 a.m. at their Administrative Offices located at 34156 Del Obispo Street, Dana Point, California. The following members of the Board of Directors were present:

MIKE DUNBAR	Emerald Bay Service District	Director
KATHRYN FRESHLEY	El Toro Water District	Director
GAVIN CURRAN	City of Laguna Beach	Alternate Director
FRANK URY	Santa Margarita Water District	Director
MATT COLLINGS	Moulton Niguel Water District	Director
SCOTT GOLDMAN	South Coast Water District	Director
DAVE REBENDSOLF	City of San Clemente	Director [arrived @ 8:34 a.m.]

Staff Present:

JIM BURROR	Acting General Manager/Director of Operations
AMBER BOONE	Director of Environmental Compliance
MARY CAREY	Finance Controller
DINA ASH	HR Administrator
RONI GRANT	Associate Engineer
KONSTANTIN SHILKOV	Senior Accountant
JACK BECK	Staff Accountant
ANNA SUTHERLAND	Accounts Payable
MATT CLARK	IT Administrator
DANITA HIRSH	Executive Assistant

Also Present:

ADRIANA OCHOA	Procopio Law		
BRAD NEUFELD	Varner & Brandt LLP	ROD WOODS	Moulton Niguel Water District
RICK SHINTAKU	South Coast Water District	MARC SERNA	South Coast Water District
JENNY LEISZ	South Coast Water District	DENNIS CAFFERTY	El Toro Water District
SHERRY WANNINGER	Moulton Niguel Water District	KELSEY DECASAS	Moulton Niguel Water District
JOE MULLER	South Coast Water District	DAVID LARSEN	Moulton Niguel Water District

1. CALL TO ORDER

Chairman Collings called the meeting to order at 8:31 a.m.

2. PLEDGE OF ALLEGIANCE – Director Kathryn Freshley

3. ORAL COMMUNICATIONS

None.

4. APPROVAL OF BOARD MEMBER REQUEST FOR REMOTE PARTICIPATION

None.

The Board of Directors convened to Closed Session at 8:33 a.m.

5. CLOSED SESSION

- A. A Closed Session Conference was held with the Labor Negotiator pursuant to Gov. Code 54957.6.
- Agency Designated Representatives:
 - Brad Neufeld of Varner & Brandt
 - Jim Burror, Acting General Manager/Director of Operations

The Board of Directors reconvened to the Open Session at 10:12 a.m.

- B. Report Out of Closed Session – Director Collings reported that the Board of Directors voted unanimously to approve a Memorandum of Understanding (MOU) with the SOCWA Employee Association from July 1, 2024 to June 30, 2025.

ACTION TAKEN

A motion was made by Director Dunbar and seconded by Director Ury to approve a Memorandum of Understanding with the SOCWA Employee Association from July 1, 2024, to June 30, 2025.

Motion carried:	Aye 7, Nay 0, Abstained 0, Absent 0
Director Dunbar	Aye
Director Freshley	Aye
Director Collings	Aye
Director Curran	Aye
Director Ury	Aye
Director Goldman	Aye
Director Rebensdorf	Aye

6. BUDGET WORKSHOP – Presentation of FY 2024-25 Budget

Mr. Jim Burror, Acting General Manager/Director of Operations, stated that staff had been working on the preparation of the budget since February of this year. He noted that the basis for the member agencies' presentation relates to the anticipated flows and solids coming to the treatment plants. Budget updates were presented to the Finance and Engineering Committee, and their feedback and input were solicited in preparation for the presentation. Mr. Burror introduced Ms. Mary Carey, Finance Controller, to begin the presentation. An open discussion ensued.

Ms. Carey presented the proposed SOCWA budget for FY 2024-25 with the updated costs from the approved MOU. She explained payroll increases for employees and admin, with potential rate changes.

- In comparison to SOCWA's FY 2023-24 Budget, the FY 2024-25 Budget increased by \$1.6 million or 6.5%, primarily due to financial market fluctuations impact.
- COLA is 6%, and Merit increases are an average of 3% per the FY 2024-25 MOU Agreement. At 0.347% per 1.00% COLA, the increase would have been 2.082% without holiday overtime reductions. (slide 3a)
- The Proposed FY 2024-25 Budget increased by \$470,312 or 1.8% since April, primarily due to a 6% COLA, and the Employer 457 Plan Match increased to \$1,500 from \$1,100 Annually per employee. (slide 4a)

- Unfunded Accrued Pension Liabilities (UAL) increased 20.7% due to CalPERS financial market fluctuations and OPEB “Pay-Go” increased 19.4% due to increased Premiums. (slide 5a)
- Environmental Compliance department increased one FTE, split 50/50 between the Lab and Pretreatment, to meet increase regulatory compliance. (slide 6)
- Engineering decreased two FTE’s and will use two Contract Employees to support Capital Projects. (slide 6)
- The Acting General Manager and Director of Operations is included in Administration, but 10% of the labor costs are included in Residual Engineering; regular salaries include 90% of the Acting General Manager’s labor costs. (slide 14a)
- The Administration Budget increased by \$89,442 or 3.9% since April due to a 6% COLA and the Employer 457 match increased to \$1,500 from \$1,100 annually per Employee. New time allocation of labor costs includes General Manager at 50%, Executive Assistant at 60 %, and the Finance Controller at 25%. (slides 14a & 16a)
- The General Fund Budget increased by \$18,349 or 3.8% since April due to a 6% COLA and the Employer 457 match increased to \$1,500 from \$1,100 annually per Employee, and is distributed evenly amongst the seven Member Agencies. (slide 16a)
- SOCWA’s Year-Over-Year total budget remains relatively flat, with a slight increase of about 3% each year indicating a consistent and stable financial performance.

An open discussion ensued on the allocation methodology for the Administration budget based on usage and accounting standards, as well as the need for investing \$50 million in the pension fund given the potential fluctuations in the market.

Mr. Burror provided an overview of the CIP budget, noting detailed spreadsheets on capital expenses had been provided to the Engineering Committee members, and their comments and feedback were incorporated into the budget.

The Board comments and direction to staff is as follows:

- Going forward, provide a breakdown of environmental costs into separate categories for easier evaluation.
- Provide the Engineering Committee with details on the approach and scope for future engineering consultant contracts.
- Finance Committee to further evaluate guidelines around using funds from the PARS trust account to offset budget increases.
- SOCWA staff to work with Moulton Niguel Water District over the next few months regarding their participation in SOCWA as the transition is considered.
- Present the one-year proposed budget for approval at the June Board meeting.
- Biosolids contract review.
- Insurance and premiums review.
- CIP staffing costs by Project review.

7. OTHER MATTERS

None.

ADJOURNMENT

There being no further business, Director Collings adjourned the meeting at 10:16 a.m.

I HEREBY CERTIFY that the foregoing Minutes are a true and accurate copy of the Minutes of the Special Meeting of the South Orange County Wastewater Authority Board of Directors Budget Workshop on May 16, 2024, and approved by the Board of Directors of the South Orange County Wastewater Authority.

Danita Hirsh, Assistant Secretary
SOUTH ORANGE COUNTY WASTEWATER AUTHORITY

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

**Project Committee No. 17
Meeting**

**April 24, 2024
4:00 p.m.**

DRAFT

The Special Meeting of the South Orange County Wastewater Authority (SOCWA) Project Committee 17 was held on April 24, 2024, at 4:00 p.m. in person and via teleconference at 34156 Del Obispo Street, Dana Point, California. The following members of Project Committee No. 17 were present:

BOB WHALEN	City of Laguna Beach	Director
KATHRYN FRESHLEY	El Toro Water District	Director
MIKE DUNBAR	Emerald Bay Service District	Director
MATT COLLINGS	Moulton Niguel Water District	Director
SCOTT GOLDMAN	South Coast Water District	Director

Staff Participation:

JIM BURROR	Director of Operations
MATT CLARKE	IT Administrator
DANITA HIRSH	Executive Assistant

Also Participating:

ADRIANA OCHOA	Procopio Law
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1. Call Meeting to Order

Chairman Collings called the meeting to order at 4:00 p.m.

2. Public Comments

None.

The PC 17 Committee convened to Closed Session at 4:01 p.m.

The PC 17 Committee reconvened to Open Session at 5:08 p.m.

3. Closed Session

A. A Closed Session Conference with Legal Counsel was held to discuss a significant exposure to litigation pursuant to (Gov. Code 54956.9(d)(2)) on one potential matter.

B. Report out of Closed Session – There were no reportable actions.

Adjournment

There being no further business, Chairman Collings adjourned the meeting at 5:09 p.m.

I HEREBY CERTIFY that the foregoing Minutes are a true and accurate copy of the Minutes of the Special Meeting of the South Orange County Wastewater Authority Project Committee No. 17 of April 24, 2024, and approved by the Project Committee No. 17, 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 SPECIAL MEETING
OF THE
SOUTH ORANGE COUNTY WASTEWATER AUTHORITY**

**Project Committee No. 2
Meeting**

**May 15, 2024
10:30 a.m.**

DRAFT

The Special Meeting of the South Orange County Wastewater Authority (SOCWA) Project Committee 2 was held on May 15, 2024, at 10:30 a.m. in person at 34156 Del Obispo Street, Dana Point, California. The following members of Project Committee No. 2 were present:

MATT COLLINGS	Moulton Niguel Water District	Director
SCOTT GOLDMAN	South Coast Water District	Director
FRANK URY	Santa Margarita Water District	Director

Staff Participation:

JIM BURROR	Director of Operations
RONI GRANT	Associate Engineer
ERNIE LEAL	Chief Operator
JEANETTE COTINOLA	Procurement/Contracts Manager
DANITA HIRSH	Executive Assistant

Also Participating:

ALAN MAKAR	Hazen & Sawyer
JESUS GARIBAY, JR.	Moulton Niguel Water District
JEFF WEISHAAR	Carollo Engineers
SHERRY WANNINGER	Moulton Niguel Water District
JOE MULLER	South Coast Water District

1. Call Meeting to Order

Chairman Collings called the meeting to order at 10:30 a.m.

2. Public Comments

Mr. Jim Burror, Acting General Manager/Director of Operations, briefly overviewed what to expect on the J.B. Latham Treatment Plant tour.

3. Tour of J.B. Latham Plant (JBL) Upcoming Capital Projects

An in-person tour of the J.B. Latham Plant occurred and ended at 11:40 a.m.

4. Adjournment

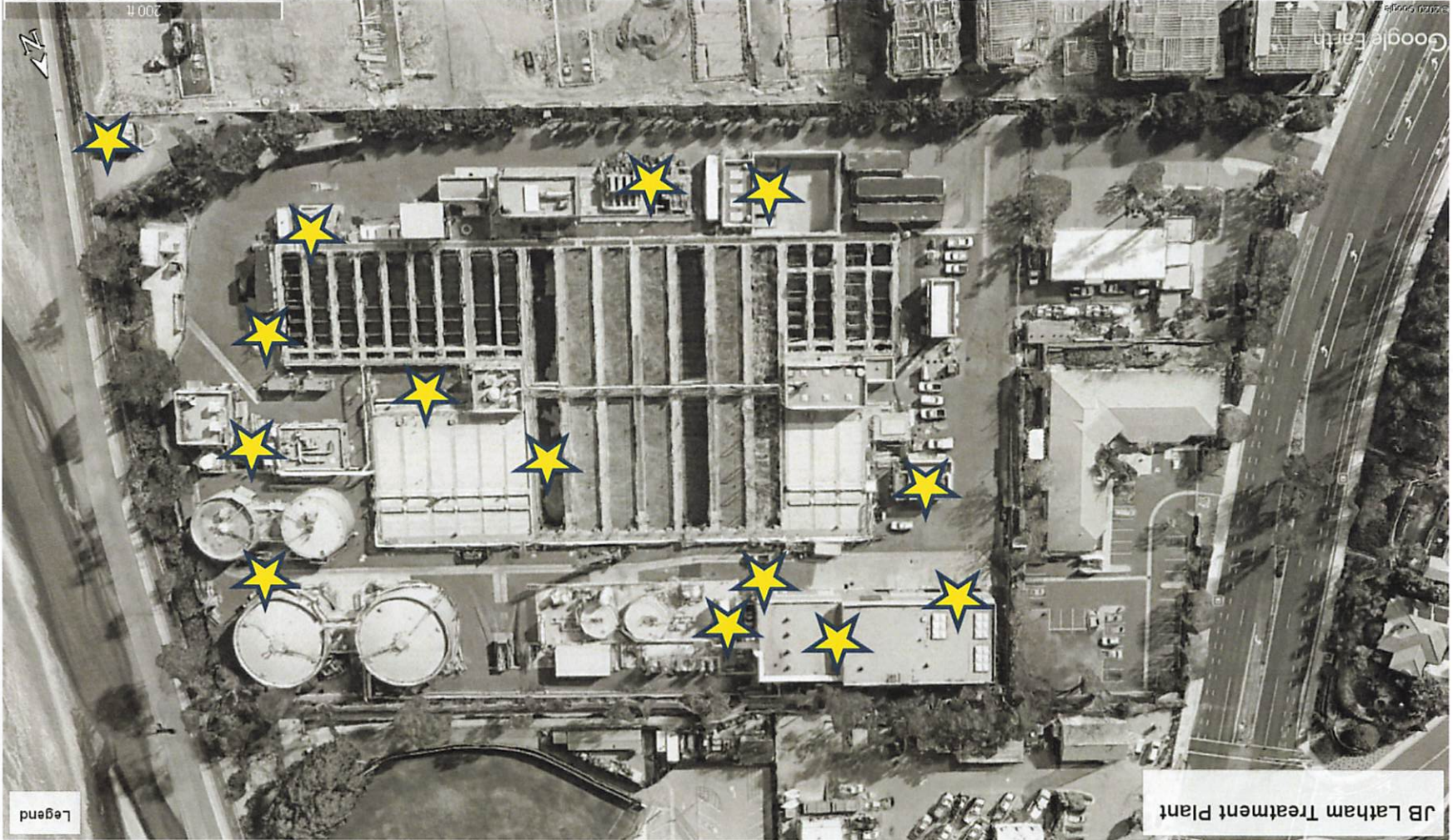
There being no further business, Chairman Collings adjourned the meeting at 11:41 a.m.

I HEREBY CERTIFY that the foregoing Minutes are a true and accurate copy of the Minutes of the Special Meeting of the South Orange County Wastewater Authority Project Committee No. 2 of May 15, 2024, and approved by the Project Committee No. 2, 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

JBL Tour 5-15-2024 Sites

Note: Projects for gates, pipes, and grating are throughout plant



**MINUTES OF SPECIAL MEETING
OF THE
SOUTH ORANGE COUNTY WASTEWATER AUTHORITY
Finance Committee**

March 19, 2024

The Special Meeting of the South Orange County Wastewater Authority (SOCWA) Finance Committee Meeting was held on March 19, 2024, at 10:30 a.m. in-person and via teleconference from the Administrative Offices located at 34156 Del Obispo Street, Dana Point, California. The following members of the Finance Committee were present:

GAVIN CURRAN	City of Laguna Beach	Alternate Director
DENNIS CAFFERTY	El Toro Water District	Alternate Director
ERICA CASTILLO	Santa Margarita Water District	Alternate Director
PAM ARENDS-KING	South Coast Water District	Alternate Director
MATT COLLINGS	Moulton Niguel Water District	Director

Staff Participation:

JIM BURROR	Acting General Manager
MARY CAREY	Finance Controller
RONI GRANT	Associate Engineer
JACK BECK	Staff Accountant
KONSTANTIN SHILKOV	Senior Accountant
DINA ASH	HR Administrator
MATT CLARKE	IT Administrator

Also Participating:

ADRIANA OCHOA	Procopio Law
MIKE DUNBAR	Emerald Bay Service District
KATHRYN FRESHLEY	El Toro Water District
KELSEY DECASAS	Moulton Niguel Water District
JOE MULLER	South Coast Water District
SHERRY WANNINGER	Moulton Niguel Water District
DREW ATWATER	Moulton Niguel Water District
ROD WOODS	Moulton Niguel Water District

1. Call Meeting to Order

Chairperson Castillo called the meeting to order at 10:31 a.m.

2. Public Comments

None.

3. Approval of Minutes

- Finance Committee Meeting of February 20, 2024.

ACTION TAKEN

A motion was made by Director Cafferty and seconded by Director Curran to approve the Minutes for February 20, 2024, as submitted.

Motion carried: Aye 5, Nay 0, Abstained 0, Absent 0
Director Castillo Aye
Director Curran Aye
Director Cafferty Aye
Director Collings Aye
Director Arends-King Aye

4. Financial Reports for the Month of January 2024

ACTION TAKEN

A motion was made by Director Collings and seconded by Director Castillo that the Board of Directors (i) receive and file the January 2024 Financial Reports, (ii) ratify the January 2024 disbursement for the period from January 1, 2024, through January 31, 2024, totaling \$5,096,522.

Motion carried: Aye 5, Nay 0, Abstained 0, Absent 0
Director Castillo Aye
Director Curran Aye
Director Cafferty Aye
Director Collings Aye
Director Arends-King Aye

5. Investment Policy for Public Funds Review 2024

ACTION TAKEN

A motion was made by Director Castillo and seconded by Director Collings that the Board of Directors adopt Resolution 2024-03, A Resolution of the South Orange County Wastewater Authority (SOCWA) Adopting Investment Policy for Public Funds, based on the annual review.

Motion carried: Aye 5, Nay 0, Abstained 0, Absent 0
Director Castillo Aye
Director Curran Aye
Director Cafferty Aye
Director Collings Aye
Director Arends-King Aye

6. FY 2024-25 Budget Update

Ms. Carey, Finance Controller, outlined the options for the Fiscal Year 2024-25 budget update. She stated that she used a ratio-based approach for the administrative cost allocation, supported by industry standards and data set by the Board of Directors.

Ms. Carey noted that the general and administrative expenses are incurred for managing and administrating the business unit as a whole and cannot be identified to one particular Project Committee. An open discussion ensued.

Ms. Adriana Ochoa, General Counsel, defined the administrative costs concerning necessary improvements as specified in the JPA. An open discussion ensued.

Staff was directed to present an equal allocation of administrative costs of the Fiscal Year 2024-25 Budget for review and discussion at the next Finance meeting in April.

Adjournment

There being no further business, Chairperson Castillo adjourned the meeting at 12:27 p.m.

I HEREBY CERTIFY that the foregoing Minutes are a true and accurate copy of the Minutes of the Special Meeting of the South Orange County Wastewater Authority Finance Committee of March 19, 2024, and approved by the Finance 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

Agenda Item

5.E.

Meeting Date: June 6, 2024

TO: Board of Directors
FROM: Jim Burror, Acting General Manager/Director of Operations
SUBJECT: April 2024 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

An eight (8) 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. Beach Ocean Monitoring Report

4. Recycled Water Report

5. Pretreatment Report

Fiscal Impact

No change.

Recommended Action: Receive and file the Operational Reports.

Monthly Operational Report

SOCWA Operational Report April, 2024

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)	2.96	7.60	7.71	1.04	19.31
Effluent (mgd)	2.83	6.56	7.71	2.64	19.74
Peak Flow (mgd)	9.86	20.49	10.28	5.67	46.30
Influent BOD (mg/l)	198	251	238	368	
Influent TSS (mg/l)	280	316	381	480	
Effluent BOD (mg/l)	5.3	5.8	8.2	9.6	
Effluent TSS (mg/l)	7.1	7.2	10.3	13.0	
Effluent Turbidity (NTU)	3.4	3.3	4.6	8.2	

(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)	0.44	1.04		1.48
Days of Operation (days)	20	14		
Total Flow (million gallons)	13.3	31.2		44.5
Plant Irrigation (million gallons)	0.10	0.20	0.17	
AWT Time Online (%)	100.0			

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 April, 2024 (cont'd)

Biosolids Management

Biosolids Management Site	CTP	RTP	JBL	Totals
Synagro Compost (tons)		746.7	0.0	746.7
Nursery Products (tons)		326.8	509.7	836.5
Prima Deshecha (tons)		86.0	240.5	326.5
Other: (tons)		0.0	0.0	0.0
Total Processed (tons)		1,159.6	750.2	1,909.8

Summary of Maintenance Activities

Task Type	CTP	RTP	JBL	Totals
Preventative Maintenance	221	371	359	951
Corrective Maintenance	14	54	34	102

Site Visitors

Visitor Types	CTP	RTP	JBL	Totals
Regulatory	0	0	0	0
Member Agency	1	4	4	9
Residents	0	0	0	0
Others	15	18	21	54
Tours #/Visitors	2	0	1	3

Grit Disposal Management

Grit & Screenings	CTP	RTP	JBL	Totals
Simi Valley Landfill (tons)	7.1	16.3	36.8	60.2

Chemical and Energy Utilization

Chemical/Utility	CTP	RTP	JBL	Totals
Ferric Chloride (tons)	NA	36.3	NA	36.3
Utility Power Purchase (kWh)	199,852	331,796	186,755	718,403
Cogen Power (kWh)		262,613	446,759	709,372
Natural Gas (Dth)	13	NA	NA	13
Digester Gas to Engine (scfm)		4,041,437	5,295,365	9,336,802
Digester Gas to Boiler (scfm)		0		0
Digester Gas to Flares (scfm)		3,113,036	606,590	3,719,626
Digester Gas Power Savings		\$46,269		

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 April, 2024 (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	1.847	61.32%				1.85
EBSD	0.080	2.65%				0.08
SCWD	1.085	36.04%				2.90
MNWD	0.000	0.00%	7.60	1.400	16.00%	9.00
CSJC				2.150	24.57%	2.15
SMWD				3.383	38.66%	3.38
Total	3.012	100.00%	7.60	8.751	100.00%	19.36

Total Agency Outfall Flows by Outfall System-Billing Flows

Agency	SJCOO (mgd)	SJCOO (%)	SJCOO Meter (mgd)	ACOO (mgd)	ACOO (%)	Total (mgd)	Notes
CLB				1.85	11.25%	1.85	
EBSD				0.08	0.49%	0.08	
SCWD	1.99	13.80%		0.82	5.01%	2.82	Includes Desalters
MNWD	3.04	21.04%		6.56	39.95%	9.60	
ETWD				3.33	20.27%	3.33	Direct Outfall Only
CSJC	2.63	18.18%				2.63	Incudes Desalter
SMWD	3.50	24.25%				3.50	Includes Chiquita
CSC	3.28	22.73%				3.28	Direct Outfall Only
IRWD				3.78	23.02%	3.78	Direct Outfall Only
Total	14.45	100.00%	8.51	16.41	100.00%	30.86	

SOCWA Operational Report April, 2024 (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%	2.108	27.50%	2.150	24.57%	2.25	28.41%
MNWD	3.00	23.08%	1.400	18.26%	1.400	16.00%	1.40	17.66%
SCWD	3.75	28.85%	1.598	20.85%	1.818	20.77%	1.83	23.08%
SMWD	2.25	17.31%	2.559	33.39%	3.383	38.66%	2.44	30.84%
Total	13.00	100.00%	7.665	100.00%	8.751	100.00%	7.93	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%	6,202	20.48%	6,654	26.11%	6,549	27.01%
MNWD	8,340	21.62%	5,183	17.12%	4,445	17.45%	5,121	21.12%
SCWD	7,715	20.00%	5,693	18.80%	3,637	14.27%	4,635	19.12%
SMWD	10,946	28.38%	13,200	43.60%	10,742	42.16%	7,942	32.75%
Total	38,573	100.00%	30,278	100.00%	25,478	100.00%	24,246	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%	3.284	22.73%	2.984	23.64%
CSJC	11.08%	8.860	11.08%	2.628	18.18%	2.694	21.34%
MNWD(3)	15.51%	12.410	15.51%	3.040	21.04%	2.461	19.50%
SCWD	12.46%	9.970	12.46%	1.994	13.80%	1.968	15.59%
SMWD	44.32%	35.460	44.33%	3.504	24.25%	2.514	19.92%
Total	100.00%	80.000	100.00%	14.450	100.00%	12.621	100.00%

(1) Influent billing meter summary:

- CSJC is metered daily in the collection system. The area-velocity meter has an accuracy of +/- 20%.
- MNWD is assumed to be 1.4 mgd unless Treatment Plant 3A is discharging to the sewer. If other discharges occur, they are estimated.
- SCWD flows are the summation of the DPSD and Victoria PS meters. The two metering systems have an accuracy of +/- 10%.
- 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 April, 2024 (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%	1.430	53.56%	1.847	61.32%	1.608	56.90%
EBS	0.20	2.99%	0.060	2.25%	0.080	2.65%	0.074	2.62%
SCWD	2.00	29.85%	1.180	44.19%	1.085	36.04%	1.144	40.48%
MNWD	1.96	29.25%	0.000	0.00%	0.000	0.00%	0.000	0.00%
Total	6.70	100.00%	2.670	100.00%	3.012	100.00%	2.826	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	0.01480	0.2040%	0.0000	0.0171	0.0171	0.2217%	0.0156	0.2018%
EBS	0.00060	0.0083%	0.0000	0.0007	0.0007	0.0096%	0.0007	0.0093%
SCWD	0.01210	0.1668%	0.0000	0.0100	0.0100	0.1303%	0.0110	0.1422%
ETWD	0.01810	0.2495%	0.0000	0.0172	0.0172	0.2232%	0.0150	0.1945%
MNWD	7.20960	99.3715%	7.5963	0.0663	7.6627	99.4153%	7.6628	99.4521%
Total	7.25520	100.0000%	7.5963	0.1114	7.7077	100.0000%	7.7050	100.0000%

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

SOCWA Operational Report April, 2024 (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%	4,509	13.13%	169,317	15.34%	168,320	14.43%
EBSD	295	0.59%	194	0.56%	7,314	0.66%	7,806	0.67%
SCWD	4,480	8.96%	3,691	10.75%	99,511	9.02%	118,289	10.14%
ETWD	10,200	20.41%	5,207	15.16%	170,453	15.44%	160,062	13.73%
MNWD	29,395	58.82%	20,747	60.40%	657,238	59.54%	711,621	61.03%
Total	49,975	100.00%	34,348	100.00%	1,103,833	100.00%	1,166,098	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%	1.847	11.25%	1.608	12.74%
EBSD	0.78%	0.390	0.78%	0.080	0.49%	0.074	0.59%
ETWD	16.30%	8.151	16.30%	3.327	20.27%	2.639	20.92%
IRWD	15.76%	7.880	15.76%	3.778	23.02%	3.035	24.06%
MNWD	43.85%	21.924	43.85%	6.557	39.95%	4.474	35.46%
SCWD	12.31%	6.155	12.31%	0.823	5.01%	0.787	6.24%
Total	100.00%	50.000	100.00%	16.411	100.00%	12.618	100.00%

SOCWA Operational Report April 2024 (cont'd)

Select Critical Equipment Repairs

JBL - PC2

Replaced failed motor on RSP#3.
Replaced failed pressure switch and leaking bleach line on Bleach Metering Pump #1
Troubleshoot failing auto-degasser on Bleach Metering Pump #4
Removed abandoned DAFT TWAS piping.
Replaced failing decant line and isolation valve.
Prepare the site for new 9-side Bleach and Caustic tanks.
Prepared for the Process Water Pump #3 overhaul, which was at the end of its useful life.
Replaced failed East RAS Pump #4 Hour Meter.
Troubleshoot power outage for the Boiler control panel.
Troubleshoot failed alarm sensor for the San Juan Creek Ocean Outfall Surge Tower.
Install overhauled Process Water Pump #2.

CTP - PC15

Troubleshoot failed Primary Tank Nos. 1 and 2 Collectors.
Replaced failed several primary sludge valves, including draining and cleaning basins for the project.
Troubleshoot failing sensors on the Odor Control Scrubber.
Troubleshoot failing EQ Mix Pump #2.
Replaced failing Backwash Pump #2.

RTP - PC17

Troubleshoot faulty Centrifuges Nos. 2 and 4 diverter gates.
Replaced failing site lighting around the Plant.
Troubleshoot faulty wiring for the SET Pump System, scheduled Small Capital Project to replace electrical feeder.
Replaced failed pressure gauge on Grit Pump #4.
Repaired leak on the Dynablend #1 system.
Troubleshoot failing Primary Sedimentation Scum Pump #1.
Replaced failing gearbox on Primary Tank #4.
Removed Digester #2 Pump for a scheduled overhaul.
Replaced several failing valves on the sludge feed system.
Replaced several failed discs in Aeration Tank #2.
Replaced failed TWAS Pump #1 pressure switch.
Performed overhaul of Gas Skid Equipment.
Replaced failed gaskets on Gas Blower #3.

SOCWA Operational Report April 2024 (cont'd)

Select Critical Equipment Repairs (cont'd)

Support Services - ALL PC'S

Repaired water and coolant leaks on the Cogen cooling system at JBL.
Replaced failed SC200 Controller on the 9-Side Odor Scrubber at JBL.
Replaced failed motor on West RAS pump #6 at JBL.
Troubleshoot Digester #4 level indicator at JBL.
Troubleshoot failed Aeration Tank #5 Sump Pump Disconnect at JBL.
Replaced failed UPS on the Gas Flare at JBL.
Replaced failed D.O. probe on Aeration West 2B at CTP.
Troubleshoot failed WAS Pump #3 Flow Meter at RTP.
Troubleshoot faulty breaker for WAS Pump #1 at RTP.
Troubleshoot failing RAS #6 Flow Meter at RTP.
Troubleshoot several communication issues with the SCADA system at RTP.
Replaced failed hour meter on Gas Blower #3.
Troubleshoot faulty Lab fume hood.

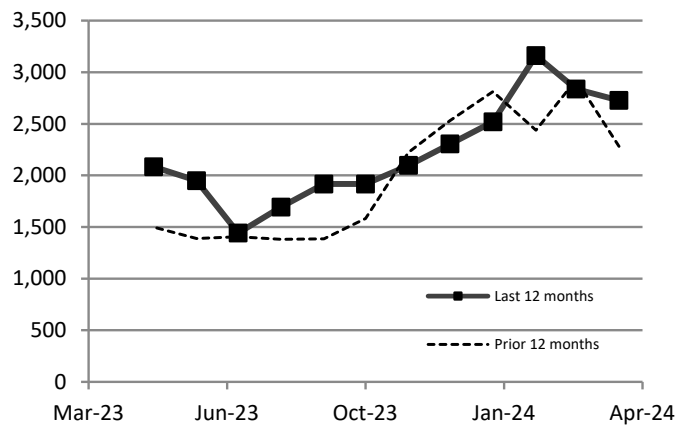
SOCWA Ocean Outfall Discharges by Agency

SOCWA Operational Report April, 2024 (cont'd)

Agency	SJCOO (mgd)	SJCOO (%)	ACOO (mgd)	ACOO (%)	Total (mgd)
CLB			1.85	11.25%	1.85
EBSD			0.08	0.49%	0.08
SCWD	1.99	13.80%	0.82	5.01%	2.82
MNWD	3.04	21.04%	6.56	39.95%	9.60
ETWD			3.33	20.27%	3.33
CSJC					2.63
SMWD					3.50
CSC					3.28
IRWD			3.78	23.02%	3.78
Total			14.45	100.00%	16.41
	or Acre-Feet per year equivalent				34,565

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

Apr-24	2,727
Mar-24	2,837
Feb-24	3,161
Jan-24	2,519
Dec-23	2,305
Nov-23	2,097
Oct-23	1,916
Sep-23	1,917
Aug-23	1,693
Jul-23	1,442
Jun-23	1,949
May-23	2,083
Total	26,646



Beach / Ocean Monitoring Report

ALISO CREEK OCEAN OUTFALL MONITORING REPORT

April 2024

DATE	IRWD LOS ALISOS WRP				EL TORO WRP				SOCWA REGIONAL PLANT				SOCWA COASTAL PLANT				IRWD IDP	IRWD SGU	SCWD ACWRF	ACOO	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	FLOW MGD	FLOW MGD	FLOW MGD	FLOW MGD	Fall inches
04/01/24	3.820	15.0	9.5	0.1	2.577	8.8		<0.1	11.200	9.2	6.0	<0.1	3.965	5.4	5.0	<0.1	0.392	0.000	0.000	21.954	0.06
04/02/24	4.243	16.0	10.0	<0.1	3.530	13.0	4.4	<0.1	9.19	6.2	3.0	<0.1	2.677	4.1	4.0	0.1	0.391	0.000	0.000	20.031	0.02
04/03/24	3.594	11.0	12.0	0.1	4.573	10.2	4.0	<0.1	8.150	6.0	4.0	0.1	2.495	5.2	7.0	<0.1	0.385	0.000	0.000	19.197	0.06
04/04/24	3.613	14.0	9.5	0.1	3.639	5.4	3.0	<0.1	7.820	11.2	8.0	<0.1	2.638	3.5	5.0	<0.1	0.391	0.000	0.000	18.101	0.01
04/05/24	3.597	13.0	8.6	0.1	3.279	8.4	5.0	0.1	7.480	5.8	4.0	0.1	2.704	4.7	4.0	<0.1	0.391	0.000	0.000	17.451	0.30
04/06/24	3.212	11.0		<0.1	5.267	16.0	5.0	<0.1	7.920	6.4	6.0		3.002	8.4	7.0		0.391	0.000	0.000	19.792	0.00
04/07/24	3.235	8.2	6.4	<0.1	5.056	10.4	7.1	<0.1	7.760	6.8	6.0	0.2	2.929	11.6	7.0	<0.1	0.391	0.000	0.000	19.371	0.00
04/08/24	3.352	15.0	6.7	<0.1	3.767	10.8		<0.1	7.970	6.0	12.0	<0.1	2.887	7.9	6.0	0.1	0.391	0.000	0.000	18.367	0.00
04/09/24	3.454	8.2	6.4	0.1	3.239	13.3	6.1	<0.1	5.520	5.4	4.0	<0.1	2.830	9.4	5.0	<0.1	0.391	0.000	0.000	15.434	0.00
04/10/24	3.430	11.0	8.3	0.2	3.233	10.3	5.0	0.1	5.240	4.9	4.0	<0.1	2.939	6.1	4.0	<0.1	0.391	0.000	0.000	15.233	0.00
04/11/24	3.333	9.8	8.3	0.1	3.141	13.0	7.0	<0.1	5.180	6.6	6.0	<0.1	2.572		11.0	<0.1	0.366	0.000	0.168	14.760	0.00
04/12/24	3.316	14.0	9.9	0.1	3.203	13.4	6.4	<0.1	6.390	7.1	5.0	<0.1	2.800	6.6	4.0	<0.1	0.391	0.000	0.130	16.230	0.00
04/13/24	3.317	15.0		<0.1	3.259	18.8	6.9	<0.1	7.120	6.3	5.0	<0.1	2.309	8.9	6.0		0.391	0.000	0.139	16.535	0.27
04/14/24	3.317	17.0	9.7	<0.1	3.791	7.0	7.6	<0.1	7.520	8.4	6.0	<0.1	2.404		5.0	<0.1	0.391	0.000	0.116	17.539	0.02
04/15/24	3.321	14.0	10.0	<0.1	3.611	8.7		<0.1	5.700	8.0	6.0	0.3	2.458	9.8	7.0	<0.1	0.391	0.000	0.132	15.613	0.00
04/16/24	3.323	18.0	14.0	0.3	3.230	14.0	3.0	0.1	7.190	7.0	6.0	<0.1	2.456		7.0	<0.1	0.391	0.000	0.140	16.730	0.00
04/17/24	3.316	18.0	12.0	0.4	3.013	12.7	7.2	0.1	7.320	7.1	6.0	<0.1	2.236	3.1	4.0	<0.1	0.359	0.000	0.138	16.382	0.00
04/18/24	3.323	17.0	9.4	<0.1	3.794	18.7	9.0	0.3	7.230	6.8	6.0	<0.1	2.428	5.0	3.0	<0.1	0.379	0.000	0.121	17.275	0.00
04/19/24	3.318	18.0	11.0	0.2	3.133	24.7	11.0	0.1	7.140	7.1	4.0	<0.1	2.883	6.6	5.0	<0.1	0.374	0.000	0.133	16.981	0.00
04/20/24	3.318	16.0		0.2	3.398	30.8	17.0	0.2	7.090	7.5	6.0		3.192	8.3	5.0		0.391	0.000	0.132	17.521	0.00
04/21/24	3.255	13.0	7.8	0.1	3.365		9.8	<0.1	7.180	7.6	6.0	0.2	3.137	6.6	6.0	<0.1	0.391	0.000	0.160	17.488	0.00
04/22/24	3.310	21.0	9.3	<0.1	1.653	15.0		0.2	4.670	10.4		0.2	3.127	7.4		<0.1	0.274	0.000	0.103	13.137	0.00
04/23/24	3.322	14.0	7.7	<0.1	3.032	17.7	10.4	0.2	5.330	8.0	9.0	0.1	2.593	8.8	4.0	<0.1	0.350	0.000	0.043	14.670	0.00
04/24/24	3.321	15.0	7.8	<0.1	3.027			0.1	5.220	7.8	5.0	<0.1	2.608	9.0	5.0	<0.1	0.391	0.000	0.103	14.670	0.00
04/25/24	3.324	19.0	9.1	0.2	2.470	16.7	8.4	0.1	5.250	6.8	5.0	0.1	3.016	7.2	4.0	0.1	0.391	0.000	0.125	14.576	0.00
04/26/24	3.214	20.0	8.9	0.1	3.038	20.4	9.2	0.1	5.090	7.2	5.0	0.1	2.850	7.1	4.0	<0.1	0.391	0.000	0.102	14.685	0.00
04/27/24	3.177	15.0		<0.1	3.348	21.2	9.7	0.2	4.940	6.6	5.0		2.284	7.8	4.0		0.391	0.000	0.139	14.279	0.00
04/28/24	3.182	17.0	7.8	<0.1	3.533	15.2	4.5	<0.1	5.190	7.4	6.0	<0.1	2.576	5.0	5.0	<0.1	0.391	0.000	0.148	15.020	0.00
04/29/24	3.400	16.0	7.4	<0.1	2.174	13.5		0.2	4.350	7.8		<0.1	2.607	9.9		<0.1	0.391	0.000	0.124	13.046	0.00
04/30/24	3.618	12.0	8.5	0.9	2.449	16.0	14.4	0.1	3.350	6.6	7.0	0.2	2.877		6.0	0.1	0.375	0.000	0.115	12.784	0.00
AVG	3.396	14.7	9.1	<0.2	3.327	14.4	7.5	<0.1	6.557	7.2	5.8	<0.1	2.749	7.1	5.3	<0.1	0.382	0.000	0.084	16.495	
TOTAL	101.88				99.82				196.70				82.48				11.47	0.00	2.511	494.85	0.74

Unified Beach Monitoring

#1

South Orange County Wastewater Authority-Aliso Creek Ocean Outfall

REPORT FOR: April 2024
REPORT DUE: June 1 2024
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 06:12

Weather: Overcast

COMMENTS:

STA#	DATE	TIME	Total	Fecal	Entero-	Material of Sewage				Water	H2O	Water	Water	
			Coliform	Coliform	coccus	Origin		Oil &	Odor					
			CFU/100ml	CFU/100ml	CFU/100ml	Onshore	Offshore	Grease						
			SM9222B	SM9222D	EPA 1600					Color	Temp(F)	Condition	Outlet	Birds
S3	04/04/24	08:03	<10	<10	<2	None	None	None	None	Green	57	Clear		
S4	04/04/24	10:22	10	<10	<2	None	None	None	None	Green		Clear		
S5	04/04/24	10:06	<10	10	2	None	None	None	None	Green		Clear		
S6	04/04/24	09:34	<10	<10	<2	None	None	None	None	Green		Clear		
WEST	04/04/24	09:31	10	10	2	None	None	None	None	Green		Clear		
S7	04/04/24	09:26	10	<10	4	None	None	None	None	Green		Clear		
S8	04/04/24	09:02	90	<10	<2	None	None	None	None	Green		Clear		
S9	04/04/24	08:58	130	40	10	None	None	None	None	Green		Clear		
ACM1	04/04/24	08:56	2900	440	110	None	None	None	None	Brown	Turbid	Flowing		
S10	04/04/24	08:35	60	<10	<2	None	None	None	None	Green	Clear			
S11	04/04/24	08:48	20	10	4	None	None	None	None	Green	Clear			
S12	04/04/24	08:40	<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.

Unified Beach Monitoring

#2

South Orange County Wastewater Authority-Aliso Creek Ocean Outfall

REPORT FOR: April 2024
 REPORT DUE: June 1, 2024
 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 06:04

Weather: Overcast

COMMENTS:

STA#	DATE	TIME	Total	Fecal	Entero-	Material of Sewage				Water	H2O	Water	Water	Birds
			Coliform	Coliform	coccus	Origin		Oil &	Odor					
			CFU/100ml	CFU/100ml	CFU/100ml	Onshore	Offshore	Grease						
			SM9222B	SM9222D	EPA 1600					Color	Temp(F)	Condition	Outlet	
S3	04/11/24	11:00	10	<10	6	None	None	None	None	Green	61	Slightly Turbid	Flowing	
S4	04/11/24	10:45	<10	<10	<2	None	None	None	None	Green		Slightly Turbid		
S5	04/11/24	10:25	40	20	10	None	None	None	None	Green		Slightly Turbid		
S6	04/11/24	10:05	10	<10	<2	None	None	None	None	Green		Slightly Turbid		
WEST	04/11/24	10:00	<10	<10	<2	None	None	None	None	Green		Slightly Turbid		
S7	04/11/24	09:55	<10	<10	4	None	None	None	None	Green		Slightly Turbid		
S8	04/11/24	09:50	<10	<10	<2	None	None	None	None	Green		Slightly Turbid		
S9	04/11/24	09:30	<10	<10	10	None	None	None	None	Green		Turbid		
ACM1	04/11/24	09:35	600	70	110	None	None	None	None	Green		Turbid		
S10	04/11/24	09:10	30	10	10	None	None	None	None	Green		Turbid		
S11	04/11/24	09:05	10	<10	2	None	None	None	None	Green		Turbid		
S12	04/11/24	09:00	<10	<10	2	None	None	None	None	Green		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

Unified Beach Monitoring

#3

South Orange County Wastewater Authority-Aliso Creek Ocean Outfall

REPORT FOR: April 2024
 REPORT DUE: June 1, 2024
 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 06:29

Weather: Overcast

COMMENTS:

0.0

STA#	DATE	TIME	Total Coliform CFU/100ml	Fecal Coliform CFU/100ml	Entero- coccus CFU/100ml	Material of Sewage Origin		Oil & Grease	Odor	Water Color	H2O Temp(F)	Water Condition	Water Outlet	Birds
			SM9222B	SM9222D	EPA 1600	Onshore	Offshore							
S3	04/18/24	08:16	50	10	10	None	None	None	None	Blue	58	Clear		
S4	04/18/24	10:08	<10	<10	<2	None	None	None	None	Blue		Clear		
S5	04/18/24	10:16	10	<10	<2	None	None	None	None	Blue		Clear		
S6	04/18/24	09:41	10	<10	8	None	None	None	None	Blue		Clear		
WEST	04/18/24	09:32	100	<10	8	None	None	None	None	Blue		Clear		
S7	04/18/24	09:53	10	<10	<2	None	None	None	None	Blue		Clear		
S8	04/18/24	09:24	<10	<10	4	None	None	None	None	Blue		Clear		
S9	04/18/24	09:20	20	<10	<2	None	None	None	None	Blue		Clear		
ACM1	04/18/24	08:58	1400	110	44	None	None	None	None	Blue		Clear	Flowing	
S10	04/18/24	08:50	10	<10	10	None	None	None	None	Blue		Clear		
S11	04/18/24	08:42	20	<10	4	None	None	None	None	Blue		Clear		
S12	04/18/24	08:37	<10	<10	4	None	None	None	None	Blue		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.

Unified Beach Monitoring

#4

South Orange County Wastewater Authority-Aliso Creek Ocean Outfall

REPORT FOR: April 2024
 REPORT DUE: June 1, 2024
 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 09:34

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	Coliform	coccus	Onshore	Offshore							
			CFU/100ml	CFU/100ml	CFU/100ml									
			SM9222B	SM9222D	EPA 1600									
S3	04/23/24	08:00	<10	<10	2	None	None	None	None	Green	57	Clear		
S4	04/23/24	10:32	10	10	<2	None	None	None	None	Green		Clear		
S5	04/23/24	10:20	<10	10	4	None	None	None	None	Green		Clear		
S6	04/23/24	10:00	<10	<10	2	None	None	None	None	Green		Clear		
WEST	04/23/24	09:55	<10	<10	2	None	None	None	None	Green		Clear		
S7	04/23/24	09:45	<10	<10	2	None	None	None	None	Green		Clear		
S8	04/23/24	09:35	<10	<10	<2	None	None	None	None	Blue		Clear		
S9	04/23/24	09:20	20	<10	<2	None	None	None	None	Green		Clear		
ACM1	04/23/24	09:15	50	10	4	None	None	None	None	Green		Clear		
S10	04/23/24	09:00	<10	<10	<2	None	None	None	None	Green		Clear		
S11	04/23/24	08:55	10	<10	<2	None	None	None	None	Green		Clear		
S12	04/23/24	08:35	<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.

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: April 2024

Report Frequency: Monthly

Report Due: June 1, 2024

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:

Low Tide 1157

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	04/16/24	2	<2	<2	08:02	0	0	
A-1	Mid depth	04/16/24	40	<10	<10				
A-2	Surface	04/16/24	<2	<2	<2	07:56	0	0	
A-2	Mid depth	04/16/24	20	<10	<10				
A-3	Surface	04/16/24	<2	<2	<2	08:09	0	0	
A-3	Mid depth	04/16/24	<10	<10	<10				
A-4	Surface	04/16/24	<2	<2	<2	08:14	0	0	
A-4	Mid depth	04/16/24	<10	<10	<10				
A-5	Surface	04/16/24	<2	<2	<2	08:05	0	0	
A-5	Mid depth	04/16/24	<10	<10	<10				
B-1	Surface	04/16/24	2	<2	<2	07:46	0	0	
B-1	Mid depth	04/16/24	10	10	<10				
B-2	Surface	04/16/24	<2	<2	<2	08:26	0	0	
B-2	Mid depth	04/16/24	<10	<10	<10				
N1	Surface	04/16/24	<2	<2	<2	08:44	0	0	
N2	Surface	04/16/24	44	4	<2	08:40	0	0	
N3	Surface	04/16/24	80	14	<2	08:39	0	0	
N4	Surface	04/16/24	96	6	10	08:37	0	0	
N5	Surface	04/16/24	6	<2	<2	08:35	0	0	
N6	Surface	04/16/24	<2	2	<2	08:34	0	0	
N7	Surface	04/16/24	40	<2	<2	08:32	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.

Receiving Water Limitations: (1) 30-Day geometric mean of fecal coliform density not to exceed 200 CFU/100 mL

calculated based on the five most recent samples from each site (2) single sample max not to exceed 400 CFU/100 mL

(3) Enterococcus 6-week rolling geometric mean not to exceed 30 CFU/100 mL, calculated weekly. (4) Statistical threshold value (STV)

of 110 CFU/100 mL for enterococcus not to be exceeded by more than 10% of samples collected in a calendar month, calculated in a static manner

**Compliance Summary Report
Aliso Creek Ocean Outfall 2024**

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 - 2024
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

April 2024

DATE	J.B. LATHAM FACILITY				SAN CLEMENTE WRP				SMWD CHIQUITA WRP				3-A PLANT				CSJC Desalter	SCWD Desalter	SJCOO	Rain Fall
	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	FLOW MGD	FLOW MGD	FLOW MGD	inches
04/01/24	8.000	35.0	23.8	<0.1	5.319	12.2	11.0	<0.1	0.003	6.7	6.3	<0.1	1.835	7.4	5.5	<0.1	0.180	0.176	13.710	0.06
04/02/24	9.240	13.8	7.7	<0.1	3.342	11.0	10.0	<0.1	0.002	1.6	6.2	<0.1	1.669	7.2	4.6	<0.1	0.110	0.176	15.450	0.02
04/03/24	8.410	7.3	5.7	<0.1	3.498	10.6	8.0	<0.1	0.005	1.2	2.1	<0.1	1.657	10.0	7.6	<0.1	0.460	0.172	14.200	0.06
04/04/24	8.100	7.4	6.0	<0.1	3.111	9.8	8.0	<0.1	0.000				1.641	9.8	7.2	<0.1	0.520	0.179	14.150	0.01
04/05/24	7.900	7.8	6.3	<0.1	3.205	10.1	7.0	<0.1	0.000				1.851	11.2	7.6	<0.1	0.520	0.171	13.820	0.30
04/06/24	8.040	8.7	3.0	<0.1	3.277		7.0		0.000				1.748				0.520	0.178	14.210	0.00
04/07/24	7.970	10.4	8.7	<0.1	3.243				0.000				1.738				0.520	0.173	14.180	0.00
04/08/24	8.140	10.8	13.7	0.1	3.180	8.2	8.0	<0.1	0.000				1.692	10.4	6.8	<0.1	0.520	0.011	14.490	0.00
04/09/24	8.020	8.5	7.7	<0.1	3.751	9.2	8.0	<0.1	0.000				1.609	6.6	5.4	<0.1	0.510	0.369	14.910	0.00
04/10/24	7.790	7.2	6.3	<0.1	3.734	7.8	8.0	0.1	0.077	3.0	3.1	<0.1	1.606	7.6	5.0	<0.1	0.510	0.174	14.890	0.00
04/11/24	8.010	7.2	6.8	<0.1	2.943	11.7	8.0	0.2	0.002	2.9	3.1	<0.1	1.637	7.4	6.0	<0.1	0.500	0.179	14.600	0.00
04/12/24	8.090	5.4	6.6	<0.1	3.133	8.4	7.0	<0.1	0.011	3.2	3.5	<0.1	1.552	9.0	6.5	<0.1	0.520	0.173	13.660	0.00
04/13/24	7.980	6.4	7.1	<0.1	2.806		8.0		0.000				1.679				0.510	0.178	13.220	0.27
04/14/24	8.140	9.3	8.7	<0.1	3.125				0.000				1.711				0.510	0.177	13.720	0.02
04/15/24	8.400	11.2	11.4	0.1	3.129	9.5	7.0	<0.1	0.000				1.684	8.8	5.2	<0.1	0.470	0.178	14.020	0.00
04/16/24	8.180	9.1	7.4	<0.1	3.716	11.6	8.0	<0.1	0.001	2.0	4.0	<0.1	1.594	12.0	8.0	<0.1	0.510	0.172	14.480	0.00
04/17/24	8.030	8.0	8.7	<0.1	3.251	12.2	8.0	<0.1	0.061	3.0	3.4	<0.1	1.576	8.0	5.0	<0.1	0.510	0.177	14.140	0.00
04/18/24	7.780	10.1	9.6	<0.1	3.315	12.0	8.0	<0.1	0.000				1.586	8.0	6.3	<0.1	0.510	0.173	13.910	0.00
04/19/24	7.840	7.3	8.2	<0.1	2.933	10.6	8.0	<0.1	0.000				1.581	9.6	7.4	<0.1	0.510	0.178	13.930	0.00
04/20/24	7.830	9.7	9.3	0.1	3.373		12.0		0.000				1.592				0.510	0.177	13.570	0.00
04/21/24	7.910	16.8	10.7	<0.1	3.355				0.000				1.634				0.480	0.173	14.020	0.00
04/22/24	7.890	32.3		0.4	2.895	14.6	16.0	<0.1	0.470	3.0	4.3	3.0	1.594	7.0	4.8	<0.1	0.450	0.176	14.180	0.00
04/23/24	7.490	20.9	15.3	<0.1	3.344	14.4	14.0	<0.1	0.484	19.5	8.8	4.0	1.610	7.0	5.2	<0.1	0.430	0.174	14.530	0.00
04/24/24	7.350	14.6	8.0	<0.1	3.484	11.6	6.0	0.1	0.429	19.2	7.8	5.5	1.621	9.8	6.9	<0.1	0.440	0.177	14.620	0.00
04/25/24	7.420	9.6	7.6	0.1	3.201	10.8	11.0	<0.1	0.344	18.0	8.7	2.0	1.568	7.4	5.6	<0.1	0.300	0.176	14.670	0.00
04/26/24	7.260	8.1	6.7	<0.1	3.047	10.8	8.0	<0.1	0.223	14.0	15.6	1.5	1.624	7.8	5.2	<0.1	0.620	0.172	13.870	0.00
04/27/24	7.350	8.3	8.3		2.942		9.0		0.340	8.3	4.4	1.0	1.584				0.620	0.179	13.860	0.00
04/28/24	7.370	8.1	8.0	<0.1	2.871				0.488	10.0	6.4	1.0	1.603				0.540	0.174	14.350	0.00
04/29/24	7.380	10.9		<0.1	2.773	11.0	10.0	<0.1	0.353	13.3	10.3	0.1	1.568	8.4	5.0	<0.1	0.500	0.176	14.600	0.00
04/30/24	7.380	9.7	9.0	0.1	3.235	10.8	10.0	<0.1	0.315	9.3	8.3	0.1	1.561	11.8	7.8	<0.1	0.510	0.178	14.380	0.00
AVG	7.890	11.3	8.8	<0.1	3.284	10.9	9.0	<0.1	0.120	8.1	6.3	<1.1	1.640	8.7	6.1	<0.1	0.477	0.177	14.211	
TOTAL	236.690				98.531				3.608				49.205				14.320	5.296	426.340	0.74

Unified Beach Monitoring

#1

South Orange County Wastewater Authority-San Juan Creek Ocean Outfall

REPORT FOR: April 2024
 REPORT DUE: June 1, 2024
 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 11:35

Weather: Clear

COMMENTS: Lots of birds present at DSB5z, S2

STATION #	DATE	TIME	Total Coliform CFU/100ml	Fecal Coliform CFU/100ml	Entero- coccus CFU/100ml	Material of Sewage Origin		Oil & Grease		Water Color		H2O Temp(F)	Water Condition	Water Outlet	Birds
			SM9222B	SM9222D	EPA 1600	Onshore	Offshore	Grease	Odor	Color	Temp(F)	Condition	Condition	Outlet	
S0	04/02/24	08:59	1000	100	100	None	None	None	None	Brown	62	Slightly Turbid			
S1	04/02/24	09:04	1900	480	280	None	None	None	None	Brown		Slightly Turbid			
S2	04/02/24	10:02	>=7500	4300	10400	None	None	None	None	Brown		Slightly Turbid			
DSB5	04/02/24	10:12	2900	420	740	None	None	None	None	Brown		Slightly Turbid		Flowing	
S3	04/02/24	09:13	320	80	40	None	None	None	None	Brown		Slightly Turbid			
DSB4	04/02/24	09:11	820	240	100	None	None	None	None	Brown		Slightly Turbid			
S5	04/02/24	09:24	320	80	20	None	None	None	None	Brown		Slightly Turbid			
DSB1	04/02/24	09:20	240	40	<20	None	None	None	None	Brown		Slightly Turbid			
SJC1	04/02/24	08:45	2800	500	400	None	None	None	None	Brown		Slightly 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.

Unified Beach Monitoring

#2

South Orange County Wastewater Authority-San Juan Creek Ocean Outfall

REPORT FOR: April 2024
 REPORT DUE: June 1, 2024
 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 05:10

Weather: Clear

COMMENTS:

STATION #	DATE	TIME	Total Coliform CFU/100ml	Fecal Coliform CFU/100ml	Entero-coccus CFU/100ml	Material of Sewage Origin		Oil & Grease		Water Color		H2O Temp(F)	Water Condition	Water Outlet	Birds
			SM9222B	SM9222D	EPA 1600	Onshore	Offshore	Grease	Odor	Color					
S0	04/10/24	09:20	20	<20	10	None	None	None	None	Green			Slightly Turbid		
S1	04/10/24	09:17	60	20	44	None	None	None	None	Green			Slightly Turbid		
S2	04/10/24	08:35	260	20	130	None	None	None	None	Green			Slightly Turbid		
DSB5	04/10/24	08:28	1120	200	160	None	None	None	None	Brown			Slightly Turbid	Flowing	
S3	04/10/24	09:36	20	<20	<2	None	None	None	None	Green			Slightly Turbid		
DSB4	04/10/24	09:33	20	<20	20	None	None	None	None	Green			Slightly Turbid		
S5	04/10/24	09:48	<20	20	10	None	None	None	None	Green	57		Slightly Turbid		
DSB1	04/10/24	09:51	<20	<20	<2	None	None	None	None	Green			Slightly Turbid		
SJC1	04/10/24	09:10	600	100	170	None	None	None	None	Brown			Slightly 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.

Unified Beach Monitoring

#3

South Orange County Wastewater Authority-San Juan Creek Ocean Outfall

REPORT FOR: April 2024
 REPORT DUE: June 1, 2024
 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 12:03

Weather: Clear

COMMENTS:

STATION #	DATE	TIME	Total Coliform CFU/100ml	Fecal Coliform CFU/100ml	Entero- coccus CFU/100ml	Material of Sewage Origin		Oil & Grease		Water Color		H2O Temp(F)	Water Condition	Water Outlet	Birds
			SM9222B	SM9222D	EPA 1600	Onshore	Offshore	Grease	Odor	Color	Temp(F)	Temp(F)	Condition	Outlet	
S0	04/16/24	09:19	100	<20	20	None	None	None	None	Green			Slightly Turbid		
S1	04/16/24	09:14	100	<20	4	None	None	None	None	Green			Slightly Turbid		
S2	04/16/24	08:51	300	200	130	None	None	None	None	Green			Slightly Turbid		
DSB5	04/16/24	08:45	2000	340	42	None	None	None	None	Green			Slightly Turbid	Flowing	
S3	04/16/24	09:33	60	20	2	None	None	None	None	Green			Slightly Turbid		
DSB4	04/16/24	09:38	80	<20	60	None	None	None	None	Green			Slightly Turbid		
S5	04/16/24	09:48	<20	<20	<2	None	None	None	None	Green	60		Slightly Turbid		
DSB1	04/16/24	09:51	20	<20	2	None	None	None	None	Green			Slightly Turbid		
SJC1	04/16/24	09:07	500	<100	60	None	None	None	None	Green			Slightly 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.

Unified Beach Monitoring

#4

South Orange County Wastewater Authority-San Juan Creek Ocean Outfall

REPORT FOR: April 2024
 REPORT DUE: June 1, 2024
 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 10:11

Weather: Partly Cloudy

COMMENTS:

STATION #	DATE	TIME	Total Coliform CFU/100ml	Fecal Coliform CFU/100ml	Entero- coccus CFU/100ml	Material of Sewage Origin		Oil & Grease		Water Color		H2O Temp(F)	Water Condition	Water Outlet	Birds
			SM9222B	SM9222D	EPA 1600	Onshore	Offshore	Grease	Odor	Color	Temp(F)	Condition	Condition	Outlet	
S0	04/24/24	09:20	280	80	64	None	None	None	None	Green			Slightly Turbid		
S1	04/24/24	09:10	100	40	36	None	None	None	None	Green			Slightly Turbid		
S2	04/24/24	09:45	20	<20	2	None	None	None	None	Brown	58		Slightly Turbid		
DSB5	04/24/24	09:55	3700	1200	94	None	None	None	None	Brown			Slightly Turbid		
S3	04/24/24	09:05	40	<20	28	None	None	None	None	Green			Slightly Turbid		
DSB4	04/24/24	09:00	40	<20	22	None	None	None	None	Green			Slightly Turbid		
S5	04/24/24	08:45	20	<20	4	None	None	None	None	Green			Clear		
DSB1	04/24/24	08:35	20	<20	<2	None	None	None	None	Green			Clear		
SJC1	04/24/24	09:30	700	400	150	None	None	None	None	Brown			Slightly 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: April 2024

Report Frequency: Monthly

Report Due: June 1, 2024

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

Low Tide 1157. A4 taken
0.1mi away from actual
site

Samples Analyzed By: SOCWA Lab

Comments:

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	0 - None 1 - Mild 2 - Moderate 3 - Severe
A-1	Surface	04/16/24	2	<2	<2	09:43	0	0	
A-1	Mid depth	04/16/24	20	10	<10				
A-2	Surface	04/16/24	<2	<2	<2	09:37	0	0	
A-2	Mid depth	04/16/24	<10	<10	<10				
A-3	Surface	04/16/24	2	<2	<2	09:52	0	0	
A-3	Mid depth	04/16/24	10	10	<10				
A-4	Surface	04/16/24	6	<2	<2	09:57	0	0	
A-4	Mid depth	04/16/24	230	100	60				
A-5	Surface	04/16/24	2	<2	<2	09:48	0	0	
A-5	Mid depth	04/16/24	10	10	<10				
B-1	Surface	04/16/24	2	<2	4	09:30	0	0	
B-1	Mid depth	04/16/24	<10	<10	<10				
B-2	Surface	04/16/24	<2	<2	<2	10:09	0	0	
B-2	Mid depth	04/16/24	120	70	30				
N1	Surface	04/16/24	<2	<2	<2	09:21	0	0	
N2	Surface	04/16/24	12	<2	<2	09:18	0	0	
N3	Surface	04/16/24	12	6	<2	09:15	0	0	
N4	Surface	04/16/24	2	<2	<2	09:10	0	0	
N5	Surface	04/16/24	2	<2	<2	09:07	0	0	
N6	Surface	04/16/24	2	<2	<2	09:05	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.

Receiving Water Limitations: (1)30-Day geometric mean of fecal coliform density not to exceed 200CFU/100 mL

calculated based on the five most recent samples from each site (2)single sample max not to exceed 400 CFU/100mL

(3) Enterococcus 6-week rolling geometric mean not to exceed 30 CFU/100 mL, calculated weekly. (4) Statistical threshold value (STV) of 110 CFU/100 mL for enterococcus not to be exceeded by more than 10% of samples collected in a calendar month, calculated in a static manner

Waste Discharge Requirement Order 97 - 52

Agency - Facility	Violation Date	Constituent	Effluent Limit Violation	Units	Permit Limit	Reported Value	Remarks
MNWD - RTP	1/5/2024	TDS	12 month	mg/L	1000	1198	
MNWD - RTP	1/5/2024	Manganese	12-Month	mg/L	0.05	0.130	
SOCWA - CTP	1/9/2024	Manganese	12-Month	mg/L	0.05	0.07	
MNWD - 3A	10/2/2023	TDS	12-Month	mg/L	1000	1064	Offline
MNWD - 3A	10/2/2023	Manganese	12-Month	mg/L	0.05	0.09	Offline
MNWD - RTP	2/13/2024	TDS	12 month	mg/L	1000	1245	
MNWD - RTP	2/13/2024	TDS	Daily Maximum	mg/L	1100	1520	
MNWD - RTP	2/13/2024	Manganese	12-Month	mg/L	0.05	0.140	
SOCWA - CTP	3/2/2024	TDS	Daily Maximum	mg/L	1200	1240.00	
SOCWA - CTP	3/2/2024	Manganese	12-Month	mg/L	0.05	0.14	
MNWD - 3A	10/2/2023	TDS	12-Month	mg/L	1000	1064	Offline
MNWD - 3A	10/2/2023	Manganese	12-Month	mg/L	0.05	0.09	Offline
MNWD - RTP	3/12/2024	TDS	12 month	mg/L	1000	1251	
MNWD - RTP	3/12/2024	TDS	Daily Maximum	mg/L	1100	1430	
MNWD - RTP	3/12/2024	Manganese	12-Month	mg/L	0.05	0.130	
SOCWA - CTP	3/2/2024	TDS	Daily Maximum	mg/L	1200	1241	
SOCWA - CTP	3/2/2024	Manganese	12-Month	mg/L	0.05	0.08	
MNWD - 3A	10/2/2023	TDS	12-Month	mg/L	1000	1064	Offline
MNWD - 3A	10/2/2023	Manganese	12-Month	mg/L	0.05	0.09	Offline
MNWD - RTP	4/10/2024	TDS	12 month	mg/L	1000	1257	
MNWD - RTP	4/10/2024	TDS	Daily Maximum	mg/L	1100	1440	
MNWD - RTP	4/10/2024	Manganese	12-Month	mg/L	0.05	0.130	
SOCWA - CTP	4/3/2024	TDS	Daily Maximum	mg/L	1200	1500	
SOCWA - CTP	4/3/2024	Manganese	12-Month	mg/L	0.05	0.09	
MNWD - 3A	10/2/2023	TDS	12-Month	mg/L	1000	1055	Offline
MNWD - 3A	10/2/2023	Manganese	12-Month	mg/L	0.05	0.09	Offline

Recycled Water Report

SOUTH ORANGE COUNTY WASTEWATER AUTHORITY

QUARTERLY RECYCLED WATER MONITORING

Monitoring Period Ending:

Apr 30, 2024

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	947.00		821.00	841.00	1055.00	1257.00	1066.00
Chloride	mg/L	375	215.00		205.00	219.00	227.00	254.00	249.00
Sulfate	mg/L	400	319.00		233.00	197.00	250.00	350.00	328.00
Sodium	mg/L	None	53.00		140.00	163.00		150.00	180.00
Alkalinity	mg/L	None	-	-	-	-		262.00	198.00
Adjusted SAR	Ratio	None	3.72		4.21	5.43	3.20	3.55	4.25
Iron	mg/L	0.3	.04		.09	.04	.17	.20	.14
Manganese	mg/L	0.05	.00		.03	.01	0.09	.13	.09
MBAS	mg/L	0.5	ND		ND	ND	<0.05	<0.10	<0.10
Boron	mg/L	0.75	.32		.23	.21	.31	.33	.31
Fluoride	mg/L	None	.67		.78	.74	.80	.78	.82
Total Organic Carbon	mg/L	None	6.30		9.80	6.00	2.60	8.90	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)
2024

Agency	Facility or Region	Jan '24	Feb '24	Mar '24	Apr '24	May '24	Jun '24	Jul '24	Aug '24	Sep '24	Oct '24	Nov '24	Dec '24	Annual Totals
CSJC 1	3-A Plant/MNWD	.00	.00	.16	.00									.16
CSJC 2	Chiquita/SMWD	8.32	4.19	3.20	2.87									18.58
CSJC 3	Non-Domestic Well	4.26	.00	13.67	28.43									46.36
ETWD	Region 8	17.23	9.21	19.77	44.84									91.05
IRWD														
4	IRWD - 8	26.18	7.83	13.06	35.61									82.68
4	IRWD - 9	9.80	2.87	7.17	17.10									36.94
SCWD	SOCWA CTP	30.54	.08	23.56	40.84									95.03
MNWD	JRP	210.93	154.61	24.95	95.72									486.21
	3-A Plant	.00	.00	.00	.00									
5	CTP	3.04	-1.49	-3.55	-10.31									-12.31
SMWD	Oso Creek	Offline	Offline	Offline	Offline									
	Chiquita	535.21	513.58	536.29	494.52									2079.60
	Nichols	1.61	1.68	1.46	1.39									6.14
TCWD	RRWRP	39.21	39.85	43.29	41.57									163.92
TOTALS		886.30	732.41	683.04	792.57									3094.32

- 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: June 6, 2024

TO: Board of Directors

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

STAFF CONTACT: Katie Greenwood, Source Control Manager

SUBJECT: Monthly Pretreatment Report – April and May 2024
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.

Staff received notice that RWQCB-SD Staff will conduct a Pretreatment Compliance Audit (PCA) of SOCWA’s Pretreatment Program on June 18, 2024.

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:

SCWD – NSWD Permit No. SCWD-N4-010 for Three Arch Bay (TAB) – TAB has finalized construction of two new dry weather diversion sewer connections to replace the existing connection. SOCWA Staff received a permit application from TAB Staff on April 15. SCWD Staff is working on finalizing a new agreement between the two agencies. Once finalized and received, the current permit will be revoked, and a new permit will be issued reflecting the new diversions and removal of the existing connection.

CSC – Renewal WD Permit No. CSC-1-002 for Glaukos at 229 Avenida Fabricante – Non-Significant Categorical Industrial User (NSCIU) WD Permit to allow Glaukos to continue to discharge no more than 100 gpd of wastewater subject to metal finishing rules under 40 CFR Part 433. Staff are waiting to receive a renewal permit application and expect to issue a renewal permit issued before June 19, 2024.

CSC – Renewal NSW Permit No. CSC-N4-001 – Multiple Dry Weather Diversions – NSW Permit to continue to allow dry weather diversion flows to be discharged to the sewer. A renewal application was received on May 6, 2024, and a new renewal permit will be issued before June 24, 2024.

Trainings and Committee Meetings Attended

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

On April 29, 2024, Staff attended the in-person Human Waste Abatement Group (HWAG) meeting at MNWD HQs to receive updates on the Comprehensive Human Waste Source Reduction Strategy (CHWSRS) work plan and to support MA Staff who provided presentations on SSOs and FOG control measures.

On May 14-17, 2024, Staff attended NACWA's Annual Pretreatment Workshop. The workshop focused on PFAS regulations from a Federal, State, and local program perspective. Staff helped lead breakout session discussions for EPA Region 9. Staff also continues to attend the annual pretreatment committee meeting to share and receive national news as it relates to wastewater rules and regulations.

Inspections

SOCWA Staff will soon start conducting its required annual site inspections and monitoring/sampling of all SIUs/CIUs in the SOCWA service area. This is a required activity of the SOCWA pretreatment program. The information and data obtained from these required activities will be incorporated into the SOCWA Pretreatment Annual Report.

Summary of IWS Activities in SOCWA's Service Area - YTD through May 20, 2024

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)	10	11	35	18	184	1265	37	1	0	1550
CSJC (S)	4	0	27	59	143	1691	29	0	0	1949
ETWD (M)	0	0	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	915	18	0	0	1072
MNWD (S)	51	5	120	38	652	2140	150	11	2	3105
SMWD (S)	20	10	19	20	215	841	52	3	1	1157
SCWD (S)	0	7	33	7	148	186	15	0	0	397
TCWD (S)	0	0	11	0	7	33	2	0	0	51
SOCWA (S)	0	5	1	0	0	0		0	0	6
Totals	85	46	387	168	1682	7312	368	15	3	9918

(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: June 6, 2024

TO: Board of Directors

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

STAFF CONTACT: Roni Grant, Associate Engineer

SUBJECT: Capital Improvement Program Status Report (May)

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

J.B. Latham Centrate Line Upgrades

Replacement of valves and piping in the centrate system located in the Dewatering Building.

The notice to proceed (NTP) has been issued to SS Mechanical. The contractor mobilized in mid-May.

Coastal Treatment Plant Diffusers Upgrades

Replacement of diffusers and air headers in the aeration basins.

The contractor completed the installation of fine-bubble diffusers in the first basin.

Aliso Creek and San Juan Creek Ocean Outfalls Ballast Maintenance

Ballast maintenance and repair as part of the conditional lease requirements in the State Lands Commission 24-year leases.

The NTP has been issued to Subsea Global Solutions on 2/21/2024. Work on the San Juan Creek Ocean Outfall was completed on 4/19/2024. Work on the Aliso Creek Ocean Outfall was completed on 5/3/2024. This will be the last report of the project.

Recommended Action: Information Item.

SOCWA CIP Workplan

Project Number	Project Name	Project Budget	Status	FY 2023/2024				FY 2024/2025			
				Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
PC 2 - J.B. Latham Treatment Plant											
3220/3231/3287	Facility Improvements B		Construction complete								
32234L	Chlorine Contact Basin Isolation Gates and Structural Rehab	\$ 165,736						D	D	B&A	C
32231C	Process Water Repiping	\$ 50,000						P	P	D	D
3216/32225S	Energy Building Upgrades	\$ 2,037,000	Design proposal under review				P	D	D	D	B&A
3252	MCC M and G Replacement	\$ 1,882,988	Design underway	D	D	D	D	B&A	C	C	C
3234	Centrate Piping Reconstruction	\$ 648,794	Construction underway	D	B&A	C	C	C	C		
32226L	Effluent Pump Station Upgrades	\$ 950,000	Design proposal under review				P	D	D	D	B&A
32233S	Scum Line Replacement	\$ 150,000	Design underway			D	D	B&A	C		
32244S	Digester Gas and Flare Piping Improvements	\$ 75,000				P	P	D	D	D	D
32243L	Plant 2 Headworks Rehabilitation	\$ 200,000	Design proposal under review			P	D	D	D	B&A	C
32244L	Plant 2 Primary Clarifier Condition Assessment	\$ 50,000	Complete			P	CA				
32243C	SCADA Server Replacement	\$ 200,000	Bidding underway			B&A	B&A	C	C		
PC 5 - San Juan Creek Ocean Outfall											
36241O	SJCOO Outfall Ballast Repairs	\$ 250,000	Complete		D	B&A	C				
PC 15 - Coastal Treatment Plant											
3541	Export Sludge Environmental Mitigation	\$ 1,392,100	Mitigation work/permitting ongoing	ENV	ENV	ENV	ENV	ENV	ENV	ENV	ENV
35228L	Aeration Diffuser Replacement	\$ 1,250,000	Construction underway	D	B&A	C	C	C	C		
3525	Personnel Building Reconstruction	\$ 471,586	Design underway	D	D	D	D	B&A	C	C	C
35221L	Auxiliary Blower Building Roof	\$ 250,000	Bidding underway					B&A	C	C	C
3522AL	Drainage Pump Station	\$ 500,000	Conceptual design underway	D	D	D	D	D	D	B&A	C
35235L	Odor Control Scrubber Improvements	\$ 1,447,600	Planning underway			P	P	D	D	D	B&A
35245L	Aeration Deck Grating Replacement	\$ 50,000	Design underway		D	D	B&A	C	C		
35246L	West Primary Sludge Skimmers and Launderers/Weirs	\$ 150,000	Design underway		D	D		B&A	C	C	C
35247L	Aeration Blower System Upgrades	\$ 75,000	Planning underway		P	P	P	P	P	D	D
35249L	SCADA Server Replacement	\$ 200,000	Bidding underway			B&A	B&A	C	C		

SOCWA CIP Workplan

Project Number	Project Name	Project Budget	Status	FY 2023/2024				FY 2024/2025			
				Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
PC 17 - Regional Treatment Plant											
3742	Aeration System Upgrades	\$ 3,531,085							P	P	D
37241L	Grit/Primary Grating/Gate Replacement	\$ 150,000	RFP issued					D	D	D	B&A
37242L	Aeration Influent/Effluent Gate Replacement	\$ 100,000	RFP issued					D	D	D	B&A
3722AL/37236S /3779/37244C	MCC Replacement/Power System Improvements	\$ 2,337,197	RFP issued		P	P	P	D	D	D	D
37245S	Digester Gas System Improvements	\$ 200,000	PO issued for Flare Upgrades				D	D	D	B&A	C
37246S	Digester 1 Piping Replacement	\$ 250,000	Condition assessemnt complete				CA	D	D	D	B&A
37247S	Odor Scrubber 1 Replacement	\$ 15,000						P	P	D	D
37243C	SCADA Server Replacement	\$ 200,000	Bidding underway			B&A	B&A	C	C		
PC 21 - Effluent Transmission Main											
3105/3106/ 3107/3108	Air Valve Replacement	\$ 2,226,210	Design underway	D	D	D	D	ENV	B&A	B&A	C
3101/31221B	Trail Bridge Crossing	\$ 1,859,987	Planning/design underway	P	P	P	P	ENV	ENV	ENV	ENV
PC 24 - Aliso Creek Ocean Outfall											
34241O	ACOO Outfall Ballast Repairs	\$ 280,000	Complete		D	B&A	C				

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

Note: Projects with zero budget had funds collected in a prior fiscal year.

Agenda Item

5.G.

Board of Directors Meeting

Meeting Date: June 6, 2024

TO: Board of Directors

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

STAFF CONTACT: Roni Grant, Associate Engineer

SUBJECT: Capital Improvement Construction Projects Progress and Change Order Report (May) [Project Committee Nos. 2, 5, 15 and 24]

Overview

This agenda item provides an update on projects in construction, including any change orders. Attached are the updated CIP reports.

Project Updates

JBL Centrate Line Upgrades

The notice to proceed (NTP) has been issued to SS Mechanical. The contractor mobilized onsite in mid-May.

CTP Diffusers Replacement

The contractor completed the installation of fine-bubble diffusers in the first basin.

Aliso Creek and San Juan Creek Ocean Outfalls Ballast Maintenance

The NTP has been issued to Subsea Global Solutions on 2/21/2024. Work on the San Juan Creek Ocean Outfall was completed on 4/19/2024. Work on the Aliso Creek Ocean Outfall was completed on 5/3/2024. This will be the last report of the project.

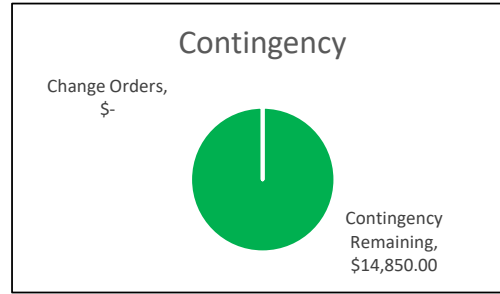
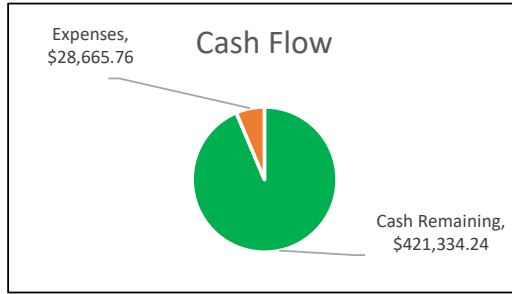
Recommended Action: Information Item.

Project Financial Status

Project Committee	2
Project Name	Centrate Line Upgrades - 3234
Project Description	Removal and replacement of centrate drain piping, non-potable water piping in the Solids Dewatering Building

Data Last Updated

May 28, 2024

**Cash Flow**

Collected	\$ 450,000.00
Expenses	\$ 28,665.76

Project Completion

Schedule	15%
Budget	13%

Contracts

Company	PO No.	Original	Change Orders*	Total	Costs to Date
S&S Mechanical	19635	\$ 148,455.00		\$ 148,455.00	
Kleinfelder	14234	\$ 71,374.00	\$ -	\$ 71,374.00	\$ 6,486.25
SOCWA Staff Time	3234	\$ -	\$ -	\$ -	\$ 22,179.51
		\$ 219,829.00	\$ -	\$ 219,829.00	\$ 28,665.76

*Values include change orders to be reviewed by Engineering Committee

Contingency

Area	Project Code	Amount	Change Orders*	Total Remaining	Percent Used
Solids	3234	\$ 14,850.00		\$ 14,850.00	0.0%
		\$ 14,850.00	\$ -	\$ 14,850.00	0.0%

*Values include change orders to be reviewed by Engineering Committee

Change Orders

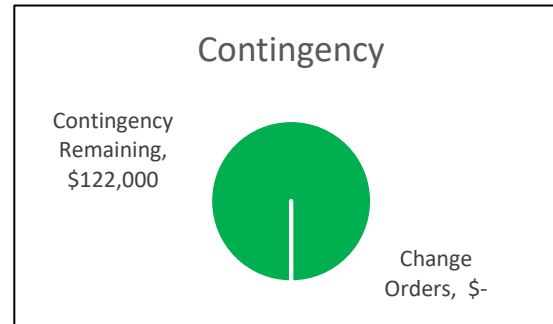
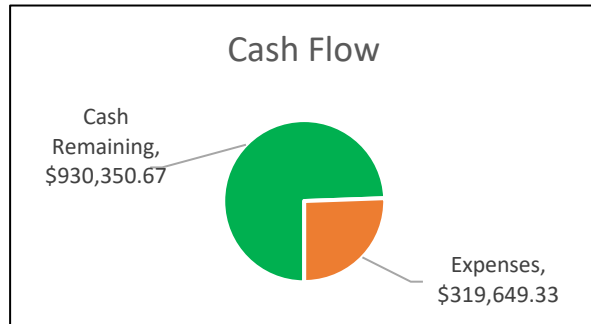
Change Order No.	Vendor Name	Project ID	Description	Status Date	Days	Amount
						\$ -

Project Financial Status

Project Committee	15
Project Name	CTP Diffusers
Project Description	Replacement of diffusers in the aeration basins

Data Last Updated

May 28, 2024

**Cash Flow**

Collected	\$ 1,250,000.00
Expenses	\$ 319,649.33

Project Completion

Schedule	25%
Budget	23%

Construction Contracts

Company	PO No.	Original	Change Orders	Amendments	Total	Costs to Date
Filanc	19640	\$ 1,022,250.00			\$ 1,022,250.00	\$ 25,887.50
EDI	16620	\$ 250,490.00			\$ 250,490.00	\$ 250,490.00
Hazen	17256/19641	\$ 93,578.00			\$ 93,578.00	\$ 13,982.50
SOCWA Staff Time	35228L				\$ -	\$ 29,289.33
		\$ 1,366,318.00	\$ -	\$ -	\$ 1,366,318.00	\$ 319,649.33

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

Construction Contingency

Area	Project Code	Amount	Change Orders	Total Remaining	Percent Used
Liquids	35228L	\$ 122,000.00		\$ 122,000.00	0.0%
		\$ 122,000.00	\$ -	\$ 122,000.00	0.0%

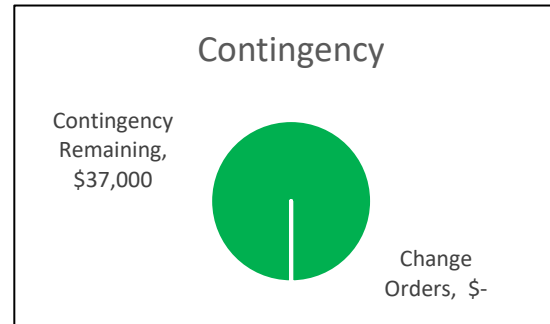
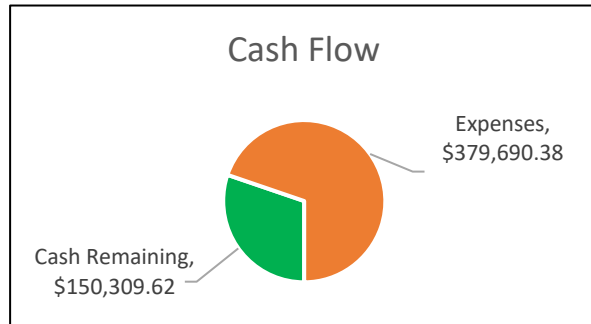
Change Order No.	Vendor Name	Project ID	Description	Status Date	Days	Amount
1	Filanc	35228L	Contract Extension	4/4/2024	273	\$ -
						\$ -

Project Financial Status

Project Committee	5 and 24
Project Name	SJCOO and ACCO Ballast Maintenance - 36241O/34241O
Project Description	Maintenance and repair of ballast at the two outfalls

Data Last Updated

May 28, 2024



Cash Flow

Collected	\$ 530,000.00
Expenses	\$ 379,690.38

Project Completion

Schedule	100%
Budget	99%

Construction Contracts

Company	PO No.	Original	Change Orders	Amendments	Total	Costs to Date
Subsea Global	19944	\$ 370,000.00			\$ 370,000.00	\$ 355,707.88
Seaventures	20102	\$ 10,000.00			\$ 10,000.00	\$ 10,000.00
SOCWA Staff Time	36241O/34241O				\$ -	\$ 13,982.50
		\$ 380,000.00	\$ -	\$ -	\$ 380,000.00	\$ 379,690.38

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

Construction Contingency

Area	Project Code	Amount	Change Orders	Total Remaining	Percent Used
Outfall	36241O/34241O	\$ 37,000.00		\$ 37,000.00	0.0%
		\$ 37,000.00	\$ -	\$ 37,000.00	0.0%

Change Orders

						\$ -

Agenda Item

5.H.

Budgeted: N/A

Budget amount: N/A

Line Item: N/A

Legal Counsel Review: No

Meeting Date: June 6, 2024

TO: Board of Directors

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

STAFF CONTACT: Amber Boone, Director of Environmental Compliance

SUBJECT: House of Representatives (H.R.) 7944 Support Letter

Summary

H.R. 7944 would provide CERCLA liability protections for PFAS chemicals designated as hazardous substances for public and private water and wastewater utilities, as well as Biosolids management. The legislation would protect these utilities from being dragged into third-party litigation as a means to help the primary responsible party reduce its cleanup costs under CERCLA. Importantly, H.R. 7944 would only grant such protections if utilities abide by all applicable laws at the time of conveyance or treatment.

Discussion/Analysis

H.R. 7944 was introduced into the House of Representatives on April 11, 2024. H.R. was then referred to the Committee on Energy and Commerce and in addition to the Committee on Transportation and Infrastructure. The Committee on Energy and Commerce referred the bill to the Subcommittee on Environment, Manufacturing, and Critical Materials. Three members of the Environment, Manufacturing, and Critical Materials Subcommittee are from California. Congresswoman Nanette Diaz Barragan, representing District 44, is the closest geographical representative to the SOCWA representatives.

The SOCWA service area is also included within three U.S. House of Representatives jurisdictions. The jurisdictions are for Congresspersons Young Kim, Katie Porter, and Mike Levin.

At the direction of the SOCWA Board, the attached letter will be provided to each of the four (4) U.S. House of Representatives for California to support H.R. 7944.

Prior Related Project Committee or Board Action(s)

At the May 2, 2024, SOCWA Board Meeting, Board member Goldman asked Acting General Manager/Director of Operations Jim Burror for the status of the California Association of Sanitation Agency letter. This agenda item brings this discussion to the Board as a follow-up to Director Goldman's inquiry.

Recommended Action: Staff recommends that the Board of Directors authorize SOCWA's Board Chair to send the H.R. 7944 CASA Delegation Letter to the four (4) U.S. House of Representatives from California listed above.

Attachment(s): H.R. 7944 CASA Delegation Letter



South Orange County Wastewater Authority

June 6, 2024

The Honorable _____
U.S. House of Representatives
Washington, D.C. 20515

Dear Representative _____:

On behalf of the South Orange County Wastewater Authority (SOCWA), we write to urge you to support the *Water Systems PFAS Liability Protection Act* (H.R. 7944). This bipartisan legislation provides critical liability protections for public water and wastewater agencies for PFAS chemicals designated as hazardous substances under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA).

The South Orange County Wastewater Authority (SOCWA) is a Joint Powers Authority responsible for providing wastewater treatment, effluent and biosolids disposal, and water recycling at regional facilities in the southern part of Orange County. SOCWA was formed by the following seven (7) member agencies: the City of Laguna Beach, the City of San Clemente, El Toro Water District, Emerald Bay Service District, Moulton Niguel Water District, Santa Margarita Water District, and South Coast Water District.

SOCWA and the nine wastewater facilities that are covered under the two NPDES permits are passive recipients of PFAS. We are not the creators or users of these chemicals. While we maintain a stringent Source Control program designed to decrease the amount of toxic pollutants entering the sewer system, the ubiquity of PFAS makes it difficult, if not impossible, to control through standard pretreatment programs.

Unfortunately, the U.S. Environmental Protection Agency's (USEPA) Designation of Perfluorooctanoic Acid (PFOA) and Perfluorooctanesulfonic Acid (PFOS) as CERCLA Hazardous Substances final rule does not provide liability protections for public wastewater utilities, like SOCWA. While the Agency has stated it does not intend to go after public wastewater utilities, there is still the threat that SOCWA could be dragged into third-party litigation. The final rule also does not provide liability protections for biosolids management or land application. As a result, SOCWA faces dual uncertainty concerning the legality of our biosolids management practices. If SOCWA or another public wastewater agency were to be unfairly dragged into litigation under CERCLA for PFOS or PFOA cleanups, it would ultimately be a cost borne by our ratepayers, contradicting CERCLA's "polluter pays principle."

H.R. 7944 would provide CERCLA liability protections for PFAS chemicals designated as hazardous substances for public and private water and wastewater utilities, as well as biosolids management. The legislation would protect these utilities from being dragged into third-party litigation as a means to help the primary responsible party reduce its cleanup costs under CERCLA. Importantly, H.R. 7944 would only grant such protections if utilities abide by all applicable laws at the time of conveyance or treatment.

Again, we urge you to support H.R. 7944 and ensure that the underlying "polluter pays principle" of CERCLA is upheld and public wastewater agencies, who passively receive these chemicals, and ratepayers are not held holding the bag.

Sincerely,

Matt Collings
Board of Directors Chairman
South Orange County Wastewater Authority
(SOCWA)

Agenda Item

5.I.

Budgeted: No

Budget amount: \$685,000 Small Cap

Line Item: 02-1580-00-01-00 (Small Cap)

Legal Counsel Review: No

Meeting Date: June 6, 2024

TO: Board of Directors

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

STAFF CONTACT: Jeanette Cotinola, Procurement/Contracts Manager

SUBJECT: Blower #8 Overhaul at J.B. Latham Plant (JBL) [Project Committee 2]

Summary

This agenda item provides a recommendation for awarding a small capital project to overhaul Blower #8 at JBL. The total cost for the equipment is \$52,883.70 plus supplemental taxes, shipping, and fees to be determined at the time of shipping.

Discussion/Analysis

SOCWA needs to overhaul a Blower that was installed in 2017 that is at the end of its useful life. AERZEN USA Corporation parts and services are solely distributed by AERZEN for AERZEN Blowers in California.

Thus, AERZEN USA Corporation is the only available vendor to SOCWA for these overhaul services.

Fiscal Impact

This contract will exceed the Acting General Manager's purchasing authority of \$50,000.

This small capital project is located in the liquids area of JBL. Therefore, the costs will be allocated using the liquids ownership allocations for JBL. The following are the cost allocations for the project:

Agency	Budget Allocation %(1)	Cost
MNWD	23.08%	\$12,205.56
SCWD	28.84%	\$15,251.66
SMWD	48.08%	\$25,426.48
Total	100.00%	\$52,883.70

(1) Budget Book 2023-24

The actual shipping costs, fees, and additional tax will be added to the allocated costs using the liquids ownership percentages shown above when the invoice is received.

Staff also requests a \$5,000 contingency for unknown conditions discovered during the teardown of the Blower.

Recommended Action: Staff recommends that the PC 2 Board of Directors i) authorize the Acting General Manager/Director of Operations to contract with AERZEN USA Corporation for the overhaul of Blower #8 at JBL, at the cost of \$52,883.70, plus shipping costs, fees, and additional tax to be determined at the time the units are shipped, and ii) approve a \$5,000 project contingency for unknown conditions discovered during the teardown of the Blower.

Agenda Item

5.J.

Board of Directors Meeting

Meeting Date: June 6, 2024

TO: Board of Directors

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

STAFF CONTACT: Dina Ash, Human Resources Administrator

SUBJECT: Resolution 2024-04: A Resolution of the Board of Directors of the South Orange County Wastewater Authority (SOCWA) Approving New Employee Salary Ranges to the July 1, 2024, to June 30, 2025, Memorandum of Understanding ("MOU") between the South Orange County Wastewater Authority and the SOCWA Employee Association

Summary/Discussion

With the approval of the SOCWA Employee Association MOU on May 16, 2024, the Authority authorized a Cost of Living Increase of 6%.

The Deferred Compensation Match increases by \$400 to equal up to \$1,500 per fiscal year.

All employees eligible to receive paid holidays will be scheduled by management.

MOU has been updated to incorporate various language changes and applicable changes to employment laws and regulations.

Therefore, beginning July 1, 2024, the salary ranges in the MOU in Exhibit "B" have been increased 6%.

Recommended Action: Staff recommends that the Board of Directors approve Resolution 2024-04, A Resolution of the Board of Directors of the South Orange County Wastewater Authority (SOCWA) Approving New Employee Salary Ranges to the July 1, 2024, to June 30, 2025, Memorandum of Understanding ("MOU") between the South Orange County Wastewater Authority and the SOCWA Employee Association.

Attachments/

RESOLUTION NO.2024-04

**A RESOLUTION APPROVING NEW EMPLOYEE SALARY RANGE SUMMARY
AND EMPLOYEE JOB CLASSIFICATION SALARY SCHEDULE TO THE JULY 1,
2024, TO JUNE 30, 2025, MEMORANDUM OF UNDERSTANDING BETWEEN THE
SOUTH ORANGE COUNTY WASTEWATER AUTHORITY AND THE SOCWA
EMPLOYEE ASSOCIATION**

WHEREAS, the employees represented by the South Orange County Wastewater Authority Employee Association (SEA) are a viable and important part of the SOCWA organization; and

WHEREAS, the SEA has met and conferred in good faith with the designated Authority representatives for the adoption of the current Memorandum of Understanding applicable to the period July 1, 2024, to June 30, 2025 ("**MOU**"); and

WHEREAS, the MOU establishes Salary Adjustments on an annual basis, and thereby requires the adjustment of Exhibit "B" Job Classification Salary Schedule to the MOU in each annual period for the purposes of maintaining a current Salary Range Summary and Job Classification Salary Schedule; and

WHEREAS, the SOCWA now desires to approve a revised Exhibit "B" Job Classification Salary Schedule to the MOU to memorialize the percentage change of 6%, the same begin consistent with the terms of the MOU.

NOW, THEREFORE, the Board of Directors of the South Orange County Wastewater Authority does hereby **RESOLVE, DETERMINE AND ORDER** as follows:

Section 1. The MOU provides that salary adjustments will be made according to MOU Section IV Compensation (C). The MOU salary adjustment will be 6%. Therefore, beginning July 1, 2024, the salary ranges in Exhibit "A" and salary schedules in Exhibit "B" have been increased 6%.

Section 2. The Acting General Manager/Director of Operations or the Chairperson of the Board of Directors is authorized to attach to the MOU for the period July 1, 2024, to June 30, 2025, the revised Exhibit "A" and "B" attached hereto.

Section 3. The Secretary of SOCWA shall certify the adoption of Resolution No. 2024-04 and shall maintain a certified copy thereof at the principal office of SOCWA.

PASSED AND ADOPTED this 6th day of June 2024.

SOUTH ORANGE COUNTY WASTEWATER AUTHORITY

(Seal)

By: _____
Matt Collings, Chairman

By: _____
James (Jim) L. Burror, Jr., Board Secretary

STATE OF CALIFORNIA)
) ss.
COUNTY OF ORANGE)

I, James L. Burror, Jr., Secretary of the Board of Directors of the SOUTH ORANGE COUNTY WASTEWATER AUTHORITY (“SOCWA”), do hereby certify that the foregoing is a full, true, and correct copy of **Resolution No. 2024-04** of said Board and that the same has not been amended or repealed.

Dated this 6th day of June 2024.

James L. Burror, Jr., Board Secretary
SOUTH ORANGE COUNTY WASTEWATER AUTHORITY

MEMORANDUM OF UNDERSTANDING
BETWEEN THE
SOUTH ORANGE COUNTY WASTEWATER AUTHORITY
AND THE
SOCWA EMPLOYEE ASSOCIATION

July 1, 2024 to June 30, 2025

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SECTION I

A. RECOGNITION

The South Orange County Wastewater Authority, hereinafter referred to collectively as the "Agency," recognize the SOCWA Employee Association, hereinafter referred to as the "SEA", as the exclusive recognized employee organization for matters within the scope of representation for the classifications shown in Exhibit "A".

B. DURATION

This Memorandum of Understanding shall become effective as of July 1, 2024 and shall remain in full force and effect until June 30, 2025 and shall renew automatically from year to year thereafter unless either party gives at least sixty (60) days' notice in writing to the other party prior to any annual expiration date of their desire to modify or terminate this Agreement.

C. FULL UNDERSTANDING, MODIFICATION AND WAIVER

It is intended that this Memorandum of Understanding sets forth the full and entire understanding of the parties regarding the matters set forth herein, and any other prior or existing understanding or agreements by the parties, whether formal or informal, regarding any such matters are hereby suspended or terminated in their entirety.

Except as specifically provided herein, it is agreed and understood that SEA hereto voluntarily and unqualifiedly waives its rights, and agrees that the Agency will not be required to negotiate with respect to any subject or matter covered herein during the term of this Agreement. Except in cases of emergency as provided by Government Code Section 3504.5, the Agency shall provide reasonable written notice to the SEA of any ordinance, resolution; rule or regulation directly related to matters within the scope of representation proposed to be adopted by the Agency Board of Directors and shall give SEA the opportunity to meet with the Agency representatives.

Any agreement, alteration, understanding, variation, waiver or modification of any of the terms or provisions contained herein shall not be binding upon the parties hereto unless contained in writing signed by both parties and approved and implemented by the Agency Board of Directors.

The waiver of any breach, term or condition of this Agreement by either party shall not constitute a precedent in the future enforcement of all of its terms and provisions.

D. PROVISIONS OF LAW

It is understood and agreed that this Memorandum of Understanding is subject to all current and future applicable federal and state laws, and federal and state regulations. If any part of a provision of this Memorandum of Understanding is in conflict or inconsistent with such above applicable laws, rules and regulations, or is otherwise held to be invalid or unenforceable by any tribunal of competent jurisdiction, such part of provision shall be suspended and superseded by such applicable law or regulations, and the remainder of this Memorandum of Understanding shall not be affected thereby.

E. MANAGEMENT RIGHTS

Except as expressly limited by the provisions of this Memorandum of Understanding, all management rights, including the control, direction, and supervision of all SOCWA operations and personnel are vested in the Agency. Such functions include, but are not limited to, the right to hire new employees; to direct the work force; to determine the types and kind of services to be provided; to hire outside companies and vendors to perform services; to increase and decrease the amount of work available; to schedule and assign work; to determine the number of work shifts and hours of work; to subcontract work; to determine the types of work to be performed; to establish and enforce job standards; qualifications; conduct and safety regulations; to determine job content; and to change materials, processes, services, equipment, jobs, operations, locations and the number and type of facilities. The Agency also retains the right to hire, transfer, promote, demote, layoff and recall employees and to discharge, suspend and discipline employees for just cause.

F. NO STRIKE OR LOCKOUT

During the term of this Memorandum of Understanding, the employees, their agents and representatives, including, but not limited to, SEA will not instigate, promote, sponsor, engage in or condone any strike (including sympathy strike), slow down, concerted stoppage of work, sick-out, or any other disruption of the operations of the Agency, regardless of the reason for so doing. Any employee engaging in such activity prohibited by this Article, or who instigates or gives leadership to such activity, shall be subject to disciplinary action up to and including termination.

During the term of this Memorandum of Understanding, the Agency will not institute a lockout over a dispute with the employees so long as there is no breach of the above no-strike provision.

G. DUES DEDUCTIONS AND NEW HIRE ORIENTATION

The Agency will deduct from each regular paycheck of all employees who have submitted a Dues, Deduction to SEA and remit to the SEA Treasurer, the dues, initiation fees and assessments for each employee as required by California law.

Authorizations for payroll deductions and authorizations to stop payroll deductions will be submitted in writing by the employee to the SEA Treasurer.

The Association will receive no less than 10 days written notice (via email) in advance of an orientation for new hires whose positions are within their bargaining unit, except that a shorter notice may be provided in a specific instance where there is an urgent need critical to the SOCWA's operations that was not reasonably foreseeable. The Association representative shall have 15 minutes during the orientation, or a longer time if mutually agreed upon, to present information to the new hire(s) related to the Association and MOU. Within 30 days of the date of hire, the SOCWA shall provide the Association with the name, job title, department, work location, work, home, and personal cellular telephone numbers, personal email address on file with the SOCWA and the home address of the new hire (personal information may be excluded upon written request of the employee as set forth in Government Code section 6254.3(c)). In addition, the SOCWA shall provide the same information for all employees in the bargaining unit to the Association every six months.

H. USE OF AGENCY FACILITIES

SEA may use Agency facilities to hold general membership and Board of Directors meetings with employees. Reasonable release time will be allowed to conduct Association business, subject to approval by the General Manager. Such requests must be made in writing to the Human Resources Department at least 48 hours prior to the date requested. Approval will be granted unless prior Agency use of the facility is scheduled. This permission to use Agency facilities is subject to revocation upon ten (10) days' notice to the SEA.

I. ACCRUAL OF NEW OR EXISTING FACILITIES

In the event any new or existing plant and/or facility is acquired by, or comes under the control or direction of the Agency during the time of this Memorandum of Understanding, the parties agree that the employees of any such plants and/or facilities, occupying positions identical, or substantially similar to, and/or performing job duties identical, and/or substantially similar to classifications contained herein, shall be governed by the provisions of this Agreement to the extent allowed by law. In the event that there is any discrepancy between policies, procedures, or other practices currently governing such employees, the current MOU between SOCWA and SEA and the personnel policies of the Agency would govern.

J. AGENDAS

Agendas of SOCWA Board of Director meetings will be furnished to SEA at no charge.

K. AMERICANS WITH DISABILITIES ACT

The parties recognize that they are subject to the Americans with Disabilities Act (ADA) and Fair Employment and Housing Act ("FEHA"), and that these laws may require, among other things, that the Agency provide reasonable accommodation to employees with disabilities. Accordingly, the Agency is permitted to take all actions necessary to comply with the ADA and FEHA.

SECTION II EMPLOYMENT

A. EMPLOYEE EVALUATION

1. Original Appointments: Original appointments shall be subject to a probationary period of between six to twelve months. In the event an employee is off work for any reason for two or more weeks during the probationary period, then the probationary period will be extended by the amount of time that employee is away from work.
2. Probation Period: The probationary period shall be regarded as part of the selection process and shall be utilized for close observation and evaluation in order to determine the capability of the probationer to satisfactorily perform the requirements of the position.

After serving the probationary period and receiving a favorable rating from their immediate supervisor and/or Department Director and a favorable recommendation from the General Manager, said employee may thereafter be paid on a monthly basis at the rate fixed no greater than the amount approved by the General Manager and within the range the employee was hired. Passing the

probation period with a satisfactory rating is a requirement for continued employment. Each year thereafter, the employee shall receive a performance rating. Upon recommendation of the General Manager, a new employee may be hired at a higher rate than the minimum salary of the applicable range of the salary schedule.

3. Promotional Appointments: Present employees will be notified of promotional opportunities when a vacancy occurs at any of the SOCWA treatment plants. Employees with the required knowledge, certification, skill, ability, interest and physical fitness will be given an opportunity to apply for such vacancies. Decisions regarding promotional appointments shall be made by a review panel appointed by the General Manager. All promotional appointments are subject to final approval by the General Manager. Promotional appointments shall be subject to at least six (6) and up to nine (9) months probationary period. In the event an employee is off work for any reason for two or more weeks during the probationary period, then the probationary period will be extended by the amount of time that the employee is away from work.

Any employee, who is in a Grade I or II category, may be promoted to a Grade II or III upon:

- 1) Successful completion of the required or voluntary applicable exam; and
 - 2) Two consecutive above-standard performance reviews, one while in possession of the higher certification and recommendation of the employee's supervisor and approval of the General Manager.
4. Rejection during Probationary Period: A probationary employee may be rejected at any time without the right of appeal or hearing during the probationary period. A rejected probationer serving as a result of original appointment shall be dismissed from service. A rejected probationer serving as a result of promotional appointment shall be reinstated to the position or class, or comparable position, from which promoted, unless otherwise dismissed from service as provided in this policy.
 5. Reclassification. When a full-time employee is reclassified and the position he/she occupies is reclassified to a position with a lower salary range, the employee will be designated at the lower salary range unless otherwise recommended by the employee's supervisor and concurred with by the General Manager.
 6. Performance Evaluation: Employees who have passed their probationary period shall have their performance evaluated by their supervisors at least annually from the date of completing probation (anniversary date). Such evaluations may be prepared on such a frequency as is deemed appropriate by the supervisor. The evaluation and appraisal form will be reviewed together by both the employee and his/her supervisor and signed after having been reviewed and approved by the General Manager.

B. WORK DAYS

1. Work day shifts may be changed from time to time, in regard to the respective job functions. The workweek schedule will commence on Sunday and end on

Saturday. The designated work schedule will include a one half-hour lunch period for which the employee will be compensated.

SOCWA establishes work schedules and start times to meet the needs of the organization. Normal work weeks consist of either five eight-hour day weeks (5/80), a 36-44 hour pay period (9/80) schedule, or a four ten-hour per day schedule (4-10). Additional work weeks may be considered and approved by the general manager at his or her sole discretion.

Current work schedules available year –around are:

5 days per week, 8 hours per day (5/40) 9 days per pay period (9/80)

4 days per week, 10 hours per day (4/10)

Individual employees are assigned a work schedule by management and may, at the General Manager's sole discretion, determine which type of work week the employee will work (5/40, 9/80 or 4/10).

Employees may request to work flexible starting hours (starting at either 6:00 a.m. or 7:00 a.m.). Management retains the sole right to determine whether or not SOCWA can accommodate the request.

2. The designated work schedule will be established by the appropriate department head, subject to approval by the General Manager. The Agency may change work schedules at any time in its sole discretion.
3. Under normal weather and operating conditions, employees subject to shift changes will be given one hundred forty-four (144) hour advance notice of any changes in their normal work schedule, except in cases of an emergency as determined by the General Manager. At the end of the weather or operating emergency, the employee's shift will revert to what it was prior to the emergency.
4. In cases where the employee could not be given one hundred forty-four (144) hour advance notice of a shift change, the employee will be eligible to receive compensation equal to the rate of one and one-half times the employee's rate of pay for the first day of the altered work schedule.
5. Employees in the Operation, Maintenance or Laboratory Divisions may, at the discretion of the General Manager, be assigned to work at any of the SOCWA treatment plants.
6. Employees are required to be dressed and ready for work at the start of their scheduled work period. Punctuality is expected at all times and a lack of same is grounds for discipline or termination.
7. An employee shall personally notify his/her supervisor within one (1) hour of the start of the employee's assigned shift of the employee's inability to report to work on that shift. Repeated failure to comply with this provision is grounds for disciplinary action.

C. GRIEVANCE PROCEDURE

1. A grievance procedure has been established for the following purposes:
 - a. Promoting improved employer/employee relations by establishing an appropriate means for determining the validity of grievances; i.e., claims by an employee that the Agency has violated, misinterpreted or misapplied an obligation to the employee as such obligation is expressed and written in this MOU.
 - b. Providing a method of resolving such claims as closely as possible to the point of origin and as informally as possible.
 - c. Encouraging free communication between supervisors and employees.
2. The following steps shall be taken when filing a grievance.
 - a. Step One: Employees who have a grievance shall first take it up verbally with their division supervisor within seven (7) calendar days after they knew or reasonably should have known of the occurrence of the cause of the grievance and any action taken. An SEA representative will be permitted at a mutually agreed upon time so as not to negatively impact agency operations, as a neutral observer of the discussion in the event the employee so chooses. Management retains the right to have a representative from Human Resources present at such a grievance meeting.
 - b. Step Two: If the grievance is not resolved within seven (7) calendar days after its submission in Step One, employees may submit the grievance in writing to the division supervisor within seven (7) calendar days thereafter. The division supervisor shall meet with the employee within seven (7) calendar days after submission of the grievance and shall deliver his/her answer, in writing, to the employee within seven (7) calendar days after such meeting.

At this and subsequent steps in the grievance procedure, employees have the right to present their grievance with or without a representative at their option. Should an employee choose to have representation, they must submit, in writing, their intention to do so with the name and title of their representative to the appropriate division supervisor at the time of the Step Two grievance submission.
 - c. Step Three: If the grievance is not resolved within seven (7) calendar days after its submission in Step Two, employees may submit the grievance in writing to the Department Director, within seven (7) calendar days thereafter. The Department Director shall meet with the employee within seven (7) calendar days after submission of the grievance and shall deliver his/her answer, in writing, to the employee within seven (7) calendar days after such meeting.
 - d. Step Four: If the grievance is not resolved in the Third Step, the aggrieved employee may submit it in writing to the General Manager within seven (7) calendar days after the Department Director's answer is received. The

General Manager shall meet with the employee within seven (7) calendar days after receiving the grievance and shall deliver his/her answer in writing within seven (7) calendar days after such meeting.

After Step One, failure of the aggrieved employee to follow the timeline set forth in the grievance procedure shall be considered a waiver of the employee's right to grieve the matter any further and acceptance of the decision at the prior level. Timelines may be extended by mutual written agreement.

D. DISCIPLINARY ACTIONS

1. Disciplinary actions shall be administered as set forth in the SOCWA Employee Manual, except that a disciplinary suspension of two (2) or more working days, a disciplinary demotion or a disciplinary termination may be appealed by the SEA to final and binding arbitration.
 - a. The appeal to arbitration shall be made in writing to the General Manager.
 - b. Within ten (10) calendar days of the appeal to arbitration, the parties shall either mutually select an impartial arbitrator or jointly make a request to the State Mediation & Conciliation Service to provide a list of seven names to the parties.
 - c. Within Five (5) working days of receipt of the State Mediation & Conciliation Service list, the parties shall select an arbitrator from said list by alternatively striking names until only one name remains. The party starting first shall be determined by a coin flip.
 - d. The cost of the arbitrator shall be shared equally by SOCWA and SEA.
 - e. An employee shall suffer no loss of pay for the time spent as a witness at an arbitration hearing held pursuant to this procedure.
 - f. The decision of the arbitrator shall be in writing and transmitted to the parties within thirty (30) calendar days after the close of the hearing.
 - g. The decision of the arbitrator shall be final and binding.

E. LAYOFF PROCEDURES

Business and operational needs may necessitate a decrease in the number of employees. Layoffs are not used for disciplinary reasons or to discriminate against any protected person or group. Layoffs are to be determined by the General Manager to meet current staffing needs. In determining who is to be affected by a layoff, the General Manager will consider the length of service of each employee and the individual skills and abilities of each employee. The Agency reserves the right to add, delete or modify individual job responsibilities to maintain maximum operating efficiency.

Should a reduction-in-force be deemed necessary, the Agency will observe the following procedures:

1. Order of Layoff:

- a. Temporary employees.
- b. Probationary employees who have not yet completed their probation, excluding promotional probationary employees who shall be considered full-time employees.
- c. Full-time employees.

In each of the above categories when a reduction in the work force is necessary, the Agency will select employees for layoff based on consideration of all of the following factors:

- 1) Length of continuous service with the Agency (this includes length of time with either AWMA, SERRA, or Moulton Niguel Water District, South Coast Water District or any other predecessor which has operated a current SOCWA facility).
- 2) Past and present performance based on performance evaluations.
- 3) Demonstrated special skills/abilities of the individual employee.
- 4) Inter-agency cross training.
- 5) Education and/or job certification beyond the minimum required.

It is to be noted that when all other factors are equal, length of continuous service will be the determining factor when evaluating persons for layoff.

All SOCWA employees, whether in Operations, Maintenance, Laboratory or other Departments, will be considered for available job openings within respective departments (at all plant facilities), to avoid layoffs.

An employee who holds a higher-level position within a Department (such as Operations, Maintenance or Laboratory) may be placed (bumped) into a lower level position within the same Department for which the employee is qualified in order to avoid a layoff. This may necessitate the layoff of an employee holding a lower level position. For purposes of this section, "qualification" is presumed where the person has held the position previously with the Agency or where the person meets the minimum qualifications for the position. An employee may not have "bumping" rights in the event an entire classification is eliminated unless they have previously held a like position within SOCWA that would qualify them for such position. The Agency's decision to abolish a position is not subject to the employee's right of appeal or grievance.

2. Y-Rate: An employee's salary is Y-Rated or frozen when the employee bumps into a lower level position for which the top range of the salary scale is below the employee's salary in his/her previous position. The employee will continue to receive his former salary and will be frozen at this salary level until such time as subsequent general salary increases cause the top range of the salary scale for the lower level position to exceed the employee's salary at the Y-Rate. The

employee's salary anniversary date shall not change. If the employee's salary rate in the lower level position is below the top of the range for that position, he/she shall be entitled to be considered for normal salary increases.

3. Notification to Employees: Written notices of layoff shall be served to employees personally at work whenever practicable. The notice of layoff shall include the proposed effective date of the layoff. The Agency shall give at least thirty (30) days' notice of layoff to affected employees.
4. Status on Re-employment: An employee who is laid off according to this policy and is subsequently re-hired within eighteen (18) months from the date of his/her layoff to a regular, full-time position will receive the following considerations and benefits:
 - a. All unpaid sick leave at the time of the layoff will be credited to the employee's account when employment is restored; and
 - b. All prior service is credited for all purposes.
5. Recall: Recall will be in reverse order of layoff, with the recall list being maintained for a period of eighteen (18) months. The employee must qualify for such position being recalled by holding a like position when previously employed with SOCWA.

Laid-off employees are eligible for recall for up to eighteen (18) months.

6. Separation Pay: Regular full-time employees whose employment with the Agency terminates due to a reduction-in-force or layoff are eligible to receive separation pay equivalent to two (2) weeks salary providing an employee has completed at least six (6) months to one (1) full year of continuous service to the Agency, with an additional week for every full year of employment thereafter. Receipt of separation pay will not impact a terminated employee's right to apply for unemployment insurance benefits. All employees affected by a layoff are eligible for unemployment and COBRA benefits as provided by law.

Manner in Which Points are Calculated Under SOCWA - SEA Layoff Provision:

1. Length of continuous service with the Agency (this includes length of time with either AWMA, SERRA, Moulton Niguel Water District, South Coast Water District or any other predecessor which has operated a current SOCWA facility). This factor will have a **maximum** weight of 12 points, with each full year of service up to 12 years receiving one point.
2. Past and present performance based on the two most recent performance evaluations. This factor will have a **maximum** weight of 5 points to be determined as outlined below:

For Each Performance Review:

Superior or Outstanding	2.5
Exceeds Expectations or Above Standard	2
Meets Standard or Standard	1
Needs Improvement	0
Unsatisfactory	-.5

This could give a maximum total of 5 points after reviewing the two most recent performance evaluations.

Example:

2 Superior or Outstanding = 5

2 Exceeds Expectations or Above Standard = 4

Above standard or Exceeds Expectations & 1 standard or Meets Standard = 3

2 Standards or 2 Meets Standard = 2

1 Standard or Meets Standard & 1 needs improvement = 1

3. Demonstrated special skills/abilities of the individual employee. This factor will have a **maximum** weight of 5 points to be determined by how many relevant special skills/abilities the employee will bring into the job that are not requirements in the job description. Each additional skill/ability will be counted as one point, up to a **maximum** of 5 total points for this category. Skills/abilities will be determined by the Agency.

The following types of demonstrated skills/abilities are examples of what may be determined to be relevant, depending on the circumstances: Welding skills, truck driving, heavy equipment operator skills, carpentry skills, electrical experience, computer skills, etc. This is not intended to be an exhaustive list.

4. Cross-training: This factor will have a **maximum** weight of 5 points to be determined by the number of different Agency/jobs/departments the employee has been cross-trained in.

Example:

Cross-training at different plant (minimum 1-year at each facility) = 2 points

Cross-training in separate department at same plant (until proficient at task/job) = 1 points

SOCWA cross-training program (minimum 120 hours at different plant) = 1 points

5. Education and/or job certification beyond the minimum required per the job description. This factor will have a **maximum** weight of 5 points and will be determined by giving one point for any certification above the minimum required (i.e., an Operator in a position requiring a Grade II certificate will receive 2 points if he/she has a Grade IV certificate). Additional points may be given in the Agency discretion for (a) any job-related class that has been approved by the Agency and successfully completed by the employee, or (b) other relevant education deemed beneficial to the long-term interests of the Agency.

SECTION III BENEFITS

A. VACATION

1. Accrual Rates:

For employees hired prior to July 1, 2014, the following applies:

Full-time employees shall accrue the following vacations hours which will be properly credited on a biweekly basis.

- First year through five years of employment - 96 hours per year.
- Sixth year through tenth year of employment - 120 hours per year.
- After ten years of employment - 160 hours per year.

1(b) For employees hired on or after July 1, 2014, the following applies:

- First year through five years of employment - 80 hours per year.
 - Sixth year through tenth year of employment - 120 hours per year. After ten years of employment - 160 hours per year.
2. Part-time regular employees who work at least 40 hours per pay period shall accrue vacation subject to the schedule set forth in paragraph 1 above, but it shall be prorated on the basis of the number of hours worked.
 3. All vacation time must have prior approval. The Director may approve vacation requests up to three (3) days.
 4. Vacation requests for over three (3) days must be submitted no less than two weeks prior to the commencement of the requested vacation, except in an emergency situation as determined by the General Manager or his/her designee.
 5. No vacation time for over thirty (30) hours shall be taken without prior approval of the General Manager or his/her designee.
 6. Vacation duration is limited to no more than 120 hours (3 weeks) without special approval by the General Manager.
 7. Vacation requests submitted three (3) months in advance and approved at least four (4) weeks prior to the commencement of the requested vacation, will not be canceled by anyone other than the employee, except in cases of an emergency as determined by the General Manager, his/her designee or the Assistant General Manager/Director of Operations.
 8. Any employee separating from employment who has not taken earned vacation shall receive pay for each hour (or part thereof) of earned vacation according to the level of earnings for such employee on the last day worked.
 9. Not more than 240 hours may be accrued and carried over from one calendar year to the next calendar year, nor may an employee receive pay in lieu of taking a vacation, without prior approval of the General Manager. Every effort shall be made by the employees to schedule at least one continuous forty (40) hour (one week) vacation during the year.

10. Eligible new hires shall accrue vacation beginning with the date of hire, but may not utilize such during the first six (6) months of their probationary period.
11. Employees may request up to 40 hours pay in lieu of vacation, subject to approval by the General Manager, provided the employee has taken 7 consecutive days off in any combination of holidays, vacation, personal holidays, weekends, scheduled days off, etc., within the last 12 months. This policy may be used up to a maximum of 2 times within twelve consecutive months. After the employee has been paid for the second 40 hours of vacation pay in lieu of vacation he/she will not be granted another 40 hours vacation pay in lieu of vacation until it has been 12 consecutive months from the original and first date of request.

B. HOLIDAYS

1. All full-time employees and those eligible part-time employees shall receive the following paid holidays:

New Year's Day (January 1)

President's Day (third Monday in February) Memorial Day (last Monday in May)

Independence Day (July 4)

Labor Day (first Monday in September) Veteran's Day (November 11) Thanksgiving Day

Thanksgiving Holiday (Friday after Thanksgiving Day) Christmas Day (December 25)

2. Holiday overtime pay will only be paid for working on the above nine dates, the actual day of the holiday
3. Whenever a holiday falls on a Saturday not scheduled as a regular workday, the preceding Friday shall be observed as the day off. Whenever a holiday falls on a Sunday not scheduled as a regular workday, the following Monday shall be observed as the day off.
4. When a holiday falls on an employee's regular scheduled day off and the employee would otherwise lose the holiday, the employee will be paid for the amount of a regularly scheduled work day as straight-time pay. If staffing requirements allow, an employee may elect to take a regularly scheduled day off, providing the day off falls within the same pay period as the holiday. Arrangements for such days off must be made with the employee's supervisor.
5. In addition, all full-time employees are eligible to receive three (3) personal days per fiscal year. Personal days must be taken as a full day off. Advanced notification of an employee's use of a personal day is encouraged, but not required. Personal days accrue on July 1 of each year and must be taken prior to June 30 of the following year.

A personal day is the equivalent of a full day worked regardless of the number of hours in the employee's shift at the time the personal day is used (8, 9 or 10 hour shift).

6. All Part-time employees are eligible to receive 1 ½ days of Personal Leave per calendar year.

Once an employee has given his/her notice of termination, there will be no further accumulation of personal holidays.

7. An employee must have been paid for the entire amount of regularly scheduled hours the days immediately prior to and following a holiday observed by the Agency in order to be paid holiday pay.
8. All employees eligible to receive paid holidays, and who are scheduled by management to work on the holiday, shall be paid at one and one-half times their normal rate of pay. This is in addition to the holiday pay (or day off in lieu) at eight or nine hour's straight time, depending on the employee's schedule. Employees not scheduled to work but who are called in to work shall receive compensation equal to double their normal rate of pay for the first consecutive eight, nine or ten hours worked (depending on employee's schedule). All consecutive hours worked beyond eight, nine or ten (depending on employee's schedule) on a holiday will be paid at three times the employees' normal rate of pay.
9. Temporary employees shall be entitled to paid holidays only if such a holiday falls on a day such employee would ordinarily be required to work.

C. SICK LEAVE

1. All full-time employees hired prior to July 1, 2014; earn ninety-six (96) hours of sick leave per year. All full-time employees hired on or after July 1, 2014, earn eighty (80) hours of sick leave per year. Employees shall accrue sick leave beginning with the date of hire, on a biweekly basis, but may not utilize such during the first thirty (30) days of employment.
2. Part-time regular employees who work at least forty (40) hours in a pay period shall accrue sick leave subject to Paragraph 1 above, but it shall be prorated on the basis of the number of hours worked per week versus a 40 hour week, and in no case shall it be less than the amount required by applicable law. Other part-time employees shall accrue one (1) hour of sick leave for every thirty (30) hours worked.
3. Not more than forty-eight (48) hours of sick leave per calendar year may be taken in cases where an employee's presence is required elsewhere to attend to the illness of an "immediate family member". An employee's "immediate family" includes a registered domestic partner, spouse, parent, child, brother, sister, grandparent, and a designated person. (A "designated person" means a person identified by the employee at the time the employee requests paid sick days. The Agency limits an employee to one (1) designated person per twelve (12) month period for paid sick days.) A non-serious illness or disability is defined as one that is not covered under the Family and Medical Leave Act of 1993. Employee leave for the serious health condition of members of their immediate family is governed by the Agency Family Leave policy as detailed in the Employee Manual.
4. The General Manager may require a doctor's certificate if an employee's absence exceeds three (3) consecutive working days. If an employee is absent for five (5) consecutive working days, a doctor's certificate may be mandatory in order to return to work.

5. An employee may carry over a maximum of two hundred forty (240) hours of accumulated sick leave on an annual basis. This annual basis shall end on the last day of the first pay period that ends in December. For all hours in excess of one hundred seventy six (176) hours, employees will be eligible to receive compensation for 75% of those hours at their current rate of pay. Such compensation will be paid at the end of the first pay period that ends in December.
6. When an employee has utilized their total accumulated sick leave, accrued vacation may be taken to the extent available providing the employee receives prior approval (refer to Section III-A, above, regarding submittal of vacation requests). If an employee does not elect to utilize, does not have sufficient accrued vacation time to cover the absence, and/or does not receive prior approval for the use of vacation leave, the employee shall not receive compensation.
7. Accumulated sick leave and/or vacation time may be utilized by an employee during his/her family leave or pregnancy disability leave.
8. Employees, who have given at least two weeks written notice of their intention to leave the employ of the Agency shall be paid 75% of their accumulated sick leave above one hundred seventy six (176) hours on the date of termination.

Employees, who have given at least two weeks written notice of their intention to retire from the Agency, shall be paid for unused sick leave at a rate of 75% upon retirement (remaining 25% converting to service credit with CalPERS). Departing retiring employees have the option to convert 100% of their unused sick leave to service credit with CalPERS.

D. HEALTH, DENTAL INSURANCE AND VISION CARE PLAN FOR EMPLOYEES

1. Full-time and part-time employees and their dependents are provided a group dental and vision care plan; the premiums for the vision and dental are paid for by the Agency. Eligibility for dental and vision insurance will begin the first of the month following thirty (30) days of employment.
2. Full-time employees and their dependents are provided with group health insurance coverage under the CalPERS PEMHCA program. The Agency shall revise its current PEMHCA contract with CalPERS through the adoption of a new PEMHCA resolution to provide that the Agency shall pay to CalPERS, on behalf of each employee and retired employee who qualifies for retiree medical benefits, a monthly employer contribution equal to the minimum contribution required under Government Code Section 22892(b)(2) ("PEMHCA Minimum").
3. For an eligible dependent to be eligible for coverages, a copy of a marriage license, State of California Declaration of Domestic Partnership form (NP/SF DP-1), birth certificate, or other identifying paperwork will be required.

The PEMHCA Minimum is established by CalPERS and may change annually. Additional employer contributions shall be provided in accordance with the terms set forth in this Section D and Section E below.

4. Employees of the Agency shall be eligible for a monthly health insurance allowance from the Agency equal to an amount that is 95% of the average of all health plans CalPERS makes available to the Agency, excluding the PERS Platinum Plan, at the appropriate level of coverage selected by the employee (employee, employee + 1, or employee + family). The Health Allowance shall be made available through the Agency's Cafeteria Plan in order to preserve it as a nontaxable benefit and a portion of the Health Allowance will be designated as the PEMHCA Minimum contribution set forth in paragraph #2 above and paid directly to CalPERS. If an employee enrolls in a CalPERS health plan with a monthly premium that exceeds the Health Allowance, the excess cost will be the employee's responsibility. Contributions to be paid for by the employee will be calculated on an annual basis and withheld in equal amounts over the amount of pay periods in the year. Unequal remainder amounts will be included in the final paycheck for the calendar year. Eligibility for health coverage and the Health Allowance will begin the first of the month following thirty (30) days of employment.
5. Regular part-time employees who meet the applicable eligibility requirements established by the Agency insurance partner shall be provided health, dental and vision insurance for themselves and their dependents, upon request.
6. The cost of the premiums for dental and vision insurance for part-time employees will be shared by the Agency and the employee based upon the number of hours the employee normally works in an eighty (80) hour pay period. For example, an employee who normally works sixty (60) hours will pay 25% of the premium, while an employee who normally works forty (40) hours will pay 50% of the premium. Withholdings will be calculated as they are in paragraph #3 above.
7. It is mandatory that each employee notifies the Agency, in writing, whenever any additions or deletions occur in the status of his/her dependents. Failure to do so may result in a lapse of coverage for the additional dependent(s).
8. In lieu of health insurance coverage, eligible employees may elect to receive compensation at a rate of \$300.00 per month in addition to their regular pay. Employees must show current proof of health insurance coverage under another plan outside of the Agency and may be required to periodically show proof upon request. Requests for compensation in lieu of health insurance coverage should be in writing and are subject to review and approval of the General Manager. Compensation will begin on the first of the month following cancellation of coverage from the Agency Health Plan.
9. The post-retirement health insurance plan must be selected from the health care plans provided to other full-time SOCWA employees in accordance with requirements of the PERS Program, which may be revised from time to time.

E. RETIREE HEALTH INSURANCE

1. Pursuant to PEMHCA and relevant CalPERS regulations, a retired employee will qualify for retiree medical benefits if his or her retirement from the Agency is effective within 120 days of his or her separation from employment with the Agency and the retired employee receives a retirement allowance from CalPERS resulting from his or her service

with the Agency. Retired employees who satisfy the preceding requirements ("Eligible Retirees") are eligible to continue health coverage with CalPERS for themselves and their eligible dependents. All allowances described in this section shall only be available to Eligible Retirees enrolling in a CalPERS health plan.

2. The retiree health benefits provided by the Agency vary depending upon an Eligible Retiree's date of employment with the Agency. The Agency provides retiree health benefits as follows:

- a) Employees hired before July 1, 2017. Eligible Retirees hired before July 1, 2017 will receive a monthly amount from the Agency not to exceed the Health Allowance made available by the Agency to active employees ("Tier I Allowance"). The Tier I Allowance will be paid as follows:

an amount equal to the PEMHCA Minimum will be paid directly to CalPERS by the Agency; and

a reimbursement by the Agency will be paid to the retiree for the monthly health insurance premiums actually paid by

the retiree, in an amount not to exceed the difference between the Tier I Allowance and the PEMHCA Minimum.

If an Eligible Retiree subject to this Section E.2.a enrolls in a CalPERS health plan with a monthly premium that exceeds the Tier I Allowance, the excess cost will be the Eligible Retiree's responsibility. Conversely, if any Eligible Retiree enrolls in a CalPERS health plan with a monthly premium that is less than the Tier I Allowance, the remainder shall be forfeited.

Eligible Retirees shall be subject to any changes to the health insurance coverage provided by the Agency to the same extent as active employees of the Agency.

- b) Employees hired on or after July 1, 2017.

- Eligible Retirees hired on or after July 1, 2017 will receive a monthly amount from the Agency equal to the PEMHCA Minimum, which the Agency will pay directly to CalPERS ("Tier II Allowance"). If an Eligible Retiree subject to this Section E.2.b enrolls in a CalPERS health plan with a monthly premium that exceeds the Tier II Allowance, the excess cost will be the Eligible Retiree's responsibility.
- In addition, during employment with the Agency, employees hired on or after July 1, 2017 shall receive an Agency contribution equal to \$200 per month to an individual account under a retiree health savings plan. This amount may be subject to change at the Agency's discretion but will not be reduced below \$200 during the term of this MOU. The retiree health savings plan is to be used exclusively to reimburse qualifying medical expenses during retirement. The retiree health savings plan will be administered by a third party administrator selected by the Agency.

F. LONG-TERM DISABILITY INSURANCE

Effective thirty days after employment, both short-term and long-term disability insurance coverage is provided for all full-time and part-time employees; the premiums are paid for by the Agency.

G. LIFE INSURANCE

1. Effective thirty days after employment, group life insurance is provided to all full-time and part-time employees in an amount of \$100,000. The premiums for full-time employees are paid for by the Agency. The premiums for part-time employees are shared 50/50 by the Agency and the employee. (The cost of premiums paid by the Agency for life insurance in excess of \$50,000 is considered noncash compensation for tax purposes).
2. It is mandatory that each employee notify the Human Resource Department whenever any additions or deletions occur in the status of his/her dependents, as well as any desired change in beneficiary data.

H. RETIREMENT

1. PERS Retirement Plans
 - a. All regular full and part-time employees' are covered by the Public Employees' Retirement System (PERS). Employees hired prior to February 2011 are on the 2.5% at 55 formula with the employee paying the full employee contribution.
 - b. Employees hired after February 2011 but prior to January 1, 2013, and employees that are hired after January 1, 2013 but qualify as an existing PERS "Classic" employee will be on the 2% at 55 formula with the employee paying the full employee contribution.
 - c. Employees hired after of January 1, 2013 that do not qualify as an existing PERS "Classic" employee are on the 2% at 62 formula with the employee paying the full employee contribution.

I. DEFERRED COMPENSATION PLAN

Regular full and part-time employees are eligible to participate in the Agency deferred compensation plan(s). The primary purpose of the plan(s) is to provide future payments in lieu of deferred current income upon death, disability, retirement, or other termination of employment. The plan(s) are intended to qualify as eligible State Deferred Compensation Plan(s) within the meaning of Section 457 of the Internal Revenue Code of 1954, as amended. Each employee may elect to become a participant of any Plan(s) and defer payment of part of his/her compensation (within the guidelines of Section 457) by executing the required participation agreement.

The Agency will provide a matching contribution for deferred compensation during the term of this MOU up to \$1,500.00 per fiscal year.

J. UNIFORMS AND SAFETY EQUIPMENT

The Agency shall provide, as an employee benefit, all full-time field operational personnel with uniforms to be worn while on duty and the necessary Agency owned safety equipment. The

Agency shall reimburse full-time field operational personnel, upon date of hire and annually thereafter, up to a maximum amount of \$400.00 for purchase of steel-toed shoes as required by the Agency's separate Injury and Illness Prevention Safety Program included in the Safety Handbook. Field operational personnel may purchase a second pair of shoes if funds remain from the original allocation and, if needed; the employee shall contribute the additional funds required. Employees will be allowed to use this amount to also purchase other work uniform related items such as belts, boot/shoe inserts, laces, etc. If, in the discretion of an employee's department head, the employees work boots are worn out or damaged due to work-related wear-and-tear, the department head may authorize the reimbursement of a second pair of boots within one year.

Laboratory personnel will be allowed an additional \$75 per year to purchase aqua shoes to be used for beach sampling.

It is the responsibility of the employee to provide an original receipt of charges for payment reimbursement. All employees shall present a clean and neat appearance at all times.

The Agency shall continue to report non-safety uniform expenditures on a per pay period basis, not to exceed \$400.00 annually. The allocation is subject to change based on uniform provider, operational safety and requirements as determined by the department head. The foregoing shall be subject to the provisions and limitations under the Public Employees Retirement Law, including prohibitions on reporting the uniform allowance as pensionable compensation for employees deemed "new members" under the Public Employees Pension Reform Act of 2013. The actual per employee, per pay period amount will be established each fiscal year based on an average monthly rental/cost amount paid in the prior fiscal year.

SECTION IV COMPENSATION

A. EMPLOYEE COMPENSATION

1. All full-time employees shall receive compensation in accordance with the adjusted ranges in the Salary Schedule (as defined herein as Exhibit B attached).
2. Pay days are on a biweekly basis - every other Thursday.

B. BONUS/MERIT POOL

During the term of this agreement a merit pay pool equal to approximately 3.0% of the salaries of all employees covered by this MOU will be established for the purpose of awarding merit/bonus increases. Individual employees may be awarded a salary increase of between zero and five percent (0 – 5%) based on their level of performance. Award of a merit increase is based on a recommendation by the employee's supervisor and department head, and subject to approval of the General Manager.

The total amount of meritorious salary increases shall not exceed the 3.0% merit pay pool in any fiscal year. SOCWA will provide training for supervisors and managers to assure compliance with this section.

In the event an employee covered by this MOU receives a merit increase that is less than the total amount awarded during the review process, due to being topped out in their respective salary range, said employee shall receive the remaining review award in a monetary bonus, which shall not be considered as reportable compensation to CalPERS..

C. SALARY ADJUSTMENTS

All employees shall receive a 6.0 percent (6.0%) increase, effective July 1, 2024.

D. INCENTIVE PAY

Education Certification Incentive Program

Employees who obtain a job-related educational certificate which exceeds their minimum job requirements are eligible to receive an incentive pay increase and shall be considered as reportable special compensation for each certificate received in accordance with Agency policy. Certificates must be recognized by CWEA, State Water Resource Board and NCCCO.

1. For Employees hired prior to July 1, 2017:

- a. Full-time continuous employees receiving education certification one step or higher above their existing job classification will be eligible to receive a 2.5% of base pay reported as special compensation.
 - Any Grade III employees may receive an additional 2.5% of base pay reported as educational incentive if they obtain a certification two-steps above their existing job classification (i.e., Grade III Operator with a Grade V certification), as approved by the General Manager. Employees must first make application to their supervisor to be eligible to participate in the incentive program including employees whose job classification may not have corresponding education certification. All applications are subject to approval of the General Manager.
- b. Employees will receive a 2.5% of base pay reported as special compensation upon receiving a NCCCO Crane Certification; and legal ability to drive a crane.

2. Employees hired on or after July 1, 2017, will only be eligible for additional pay certification as follows:

- a. Employees will receive a one-time lump sum educational incentive of \$800.00 payment on achieving a Grade 2.
- b. Employees will receive a one-time lump sum educational incentive of \$800.00 payment upon receiving a NCCCO Crane Certification; and legal ability to drive a crane.
- c. Employees will receive a one-time lump sum educational incentive of \$1200.00 payment upon achieving a Grade 3 or higher certification.

D. STANDBY PAY

1. When Field Personnel have been designated to be on standby duty after their normal workday, they shall be compensated at a rate of \$500.00 per week for any employee in Operations or Maintenance that covers SOCWA facilities as assigned in addition to their regular pay.
2. Standby duties require an operations employee to be available upon forty-five (45) minutes' notice, on a twenty-four hour basis.

Maintenance and Electrical employees to report within 90-minutes.

3. A mobile phone will be provided for **all** personnel. Employees will be responsible for the mobile phone while in his/her possession and must replace it if lost.
4. When any employee is called back to work without prior notice, and the employee has completed their normal work shift and left the plant, the employee shall receive a minimum of two (2) hours call back pay. The two (2) hour minimum, whether or not actually worked, shall be paid at the rate of one and one half times the employee's regularly hourly rate.

E. COMPENSATORY TIME OFF

Non-exempt employees may accrue up to 45 hours of compensatory time off ("CTO") in lieu of overtime compensation. Employees electing CTO in lieu of overtime compensation must indicate it on their time card. Use of compensatory time off must be pre-approved by the employee's supervisor and cannot be cashed out except upon termination of employment.

Date: _____

Date: _____

Matt Collings
Chairperson, Board of Directors
South Orange County Wastewater
Authority

Daniel Grilley, SEA President

For South Orange County Wastewater
Authority Employee Association

Charles Barfield,
General Manager
OCEA

EXHIBIT “A” SOCWA

SOCWA EMPLOYEE ASSOCIATION SEA REPRESENTED CLASSIFICATIONS

Operator III
Operator II
Operator I
Operator in Training

Maintenance Mechanic III
Truck Driver / Maintenance Mechanic II
Maintenance Mechanic I
Maintenance Mechanic I

O & M Inventory / Purchasing Specialist

Sr. Electrician / SCADA Technician Maintenance Mechanic III
w/Co-gen Electrical / Instrumentation Technician

Laboratory Technician III
Laboratory Technician II
Laboratory Technician I
Laboratory Aide/Sampler
Laboratory Q&A Specialist

Agenda Item

5.K.

Board of Directors Meeting

Meeting Date: June 6, 2024

TO: Board of Directors

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

STAFF CONTACT: Dina Ash, Human Resources Administrator

SUBJECT: Resolution 2024-05, A Resolution of the Board of Directors of the South Orange County Wastewater Authority (SOCWA) Approving New Employee Salary Ranges and the South Orange County Wastewater Authority Employee Manual for All SOCWA Employees

Summary/Discussion

With the approval of the SOCWA Employee Association Memorandum (“MOU”) and related tentative agreements contained in the SOCWA Employee Manual for the represented employees of the SOCWA Employee Association (SEA) on May 16, 2024, the next step is to formally update the SOCWA Employee Manual.

The Employee Manual incorporates many items from the MOU that might also pertain to the unrepresented group of employees and covers all non-negotiated SOCWA policies that pertain to all employees, whether represented or non-represented. This includes providing the unrepresented employees the same compensation changes given to the represented employees.

The Employee Manual has also been updated to incorporate applicable changes to employment laws and regulations. SOCWA’s Labor Counsel Brad Neufeld will provide an overview of the Employee Manual changes at the Board meeting.

Fiscal Impact

The approved 2024-2025 SOCWA Budget includes the funding for salaries and benefits for the revised MOU and Employee Manual.

Recommended Action: Staff recommends that the Board of Directors approve Resolution 2024-05, A Resolution of the Board of Directors of the South Orange County Wastewater Authority (SOCWA) Approving New Employee Salary Ranges and the South Orange County Wastewater Authority Employee Manual for All SOCWA Employees.

Attachment(s): SOCWA Employee Manual – Clean
SOCWA Employee Manual - Redlined

RESOLUTION NO. 2024-05

**A RESOLUTION OF THE BOARD OF DIRECTORS OF THE
SOUTH ORANGE COUNTY WASTEWATER AUTHORITY APPROVING
THE UPDATED EMPLOYEE MANUAL FOR ALL SOCWA EMPLOYEES**

WHEREAS, the employees represented by the South Orange County Wastewater Authority are a viable and important part of the SOCWA organization; and

WHEREAS, this updated Employee Manual has been presented to the Board for its approval.

NOW, THEREFORE, the Board of Directors of the South Orange County Wastewater Authority does hereby **RESOLVE, DETERMINE, AND ORDER** as follows:

Section 1. The Acting General Manager/Director of Operations is authorized to issue the updated Employee Manual to all employees on behalf of the authority and provide for its implementation.

Section 2. The Secretary of SOCWA shall certify the adoption of Resolution No. 2024-05 and shall maintain a certified copy thereof at the principal office of SOCWA.

PASSED AND ADOPTED this 6th day of June 2024.

SOUTH ORANGE COUNTY WASTEWATER AUTHORITY

(Seal)

By: _____
Matt Collings, Chairman

By: _____
James (Jim) L. Burror, Jr., Secretary

STATE OF CALIFORNIA)
) ss.
COUNTY OF ORANGE)

I, James L. Burror, Jr., Secretary of the Board of Directors of the SOUTH ORANGE COUNTY WASTEWATER AUTHORITY ("SOCWA"), do hereby certify that the foregoing is a full, true, and correct copy of **Resolution No. 2024-05** of said Board and that the same has not been amended or repealed.

Dated this 6th day of June 2024.

James L. Burror, Jr., Board Secretary
SOUTH ORANGE COUNTY WASTEWATER AUTHORITY

SOUTH ORANGE COUNTY WASTEWATER AUTHORITY
EMPLOYEE MANUAL

Effective July 1, 2024
Until Revised

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EMPLOYMENT POLICIES GENERALLY

These employment policies are designed to comply with all applicable federal, state and local employment laws, regulations and ordinances. Accordingly, to the extent of any conflict between such applicable laws, regulations or ordinances the South Orange County Wastewater Authority's employment policies should be interpreted and applied to be consistent with such laws, regulations and ordinances. If you believe that a South Orange County Wastewater Authority employment policy is in conflict with one of these, please notify Human Resources so that appropriate remedial measures may be undertaken. When the South Orange County Wastewater Authority becomes aware of an actual conflict between its policies and applicable law, regulations or ordinances it will take steps to revise the policy and provide employees with a written change to the policies within a reasonable period of time.

SECTION I.

A. PURPOSE

It is the objective of the South Orange County Wastewater Authority (SOCWA), hereinafter referred to as the "Agency", to provide fair and equitable personnel management within the Agency.

This manual is intended to insure uniform and fair treatment of applicants for employment and of the Agency employees and to define the obligations, rights, privileges, benefits and prohibitions to all employees of the Agency. This manual may be modified at any time. For employees in a recognized bargaining unit, if there is a conflict between the provisions of this manual and a valid MOU, the MOU shall control.

B. DEFINITIONS

For purposes of this Employee Manual, the following definitions shall apply:

1. **AGENCY**
This shall mean the South Orange County Wastewater Authority authorized under the California State Government Code Section 6500 et al.
2. **SEA**
This shall mean the SOCWA Employee Association.
3. **BOARD OF DIRECTORS**
This shall mean the Board of Directors of the Agency.
4. **GENERAL MANAGER**
This shall mean the General Manager of the Agency, appointed by the Board of Directors.
5. **DIRECTOR OF OPERATIONS**
This shall mean the Director of Operations of the Agency.
6. **FULL-TIME EMPLOYEE**
This shall mean all employees appointed by the General Manager for employment on a regular basis of eighty hours (80) per pay period.
7. **PART-TIME EMPLOYEE**
This shall mean all employees appointed by the General Manager for employment on a regular basis who work between 40 and 72 hours per pay period.

8. **TEMPORARY EMPLOYEE**

This shall mean any employee hired by the General Manager for a limited period of time and paid by the hour. Except as otherwise explicitly stated in this Manual, temporary employees only receive those benefits required by applicable law.

9. **PROBATIONARY EMPLOYEE**

This shall mean any employee who has taken a new appointment. The employee shall be subject to a probationary period of between six to twelve months.

10. **REGULAR EMPLOYEE**

This shall mean any employee (who is not a temporary employee) who has successfully passed his/her probationary period.

11. **DELEGATION OF RESPONSIBILITY BY THE GENERAL MANAGER OR DESIGNEE**

This shall mean that in the absence of the General Manager, his/her designated representative shall act in his/her behalf.

12. **SAFETY HANDBOOK**

This shall mean that document which contains the Agency Injury and Illness Prevention Safety Program.

C. ORGANIZATION CHART

The Agency current table of organization is depicted as Exhibit "C" to this policy, which exhibit is attached hereto and by reference incorporated herein. The same shall be revised from time to time in each fiscal year and shall be shown in the budget.

SECTION II EMPLOYMENT

A. HIRING

1. The Agency subscribes to the public policies of the United States and the State of California as expressed in all applicable statutes that are necessary to protect and safeguard the right and opportunity of all persons to seek, obtain, and hold employment without discrimination or abridgment because of race, religious creed, color, age (40 or over), sex, gender, physical or mental disability, medical condition, reproductive health decisionmaking, national origin, gender identity, gender expression, genetic information, sexual orientation, marital status, military and veteran status or ancestry. It is the policy of the Agency to provide equal employment opportunity to all persons. Its recruitment and employment practices, all offers of employment and all its courses of action concerning training opportunities and training, job placement, promotion, compensation and termination are based solely on merit without regard to race, religious creed, color, age (40 or over), sex, gender, gender identity, sexual orientation, marital status, physical or mental disability, medical condition, reproductive health decisionmaking, national origin, gender expression, genetic information, ancestry, military and veteran status or any other protected category. To assist in fulfilling the Agency policies regarding equal employment, the Agency has elected to undertake certain Equal Employment Opportunity Policies set forth in this Employee Manual.
2. All employees shall be appointed to their positions by the General Manager.
3. The General Manager shall hire new employees from time to time for positions as identified in the annual budget. Job classifications are approved by the Board of Directors as detailed in Exhibit "B" and shown on Exhibit "C" with the same being modified from time to time in accordance with Section IV.L.
4. Without approval from the Board of Directors, no direct relations of any Agency personnel shall be employed on a full-time, part-time or temporary basis. (The Agency will follow applicable law regarding marital status discrimination).
5. It shall be required that all employees certify, by signature, that they have received, read and fully understand the current Employee Manual and Safety Handbook.
6. The Agency will comply, to the extent applicable, with the provisions of the Fair Labor Standards Act, and other applicable statutes and regulations regarding wages, hours and benefits.

7. All employees entering full-time or part-time employment are required by Chapter 8 (commencing with Section 3100) Division 4, Title 1 of the Government Code to take and subscribe to an oath of allegiance to support and defend the Constitution of the United State of California.
8. All applicants for employment must complete all portions of the Agency employment application form.
9. It shall be required that all individuals accepting employment provide verification of work authorization and identity pursuant to the Immigration Reform and Control Act of 1986. Completion of the Employee section of Form I-9 is mandatory at hiring.
10. If an employee or applicant has a disability that limits their ability to perform essential job functions, the Agency will make reasonable efforts to accommodate them. To assist in the consideration of reasonable accommodation measures, the employee or applicant is encouraged to submit any relevant information from their physician or other healthcare practitioner. Further, upon an employee or applicant's request for accommodations, a meeting will be scheduled with the Human Resources department to engage in the "interactive process" where potential accommodations will be discussed.

B. EMPLOYEE EVALUATION

1. Original Appointments: Original appointments shall be subject to a probationary period of between six to twelve months. In the event an employee is off work for any reason for two or more weeks during the probationary period, then the probationary period will be extended by the amount of time that employee is away from work.
2. Probation Period: The probationary period shall be regarded as part of the selection process and shall be utilized for close observation and evaluation in order to determine the capability of the probationer to satisfactorily perform the requirements of the position.

After serving the probationary period and receiving a favorable rating from their immediate supervisor and/or Department Director and a favorable recommendation from the General Manager, said employee may thereafter be paid on a monthly basis at the rate fixed no greater than the amount approved by the General Manager and within the range the employee was hired. Passing the probation period with a satisfactory rating is a requirement for continued employment. Each year thereafter, the employee shall receive a performance rating. Upon recommendation of the General Manager, a new employee may be hired at a higher rate than the minimum salary of the applicable range of the salary schedule.

3. Promotional Appointments: Present employees will be notified of promotional opportunities when a vacancy occurs at any of the SOCWA treatment plants. Employees with the required knowledge, certification, skill, ability, interest and physical fitness will be given an opportunity to apply for such vacancies. Decisions regarding promotional appointments shall be made by a review panel appointed by the General Manager. All promotional appointments are subject to final approval by the General Manager. Promotional appointments shall be subject to at least a six (6) month and up to a nine (9) month probationary period. In the event an employee is off work for any reason for two or more weeks during the probationary period, then the probationary period will be extended by the amount of time that the employee is away from work.

Any employee, who is in a Grade I or II category, may be promoted to a Grade II or III upon:

- 1) Successful completion of the required or voluntary applicable exam; and
- 2) Two consecutive above-standard performance reviews, one while in possession of the higher certification and recommendation of the employee's supervisor and approval of the General Manager.

4. Rejection during Probationary Period: A probationary employee may be rejected at any time without the right of appeal or hearing during the probationary period. A rejected probationer serving as a result of original appointment shall be dismissed from service. A rejected probationer serving as a result of promotional appointment shall be reinstated to the position or class, or comparable position, from which promoted, unless otherwise dismissed from service as provided in this policy.
5. Reclassification. When a full-time employee is reclassified and the position he/she occupies is reclassified to a position with a lower salary range, the employee will be designated at the lower salary range unless otherwise recommended by the employee's supervisor and concurred with by the General Manager.
6. Performance Evaluation: Employees who have passed their probationary period shall have their performance evaluated by their supervisors at least annually from the date of completing probation (anniversary date) (If an employee is out on an approved leave of greater than two consecutive weeks (excluding vacations), the evaluation date shall be moved back by an amount equal to the leave, less two weeks.) Additional evaluations may be prepared on such a frequency as is deemed appropriate by the supervisor. The evaluation and appraisal form will be reviewed together by both the employee and his/her supervisor and signed after having been reviewed and approved by the General Manager.

C. WORK DAYS

1. Work day shifts may be changed from time to time, in regard to the respective job functions. The workweek schedule will commence on Sunday at midnight and end on Saturday at 11:59 p.m., except for employees assigned to a 9/80 schedule.

SOCWA establishes work schedules and start times to meet the needs of the organization. Normal work weeks consist of either five eight-hour day weeks (5/80), a 36-44 hour pay period (9/80) schedule, or a four ten-hour per day schedule (4-10). Additional work weeks may be considered and approved by the General Manager at his or her sole discretion.

Current work schedules available year-round are:

5 days per week, 8 hours per day (5/40)
9 days per pay period (9/80)
4 days per week, 10 hours per day (4/10)

Individual employees are assigned a work schedule by management and may, at the General Manager's sole discretion, determine which type of work week the employee will work (5/40, 9/80 or 4/10).

In addition, employees may request to work flexible starting hours (starting at either 6:00 a.m. or 7:00 a.m.). Management retains the sole right to determine whether or not SOCWA can accommodate the request.

2. The designated work schedule will be established by the appropriate department head, subject to approval by the General Manager. The Agency may change work schedules at any time in its sole discretion.
3. Under normal weather and operating conditions, employees subject to shift changes will be given one hundred forty-four (144) hour advance notice of any changes in their normal work schedule, except in cases of an emergency as determined by the General Manager. At the end of the weather or operating emergency, the employee's shift will revert to what it was prior to the emergency.
4. In cases where the employee could not be given one hundred forty-four (144) hour advance notice of a shift change, the employee will be eligible to receive compensation equal to the rate of one and one-half times the employee's rate of pay for the first day of the altered work schedule.
5. Employees in the Operation, Maintenance or Laboratory Divisions may, at the discretion of the General Manager, be assigned to work at any of the SOCWA treatment plants.

6. Employees are required to be dressed and ready for work at the start of their scheduled work period. Punctuality is expected at all times and a lack of same is grounds for discipline or termination.
7. An employee shall personally notify his/her supervisor within one (1) hour of the start of the employee's assigned shift of the employee's inability to report to work on that shift. Repeated failure to comply with this provision is grounds for disciplinary action.

D. OUTSIDE EMPLOYMENT

1. No full-time employee shall be permitted outside employment without a written request approved by the General Manager so that it can be determined if there is any conflict of interest with his/her job with the Agency. Conflicts of interest include, but are not limited to, (a) having a financial interest in or working for or with any contractor, subcontractor, agency, district, or any other entity retained by the Agency, and (b) holding an outside job which precludes the employee from fulfilling each and every aspect of his/her job with the Agency, including, for example, the ability to meet standby commitments, to be at work on time and to work overtime.
2. It is understood that all employees represent the Agency and their actions shall not be in conflict with the mission of the Agency. Any failure to comply will be considered grounds for disciplinary action.

E. JOB INJURY

1. The Agency has entered into a Self-Insurance Program for California Workers' Compensation Liabilities. On-the-job injury claims will be processed by a third-party adjuster.
2. All on-the-job injuries shall be reported within twenty-four (24) hours to the employees' supervisor, Department Director, Human Resources or General Manager. Any necessary medical treatment or first aid will be obtained immediately. All work-related injuries will be referred to a licensed medical physician selected by the Agency, unless the employee has a pre-designated physician form on file. Work-related injuries not treated by the Agency physician may not be covered by workers' compensation.
3. Workers' compensation benefits may be coordinated with sick leave benefits and/or accrued vacation time if the employee notifies Human Resources in writing as soon as reasonably possible after the leave commences.

F. CAL/OSHA (OCCUPATIONAL SAFETY AND HEALTH ACT)

1. The Agency will furnish the employee with a place of employment which is safe and healthful as required by applicable law.

Due to the occupation exposure to potentially infectious material, the Agency offers vaccinations listed below at no out of pocket cost to the employee:

Hepatitis A Hepatitis B Typhoid Tetanus Polio

The General Manager will periodically review and update this list based on the potential for employee exposures.

2. The employee's personal matters including attire and hair shall not present a safety hazard or prevent full and proper utilization of safety equipment.
3. The Agency shall maintain safety rules and regulations, updated as necessary but at least annually, which are in complete conformance with the Federal and State regulations. (Refer to the Safety Handbook.)
4. Safety meetings shall be held on a regular basis and all plant personnel are required to attend. Administrative (non-plant) personnel may attend said meetings as directed by the General Manager.
5. It shall be required that all employees certify by signature that they have received, read and fully understand the adopted safety rules and regulations. The safety rules and regulations will be certified annually by the employees.
6. All employees shall be expected to comply with all safety rules and regulations and failure to do so shall be considered as grounds for dismissal.

G. DISCIPLINARY ACTION OR TERMINATION

1. The General Manager or his/her designee has the authority to discipline or terminate any employee for cause. The following is a nonexclusive list of the types of disciplinary actions which may be imposed.
 - a. Oral or written warnings.
 - b. Probation - the placing of an individual in a position wherein his/her past and current performance is being re-evaluated. Failure to improve his/her performance during the probationary period will result in further disciplinary action.
 - c. Suspension – an involuntary absence with or without pay.

- d. Demotion - reduction from a position in one class to a position in another class having a lower salary range, affected for disciplinary purposes. (Demotions resulting from organizational changes and layoffs are not disciplinary).
 - e. Termination - discharge from service with the Agency.
2. It is intended that discipline be imposed primarily for corrective purposes and to address deficiencies in work performance. Failure of the employee to respond to the corrective action may result in further disciplinary action up to and including termination. The following is a nonexclusive list of the more common causes for disciplinary action or termination:
- a. Action contrary to the personnel rules and regulations of the Agency.
 - b. Inefficiency or incompetence.
 - c. Willful disobedience or insubordination.
 - d. Self-imposed physical or mental disability.
 - e. Dishonesty.
 - f. Possession or use of illegal drugs (including, but not limited to, marijuana, in all forms, as it remains illegal under federal law).
 - g. Improper use of legal drugs.
 - h. Being under the influence of drugs or alcohol on the Agency premises, or while engaged in Agency business.
 - i. Possession and or use of a firearm or other non-authorized weapon on Agency premises, in an Agency vehicle, or while engaged in Agency business.
 - j. Disorderly, immoral or illegal conduct.
 - k. Discourteous treatment of the public or fellow employees.
 - l. Conviction of a felony.
 - m. Unauthorized absence without leave.
 - n. Neglect of duty

- o. Action incompatible with, or not in the best interest of public service.
 - p. Failure to follow safe working practices or failure to report promptly any injury.
 - q. Falsification of any Agency record.
3. In cases of disciplinary suspensions, demotions or terminations, a regular employee shall be given prior written notification of the proposed disciplinary action. Notification shall include the following (1) A statement of the proposed action; (2) The reason therefore; (3) The effective date of the disciplinary action; (4) The name, position and authority of the person or persons initiating the proposed disciplinary action; (5) The name, position and authority of the person or persons with whom rests the final decision of the proposed action; (6) The names of witnesses used to substantiate the cause for the disciplinary action, and (7) The notice of the right to respond orally or in writing to the authority imposing the discipline. Copies of materials supportive of the disciplinary action shall be attached to the notification.
 4. Any regular employees (not probationary and temporary employees) shall have the right to an Administrative Review of a disciplinary suspension, a demotion, or termination. A written request for such a review shall be submitted to the General Manager within seven (7) calendar days of the date of mailing or personal service of the notice to proposed disciplinary action. If a timely request for review is submitted, the review shall be conducted before a representative of management (the General Manager or his/her designee) prior to the effective date of the disciplinary action.

The employee may submit written rebuttal material prior to the review and present oral and written evidence at the time of the review. The employee is entitled to representation (including an attorney). The management representative conducting the review shall make a finding of fact to support the reason for the disciplinary action, should such action be deemed appropriate. The employee shall be notified of the management representative's decision in writing. This decision shall be final.
 5. A disciplinary suspension of two (2) or more working days, a disciplinary demotion or a disciplinary termination may be appealed to the Board of Directors or designee(s) by filing a written appeal with the General Manager within ten (10) calendar days from the date of the disciplinary notice.
 6. Upon termination, the employee shall be given an exit interview during which final administrative and personnel tasks can be completed. During the interview, the employee will be given a full accounting and check for all

moneys due the employee computed to termination date. The review, will include, but is not limited to, a discussion of all benefits, including accrued sick leave, accrued vacation, public employees' retirement system, health insurance, life insurance and disability insurance, and the ability to continue these as provided by law.

7. Upon termination, the employee shall return all previously assigned property of the Agency. The cost of property not returned shall be charged to the employee.

H. ADDRESS CHANGE

It is important that the Agency maintain current home addresses and telephone numbers for all employees. Should the employee's telephone become disconnected for any reason, it is the responsibility of the employee to establish an emergency contact and provide that information to the Agency as soon as possible. There may be occasions when it is imperative that the Agency reach an employee when he/she is at home. The Agency should also be able to contact the employee's family or emergency contact person in case of accident or illness at work. Employees shall notify the Agency of any change of address or telephone number by updating their information through the ADP Payroll Systems.

I. PHYSICAL EXAMINATION

1. Due to safety concerns involved in plant operation, all employees shall be required to pass a medical or physical examination and, for positions designated by the General Manager only, a drug test prior to employment with the Agency. The Agency shall select a licensed medical physician to perform the examination and test, the cost of which shall be borne by the Agency. The examination will determine the applicant's physical fitness to perform the job.
2. In accordance with OSHA regulations, all employees who, in the course of their employment are required to wear respiratory protective equipment must undergo a health evaluation to determine if they are physically able to perform the work and use the equipment. The evaluation may include a spirometer test and may also include a physical examination if determined medically necessary by a licensed medical physician selected by the Agency. The evaluation will be done annually. The cost of the examination will be borne by the Agency.
3. The Agency shall bear the cost of a physical examination and drug test for all employees required to take such examination as a condition of continued employment.

J. GRIEVANCE PROCEDURE

1. A grievance procedure has been established for the following purposes:
 - a. Promoting improved employer/employee relations by establishing an appropriate means for determining the validity of grievances; i.e., claims by an employee that the Agency has violated, misinterpreted or misapplied an obligation to the employee as such obligation is expressed and written in this Manual.
 - b. Providing a method of resolving such claims as closely as possible to the point of origin and as informally as possible.
 - c. Encouraging free communication between supervisors and employees.
2. The following steps shall be taken when filing a grievance.
 - a. Step One: Employees who have a grievance shall first take it up verbally with their division supervisor within seven (7) calendar days after they knew or reasonably should have known of the occurrence of the cause of the grievance and any action taken. Management retains the right to have a representative from Human Resources present at such a grievance meeting.
 - b. Step Two: If the grievance is not resolved within seven (7) calendar days after its submission in Step One.
 - Employees may submit the grievance in writing to the division supervisor within seven (7) calendar days thereafter.
 - The division supervisor shall meet with the employee within seven (7) calendar days after submission of the grievance.
 - The division supervisor shall deliver his/her answer, in writing, to the employee within seven (7) calendar days after such meeting.

At this and subsequent steps in the grievance procedure, employees have the right to present their grievance with or without a representative at their option. Should an employee choose to have representation, they must submit, in writing, their intention to do so with the name and title of their representative to the appropriate division supervisor at the time of the Step Two grievance submission.

- c. Step Three: If the grievance is not resolved within seven (7) calendar days after its submission in Step Two,

- Employees may submit the grievance in writing to the Department Director within seven (7) calendar days thereafter.
 - The Department Director shall meet with the employee within seven (7) calendar days after submission of the grievance.
 - The Department Director shall deliver his/her answer, in writing, to the employee within seven (7) calendar days after such meeting.
- d. Step Four: If the grievance is not resolved in the Third Step,
- The aggrieved employee may submit the grievance in writing to the General Manager within seven (7) calendar days after the Department Director's answer is received.
 - The General Manager shall meet with the employee within seven (7) calendar days after receiving the grievance.
 - The General Manager shall deliver his/her answer in writing within seven (7) calendar days after such a meeting.

After Step One, failure of the aggrieved employee to follow the timeline set forth in the grievance procedure shall be considered a waiver of the employee's right to grieve the matter any further and acceptance of the decision at the prior level. Timelines may be extended by mutual written agreement.

K. SMOKING

Smoking (including vapes and e-cigarettes) is prohibited on SOCWA property except in designated areas on approved breaks.

L. SOLICITATION

Persons who are not employees of the Agency are not permitted to solicit or distribute anything for any purpose inside Agency buildings or elsewhere on Agency property. Employees are not permitted to distribute anything for any purpose during working time, or on nonworking time in working areas. No employee shall deface or alter any Agency building or property or employee property by affixing any poster, sign, sticker, or other type of advertising or propaganda matter or device. This policy does not prohibit protected Union activity.

SECTION III. BENEFITS

A. VACATION

1. Accrual Rates:

All regular full-time employees shall accrue the following vacations hours which will be properly credited on a biweekly basis.

- i. For employees hired prior to July 1, 2014, the following applies:
 - 1st through 5 years of employment (end of 5th year) - 96 hours per year
 - 6 through 10 years of employment (end of 10th year) - 120 hours per year
 - Beginning the 11th year of employment - 160 hours per year
- ii. For employees hired on or after July 1, 2014, the following applies:
 - 1st through 5 years of employment (end of 5th year) - 80 hours per year
 - 6 through 10 years of employment (end of 10th year) - 120 hours per year
 - Beginning the 11th year of employment - 160 hours per year
2. Part-time regular employees who work at least 40 hours per pay period shall accrue vacation subject to the schedule set forth in paragraph 1 above, but it shall be prorated on the basis of the number of hours worked.
3. All vacation time must have prior approval. The Supervising Managers/Department Head may approve vacation.
4. Vacation requests for over forty (40) days must be submitted no less than two weeks prior to the commencement of the requested vacation, except in an emergency situation as determined by the General Manager or his/her designee.
5. Vacation duration is limited to no more than 120 hours (3 weeks) without special approval by the General Manager.
6. Vacation requests submitted three (3) months in advance and approved at least four (4) weeks prior to the commencement of the requested vacation, will not be canceled by anyone other than the employee except in cases of

an emergency as determined by the General Manager, his/her designee or the Department Director.

7. Any employee separating from employment who has not taken earned vacation shall receive pay for each hour (or part thereof) of earned vacation according to the level of earnings for such employee on the last day worked.
8. Not more than 240 hours may be accrued and carried over from one calendar year to the next calendar year. For all hours in excess of 240 hours, employees will receive compensation for those hours at their current rate of pay at the end of the first pay period that ends in December.
9. Eligible new hires shall accrue vacation beginning with the date of hire but may not utilize such during the first six (6) months of their probationary period.
10. Employees may request up to 40 hours pay in lieu of vacation, subject to approval by the General Manager, provided the employee has taken 7 consecutive days off in any combination of holidays, vacation, personal days, weekends, scheduled days off, etc., within the last 12 months. This policy may be used up to a maximum of 2 times within twelve consecutive months. After the employee has been paid for the second 40 hours of vacation pay in lieu of vacation he/she will not be granted another 40 hours vacation pay in lieu of vacation until it has been 12 consecutive months from the original and first date of request.
11. Every effort shall be made by the employee to schedule at least one continuous forty (40) hour (one week) vacation during the year.

B. HOLIDAYS

1. All full-time employees and those eligible part-time employees shall receive the following paid holidays:

New Year's Day (January 1)
Presidents Day (third Monday in February)
Memorial Day (last Monday in May)
Independence Day (July 4)
Labor Day (first Monday in September)
Veteran's Day (November 11)
Thanksgiving Day
Thanksgiving Holiday (Friday after Thanksgiving Day)
Christmas Day (December 25)

2. Whenever a holiday falls on a Saturday not scheduled as a regular workday, the preceding Friday shall be observed as the day off. Whenever a holiday falls on a Sunday not scheduled as a regular workday, the following Monday shall be observed as the day off.
3. When a holiday falls on an employee's regular scheduled day off and the employee would otherwise lose the holiday, the employee will be paid for the amount of a regularly scheduled work day as straight-time pay. If staffing requirements allow, an employee may elect to take a regularly scheduled day off, providing the day off falls within the same pay period as the holiday. Arrangements for such days off must be made with the employee's supervisor.
4. In addition, all full-time employees are eligible to receive three (3) personal days per fiscal year. If the need for paid personal days is foreseeable, the employee must provide their immediate supervisor reasonable advance notification.

Personal days accrue on July 1 of each year and must be taken prior to June 30 of the following year.

A personal day is the equivalent of a full day worked regardless of the number of hours in the employee's shift at the time the personal day is used (8, 9- or 10-hour shift).

All Part-time employees are eligible to receive 13 ½ hours of personal leave per fiscal year (beginning July 1) or to be determined based on which quarter hired in.

Once an employee has given his/her notice of termination, there will be no further accumulation of personal days.

5. An employee must have been paid for the entire amount of regularly scheduled hours the days immediately prior to and following a holiday observed by the Agency in order to be paid holiday pay.
6. All employees eligible to receive paid holidays, and who are scheduled by management to work on an Agency holiday, shall be paid at one and one-half times their normal rate of pay for hours worked on the holiday. This is in addition to the holiday pay (or day off in lieu) at eight, nine or ten-hour's straight time, depending on the employee's schedule. Employees not scheduled to work but who are called in to work shall receive compensation equal to double their normal rate of pay for the first consecutive eight, nine or ten hours worked (depending on employee's schedule). All consecutive hours worked beyond eight, nine or ten (depending on employee's schedule) on a holiday will be paid at three times the employees' normal rate of pay.

7. Temporary employees shall be entitled to paid holidays only if such a holiday falls on a day such employee would ordinarily be required to work.

C. SICK LEAVE

1. All regular full-time employees shall accrue sick leave hours which will begin with the date of hire, on a biweekly basis, but may not utilize such during the first thirty (30) days of employment.
 - Employee hired prior to July 1, 2014, earn ninety-six (96) hours of sick leave per year:
 - Employee hired on or after July 1, 2014, earn eighty (80) hours of sick leave per year (accrual rate shall be as required by applicable law):
2. Part-time employees shall accrue one (1) hour of sick leave for every thirty (30) hours worked.
3. Sick leave may be used as required by California law including cases where an employee's presence is required elsewhere to attend to the illness of a "family member" or a "designated person." "Family member" is defined as: a child (whether biological, adopted, or foster child, stepchild, legal ward, or a child to whom the employee stands in loco parentis) regardless of the age of the child or dependency status, a parent (whether biological, adoptive, or foster parent, stepparent, or legal guardian of an employee or the employee's spouse or registered domestic partner, or a person who stood in loco parentis when the employee was a minor child), a spouse, a registered domestic partner, a grandparent, a grandchild, a sibling and a designated person. (A "designated person" means a person identified by the employee at the time the employee requests paid sick days. The Agency limits an employee to one (1) designated person per twelve (12) month period for paid sick days.) Employee leave for the serious health condition of members of their immediate family is also governed by the Agency Family Leave policy as detailed in this Employee Manual Attachment "C". The Agency will also approve the use of employee's accrued paid sick time if the employee is a victim of domestic violence, sexual assault, stalking and as otherwise required by applicable law.
4. Except where prohibited by applicable law, the General Manager may require a doctor's certificate if an employee's absence exceeds three (3) consecutive working days. If an employee is absent for five (5) consecutive working days, a doctor's certificate shall generally be mandatory in order to return to work.

5. An employee may carry over a maximum of two hundred and forty (240) hours of accumulated sick leave on an annual basis. This annual basis shall end on the last day of the first pay period that ends in December. For all hours in excess of 176 hours, employees will be eligible to receive compensation for 75% of those hours at their current rate of pay. Such compensation will be paid at the end of the first pay period that ends in December.
6. When an employee has utilized their total accumulated sick leave, accrued vacation may be taken to the extent available providing the employee receives prior approval (refer to Section III-A, above, regarding submittal of vacation requests). If an employee does not elect to utilize, does not have sufficient accrued vacation time to cover the absence, and/or does not receive prior approval for the use of vacation leave, the employee shall not receive compensation.
7. Accumulated sick leave and/or vacation time may be utilized by an employee during his/her family leave or pregnancy disability leave.
8. Employees who have given two weeks written notice of their intention to leave the employ of the Agency shall be paid 75% of their accumulated sick leave above 176 hours on the date of termination.

Employees, who have given at least two weeks written notice of their intention to retire from the Agency, shall be paid for all unused sick leave at a rate of 75% upon retirement (remaining 25% converting to service credit with CalPERS). Departing retiring employees have the option to convert 100% of their unused sick leave to service credit with CalPERS.

9. Sick leave shall not be used in lieu of or in addition to vacation and/or holidays for the intent of extending the vacation or the holiday period.
10. Sick leave notification: Employees calling in sick must speak directly to their immediate supervisor; text messages, phone messages or emails will not be considered appropriate notification. Sick leave notification must be given to your immediate supervisor by 8:00 a.m., or within one hour of the start of your normal work day schedule. If the need for paid sick days is foreseeable, the employee must provide their immediate supervisor reasonable advance notification.
11. Temporary employees accrue sick leave at the rate of one (1) hour for every thirty (30) hours worked. They are eligible to use sick leave beginning on the 90th day of their employment with the Agency. Temporary employees may not cash out any accrued but unused sick leave for any reason during their employment at the Agency. Sick leave will not be paid-out upon termination of employment for temporary employees.

D. LEAVE OF ABSENCE

1. Non-Medical Leave: Upon approval from the General Manager on a written request, an employee may be granted a leave of absence without pay for non-medical reasons. No employee benefits will be paid or accrue during this absence, with the exception of insurance coverage which will remain in effect for the remaining days of the month in which the leave began.
2. Military Leave of Absence: Military leave of absence is governed by provisions of federal law and the Military and Veterans Code of the State of California, including Section Nos. 395 and 395.02 and applicable federal law.
3. Miscellaneous:
 - An employee on an unpaid leave of absence shall not accrue vacation pay or sick leave during their leave, nor shall they be eligible for holiday pay (see Section III-B, par 6). Except as may be required by law, all benefits, including medical insurance, will cease for any employee whose leave of absence exceeds twelve (12) months.
 - Employees must provide their supervisor a written request for any unpaid time off.
 - An employee who falsely claims leave under this policy or supplies false information, in an attempt to obtain leave under this policy shall be subject to disciplinary action up to and including discharge. An employee who works for any other employer while out on leave is also subject to disciplinary action up to and including discharge.
 - The workweek schedule will commence on Sunday and end on Saturday. An employee is permitted the use of accumulated vacation time once sick leave is exhausted when an employee is on an extended leave of absence (2 weeks or more), without securing separate approval for use of the vacation. Employees are responsible to notify Human Resources if they wish to use this provision.
 - The following leave of absences with pay shall not reduce any employee benefits, including their allowable California Family Rights Act ("CFRA") and Federal Family and Medical Leave Act ("FMLA") time as described in Attachment C.
3. Bereavement Leave: Employees are provided five (5) days of Bereavement Leave in accordance with California law. This leave is

available for employees who have been employed for at least thirty (30) days prior to the commencement of the leave.

Whenever any full-time employee is compelled to be absent from duty for reason of death or critical illness of a member of his/her family or his/her spouse's family such as a spouse, registered domestic partner, parent, parent-in-law, child, brother, sister, grandchild or grandparent, the employee shall be entitled to three (3) days of leave with pay and two (2) additional unpaid days. If necessary, the employee may take an additional three (3) days to be charged against accrued sick leave if approved by the General Manager. Part-time employees are provided up to five (5) unpaid days of Bereavement Leave.

For all employees, the five (5) days need not be consecutive, but all Bereavement Leave must generally be completed within three (3) months of the date of death of the family member. The Agency may require documentation of the death of the family member so long as it is requested within thirty (30) days of the first day of the leave. Employees may utilize accrued and available sick leave, personal leave, compensatory time off or vacation leave while on unpaid Bereavement Leave. The Agency requests that employees provide reasonable advance notice of when they plan to use Bereavement Leave.

5. Absence due to a birth or adoption in the immediate family: Whenever any full-time employee is compelled to be absent from duty for reason of the birth or adoption of a child, the employee shall be entitled to five (5) days of leave with pay and if necessary, may take an additional three (3) days to be charged against accrued sick leave if approved by the General Manager. Employees may also be entitled to additional unpaid time off pursuant to the Agency's FMLA/CFRA policy set forth in Attachment C.

E. LIGHT DUTY

Light duty is defined as a temporary work assignment provided to injured employees (1) who are unable to perform their normal job duties, and (2) who have obtained from their doctor a release to work with restrictions.

Employees who are injured and are able to return to work with restrictions will be entitled to light duty provided (1) there is light duty available, (2) the employee is qualified to perform the light duty assignment, and (3) the light duty assignment can be performed within the scope of the employee's restrictions.

F. HEALTH, DENTAL INSURANCE AND VISION CARE PLAN

1. Full-time employees and their dependents are provided a group dental and vision care plan; the premiums for the vision and dental are paid for by the Agency for full-time employees. Eligibility for dental and vision insurance will begin the first of the month following thirty (30) days of employment.
2. Regular part-time employees who meet the applicable eligibility requirements established by the Agency insurance partner shall be provided health, dental and vision insurance for themselves and their dependents, upon request.

The cost of the premiums for dental and vision insurance for part-time employees will be shared by the Agency and the employee based upon the number of hours the employee normally works in an eighty (80) hour pay period. For example, an employee who normally works sixty (60) hours will pay 25% of the premium, while an employee who normally works forty (40) hours will pay 50% of the premium. Withholdings will be calculated as they are in paragraph #2 above.

- Full-time employees and their dependents are provided with group health insurance coverage under the CalPERS PEMCHA program.

Employees of the Agency shall be eligible for a monthly health insurance allowance from the Agency equal to an amount that is 95% of the average of all health plans CalPERS makes available to the Agency, excluding the PERS Platinum Plan, at the appropriate level of coverage selected by the employee (employee, employee + 1, or employee + family). The Health Allowance shall be made available through the Agency's Cafeteria Plan in order to preserve it as a nontaxable benefit and a portion of the Health Allowance will be designated as the PEMHCA Minimum contribution and paid directly to CalPERS. If an employee enrolls in a CalPERS health plan with a monthly premium that exceeds the Health Allowance, the excess cost will be the employee's responsibility. Contributions to be paid for by the employee will be calculated on an annual basis and withheld in equal amounts over the amount of pay periods in the year. Unequal remainder amounts will be included in the final paycheck for the calendar year. Eligibility for health coverage and the Health Allowance will begin the first of the month following thirty (30) days of employment.

3. Contributions to be paid for by the employee will be calculated on an annual basis and withheld in equal amounts over the amount of pay periods in the year. Unequal remainder amounts will be included in the final paycheck for the calendar year.
4. For an eligible dependent to be eligible for coverages, a copy of a marriage license, State of California Declaration of Domestic Partnership form (NP/SF DP-1), birth certificate, or other identifying paperwork will be required. It is mandatory that each employee notifies the Agency, in writing, whenever any additions or deletions occur in the status of his/her

dependents. Failure to do so may result in a lapse of coverage for the additional dependent(s).

5. In lieu of health insurance coverage, eligible employees may elect to receive compensation at a rate of \$300 per month in addition to their regular pay. Employees must show current proof of health insurance coverage under another plan outside of the Agency and may be required to periodically show proof upon request. Requests for compensation in lieu of health insurance coverage should be in writing and are subject to review and approval of the General Manager. Compensation will begin on the first of the month following cancellation of coverage from the Agency Health Plan.

G. SHORT TERM AND LONG -TERM DISABILITY INSURANCE

Effective thirty days after employment, both short-term and long-term disability insurance coverage is provided for all full-time and part-time employees; the premiums are paid for by the Agency.

H. LIFE INSURANCE

1. Effective thirty days after employment, group life insurance is provided to all full-time and part-time employees at an amount of \$100,000. The premiums for full-time employees are paid for by the Agency. The premiums for part-time employees are shared 50/50 by the Agency and the employee. (The cost of premiums, paid by the Agency for life insurance in excess of \$50,000 is considered noncash compensation for tax purposes.)
2. It is mandatory that each employee notify the Human Resource Department whenever any desired change in beneficiary data.
3. SOCWA offers employees the option to purchase additional life insurance coverage for themselves, spouse and dependents.

I. UNEMPLOYMENT INSURANCE

Unemployment insurance may be available to qualified employees by the Agency. To apply for benefits or to determine eligibility, employees should contact their nearest Employment Development Department office.

J. RETIREMENT

1. All regular full and part-time employees are covered by the Public Employees' Retirement System (PERS).

- TIER 1** Employees hired prior to February 1, 2011 are on the 2.5% at 55 formula with the employee paying the full employee contribution.
- TIER 2** Employees hired between February 1, 2011 and December 31, 2012, will be on the 2% at 55 formula with the employee paying the full employee contribution.
- TIER 3** Employees hired as of January 1, 2013, that do not qualify as an existing PERS “Classic” employee are on the 2% at 62 formula with the employee paying the full employee contribution.

2. Post-Retirement Health Care

- 2.2 Pursuant to PEMHCA and relevant CalPERS regulations, a retired employee will qualify for retiree medical benefits if his or her retirement from the Agency is effective within 120 days of his or her separation from employment with the Agency and the retired employee receives a retirement allowance from CalPERS resulting from his or her service with the Agency. Retired employees who satisfy the preceding requirements (“Eligible Retirees”) are eligible to continue health coverage with CalPERS for themselves and their eligible dependents. All allowances described in this section shall only be available to Eligible Retirees enrolling in a CalPERS health plan.
- 2.3 The retiree health benefits provided by the Agency vary depending upon an Eligible Retiree’s date of employment with the Agency. The Agency provides retiree health benefits as follows:
- a. Employees hired before July 1, 2017. Eligible Retirees hired before July 1, 2017 will receive a monthly amount from the Agency not to exceed the Health Allowance made available by the Agency to active employees (“Tier I Allowance”). The Tier I Allowance will be paid as follows:
- an amount equal to the PEMHCA Minimum will be paid directly to CalPERS by the Agency; and
 - a reimbursement by the Agency will be paid to the retiree for the monthly health insurance premiums actually paid by the retiree, in an amount not to exceed the difference between the Tier I Allowance and the PEMHCA Minimum.

If an Eligible Retiree subject to this Section J(2.3)(a) enrolls in a CalPERS health plan with a monthly premium that exceeds the Tier I

Allowance, the excess cost will be the Eligible Retiree's responsibility. Conversely, if any Eligible Retirees enrolls in a CalPERS health plan with a monthly premium that is less than the Tier I Allowance, the remainder shall be forfeited.

Eligible Retirees shall be subject to any changes to the health insurance coverage provided by the Agency to the same extent as active employees of the Agency.

b. Employees hired on or after July 1, 2017.

- Eligible Retirees hired on or after July 1, 2017 will receive a monthly amount from the Agency equal to the PEMHCA Minimum, which the Agency will pay directly to CalPERS ("Tier II Allowance"). If an Eligible Retiree subject to this Section J(2.3)(b) enrolls in a CalPERS health plan with a monthly premium that exceeds the Tier II Allowance, the excess cost will be the Eligible Retiree's responsibility.
- In addition, during employment with the Agency, employees hired on or after July 1, 2017 shall receive an Agency contribution equal to \$200 per month to an individual account under a retiree health savings plan. This amount may be subject to change at the Agency's discretion but will not be reduced below \$200. The retiree health savings plan is to be used exclusively to reimburse qualifying medical expenses during retirement. The retiree health savings plan will be administered by a third-party administrator selected by the Agency.

3. Temporary Employees

- 3.1 Temporary employee retirement is covered by the Agency deferred compensation plan.
- 3.2 Temporary employees will be subject to a percentage withholding of their gross salary for retirement as mandated by federal law. Employees must contribute to one of the Agency's deferred compensation plans. The amount must be equal to or greater than the amount which would normally be withheld for Social Security.
- 3.3 If an employee works more than nine hundred sixty (960) hours per fiscal year, he/she will be added to the PERS system. In such an event, the contributions for the employee and employer will be consistent with applicable law.

K. SOCIAL SECURITY – MEDICARE PORTION

All employees are subject to Medicare tax withholding.

L. EDUCATIONAL REIMBURSEMENT

Employees are encouraged to improve their own job effectiveness and opportunity for advancement by taking courses and working for a degree, credentials or licenses. The Agency shall provide employees with funds to cover the cost of tuition and registration fees, regular textbooks, lab fees and parking fees for approved job-related courses, as approved in advance by the General Manager. These courses of study must be taken through accredited colleges, universities, correspondence schools or recognized professional organizations. All textbooks paid through this program become property of the Agency. These courses of study must meet at least one of the following criteria: (1) Directly related to the employee's current position and job duties; (2) Related to their current or related department; or (3) Required for additional professional licenses required within their current or related department.

An employee may receive reimbursement for approved educational expenses up to a maximum of \$750 for any one course and not more than \$3,000 in any one calendar year. No reimbursement will be made until after the completion of the courses and will not be made if reimbursement has been made from any other source.

In order to be eligible for reimbursement an employee must meet all of the following requirements:

- Submit a course approval request to the General Manager prior to starting the course.
- Submit a copy of the "grade card" or similar document from the educational institution, indicating the course of study was completed.
- Receive a passing grade.
- Remain a regular employee with the Agency for a period of one year after the date the course was completed. If the employee does not complete this requirement, the employee must reimburse the Agency upon termination.
- Submit the request for reimbursement to the Finance Department, including original receipts for all eligible expenses.

M. MILEAGE ALLOWANCE

1. Any employee who is required to use a private vehicle in the discharge of his/her duties shall receive the maximum mileage reimbursement as established by the Internal Revenue Service. Such mileage reimbursement shall be made in the next bill payment cycle, after submittal of an approved reimbursement request.

2. The employee shall furnish the Agency and have on file at the office, a current copy of his/her Certificate of Automobile Insurance including Public Liability and Property Damage, minimum coverage (\$30,000, \$60,000, and \$10,000).
3. Use of a private vehicle, for Agency purposes or on Agency property, by an employee is governed by a separate Vehicle and Equipment Policy.

N. DEFERRED COMPENSATION PLAN

Regular full and part-time employees are eligible to participate in the Agency deferred compensation plan(s). The primary purpose of the plan(s) is to provide future payments in lieu of deferred current income upon death, disability, retirement, or other termination of employment. The plan(s) are intended to qualify as eligible State Deferred Compensation Plan(s) within the meaning of Section 457 of the Internal Revenue Code of 1954, as amended. Each employee may elect to become a participant of any Plan(s) and defer payment of part of his/her compensation (within the guidelines of Section 457) by executing the required participation agreement.

The Agency will provide a matching contribution up to \$1,500 per fiscal year.

O. UNIFORMS AND SAFETY EQUIPMENT

The Agency shall provide, as an employee benefit, all full-time field operational personnel with uniforms to be worn while on duty and the necessary Agency owned safety equipment. The Agency shall reimburse full-time field operational personnel, upon date of hire and annually thereafter, up to a maximum amount of \$400.00 for purchase of steel-toed shoes as required by the Agency separate Injury and Illness Prevention Safety Program included in the Safety Handbook. Field operational personnel may purchase a second pair of shoes if funds remain from the original allocation and, if needed, the employee shall contribute the additional funds required. Employees will be allowed to use this amount to also purchase other work uniform related items such as belts, boot/shoe inserts, laces, etc. If, in the discretion of an employee's department head, the employees work boots are worn out or damaged due to work-related wear-and-tear, the department head may authorize the reimbursement of a second pair of boots within one year.

Laboratory personnel will be allowed an additional \$75 per year to purchase aqua shoes to be used for beach sampling.

It is the responsibility of the employee to provide an original receipt of charges for payment reimbursement. All employees shall present a clean and neat appearance at all times.

The Agency shall continue to report non-safety uniform expenditures on a per pay period basis, not to exceed \$400.00 annually. The allocation is subject to change based on uniform provider, operational safety and requirements as determined by the

General Manager. The foregoing shall be subject to the provisions and limitations under the Public Employees Retirement Law, including prohibitions on reporting the uniform allowance as pensionable compensation for employees deemed “new members” under the Public Employees Pension Reform Act of 2013. The actual per employee, per pay period amount will be established each fiscal year based on an average monthly rental/cost amount paid in the prior fiscal year.

SECTION IV: COMPENSATION

A. EMPLOYEE COMPENSATION

1. All full-time employees shall receive compensation in accordance with the adjusted ranges in the Salary Schedule (Exhibit A) and job classification (Exhibit B), and the same shall be revised from time to time by action of the Agency Board.
2. Pay days are on a biweekly basis - every other Thursday.

B. MERIT POOL

Award of a merit increase is based on a recommendation by the employee's supervisor and department head, and subject to approval of the General Manager. A merit pay pool equal to approximately 3% of the salaries of all employees will generally be established for the purpose of awarding merit increases.

Individual employees may be awarded a salary increase of between zero and five percent (0 – 5%) based on their level of performance. The total amount of meritorious salary increases shall not exceed the 3% merit pay pool in any fiscal year.

In the event an employee receives a merit increase that is less than the total amount awarded during the review process, due to being topped out in their respective salary range, said employee shall receive the remaining review award in a lump sum, which shall not be considered as reportable compensation to CalPERS.

C. SALARY ADJUSTMENTS

All employees shall receive a six percent (6%) increase, effective July 1, 2024:

In an effort to remain competitive, SOCWA will review salary ranges against comparator agencies on a bi-annual basis and will adjust ranges if necessary, with the recommendations of the General Manager and approval by the Board. The approved new ranges will be effective at the start of the next fiscal year.

D. INCENTIVE PAY

Education Certification Incentive Program

Employees who obtain a job-related educational certificate which exceeds their minimum job requirements are eligible to receive an incentive pay increase and shall be considered as reportable special compensation for each certificate received in accordance with Agency policy. Certificates must be recognized by CWEA, State Water Resource Board and NCCCO.

1. For Employees hired prior to July 1, 2017

- a. Full-time continuous employees receiving education certification one step or higher above their existing job classification will be eligible to receive a 2.5% of base pay reported as special compensation.
 - Any Grade III employees may receive an additional 2.5% of base pay reported as educational incentive if they obtain a certification two-steps above their existing job classification (i.e., Grade III Operator with a Grade V certification), as approved by the General Manager. Employees must first make application to their supervisor to be eligible to participate in the incentive program including employees whose job classification may not have corresponding education certification. All applications are subject to approval of the General Manager.
 - b. Employees will receive a 2.5% of base pay reported as special compensation upon receiving a NCCCO Crane Certification; and legal ability to drive a crane.
2. Employees hired on or after July 1, 2017, will only be eligible for additional pay certification as follows:
- a. Employees will receive a one-time lump sum educational incentive of \$800.00 payment on achieving a Grade 2.
 - b. Employees will receive a one-time lump sum educational incentive of \$800.00 payment upon receiving a NCCCO Crane Certification; and legal ability to drive a crane.
 - c. Employees will receive a one-time lump sum educational incentive of \$1200.00 payment upon achieving a Grade 3 or higher certification.

E. MERIT ADVANCEMENT

Full-time and/or part-time employees in good standing may be recommended for merit advancement. Merit reviews shall take place on an annual basis upon completion of the probationary period.

An employee in good standing is defined as one who has received a performance evaluation rating which meets or exceeds expected standards and who has not received any of the following disciplinary actions within the past twelve (12) month period:

- a) Letter of reprimand
- b) Probation for disciplinary purposes

- c) Suspension and/or demotion for disciplinary purposes

The merit recommendations, if any, are to be made by the employee's supervisor and must be approved by the Department Director and the General Manager.

F. SPECIAL PERFORMANCE AWARD

In recognition of situations where long-term SOCWA employees have reached the top of the established salary range for their current positions and are consequently, no longer eligible to receive salary advancements under the regular merit pool, such employees may be considered for a special performance award. The employee must have received an overall merit-based performance review rating of at least "Exceeds Expectations" or "Above Standard" for the preceding twelve-month evaluation period. The General Manager shall approve all such performance awards in writing. The decision of the General Manager shall be final. No award granted under this program shall be considered to increase the employee's base salary, nor shall the award limit the employee's ability to receive general cost of living increases, which may be granted from time to time. No employee shall receive an award under this program more frequently than once in any twelve-month period. No award granted under this program shall exceed five percent (5%) of the employee's base salary. The award shall be paid in a lump sum to the employee. No award approved by the General Manager under this program shall require further approval by the Board of Directors; provided, however, that the General Manager shall annually following the end of the fiscal year provide a summary of the granted award during the previous twelve-month period to the Board of Directors. All employees, whether represented by the SOCWA Employee Association (SEA) or not, including management, supervisory, and confidential employees shall be eligible for this program. The decision of the General Manager to grant or withhold an award under this program shall not be subject to the grievance procedure.

G. OVERTIME

1. All employees who are classified as "non-exempt" employees, as defined under the FLSA, will be eligible for overtime pay. For purpose of defining "non-exempt" employees, the Agency policy shall mean all employees except the employees designated in the Management Division.
2. Administrative nonexempt employees will be paid overtime when they actually work more than 40 hours in a workweek. Overtime pay for bargaining unit employees is defined as that time spent on the job over eight (8) hours in one day for those employees on an eight (8) hour, five (5) day week schedule; or over nine/eight (9/8) hours in one day for those employees on a nine/eighty (9/80) schedule; or over ten (10) hours in one day for those employees on a four/ten (4/10) schedule, or over nine/four (9/4) hours in one day for those employees on a nine/four (9/4), five (5) day per week schedule. The workweek for purposes of overtime calculation shall be: (i) for employees on a nine/eighty (9/80) schedule

shall begin at the mid-point of their shift on their eight (8) hour day and end seven (7) days later. In order to be eligible for overtime pay, an employee must have his/her supervisor's approval before working overtime.

3. Overtime pay shall be paid at the rate of one and one-half times the employee's regular rate of pay for hours worked in excess of 40 in the workweek for administrative employees and for bargaining unit employees, hours worked beyond the normal work schedule. Non-exempt employees may accrue up to 45 hours of compensatory time off ("CTO") in lieu of overtime compensation. Employees electing CTO in lieu of overtime compensation must indicate it on their time card. Non-bargaining unit employees must also agree with their supervisor prior to performing the work that it will be CTO. Use of compensatory time off must be pre-approved by the employee's supervisor and cannot be cashed out except upon termination of employment.
4. Time worked on a holiday in excess of the regular shift (eight, nine or ten hours) is paid at triple time rate. This applies to either the regularly scheduled employee or to the employee called in to work.
5. Overtime pay, as defined in paragraph 4 above, will be paid to bargaining unit employees who continuously work up to four (4) hours in excess of their normal work schedule or up to eight (8) hours on their regularly scheduled day off. Double time pay, defined as compensation equal to two times an employee's normal rate of pay, will be paid for those hours worked beyond the four (4) or eight (8) hours described above for bargaining unit employees. Hours must be consecutive in order to receive double-time or triple-time pay.
6. For the purpose of computing overtime pay, the formula shall be as follows: regular rate multiplied by 1.5 for the time and one half or 2.0 for double-time pay and 3.0 for triple-time.
7. When hourly employees are required to work overtime for four (4) hours or more beyond his/her regular work schedule or when hourly employees are called out for work outside their regular work schedule and their meal period occurs during such work, they will be given a reasonable meal allowance or furnished a meal and reasonable work time to eat it. Additional meal allowances or meals will be provided at four (4) hour intervals thereafter during the work period. Employees shall submit a receipt and shall be reimbursed for food and non-alcoholic beverages up to a maximum of \$5.00.
8. Efforts will be made to assign overtime on an equal basis to employees who, in management's discretion, are qualified to perform the overtime

work. Work will be scheduled by the Director of Operations or his/her designee in advance if possible.

9. Any employee who works weekends (Saturday and/or Sunday) will receive a differential compensation rate, above their normal rate of pay of \$3.00 per hour.
10. Non-Exempt Employee Use of Communication Devices

Non-exempt employees may perform necessary and authorized work duties on various communication devices (e.g., smartphones, tablets, laptops, PDAs). All such time spent will be considered as hours worked and will count toward overtime eligibility as set forth by applicable law. Accordingly, they are required to report all time spent working after hours. Therefore, to control costs and avoid unnecessary expenses, non-exempt employees shall not use communication devices for work-related purposes outside of their regularly scheduled hours unless they receive prior instruction from management. In other words, non-exempt employees are not required to review, read, send, or respond to work-related emails outside of their regularly scheduled hours unless requested to do so with management authorization. All time spent shall be recorded as time worked.

H. ADMINISTRATIVE LEAVE

The General Manager, or designee, may grant paid administrative leave to employees. This may include, but is not limited to, times when exempt employees are required to work above and beyond their normal working hours on behalf of the Agency without additional compensation.

I. STANDBY PAY

1. When Field Personnel have been designated to be on standby duty after their normal workday, they shall be compensated at a rate of \$500.00 per week for any employee in Operations or Maintenance that covers SOCWA facilities when assigned to standby in addition to their regular pay.
2. Standby duties require OPERATORS to be available upon forty-five (45) minutes notice and Maintenance and Electrical/SCADA to be available upon ninety (90) minutes notice, on a twenty-four-hour basis.
3. A mobile phone will be provided for all personnel designated on standby. Employees will be responsible for the mobile phone while in his/her possession and must replace it if lost or damaged due to a willful act or gross negligence.

4. When an employee is called back to work without prior notice, and the employee has completed their normal work shift and left the plant, the employee shall receive a minimum of two (2) hours call back pay.

The two (2) hour minimum, whether or not actually worked, shall be paid at the rate of one and one half times the employee's regular hourly rate.

J. JURY DUTY

Any regular or probationary employee who is required to serve as a juror or who is subpoenaed as a witness in any court in this state, of the United States, or any administrative board or tribunal, shall submit to his/her supervisor notification of the need for such leave of absence as soon as such employee receives notification himself/herself. Any regular or probationary employee shall be entitled to a leave of absence with pay while performing services as a juror or a witness (witness pay is limited to circumstances set forth in applicable Government Code statutes), provided that any such employee shall pay to the Agency any amount received for jury fees, if any, exclusive of travel and subsistence. All regular or probationary employees shall be allowed time off with pay up to a maximum of fifteen (15) working days for the actual period of service required on such jury. Exempt employee's salary will not be reduced while on jury duty unless they perform no work during the entire work week following the 15 working days of paid jury service. Any jury duty beyond the fifteen (15) days will have to be served under the leave of absence criteria set forth in this policy. Upon return to work, the employee will present to the General Manager proof of service for the actual days served and have it duly authorized by the court.

K. SALARY SCHEDULE

The Agency current salary schedule is depicted as Exhibit "A" to this policy, which exhibit is attached hereto and by this reference incorporated herein.

L. JOB CLASSIFICATION

Job classifications are determined from time to time by the General Manager, and as of July 1, 2019, with the approval of the Annual Budget, the job classifications approved by the Board of Directors are depicted as Exhibit "B" to this policy. Annually, with the approval of the Budget, the General manager shall submit to the Board of Directors changes in job classifications implemented in the prior year due to promotions and hiring for business needs and/or as proposed to be implemented in the coming fiscal year.

M. FAIR PAY ACT POLICY

The Agency follows all applicable state and federal laws requiring equal pay for employees for substantially similar work. Substantially similar work is a composite of skill, effort and responsibility when performed under similar working conditions. Pay discrimination between employees of the opposite sex or between employees of

another race or ethnicity is prohibited. Pay differentials may be valid in certain situations as set forth in applicable law. California's Fair Pay Act and the Agency prohibit discrimination and retaliation against any employee who invokes or assists in the enforcement of the Fair Pay Act. Employees will not be retaliated against for inquiring about or discussing wages.

If you believe you are not being paid the same wage as other employees engaged in substantially similar work of a different race, ethnicity or sex, please report your concerns to the Human Resources Department so that appropriate corrective action may be taken.

ATTACHMENT A

Policy Against Employee Harassment and Discrimination.

1. Policy Statement

The Agency strictly prohibits unlawful harassment and discrimination. This includes harassment and discrimination on the basis of sex, gender, sexual orientation, gender identity, gender expression, genetic information, race, color, ancestry, national origin, religious creed, physical disability, mental disability, medical condition, reproductive health decisionmaking, age (40 or over), marital status, military and veteran status, or any other protected class under applicable law.

2. Application

- A. This policy applies to all phases of the employment relationship, including, but not limited to, recruitment, testing, hiring, upgrading, promotion/demotion, transfer, layoff, termination, rates of pay, benefits, and selection for training.
- B. This policy applies to all officers and employees of the Agency, including, but not limited to, full and part-time employees, per diem employees, temporary employees, and persons working under contract for the Agency.

3. Harassment Defined

- A. Harassment may consist of offensive verbal, physical, or visual conduct when such conduct is based on or related to an individual's sex and/or membership in one of the above-described protected classifications, and:
 - (1) Submission to the offensive conduct is an explicit or implicit term or condition of employment;
 - (2) Submission to or rejection of the offensive conduct forms the basis for an employment decision affecting the employee; or
 - (3) The offensive conduct has the purpose or effect of unreasonably interfering with an individual's work performance or creates an intimidating, hostile, or offensive working environment.
- B. Examples of what may constitute prohibited harassment include, but are not limited to, the following:
 - (1) Kidding or joking about sex or membership in one of the protected classifications;

- (2) Hugs, pats, and similar physical contact;
- (3) Assault, impeding or blocking movement, or any physical interference with normal work or movement;
- (4) Cartoons, posters, e-mails, texts and other materials referring to sex or membership in one of the protected classifications;
- (5) Threats intended to induce sexual favors;
- (6) Continued suggestions or invitations to social events outside the workplace after being told such suggestions are unwelcome;
- (7) Degrading words or offensive terms of a sexual nature or based on the individual's membership in one of the protected classifications;
- (8) Prolonged staring or leering at a person;
- (9) Similar conduct directed at an individual on the basis of race, color, ancestry, national origin, religious creed, physical disability, mental disability, medical condition, reproductive health decisionmaking, age (40 or over), marital status, military or veteran status, sexual orientation, gender, gender identity, gender expression, genetic information, or any other protected classification under applicable law.

4. Procedure

A. Internal Reporting Procedure

- (1) Any employee who believes that he or she has been the victim of sexual or other prohibited harassment or discrimination by co-workers, supervisors, managers, clients or customers, visitors, vendors, or others (including third parties) should immediately notify his or her supervisor or, in the alternative, the General Manager, depending on which individual the employee feels most comfortable in contacting.
- (2) Additionally, supervisors who observe or otherwise become aware of harassment that violates this policy have a duty to report it to the General Manager so the Agency can try to resolve the claim internally.

B. External Reporting Procedure

- (1) Any employee who believes that he or she has been the victim of sexual or other prohibited harassment by coworkers, supervisors, clients or customers, visitors, vendors, or others may file a

complaint with the California Civil Rights Department ("the CRD"). The phone number for the CRD is located in the phone book under government agencies.

5. Investigation

- A. Upon the filing of a complaint with the Agency, the complainant will be provided with a copy of this policy. The complainant shall be notified in a timely manner that their complaint has been received and will be investigated. The General Manager is the person designated by the Agency to investigate complaints of harassment and/or discrimination. The General Manager may, however, delegate the investigation to qualified, impartial personnel at his/her discretion. In the event the harassment or discrimination complaint is against the General Manager; a different investigator shall be appointed by the Chairperson or the Board of Directors. A fair, timely and thorough investigation will be conducted. All parties to the investigation will receive appropriate due process.
- B. Charges filed with the CRD are investigated by the CRD.

6. Internal Documentation Procedure

- A. When an allegation of harassment is made by an employee, the person to whom the complaint is made shall immediately prepare a report of the complaint according to the preceding section and submit it to the General Manager.
- B. The investigator shall make and keep a written record of the investigation, including notes of verbal responses made to the investigator by the person complaining of harassment or discrimination, witnesses interviewed during the investigation, the person against whom the complaint of harassment was made, and any other person contacted by the investigator in connection with the investigation. The investigator's notes shall be made at the time the verbal interview is in progress. Any other documentary evidence shall be retained as part of the record of the investigation. Upon completion of the investigation, the results shall be given to the complainant, the alleged harasser, and the General Manager.
- C. Based on the report and any other relevant information, the General Manager shall, within a reasonable period of time, determine whether the conduct of the person against whom a complaint has been made constitutes unlawful harassment or unlawful discrimination. In making that determination, the General Manager shall look at the record as a whole and at the totality of circumstances, including the nature of the conduct in question; the context in which the conduct, if any, occurred; and the conduct of the person complaining of harassment or discrimination. The determination of whether harassment or discrimination occurred will be

made on a case-by-case basis by the General Manager. All investigations should be closed in a timely manner.

7. Confidentiality

All records and information relating to the investigation of any alleged harassment and resulting disciplinary action shall be confidential, except to the extent disclosure is required by law, as part of the investigatory or disciplinary process, or as otherwise reasonably necessary.

8. Remedies

A. Remedial Action

(1) If the General Manager determines that the complaint of harassment or discrimination is founded, the General Manager shall take immediate and appropriate disciplinary action consistent with the requirements of law and any personnel rules or regulations pertaining to employee discipline. Other steps may be taken to the extent reasonably necessary to prevent recurrence of the harassment and to remedy the complainant's loss, if any.

(2) Disciplinary action shall be consistent with the nature and severity of the offense, the rank of the harasser, and any other factors relating to the fair and efficient administration of the Agency's operations.

B. In the event a complaint is filed with the CRD, and the CRD finds that the complaint has merit, the CRD will attempt to negotiate a settlement between the parties. If not settled, the CRD may issue a determination on the merits of the case.

(1) Where a case is not settled, the CRD may pursue litigation in civil court with the Complainant as the Real Party in Interest. Legal remedies available through the CRD for a successful claim by an applicant, employee, or former employee include possible reinstatement to a former job; award of a job applied for; back pay; front pay; reasonable attorneys' fees; and under appropriate circumstances, punitive damages, out-of-pocket losses, affirmative relief, training, and emotional distress damages.

(2) In the alternative, the CRD may grant the employee permission to withdraw the case and pursue a private lawsuit seeking similar remedies.

9. Retaliation

Retaliation against anyone for opposing conduct prohibited by this policy or for filing a complaint with or otherwise participating in an investigation, proceeding or hearing conducted by the Agency or the CRD, is strictly prohibited by state regulations. It may subject the offending person to, among other things, disciplinary action, up to and including, termination of employment.

10. Employee Obligation

- A. Employees are not only encouraged to report instances of harassment or discrimination, they are obligated to report instances of harassment.
- B. Employees are obligated to cooperate in every investigation of harassment or discrimination, including, but not necessarily limited to:
 - (1) Coming forward with evidence, both favorable and unfavorable to a person accused of harassment or discrimination; and
 - (2) Fully and truthfully making a written report or verbally answering questions when required to do so during the course of an Agency investigation of alleged harassment or discrimination.
- C. Knowingly, falsely accusing someone of harassment or discrimination or otherwise knowingly giving false or misleading information in an investigation of harassment or discrimination shall result in disciplinary action, up to and including, termination of employment.

11. Training

The Agency will provide training to employees as required by applicable law.

ATTACHMENT B

Your Rights and Responsibilities as a Pregnant Employee

If you are pregnant, have a related medical condition, or are recovering from childbirth, **PLEASE READ THIS NOTICE.**

California law protects employees against discrimination or harassment because of an employee's pregnancy, childbirth or any related medical condition (referred to below as "because of pregnancy"). California law also prohibits employers from denying or interfering with an employee's pregnancy-related employment rights.

The Agency has an obligation to:

- reasonably accommodate your medical needs related to pregnancy, childbirth or related conditions (such as temporarily modifying your work duties, providing you with a stool or chair, or allowing more frequent breaks);
- transfer you to a less strenuous or hazardous position (where one is available) or duties if medically needed because of your pregnancy; and
- provide you with pregnancy disability leave (PDL) of up to four months (the working days you normally would work in one-third of a year or 17 $\frac{1}{3}$ weeks) and return you to your same job when you are no longer disabled by your pregnancy or, in certain instances, to a comparable job. Taking PDL, however, does not protect you from non-leave related employment actions, such as a layoff.
- provide a reasonable amount of break time and use of a room or other location in close proximity to the employee's work area to express breast milk in private as set forth in the Labor Code.

For pregnancy disability leave:

- PDL is not for an automatic period of time, but for the period of time that you are disabled by pregnancy. Your health care provider determines how much time you will need.
- Once the Agency has been informed that you need to take PDL, the Agency must guarantee in writing that you can return to work in your same position if you request a written guarantee. The Agency may require you to submit written medical certification from your health care provider substantiating the need for your leave.
- PDL may include, but is not limited to, additional or more frequent breaks, time for prenatal or postnatal medical appointments, doctor-ordered bed rest, severe

“morning sickness,” gestational diabetes, pregnancy-induced hypertension, preeclampsia, recovery from childbirth or loss or end of pregnancy, and/or post-partum depression.

- PDL does not need to be taken all at once but can be taken on an as-needed basis as required by your health care provider, including intermittent leave or a reduced work schedule, all of which counts against your four-month entitlement to leave.
- Your leave will be paid or unpaid depending on the Agency policy for other medical leaves.
- You may also be eligible for state disability insurance or Paid Family Leave (PFL), administered by the California Employment Development Department.
- At your discretion, you can use any vacation during your PDL.
- The Agency requires you to use any available sick leave during your PDL.
- The Agency is required to continue your group health coverage during your PDL at the same level and under the same conditions that coverage would have been provided if you had continued in employment continuously for the duration of your leave.
- Taking PDL may impact certain of your benefits and your seniority date; please contact Human Resources for details.
- If possible, you must provide at least 30 days’ advance notice for foreseeable events (such as the expected birth of a child or a planned medical treatment for yourself.) For events that are unforeseeable, we need you to notify us, at least verbally, as soon as you learn of the need for the leave. Failure to comply with these notice rules is grounds for, and may result in, deferral of the requested leave until you comply with this notice policy.

Notice Obligations of Employees:

- Give the Agency reasonable notice: To receive reasonable accommodation, obtain a transfer, or take PDL, you must give the Agency sufficient notice for it to make appropriate plans. Sufficient notice means 30 days’ advance notice if the need for the reasonable accommodation, transfer or PDL is foreseeable, otherwise as soon as practicable if the need is an emergency or unforeseeable.
- Provide a Written Medical Certification from Your Health Care Provider. Except in a medical emergency where there is no time to obtain it, the Agency may require you to supply a written medical certification from your health care provider of the medical need for your reasonable accommodation, transfer or PDL. If the need is

an emergency or unforeseeable, you must provide this certification within the time frame the Agency requests, unless it is not practicable for you to do so under the circumstances despite your diligent, good faith efforts. The Agency must provide at least 15 calendar days for you to submit the certification. See Human Resources for a copy of a medical certification form to give to your health care provider to complete.

- PLEASE NOTE that if you fail to give the Agency reasonable advance notice or written medical certification of your medical need, the Agency may be justified in delaying your reasonable accommodation, transfer, or PDL.

You also may be entitled to additional rights under the California Family Rights Act of 1993 (CFRA) if you have more than 12 months of service with us, have worked at least 1,250 hours in the 12-month period before the date you want to begin your leave and work at a worksite with 50 or more employees within 75 miles of that worksite. This leave may be up to 12 workweeks in a 12-month period.. For further information on the availability of CFRA leave, please review your employer's policy regarding the availability of CFRA leave.

This notice is a summary of your rights and obligations under the Fair Employment and Housing Act (FEHA). For more information about your rights and obligations as a pregnant employee, contact Human Resources, visit the California Civil Rights Department's website at www.calcivilrights.ca.gov, or contact the Department at 800-884-1684. The text of the FEHA and the regulations interpreting it are available on the Department's website at www.calcivilrights.ca.gov.

ATTACHMENT C

Employee Rights And Responsibilities Under The Family And Medical Leave Act

Basic Leave Entitlement

FMLA requires covered employers to provide up to 12 weeks of unpaid, job-protected leave to eligible employees for the following reasons:

- for incapacity due to pregnancy, prenatal medical care or child birth;
- to care for the employee's child after birth, or placement for adoption or foster care;
- to care for the employee's spouse, son, daughter or parent, who has a serious health condition; or
- for a serious health condition that makes the employee unable to perform the employee's job.

The 12 month period will be calculated using a rolling 12 month period measured backward from the date the leave is first used.

Military Leave Family Entitlements

Eligible employees whose spouse, son, daughter or parent is on covered active duty or are called to covered active duty status may use their 12-week leave entitlement to address certain qualifying exigencies. Qualifying exigencies may include attending certain military events, arranging for alternative childcare, addressing certain financial and legal arrangements, attending certain counseling sessions, and attending post-deployment reintegration briefings.

FMLA also includes a special leave entitlement that permits eligible employees to take up to 26 weeks of leave to care for a covered service member during a single 12-month period. A covered service member is: (1) a current member of the Armed Forces, including a member of the National Guard or Reserves, who is undergoing medical treatment, recuperation or therapy, is otherwise in outpatient status, or is otherwise on the temporary disability retired list, for a serious injury or illness*; or (2) a veteran who was discharged or released under conditions other than dishonorable at any time during the five-year period prior to the first date the eligible employee takes FMLA leave to care for the covered veteran, and who is undergoing medical treatment, recuperation, or therapy for a serious injury or illness.*

***The FMLA definitions of “serious injury or illness” for current service members and veterans are distinct from the FMLA definition of “serious health condition.”**

Benefits and Protections

During FMLA leave, the employer must maintain the employee's health coverage under any "group health plan" on the same terms as if the employee had continued to work. Upon return from FMLA leave, most employees must be restored to their original or equivalent positions with equivalent pay, benefits, and other employment terms.

Use of FMLA leave cannot result in the loss of any employment benefit that accrued prior to the start of an employee's leave.

Eligibility Requirements

Employees are eligible if they have worked for a covered employer for at least 12 months, have 1,250 hours of service in the previous 12 months, and if at least 50 employees are employed by the employer within 75 miles of the employee making the request.

Definition of Serious Health Condition

A serious health condition is an illness, injury, impairment, or physical or mental condition that involves either an overnight stay in a medical care facility, or continuing treatment by a health care provider for a condition that either prevents the employee from performing the functions of the employee's job, or prevents the qualified family member from participating in school or other daily activities.

Subject to certain conditions, the continuing treatment requirement may be met by a period of incapacity of more than 3 consecutive calendar days combined with at least two visits to a health care provider or one visit and a regimen of continuing treatment, or incapacity due to pregnancy, or incapacity due to a chronic condition. Other conditions may meet the definition of continuing treatment.

Use of Leave

An employee does not need to use this leave entitlement in one block. Leave can be taken intermittently or on a reduced leave schedule when medically necessary. Employees must make reasonable efforts to schedule leave for planned medical treatment so as not to unduly disrupt the employer's operations. Leave due to qualifying exigencies may also be taken on an intermittent basis.

Substitution of Paid Leave for Unpaid Leave

Employees may choose or employers may require use of an accrued paid leave while taking FMLA leave. In order to use paid leave for FMLA leave, employees must comply with the employer's normal paid leave policies.

Employee Responsibilities

Employees must provide 30 days' advance notice of the need to take FMLA leave when the need is foreseeable. When 30 days' notice is not possible, the employee must provide notice as soon as practicable and generally must comply with an employer's normal call-in procedures.

Employees must provide sufficient information for the employer to determine if the leave may qualify for FMLA protection and the anticipated timing and duration of the leave. Sufficient information may include that the employee is unable to perform job functions, the family member is unable to perform daily activities, the need for hospitalization or continuing treatment by a health care provider, or circumstances supporting the need for military family leave. Employees also must inform the employer if the requested leave is for a reason for which FMLA leave was previously taken or certified. Employees also may be required to provide a certification and periodic recertification supporting the need for leave.

Employer Responsibilities

Covered employers must inform employees requesting leave whether they are eligible under FMLA. If they are, the notice must specify any additional information required as well as the employees' rights and responsibilities. If they are not eligible, the employer must provide a reason for the ineligibility.

Covered employers must inform employees if leave will be designated as FMLA-protected and the amount of leave counted against the employee's leave entitlement. If the employer determines that the leave is not FMLA-protected, the employer must notify the employee.

Unlawful Acts by Employers

The FMLA makes it unlawful for any employer to:

- interfere with, restrain, or deny the exercise of any right provided under FMLA; and
- discharge or discriminate against any person for opposing any practice made unlawful by FMLA or for involvement in any proceeding under or relating to FMLA.

Enforcement

An employee may file a complaint with the U.S. Department of Labor or may bring a private lawsuit against an employer.

FMLA does not affect any federal or state law prohibiting discrimination, or supersede any state or local law or collective bargaining agreement which provides greater family or medical leave rights.

CALIFORNIA FAMILY RIGHTS ACT LEAVE

Under the California Family Rights Act of 1993 ("CFRA"), if an employee has more than 12 months of service with the Agency and has worked at least 1250 hours in the past 12 months, and the Agency employs five or more employees, the employee may have a right to CFRA leave.

In computing the 12 month period, the Agency utilizes a rolling 12-month period measured backward from the date leave is used.

If eligible for such leave, an employee may be entitled to take up to 12 work weeks of unpaid, job protected leave in a 12-month period for the birth, adoption, or foster care placement of employee's child, for an employee's own serious health condition or to care for employee's child, parent, parent-in-law, spouse, grandparent, grandchild, sibling, registered domestic partner or "designated person". ("Designated person" means any individual related by blood or whose association with the employee is the equivalent of a family relationship. An employee is limited to one (1) "designated person" per 12-month period.) In addition, under CFRA an employee may take leave because of a qualifying exigency related to covered active duty or call to covered active duty of an employee's spouse, registered domestic partner, child or parent in the armed forces of the United States as specified in applicable law.

For CFRA leave, the Agency generally requires the employee to utilize vacation leave and sick leave while on such leave. An exception to this is the employee may not use sick leave during a period of CFRA leave in connection with the birth, adoption or foster care of a child, or to care for a child, parent, parent-in-law, grandparent, grandchild, sibling, spouse, registered domestic partner or designated person unless mutually agreed to by the employee and the General Manager.

Another exception is that employees will not be required to use their sick leave if the employee's CFRA leave also qualifies as "kin care" under California law. Under these circumstances, it will be the employee's sole discretion as to whether they wish to utilize sick leave.

While on CFRA leave, the Agency will maintain and pay for coverage under a group health plan, for the duration of the leave, not to exceed 12 workweeks in a 12 month period, commencing on the date leave under CFRA commences, at the level and under the conditions coverage would have been provided if the employee continued employment continuously for the duration of the leave. Employees must continue to pay their portion of group health plan premiums while on CFRA leave.

During CFRA leave, the leave shall not constitute a break in service for any employee benefit plan. An employee shall return with no less seniority than employee had when leave commenced, for purposes of layoff, recall, promotion, job assignment, and seniority related benefits, such as vacation.

If the employee's need for leave is foreseeable, the employee shall provide the Agency with reasonable advance notice of the need for the leave.

If the employee's need for leave pursuant to this section is foreseeable due to planned medical treatments or supervision, the employee shall make a reasonable effort to schedule the treatment or supervision to avoid disruption to the operations of the Agency, subject to the approval of the health care provider of the individual requiring the treatment or supervision.

The Agency requires that an employee's request for leave to care for a child, parent, parent-in-law, grandparent, grandchild, sibling, spouse, registered domestic partner or designated person who has a serious health condition be supported by a certification issued by the health care provider of the individual requiring care. That certification shall be sufficient if it includes all of the following:

- (A) The date on which the serious health condition commenced.
- (B) The probable duration of the condition.
- (C) An estimate of the amount of time that the health care provider believes the employee needs to care for the individual requiring the care.
- (D) A statement that the serious health condition warrants the participation of a family member to provide care during a period of the treatment or supervision of the individual requiring care.

Upon expiration of the time estimated by the health care provider, the Agency requires the employee to obtain recertification, if additional leave is required.

The Agency requires that an employee's request for leave because of the employee's own serious health condition be supported by a certification issued by the employee's health care provider. That certification shall be sufficient if it includes all of the following:

- (A) The date on which the serious health condition commenced.
- (B) The probable duration of the condition.
- (C) A statement that, due to the serious health condition, the employee is unable to perform the function of the employee's position.

The Agency requires that employees obtain subsequent recertification regarding the employee's serious health condition on a reasonable basis, if additional leave is required.

As a condition of an employee's return from leave taken because of an employee's own serious health condition, the Agency requires the employee to obtain a certification from the employee's health care provider that the employee is able to resume work.

CFRA leave provided for in this Policy may be taken in one or more periods.

“Serious health condition” means an illness, injury, impairment, or physical or mental condition that involves either of the following:

- 1) Inpatient care in a hospital, hospice or residential health care facility; or
- 2) Continuing treatment or continuing supervision by a health care provider.

“Health care provider” means any of the following: an individual holding either a physician’s and surgeon’s certificate issued pursuant to California law, an osteopathic physician and surgeon certificate issued pursuant to California law, or an individual duly licensed as a physician, surgeon, or osteopathic physician or surgeon in another state or jurisdiction, who directly treats or supervises the treatment of the serious health condition. In addition, any other person determined by the United States Secretary of Labor to be capable of providing health care services under the FMLA shall also qualify as a health care provider.

The Agency may recover the premiums for such group health plans that it pays on behalf of the employee if both of the following conditions occur:

- 1) The Employee fails to return from leave after the period of leave to which the employee is entitled has expired; and
- 2) The failure of the employee to return from the leave is for a reason other than the continuation, recurrence, or onset of “serious health condition” or other circumstances beyond the control of the employee.

Eligible employees may also take Qualifying Exigency Leave as set forth in California law.

ATTACHMENT D

Weapons/Anti Violence Policy

The Agency has adopted a Zero Tolerance Policy against workplace violence. Consistent with this policy, acts or threats of physical violence, including intimidation, harassment, and/or coercion, which involve or affect the Agency, or which occur on Agency property will not be tolerated.

Acts or threats of violence include conduct which is sufficiently severe, offensive, or intimidating to alter the employment conditions at the Agency or to create a hostile, abusive, or intimidating work environment for one or several Agency employees. Examples of workplace violence include, but are not limited to, the following:

- All threats or acts of violence occurring on the Agency premises, regardless of the relationship between the Agency and the parties involved in the incident.
- All threats or acts of violence occurring off the Agency premises involving someone who is acting in the capacity of a representative of the Agency.
- All threats or acts of violence occurring off the Agency premises involving an employee of the Agency if the threats or acts affect the legitimate interests of the Agency.
- Any acts or threats resulting in the conviction of an employee or agent of the Agency, or of an individual performing services for the Agency on a contract or temporary basis, under any criminal code provision relating to violence or threats of violence which adversely affect the legitimate interests and goals of the Agency.

Specific examples of conduct which may be considered threats or acts of violence include, but are not limited to, the following:

- Hitting or shoving an individual.
- Threatening an individual or his/her family, friends, associates, or property with harm.
- The intentional destruction or threat of destruction of Agency property.
- Harassing or threatening phone calls.
- Harassing surveillance or stalking.
- The suggestion or intimation that violence is appropriate.

- Unauthorized possession or inappropriate use of firearms or weapons.

The Agency's prohibition against threats and acts of violence applies to all persons involved in the Agency's operation, including but not limited to Agency personnel, contract, and temporary workers and anyone else on Agency property. Violations of this policy by any individual on Agency property, by any individual acting as a representative of the Agency while off Agency property, or by any individual acting off of Agency property when his/her actions affect the Agency's business interests will lead to disciplinary action (up to and including termination) and/or legal action as appropriate.

Possession while on duty or bringing onto Agency property unauthorized material, such as explosives, weapons (including, but not limited to, firearms and knives), or other similar items, is strictly prohibited.

Every employee and every person on Agency property is required to report incidents of threats or acts of physical violence or any other violation of this policy of which he/she is aware. The report should be made to the Human Resources Department, the reporting individual's immediate supervisor, or another supervisory employee if the immediate supervisor is not available. Nothing in this policy alters any other reporting obligation established in Agency policies or in state, federal, or other applicable law.

ATTACHMENT E

Rights of Victims of Domestic Violence, Sexual Assault, Stalking, Crimes that Cause Physical Injury or Mental Injury, and Crimes Involving a Threat of Physical Injury; and of Persons Whose Immediate Family Member is Deceased as a Direct Result of a Crime

1. Your Right to Take Time Off:

- You have the right to take time off from work to obtain relief from a court, including obtaining a restraining order, to protect you and your children's health, safety or welfare.
- If your Agency has 25 or more workers, you can take time off from work to get medical attention for injuries caused by crime or abuse, receive services from a domestic violence shelter, program, rape crisis center, receive psychological counseling or mental health services related to an experience of crime or abuse, or participate in safety planning and take other actions to increase safety from future crime or abuse.
- You may use accrued paid sick leave or vacation, personal leave, or compensatory time off that is otherwise available for your leave unless you are covered by a union agreement that says something different. Even if you do not have paid leave, you still have the right to time off.
- In general, you do not have to give your employer proof to use leave for these reasons.
- If you can, you should tell your employer before you take time off. Even if you cannot tell your employer before, your employer cannot discipline you if you give proof explaining the reason for your absence within a reasonable time. Proof can be a police report, a court order, a document from a licensed medical professional, a victim advocate, a licensed health care provider, or counselor showing that you were undergoing treatment for domestic violence related to trauma, or a written statement signed by you, or an individual acting on your behalf, certifying that the absence is for an authorized purpose..

2. Your Right to Reasonable Accommodation:

- You have the right to ask your employer for help or changes in your workplace to make sure you are safe at work. Your employer must work with you to see what changes can be made. Changes in the workplace may include putting in locks, changing your shift or phone number,

transferring or reassigning you, or help with keeping a record of what happened to you. Your employer can ask you for a signed statement certifying that your request is for a proper purpose and may also request proof showing your need for an accommodation. Your employer cannot tell your coworkers or anyone else about your request.

3. Your Right to be Free From Retaliation and Discrimination:
Your employer cannot treat you differently or fire you because:

You are a victim of domestic violence, sexual assault, or stalking, a crime that caused physical injury or mental injury, or a crime involving threat of physical injury, or are someone whose immediate family member is deceased as a direct result of a crime.

- You asked for leave time to get help.
- You asked your employer for help or changes in the workplace to make sure you are safe at work.

You can file a complaint with the Labor Commissioner's Office against your employer if he/she retaliates or discriminates against you.

ATTACHMENT F

Lactation Accommodation Policy

The Agency provides employees the right to request lactation accommodation in accordance with California law. The Agency will provide a reasonable amount of break time to accommodate an employee desiring to express breastmilk for the employee's infant child each time the employee has a need to express milk. The break time shall, if possible, run concurrently with any break time already provided to the employee. Break time for a nonexempt employee that does not run concurrently with the rest time authorized for the nonexempt employee shall be unpaid.

The Agency will provide the employee with the use of a room or other location for the employee to express milk in private. This room may include the place where the employee normally works if it otherwise meets the requirements set forth below.

The room shall be safe, clean and free of hazardous materials. There will be a surface to place a breast pump and personal items as well as a place to sit. The room will have access to electricity or alternative devices, including, but not limited to, extension cords or charging stations, needed to operate an electric or battery-powered breast pump. The employee shall also have access to a sink with running water and a refrigerator suitable for storing milk in close proximity to the employee's workspace. If a refrigerator cannot be provided, the Agency may provide another cooling device suitable for storing milk, such as an Agency-provided cooler. If a multipurpose room is used for the lactation, among other uses, the use of the room for lactation shall take precedence over the other uses, but only for the time it is in use for lactation purposes.

Employees who require lactation accommodation should contact Human Resources. If the Agency cannot provide break time or a location that complies with California law the Agency will provide a written response to the employee. Employees have the right to file a complaint with the Labor Commissioner for any violation of the employee's lactation rights under California law.

Exhibit A
Salary Schedule

EXHIBIT "A"				
SOCWA				
EMPLOYEE MANUAL SALARY RANGE SUMMARY				
07/01/2024 - 06/30/2025				
July 1, 2024	COLA @ 6%			
Ranges	Minimum Hourly Salary	Maximum Hourly Salary	Minimum Monthly Salary	Maximum Monthly Salary
33.0	31.60	40.33	\$5,477.33	\$6,990.53
33.5	32.39	41.31	\$5,614.27	\$7,160.40
34.0	33.17	42.38	\$5,749.47	\$7,345.87
34.5	33.99	43.43	\$5,891.60	\$7,527.87
35.0	34.84	44.46	\$6,038.93	\$7,706.40
35.5	35.70	45.57	\$6,188.00	\$7,898.80
36.0	36.57	46.68	\$6,338.80	\$8,091.20
36.5	37.48	47.83	\$6,496.53	\$8,290.53
37.0	38.38	49.00	\$6,652.53	\$8,493.33
37.5	39.36	49.95	\$6,822.40	\$8,658.00
38.0	40.33	51.48	\$6,990.53	\$8,923.20
38.5	41.31	52.77	\$7,160.40	\$9,146.80
39.0	42.38	54.06	\$7,345.87	\$9,370.40
39.5	43.43	55.43	\$7,527.87	\$9,607.87
40.0	44.46	56.70	\$7,706.40	\$9,828.00
40.5	45.57	58.16	\$7,898.80	\$10,081.07
41.0	46.68	59.58	\$8,091.20	\$10,327.20
41.5	47.83	61.07	\$8,290.53	\$10,585.47
42.0	49.00	62.57	\$8,493.33	\$10,845.47
42.5	50.24	64.12	\$8,708.27	\$11,114.13
43.0	51.48	65.69	\$8,923.20	\$11,386.27
43.5	52.77	67.33	\$9,146.80	\$11,670.53
44.0	54.06	68.97	\$9,370.40	\$11,954.80
44.5	55.44	70.70	\$9,609.60	\$12,254.67
45.0	56.70	72.43	\$9,828.00	\$12,554.53
45.5	58.16	74.22	\$10,081.07	\$12,864.80
46.0	59.58	76.04	\$10,327.20	\$13,180.27
46.5	61.07	77.95	\$10,585.47	\$13,511.33
47.0	62.57	79.88	\$10,845.47	\$13,845.87
47.5	64.12	81.82	\$11,114.13	\$14,182.13
48.0	65.69	83.86	\$11,386.27	\$14,535.73
48.5	67.33	85.92	\$11,670.53	\$14,892.80
49.0	68.97	88.04	\$11,954.80	\$15,260.27
49.5	70.70	90.25	\$12,254.67	\$15,643.33
50.0	72.43	92.44	\$12,554.53	\$16,022.93
50.5	74.22	94.76	\$12,864.80	\$16,425.07
51.0	76.04	97.04	\$13,180.27	\$16,820.27
51.5	77.94	99.47	\$13,509.60	\$17,241.47
52.0	79.88	101.92	\$13,845.87	\$17,666.13
52.5	81.82	104.45	\$14,182.13	\$18,104.67
53.0	83.82	107.00	\$14,528.80	\$18,546.67
53.5	85.98	109.69	\$14,903.20	\$19,012.93
54.0	88.03	112.36	\$15,258.53	\$19,475.73
54.5	90.24	115.14	\$15,641.60	\$19,957.60
55.0	92.44	117.97	\$16,022.93	\$20,448.13

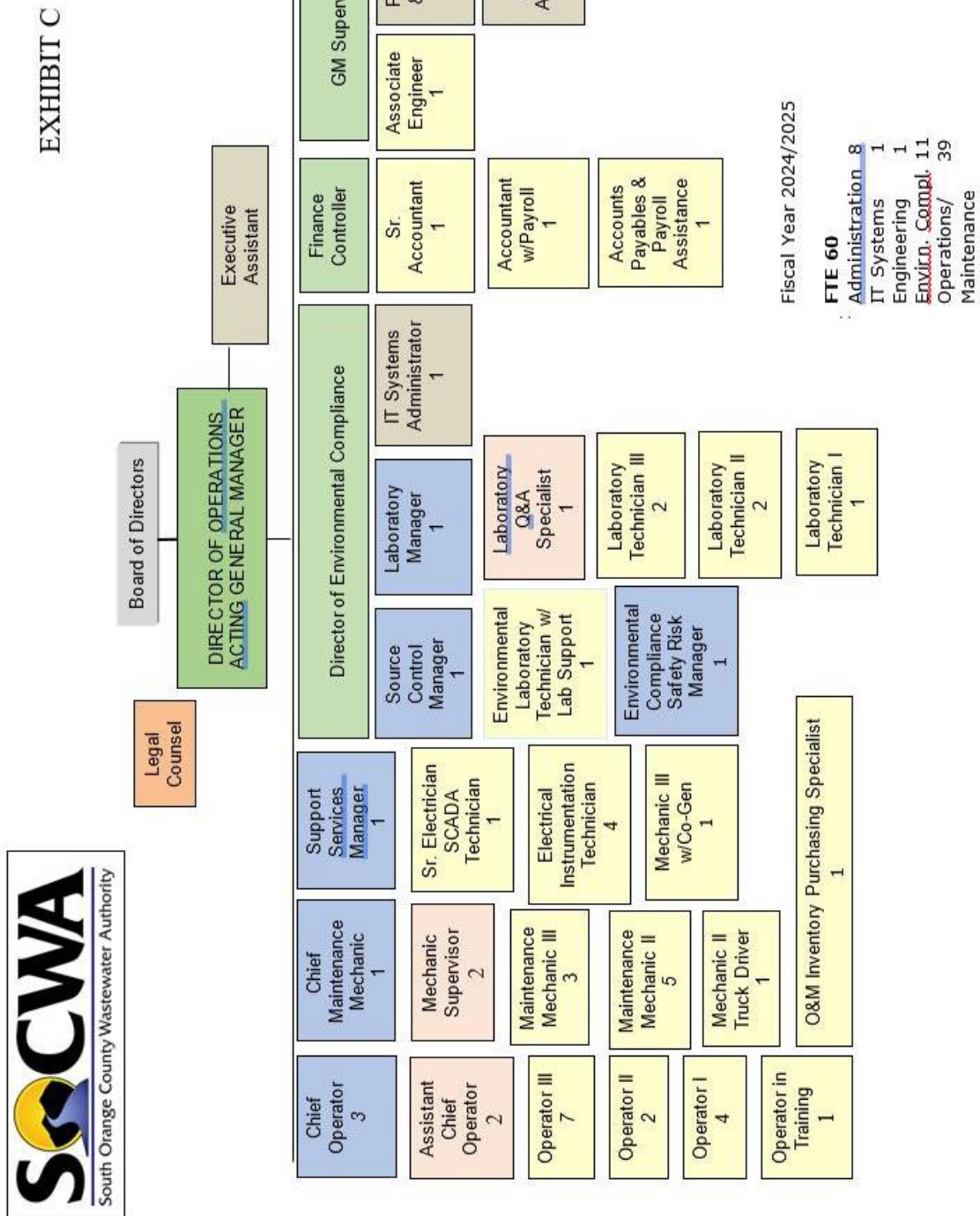
EXHIBIT B
JOB CLASSIFICATIONS

EXHIBIT "B"					
SOUTH ORANGE COUNTY WASTEWATER AUTHORITY					
EMPLOYEE MANUAL - JOB CLASSIFICATION SALARY SCHEDULE					
7/1/2024 w/COLA of 6%					
SEA Represented Classifications / Non-Exempt					
Classification	Salary Range	Minimum Hourly Salary	Maximum Hourly Salary	Minimum Monthly Salary	Maximum Monthly Salary
<i>Operations Division</i>					
Operator Grade III	43	\$ 51.48	\$ 65.69	\$ 8,923.20	\$ 11,386.27
Operator Grade II	41	\$ 46.68	\$ 59.58	\$ 8,091.20	\$ 10,327.20
Operator Grade I	37	\$ 38.38	\$ 49.00	\$ 6,652.53	\$ 8,493.33
Operator in Training	35	\$ 34.84	\$ 44.46	\$ 6,038.93	\$ 7,706.40
<i>Maintenance Division</i>					
Maintenance Mechanic III	42.5	\$ 50.24	\$ 64.12	\$ 8,708.27	\$ 11,114.13
Truck Driver/Maintenance Mechanic II	38	\$ 40.33	\$ 51.48	\$ 6,990.53	\$ 8,923.20
Maintenance Mechanic II	38	\$ 40.33	\$ 51.48	\$ 6,990.53	\$ 8,923.20
Maintenance Mechanic I	36	\$ 36.57	\$ 46.68	\$ 6,338.80	\$ 8,091.20
O&M Inventory/Purchasing Specialist	38	\$ 40.33	\$ 51.48	\$ 6,990.53	\$ 8,923.20
<i>Support Services Division</i>					
Sr. Electrician/SCADA Technician	45	\$ 56.70	\$ 72.43	\$ 9,828.00	\$ 12,554.53
Maintenance Mechanic III /w/Co-Gen	42.5	\$ 50.24	\$ 64.12	\$ 8,708.27	\$ 11,114.13
Electrical/Instrumentation Technician	42	\$ 49.00	\$ 62.57	\$ 8,493.33	\$ 10,845.47
<i>Laboratory Services</i>					
Laboratory Q&A Specialist	44.5	\$ 55.44	\$ 70.70	\$ 9,609.60	\$ 12,254.67
Environmental Technician w/Laboratory Support					
Laboratory Technician III	43.5	\$ 52.77	\$ 67.33	\$ 9,146.80	\$ 11,670.53
Laboratory Technician II	41	\$ 46.68	\$ 59.58	\$ 8,091.20	\$ 10,327.20
Laboratory Technician I	39	\$ 42.38	\$ 54.06	\$ 7,345.87	\$ 9,370.40
Laboratory Aide/Sampler	35	\$ 34.84	\$ 44.46	\$ 6,038.93	\$ 7,706.40
Unrepresented Classifications					
Classification	Salary Range	Minimum Hourly Salary	Maximum Hourly Salary	Minimum Monthly Salary	Maximum Monthly Salary
<i>Operations Division</i>					
Assistant Chief Operator	44	\$ 54.06	\$ 68.97	\$ 9,370.40	\$ 11,954.80
<i>Maintenance Division</i>					
Maintenance Mechanic Supervisor	44	\$ 54.06	\$ 68.97	\$ 9,370.40	\$ 11,954.80
<i>Environmental Compliance / Laboratory Services</i>					
Source Control Manager	46	\$ 59.58	\$ 76.04	\$ 10,327.20	\$ 13,180.27
<i>Administration Division</i>					
Executive Assistant	44.5	\$ 55.44	\$ 70.70	\$ 9,609.60	\$ 12,254.67
Clerk of the Board					
Sr. Accountant	43	\$ 51.48	\$ 65.69	\$ 8,923.20	\$ 11,386.27
Accountant w/Payroll	35	\$ 34.84	\$ 44.46	\$ 6,038.93	\$ 7,706.40
Accounts Payable Accountant w/PR Assistance	35	\$ 34.84	\$ 44.46	\$ 6,038.93	\$ 7,706.40
Professional Classifications					
Classification	Salary Range	Minimum Hourly Salary	Maximum Hourly Salary	Minimum Monthly Salary	Maximum Monthly Salary
<i>Operations Division</i>					
Chief Operator	50	\$ 72.43	\$ 92.44	\$ 12,554.53	\$ 16,022.93
<i>Maintenance Division</i>					
Chief Maintenance Mechanic	50	\$ 72.43	\$ 92.44	\$ 12,554.53	\$ 16,022.93
<i>Support Services Division</i>					
Support Services Manager	50	\$ 72.43	\$ 92.44	\$ 12,554.53	\$ 16,022.93
Information Technology Systems Administrator	46	\$ 59.58	\$ 76.04	\$ 10,327.20	\$ 13,180.27
<i>Environmental Compliance / Laboratory Services</i>					
Laboratory Manager	48	\$ 65.69	\$ 83.86	\$ 11,386.27	\$ 14,535.73
Environmental Compliance Safety Risk Manager	45.5	\$ 58.16	\$ 74.22	\$ 10,081.07	\$ 12,864.80
<i>Engineering Division</i>					
Associate Engineer	47.5	\$ 64.12	\$ 81.82	\$ 11,114.13	\$ 14,182.13
<i>Administration Division</i>					
Procurement/Contracts Manager	48	\$ 65.69	\$ 83.86	\$ 11,386.27	\$ 14,535.73
Human Resource Administrator	47.5	\$ 64.12	\$ 81.82	\$ 11,114.13	\$ 14,182.13
Management Classifications					
Classification	Salary Range	Minimum Hourly Salary	Maximum Hourly Salary	Minimum Monthly Salary	Maximum Monthly Salary
<i>Executive Management Division</i>					
Acting General Manager/Director of Operations		Set by the Board by Contract			\$ 19,749.60
Director of Environmental Compliance	54	\$ 88.03	\$ 112.36	\$ 15,258.53	\$ 19,475.73
Finance Controller	52	\$ 79.88	\$ 101.92	\$ 13,845.87	\$ 17,666.13

EXHIBIT C

TABLE OF ORGANIZATION

(As approved FY 2019-20, same may be revised from time to time in each FY)



ACKNOWLEDGMENT

I hereby acknowledge that I have received a copy of the SOCWA EMPLOYEE MANUAL (hereinafter "Manual"), 2024, and that I understand that I am to promptly read its contents. I understand that if I have any questions about the Manual or its contents, I am to discuss them with my supervisor or the Human Resources Department.

I recognize that this Manual supersedes and replaces any previous Manuals, and to the extent that provisions of this Manual conflict with previously issued policies or practices, whether or not such policies and practices were contained in an Employee Manual, this Manual shall prevail. I agree that changes in the policies set out in the Manual are not valid unless made and approved, in writing, by the Board of Directors.

Employee's Name (print or type)

Date: _____

Employee Signature

Date: _____

Witness

SOUTH ORANGE COUNTY WASTEWATER AUTHORITY
EMPLOYEE MANUAL

Effective ~~May 4~~~~June~~July ~~—~~ 1, 20243
Until Revised

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EMPLOYMENT POLICIES GENERALLY

These employment policies are designed to comply with all applicable federal, state and local employment laws, regulations and ordinances. Accordingly, to the extent of any conflict between such applicable laws, regulations or ordinances the South Orange County Wastewater Authority's employment policies should be interpreted and applied to be consistent with such laws, regulations and ordinances. If you believe that a South Orange County Wastewater Authority employment policy is in conflict with one of these, please notify Human Resources so that appropriate remedial measures may be undertaken. When the South Orange County Wastewater Authority becomes aware of an actual conflict between its policies and applicable law, regulations or ordinances it will take steps to revise the policy and provide employees with a written change to the policies within a reasonable period of time.

SECTION I.

A. PURPOSE

It is the objective of the South Orange County Wastewater Authority (SOCWA), hereinafter referred to as the "Agency", to provide fair and equitable personnel management within the Agency.

This manual is intended to insure uniform and fair treatment of applicants for employment and of the Agency employees and to define the obligations, rights, privileges, benefits and prohibitions to all employees of the Agency. This manual may be modified at any time. For employees in a recognized bargaining unit, if there is a conflict between the provisions of this manual and a valid MOU, the MOU shall control.

B. DEFINITIONS

For purposes of this Employee Manual, the following definitions shall apply:

1. **AGENCY**
This shall mean the South Orange County Wastewater Authority authorized under the California State Government Code Section 6500 et al.
2. **SEA**
This shall mean the SOCWA Employee Association.
3. **BOARD OF DIRECTORS**
This shall mean the Board of Directors of the Agency.
4. **GENERAL MANAGER**
This shall mean the General Manager of the Agency, appointed by the Board of Directors.
5. **DIRECTOR OF OPERATIONS**
This shall mean the Director of Operations of the Agency.
6. **FULL-TIME EMPLOYEE**
This shall mean all employees appointed by the General Manager for employment on a regular basis of eighty hours (80) per pay period.
7. **PART-TIME EMPLOYEE**
This shall mean all employees appointed by the General Manager for employment on a regular basis who work between 40 and 72 hours per pay period.

8. **TEMPORARY EMPLOYEE**

This shall mean any employee hired by the General Manager for a limited period of time and paid by the hour. Except as otherwise explicitly stated in this Manual, temporary employees only receive those benefits required by applicable law.

9. **PROBATIONARY EMPLOYEE**

This shall mean any employee who has taken a new appointment. The employee shall be subject to a probationary period of between six to twelve months.

10. **REGULAR EMPLOYEE**

This shall mean any employee (who is not a temporary employee) who has successfully passed his/her probationary period.

11. **DELEGATION OF RESPONSIBILITY BY THE GENERAL MANAGER OR DESIGNEE**

This shall mean that in the absence of the General Manager, his/her designated representative shall act in his/her behalf.

12. **SAFETY HANDBOOK**

This shall mean that document which contains the Agency Injury and Illness Prevention Safety Program.

C. ORGANIZATION CHART

The Agency current table of organization is depicted as Exhibit "C" to this policy, which exhibit is attached hereto and by reference incorporated herein. The same shall be revised from time to time in each fiscal year and shall be shown in the budget.

SECTION II EMPLOYMENT

A. HIRING

1. The Agency subscribes to the public policies of the United States and the State of California as expressed in all applicable statutes that are necessary to protect and safeguard the right and opportunity of all persons to seek, obtain, and hold employment without discrimination or abridgment because of race, religious creed, color, age (40 or over), sex, gender, physical or mental disability, medical condition, reproductive health decisionmaking, national origin, gender identity, gender expression, genetic information, sexual orientation, marital status, military and veteran status or ancestry. It is the policy of the Agency to provide equal employment opportunity to all persons. Its recruitment and employment practices, all offers of employment and all its courses of action concerning training opportunities and training, job placement, promotion, compensation and termination are based solely on merit without regard to race, religious creed, color, age (40 or over), sex, gender, gender identity, sexual orientation, marital status, physical or mental disability, medical condition, reproductive health decisionmaking, national origin, gender expression, genetic information, ancestry, military and veteran status or any other protected category. To assist in fulfilling the Agency policies regarding equal employment, the Agency has elected to undertake certain Equal Employment Opportunity Policies set forth in this Employee Manual.
2. All employees shall be appointed to their positions by the General Manager.
3. The General Manager shall hire new employees from time to time for positions as identified in the annual budget. Job classifications are approved by the Board of Directors as detailed in Exhibit "B" and shown on Exhibit "C" with the same being modified from time to time in accordance with Section IV.L.
4. Without approval from the Board of Directors, no direct relations of any Agency personnel shall be employed on a full-time, part-time or temporary basis. (The Agency will follow applicable law regarding marital status discrimination).
5. It shall be required that all employees certify, by signature, that they have received, read and fully understand the current Employee Manual and Safety Handbook.
6. The Agency will comply, to the extent applicable, with the provisions of the Fair Labor Standards Act, and other applicable statutes and regulations regarding wages, hours and benefits.

7. All employees entering full-time or part-time employment are required by Chapter 8 (commencing with Section 3100) Division 4, Title 1 of the Government Code to take and subscribe to an oath of allegiance to support and defend the Constitution of the United State of California.
8. All applicants for employment must complete all portions of the Agency employment application form.
9. It shall be required that all individuals accepting employment provide verification of work authorization and identity pursuant to the Immigration Reform and Control Act of 1986. Completion of the Employee section of Form I-9 is mandatory at hiring.
10. If an employee or applicant has a disability that limits their ability to perform essential job functions, the Agency will make reasonable efforts to accommodate them. To assist in the consideration of reasonable accommodation measures, the employee or applicant is encouraged to submit any relevant information from their physician or other healthcare practitioner. Further, upon an employee or applicant's request for accommodations, a meeting will be scheduled with the Human Resources department to engage in the "interactive process" where potential accommodations will be discussed.

B. EMPLOYEE EVALUATION

1. Original Appointments: Original appointments shall be subject to a probationary period of between six to twelve months. In the event an employee is off work for any reason for two or more weeks during the probationary period, then the probationary period will be extended by the amount of time that employee is away from work.
2. Probation Period: The probationary period shall be regarded as part of the selection process and shall be utilized for close observation and evaluation in order to determine the capability of the probationer to satisfactorily perform the requirements of the position.

After serving the probationary period and receiving a favorable rating from their immediate supervisor and/or Department Director and a favorable recommendation from the General Manager, said employee may thereafter be paid on a monthly basis at the rate fixed no greater than the amount approved by the General Manager and within the range the employee was hired. Passing the probation period with a satisfactory rating is a requirement for continued employment. Each year thereafter, the employee shall receive a performance rating. Upon recommendation of the General Manager, a new employee may be hired at a higher rate than the minimum salary of the applicable range of the salary schedule.

3. Promotional Appointments: Present employees will be notified of promotional opportunities when a vacancy occurs at any of the SOCWA treatment plants. Employees with the required knowledge, certification, skill, ability, interest and physical fitness will be given an opportunity to apply for such vacancies. Decisions regarding promotional appointments shall be made by a review panel appointed by the General Manager. All promotional appointments are subject to final approval by the General Manager. Promotional appointments shall be subject to at least a six (6) month and up to a nine (9) month probationary period. In the event an employee is off work for any reason for two or more weeks during the probationary period, then the probationary period will be extended by the amount of time that the employee is away from work.

Any employee, who is in a Grade I or II category, may be promoted to a Grade II or III upon:

- 1) Successful completion of the required or voluntary applicable exam; and
- 2) Two consecutive above-standard performance reviews, one while in possession of the higher certification and recommendation of the employee's supervisor and approval of the General Manager.

4. Rejection during Probationary Period: A probationary employee may be rejected at any time without the right of appeal or hearing during the probationary period. A rejected probationer serving as a result of original appointment shall be dismissed from service. A rejected probationer serving as a result of promotional appointment shall be reinstated to the position or class, or comparable position, from which promoted, unless otherwise dismissed from service as provided in this policy.
5. Reclassification. When a full-time employee is reclassified and the position he/she occupies is reclassified to a position with a lower salary range, the employee will be designated at the lower salary range unless otherwise recommended by the employee's supervisor and concurred with by the General Manager.
6. Performance Evaluation: Employees who have passed their probationary period shall have their performance evaluated by their supervisors at least annually from the date of completing probation (anniversary date) (If an employee is out on an approved leave of greater than two consecutive weeks (excluding vacations), the evaluation date shall be moved back by an amount equal to the leave, less two weeks.) Additional evaluations may be prepared on such a frequency as is deemed appropriate by the supervisor. The evaluation and appraisal form will be reviewed together by both the employee and his/her supervisor and signed after having been reviewed and approved by the General Manager.

C. WORK DAYS

1. Work day shifts may be changed from time to time, in regard to the respective job functions. The workweek schedule will commence on Sunday at midnight and end on Saturday at 11:59 p.m., except for employees assigned to a 9/80 schedule.

SOCWA establishes work schedules and start times to meet the needs of the organization. Normal work weeks consist of either five eight-hour day weeks (5/80), a 36-44 hour pay period (9/80) schedule, or a four ten-hour per day schedule (4-10). Additional work weeks may be considered and approved by the General Manager at his or her sole discretion.

Current work schedules available year-round are:

5 days per week, 8 hours per day (5/40)
9 days per pay period (9/80)
4 days per week, 10 hours per day (4/10)

Individual employees are assigned a work schedule by management and may, at the General Manager's sole discretion, determine which type of work week the employee will work (5/40, 9/80 or 4/10).

In addition, employees may request to work flexible starting hours (starting at either 6:00 a.m. or 7:00 a.m.). Management retains the sole right to determine whether or not SOCWA can accommodate the request.

2. The designated work schedule will be established by the appropriate department head, subject to approval by the General Manager. The Agency may change work schedules at any time in its sole discretion.
3. Under normal weather and operating conditions, employees subject to shift changes will be given one hundred forty-four (144) hour advance notice of any changes in their normal work schedule, except in cases of an emergency as determined by the General Manager. At the end of the weather or operating emergency, the employee's shift will revert to what it was prior to the emergency.
4. In cases where the employee could not be given one hundred forty-four (144) hour advance notice of a shift change, the employee will be eligible to receive compensation equal to the rate of one and one-half times the employee's rate of pay for the first day of the altered work schedule.
5. Employees in the Operation, Maintenance or Laboratory Divisions may, at the discretion of the General Manager, be assigned to work at any of the SOCWA treatment plants.

6. Employees are required to be dressed and ready for work at the start of their scheduled work period. Punctuality is expected at all times and a lack of same is grounds for discipline or termination.
7. An employee shall personally notify his/her supervisor within one (1) hour of the start of the employee's assigned shift of the employee's inability to report to work on that shift. Repeated failure to comply with this provision is grounds for disciplinary action.

D. OUTSIDE EMPLOYMENT

1. No full-time employee shall be permitted outside employment without a written request approved by the General Manager so that it can be determined if there is any conflict of interest with his/her job with the Agency. Conflicts of interest include, but are not limited to, (a) having a financial interest in or working for or with any contractor, subcontractor, agency, district, or any other entity retained by the Agency, and (b) holding an outside job which precludes the employee from fulfilling each and every aspect of his/her job with the Agency, including, for example, the ability to meet standby commitments, to be at work on time and to work overtime.
2. It is understood that all employees represent the Agency and their actions shall not be in conflict with the mission of the Agency. Any failure to comply will be considered grounds for disciplinary action.

E. JOB INJURY

1. The Agency has entered into a Self-Insurance Program for California Workers' Compensation Liabilities. On-the-job injury claims will be processed by a third-party adjuster.
2. All on-the-job injuries shall be reported within twenty-four (24) hours to the employees' supervisor, Department Director, Human Resources or General Manager. Any necessary medical treatment or first aid will be obtained immediately. All work-related injuries will be referred to a licensed medical physician selected by the Agency, unless the employee has a pre-designated physician form on file. Work-related injuries not treated by the Agency physician may not be covered by workers' compensation.
3. Workers' compensation benefits may be coordinated with sick leave benefits and/or accrued vacation time if the employee notifies Human Resources in writing as soon as reasonably possible after the leave commences.

F. CAL/OSHA (OCCUPATIONAL SAFETY AND HEALTH ACT)

1. The Agency will furnish the employee with a place of employment which is safe and healthful as required by applicable law.

Due to the occupation exposure to potentially infectious material, the Agency offers vaccinations listed below at no out of pocket cost to the employee:

Hepatitis A Hepatitis B Typhoid Tetanus Polio

The General Manager will periodically review and update this list based on the potential for employee exposures.

2. The employee's personal matters including attire and hair shall not present a safety hazard or prevent full and proper utilization of safety equipment.
3. The Agency shall maintain safety rules and regulations, updated as necessary but at least annually, which are in complete conformance with the Federal and State regulations. (Refer to the Safety Handbook.)
4. Safety meetings shall be held on a regular basis and all plant personnel are required to attend. Administrative (non-plant) personnel may attend said meetings as directed by the General Manager.
5. It shall be required that all employees certify by signature that they have received, read and fully understand the adopted safety rules and regulations. The safety rules and regulations will be certified annually by the employees.
6. All employees shall be expected to comply with all safety rules and regulations and failure to do so shall be considered as grounds for dismissal.

G. DISCIPLINARY ACTION OR TERMINATION

1. The General Manager or his/her designee has the authority to discipline or terminate any employee for cause. The following is a nonexclusive list of the types of disciplinary actions which may be imposed.
 - a. Oral or written warnings.
 - b. Probation - the placing of an individual in a position wherein his/her past and current performance is being re-evaluated. Failure to improve his/her performance during the probationary period will result in further disciplinary action.
 - c. Suspension – an involuntary absence with or without pay.

- d. Demotion - reduction from a position in one class to a position in another class having a lower salary range, affected for disciplinary purposes. (Demotions resulting from organizational changes and layoffs are not disciplinary).
 - e. Termination - discharge from service with the Agency.
2. It is intended that discipline be imposed primarily for corrective purposes and to address deficiencies in work performance. Failure of the employee to respond to the corrective action may result in further disciplinary action up to and including termination. The following is a nonexclusive list of the more common causes for disciplinary action or termination:
- a. Action contrary to the personnel rules and regulations of the Agency.
 - b. Inefficiency or incompetence.
 - c. Willful disobedience or insubordination.
 - d. Self-imposed physical or mental disability.
 - e. Dishonesty.
 - f. Possession or use of illegal drugs (including, but not limited to, marijuana, in all forms, as it remains illegal under federal law).
 - g. Improper use of legal drugs.
 - h. Being under the influence of drugs or alcohol on the Agency premises, or while engaged in Agency business.
 - i. Possession and or use of a firearm or other non-authorized weapon on Agency premises, in an Agency vehicle, or while engaged in Agency business.
 - j. Disorderly, immoral or illegal conduct.
 - k. Discourteous treatment of the public or fellow employees.
 - l. Conviction of a felony.
 - m. Unauthorized absence without leave.
 - n. Neglect of duty

- o. Action incompatible with, or not in the best interest of public service.
 - p. Failure to follow safe working practices or failure to report promptly any injury.
 - q. Falsification of any Agency record.
- 3. In cases of disciplinary suspensions, demotions or terminations, a regular employee shall be given prior written notification of the proposed disciplinary action. Notification shall include the following (1) A statement of the proposed action; (2) The reason therefore; (3) The effective date of the disciplinary action; (4) The name, position and authority of the person or persons initiating the proposed disciplinary action; (5) The name, position and authority of the person or persons with whom rests the final decision of the proposed action; (6) The names of witnesses used to substantiate the cause for the disciplinary action, and (7) The notice of the right to respond orally or in writing to the authority imposing the discipline. Copies of materials supportive of the disciplinary action shall be attached to the notification.
- 4. Any regular employees (not probationary and temporary employees) shall have the right to an Administrative Review of a disciplinary suspension, a demotion, or termination. A written request for such a review shall be submitted to the General Manager within seven (7) calendar days of the date of mailing or personal service of the notice to proposed disciplinary action. If a timely request for review is submitted, the review shall be conducted before a representative of management (the General Manager or his/her designee) prior to the effective date of the disciplinary action.

The employee may submit written rebuttal material prior to the review and present oral and written evidence at the time of the review. The employee is entitled to representation (including an attorney). The management representative conducting the review shall make a finding of fact to support the reason for the disciplinary action, should such action be deemed appropriate. The employee shall be notified of the management representative's decision in writing. This decision shall be final.
- 5. A disciplinary suspension of two (2) or more working days, a disciplinary demotion or a disciplinary termination may be appealed to the Board of Directors or designee(s) by filing a written appeal with the General Manager within ten (10) calendar days from the date of the disciplinary notice.
- 6. Upon termination, the employee shall be given an exit interview during which final administrative and personnel tasks can be completed. During the interview, the employee will be given a full accounting and check for all

moneys due the employee computed to termination date. The review, will include, but is not limited to, a discussion of all benefits, including accrued sick leave, accrued vacation, public employees' retirement system, health insurance, life insurance and disability insurance, and the ability to continue these as provided by law.

7. Upon termination, the employee shall return all previously assigned property of the Agency. The cost of property not returned shall be charged to the employee.

H. ADDRESS CHANGE

It is important that the Agency maintain current home addresses and telephone numbers for all employees. Should the employee's telephone become disconnected for any reason, it is the responsibility of the employee to establish an emergency contact and provide that information to the Agency as soon as possible. There may be occasions when it is imperative that the Agency reach an employee when he/she is at home. The Agency should also be able to contact the employee's family or emergency contact person in case of accident or illness at work. Employees shall notify the Agency of any change of address or telephone number by updating their information through the ADP Payroll Systems.

I. PHYSICAL EXAMINATION

1. Due to safety concerns involved in plant operation, all employees shall be required to pass a medical or physical examination and, for positions designated by the General Manager only, a drug test prior to employment with the Agency. The Agency shall select a licensed medical physician to perform the examination and test, the cost of which shall be borne by the Agency. The examination will determine the applicant's physical fitness to perform the job.
2. In accordance with OSHA regulations, all employees who, in the course of their employment are required to wear respiratory protective equipment must undergo a health evaluation to determine if they are physically able to perform the work and use the equipment. The evaluation may include a spirometer test and may also include a physical examination if determined medically necessary by a licensed medical physician selected by the Agency. The evaluation will be done annually. The cost of the examination will be borne by the Agency.
3. The Agency shall bear the cost of a physical examination and drug test for all employees required to take such examination as a condition of continued employment.

J. GRIEVANCE PROCEDURE

1. A grievance procedure has been established for the following purposes:
 - a. Promoting improved employer/employee relations by establishing an appropriate means for determining the validity of grievances; i.e., claims by an employee that the Agency has violated, misinterpreted or misapplied an obligation to the employee as such obligation is expressed and written in this Manual.
 - b. Providing a method of resolving such claims as closely as possible to the point of origin and as informally as possible.
 - c. Encouraging free communication between supervisors and employees.
2. The following steps shall be taken when filing a grievance.
 - a. Step One: Employees who have a grievance shall first take it up verbally with their division supervisor within seven (7) calendar days after they knew or reasonably should have known of the occurrence of the cause of the grievance and any action taken. Management retains the right to have a representative from Human Resources present at such a grievance meeting.
 - b. Step Two: If the grievance is not resolved within seven (7) calendar days after its submission in Step One.
 - Employees may submit the grievance in writing to the division supervisor within seven (7) calendar days thereafter.
 - The division supervisor shall meet with the employee within seven (7) calendar days after submission of the grievance.
 - The division supervisor shall deliver his/her answer, in writing, to the employee within seven (7) calendar days after such meeting.

At this and subsequent steps in the grievance procedure, employees have the right to present their grievance with or without a representative at their option. Should an employee choose to have representation, they must submit, in writing, their intention to do so with the name and title of their representative to the appropriate division supervisor at the time of the Step Two grievance submission.

- c. Step Three: If the grievance is not resolved within seven (7) calendar days after its submission in Step Two,

- Employees may submit the grievance in writing to the Department Director within seven (7) calendar days thereafter.
- The Department Director shall meet with the employee within seven (7) calendar days after submission of the grievance.
- The Department Director shall deliver his/her answer, in writing, to the employee within seven (7) calendar days after such meeting.

d. Step Four: If the grievance is not resolved in the Third Step,

- The aggrieved employee may submit the grievance in writing to the General Manager within seven (7) calendar days after the Department Director's answer is received.
- The General Manager shall meet with the employee within seven (7) calendar days after receiving the grievance.
- The General Manager shall deliver his/her answer in writing within seven (7) calendar days after such a meeting.

After Step One, failure of the aggrieved employee to follow the timeline set forth in the grievance procedure shall be considered a waiver of the employee's right to grieve the matter any further and acceptance of the decision at the prior level. Timelines may be extended by mutual written agreement.

K. SMOKING

Smoking (including vapes and e-cigarettes) is prohibited on SOCWA property except in designated areas on approved breaks.

L. SOLICITATION

Persons who are not employees of the Agency are not permitted to solicit or distribute anything for any purpose inside Agency buildings or elsewhere on Agency property. Employees are not permitted to distribute anything for any purpose during working time, or on nonworking time in working areas. No employee shall deface or alter any Agency building or property or employee property by affixing any poster, sign, sticker, or other type of advertising or propaganda matter or device. This policy does not prohibit protected Union activity.

SECTION III. BENEFITS

A. VACATION

1. Accrual Rates:

All regular full-time employees shall accrue the following vacations hours which will be properly credited on a biweekly basis.

- i. For employees hired prior to July 1, 2014, the following applies:
 - 1st through 5 years of employment (end of 5th year) - 96 hours per year
 - 6 through 10 years of employment (end of 10th year) - 120 hours per year
 - Beginning the 11th year of employment - 160 hours per year
- ii. For employees hired on or after July 1, 2014, the following applies:
 - 1st through 5 years of employment (end of 5th year) - 80 hours per year
 - 6 through 10 years of employment (end of 10th year) - 120 hours per year
 - Beginning the 11th year of employment - 160 hours per year
2. Part-time regular employees who work at least 40 hours per pay period shall accrue vacation subject to the schedule set forth in paragraph 1 above, but it shall be prorated on the basis of the number of hours worked.
3. All vacation time must have prior approval. The Supervising Managers/Department Head may approve vacation.
4. Vacation requests for over forty (40) days must be submitted no less than two weeks prior to the commencement of the requested vacation, except in an emergency situation as determined by the General Manager or his/her designee.
5. Vacation duration is limited to no more than 120 hours (3 weeks) without special approval by the General Manager.
6. Vacation requests submitted three (3) months in advance and approved at least four (4) weeks prior to the commencement of the requested vacation, will not be canceled by anyone other than the employee except in cases of

an emergency as determined by the General Manager, his/her designee or the Department Director.

7. Any employee separating from employment who has not taken earned vacation shall receive pay for each hour (or part thereof) of earned vacation according to the level of earnings for such employee on the last day worked.
8. Not more than 240 hours may be accrued and carried over from one calendar year to the next calendar year. For all hours in excess of 240 hours, employees will receive compensation for those hours at their current rate of pay at the end of the first pay period that ends in December.
9. Eligible new hires shall accrue vacation beginning with the date of hire but may not utilize such during the first six (6) months of their probationary period.
10. Employees may request up to 40 hours pay in lieu of vacation, subject to approval by the General Manager, provided the employee has taken 7 consecutive days off in any combination of holidays, vacation, personal days, weekends, scheduled days off, etc., within the last 12 months. This policy may be used up to a maximum of 2 times within twelve consecutive months. After the employee has been paid for the second 40 hours of vacation pay in lieu of vacation he/she will not be granted another 40 hours vacation pay in lieu of vacation until it has been 12 consecutive months from the original and first date of request.
11. Every effort shall be made by the employee to schedule at least one continuous forty (40) hour (one week) vacation during the year.

B. HOLIDAYS

1. All full-time employees and those eligible part-time employees shall receive the following paid holidays:

New Year's Day (January 1)
Presidents Day (third Monday in February)
Memorial Day (last Monday in May)
Independence Day (July 4)
Labor Day (first Monday in September)
Veteran's Day (November 11)
Thanksgiving Day
Thanksgiving Holiday (Friday after Thanksgiving Day)
Christmas Day (December 25)

2. Whenever a holiday falls on a Saturday not scheduled as a regular workday, the preceding Friday shall be observed as the day off. Whenever a holiday falls on a Sunday not scheduled as a regular workday, the following Monday shall be observed as the day off.
3. When a holiday falls on an employee's regular scheduled day off and the employee would otherwise lose the holiday, the employee will be paid for the amount of a regularly scheduled work day as straight-time pay. If staffing requirements allow, an employee may elect to take a regularly scheduled day off, providing the day off falls within the same pay period as the holiday. Arrangements for such days off must be made with the employee's supervisor.
4. In addition, all full-time employees are eligible to receive three (3) personal days per fiscal year. If the need for paid personal days is foreseeable, the employee must provide their immediate supervisor reasonable advance notification.

Personal days accrue on July 1 of each year and must be taken prior to June 30 of the following year.

A personal day is the equivalent of a full day worked regardless of the number of hours in the employee's shift at the time the personal day is used (8, 9- or 10-hour shift).

All Part-time employees are eligible to receive 13 ½ hours of personal leave per fiscal year (beginning July 1) or to be determined based on which quarter hired in.

Once an employee has given his/her notice of termination, there will be no further accumulation of personal days.

5. An employee must have been paid for the entire amount of regularly scheduled hours the days immediately prior to and following a holiday observed by the Agency in order to be paid holiday pay.
6. All employees eligible to receive paid holidays, and who are regularly scheduled by management to work on an Agency holiday, shall be paid at one and one-half times their normal rate of pay for hours worked on the holiday. This is in addition to the holiday pay (or day off in lieu) at eight, nine or ten-hour's straight time, depending on the employee's schedule. Employees not scheduled to work but who are called in to work shall receive compensation equal to double their normal rate of pay for the first consecutive eight, nine or ten hours worked (depending on employee's schedule). All consecutive hours worked beyond eight, nine or ten (depending on employee's schedule) on a holiday will be paid at three times the employees' normal rate of pay.

7. Temporary employees shall be entitled to paid holidays only if such a holiday falls on a day such employee would ordinarily be required to work.

C. SICK LEAVE

1. All regular full-time employees shall accrue sick leave hours which will begin with the date of hire, on a biweekly basis, but may not utilize such during the first thirty (30) days of employment.
 - Employee hired prior to July 1, 2014, earn ninety-six (96) hours of sick leave per year:
 - Employee hired on or after July 1, 2014, earn eighty (80) hours of sick leave per year (accrual rate shall be as required by applicable law):
2. ~~Part time regular employees who work at least forty (40) hours in a pay period shall accrue sick leave subject to Paragraph 1 above, but it shall be prorated on the basis of the number of hours worked and in no case shall it be less than that required by applicable law. Other p~~Part-time employees shall accrue one (1) hour of sick leave for every thirty (30) hours worked.
3. Sick leave may be used as required by California law including cases where an employee's presence is required elsewhere to attend to the illness of a "family member" or a "designated person." "Family member" is defined as: a child (whether biological, adopted, or foster child, stepchild, legal ward, or a child to whom the employee stands in loco parentis) regardless of the age of the child or dependency status, a parent (whether biological, adoptive, or foster parent, stepparent, or legal guardian of an employee or the employee's spouse or registered domestic partner, or a person who stood in loco parentis when the employee was a minor child), a spouse, a registered domestic partner, a grandparent, a grandchild, a sibling and a designated person. (A "designated person" means a person identified by the employee at the time the employee requests paid sick days. The Agency limits an employee to one (1) designated person per twelve (12) month period for paid sick days.) Employee leave for the serious health condition of members of their immediate family is also governed by the Agency Family Leave policy as detailed in this Employee Manual Attachment "C". The Agency will also approve the use of employee's accrued paid sick time if the employee is a victim of domestic violence, sexual assault, stalking and as otherwise required by applicable law.
4. Except where prohibited by applicable law, the General Manager may require a doctor's certificate if an employee's absence exceeds three (3) consecutive working days. If an employee is absent for five (5)

consecutive working days, a doctor's certificate shall generally be mandatory in order to return to work.

5. An employee may carry over a maximum of two hundred and forty (240) hours of accumulated sick leave on an annual basis. This annual basis shall end on the last day of the first pay period that ends in December. For all hours in excess of 176 hours, employees will be eligible to receive compensation for 75% of those hours at their current rate of pay. Such compensation will be paid at the end of the first pay period that ends in December.
6. When an employee has utilized their total accumulated sick leave, accrued vacation may be taken to the extent available providing the employee receives prior approval (refer to Section III-A, above, regarding submittal of vacation requests). If an employee does not elect to utilize, does not have sufficient accrued vacation time to cover the absence, and/or does not receive prior approval for the use of vacation leave, the employee shall not receive compensation.
7. Accumulated sick leave and/or vacation time may be utilized by an employee during his/her family leave or pregnancy disability leave.
8. Employees who have given two weeks written notice of their intention to leave the employ of the Agency shall be paid 75% of their accumulated sick leave above 176 hours on the date of termination.

Employees, who have given at least two weeks written notice of their intention to retire from the Agency, shall be paid for all unused sick leave at a rate of 75% upon retirement [\(remaining 25% converting to service credit with CalPERS\). Departing retiring employees have the option to convert 100% of their unused sick leave to service credit with CalPERS.](#)

9. Sick leave shall not be used in lieu of or in addition to vacation and/or holidays for the intent of extending the vacation or the holiday period.
10. Sick leave notification: Employees calling in sick must speak directly to their immediate supervisor; text messages, phone messages or emails will not be considered appropriate notification. Sick leave notification must be given to your immediate supervisor by 8:00 a.m., or within one hour of the start of your normal work day schedule. If the need for paid sick days is foreseeable, the employee must provide their immediate supervisor reasonable advance notification.
11. Temporary employees accrue sick leave at the rate of one (1) hour for every thirty (30) hours worked. They are eligible to use sick leave beginning on the 90th day of their employment with the Agency. Temporary employees may not cash out any accrued but unused sick leave for any reason during their employment at the Agency. Sick leave

will not be paid-out upon termination of employment for temporary employees.

D. LEAVE OF ABSENCE

1. Non-Medical Leave: Upon approval from the General Manager on a written request, an employee may be granted a leave of absence without pay for non-medical reasons. No employee benefits will be paid or accrue during this absence, with the exception of insurance coverage which will remain in effect for the remaining days of the month in which the leave began.
2. Military Leave of Absence: Military leave of absence is governed by provisions of federal law and the Military and Veterans Code of the State of California, including Section Nos. 395 and 395.02 and applicable federal law.
3. Miscellaneous:
 - An employee on an unpaid leave of absence shall not accrue vacation pay or sick leave during their leave, nor shall they be eligible for holiday pay (see Section III-B, par 6). Except as may be required by law, all benefits, including medical insurance, will cease for any employee whose leave of absence exceeds twelve (12) months.
 - Employees must provide their supervisor a written request for any unpaid time off.
 - An employee who falsely claims leave under this policy or supplies false information, in an attempt to obtain leave under this policy shall be subject to disciplinary action up to and including discharge. An employee who works for any other employer while out on leave is also subject to disciplinary action up to and including discharge.
 - The workweek schedule will commence on Sunday and end on Saturday. An employee is permitted the use of accumulated vacation time once sick leave is exhausted when an employee is on an extended leave of absence (2 weeks or more), without securing separate approval for use of the vacation. Employees are responsible to notify Human Resources if they wish to use this provision.
 - The following leave of absences with pay shall not reduce any employee benefits, including their allowable California Family Rights Act ("CFRA") and Federal Family and Medical Leave Act ("FMLA") time as described in Attachment C.

3. Bereavement Leave: Employees are provided five (5) days of Bereavement Leave in accordance with California law. This leave is available for employees who have been employed for at least thirty (30) days prior to the commencement of the leave.

Whenever any full-time employee is compelled to be absent from duty for reason of death or critical illness of a member of his/her family or his/her spouse's family such as a spouse, registered domestic partner, parent, parent-in-law, child, brother, sister, grandchild or grandparent, the employee shall be entitled to three (3) days of leave with pay and two (2) additional unpaid days. If necessary, the employee may take an additional three (3) days to be charged against accrued sick leave if approved by the General Manager. Part-time employees are provided up to five (5) unpaid days of Bereavement Leave.

For all employees, the five (5) days need not be consecutive, but all Bereavement Leave must generally be completed within three (3) months of the date of death of the family member. The Agency may require documentation of the death of the family member so long as it is requested within thirty (30) days of the first day of the leave. Employees may utilize accrued and available sick leave, personal leave, compensatory time off or vacation leave while on unpaid Bereavement Leave. The Agency requests that employees provide reasonable advance notice of when they plan to use Bereavement Leave.

5. Absence due to a birth or adoption in the immediate family: Whenever any full-time employee is compelled to be absent from duty for reason of the birth or adoption of a child, the employee shall be entitled to five (5) days of leave with pay and if necessary, may take an additional three (3) days to be charged against accrued sick leave if approved by the General Manager. Employees may also be entitled to additional unpaid time off pursuant to the Agency's FMLA/CFRA policy set forth in Attachment C.

E. LIGHT DUTY

Light duty is defined as a temporary work assignment provided to injured employees (1) who are unable to perform their normal job duties, and (2) who have obtained from their doctor a release to work with restrictions.

Employees who are injured and are able to return to work with restrictions will be entitled to light duty provided (1) there is light duty available, (2) the employee is qualified to perform the light duty assignment, and (3) the light duty assignment can be performed within the scope of the employee's restrictions.

F. HEALTH, DENTAL INSURANCE AND VISION CARE PLAN

1. Full-time employees and their dependents are provided a group dental and vision care plan; the premiums for the vision and dental are paid for by the Agency for full-time employees. Eligibility for dental and vision insurance will begin the first of the month following thirty (30) days of employment.
2. Regular part-time employees who meet the applicable eligibility requirements established by the Agency insurance partner shall be provided health, dental and vision insurance for themselves and their dependents, upon request.

The cost of the premiums for dental and vision insurance for part-time employees will be shared by the Agency and the employee based upon the number of hours the employee normally works in an eighty (80) hour pay period. For example, an employee who normally works sixty (60) hours will pay 25% of the premium, while an employee who normally works forty (40) hours will pay 50% of the premium. Withholdings will be calculated as they are in paragraph #2 above.

- Full-time employees and their dependents are provided with group health insurance coverage under the CalPERS PEMCHA program.

Employees of the Agency shall be eligible for a monthly health insurance allowance from the Agency equal to an amount that is 95% of the average of all health plans CalPERS makes available to the Agency, excluding the PERS Platinum Plan, at the appropriate level of coverage selected by the employee (employee, employee + 1, or employee + family). The Health Allowance shall be made available through the Agency's Cafeteria Plan in order to preserve it as a nontaxable benefit and a portion of the Health Allowance will be designated as the PEMHCA Minimum contribution and paid directly to CalPERS. If an employee enrolls in a CalPERS health plan with a monthly premium that exceeds the Health Allowance, the excess cost will be the employee's responsibility. Contributions to be paid for by the employee will be calculated on an annual basis and withheld in equal amounts over the amount of pay periods in the year. Unequal remainder amounts will be included in the final paycheck for the calendar year. Eligibility for health coverage and the Health Allowance will begin the first of the month following thirty (30) days of employment.

3. Contributions to be paid for by the employee will be calculated on an annual basis and withheld in equal amounts over the amount of pay periods in the year. Unequal remainder amounts will be included in the final paycheck for the calendar year.
4. [For an eligible dependent to be eligible for coverages, a copy of a marriage license, State of California Declaration of Domestic Partnership form \(NP/SF DP-1\), birth certificate, or other identifying paperwork will be](#)

required. It is mandatory that each employee notifies the Agency, in writing, whenever any additions or deletions occur in the status of his/her dependents. Failure to do so may result in a lapse of coverage for the additional dependent(s).

5. In lieu of health insurance coverage, eligible employees may elect to receive compensation at a rate of \$300 per month in addition to their regular pay. Employees must show current proof of health insurance coverage under another plan outside of the Agency and may be required to periodically show proof upon request. Requests for compensation in lieu of health insurance coverage should be in writing and are subject to review and approval of the General Manager. Compensation will begin on the first of the month following cancellation of coverage from the Agency Health Plan.

G. SHORT TERM AND LONG -TERM DISABILITY INSURANCE

Effective thirty days after employment, both short-term and long-term disability insurance coverage is provided for all full-time and part-time employees; the premiums are paid for by the Agency.

H. LIFE INSURANCE

1. Effective thirty days after employment, group life insurance is provided to all full-time and part-time employees at an amount of \$100,000. The premiums for full-time employees are paid for by the Agency. The premiums for part-time employees are shared 50/50 by the Agency and the employee. (The cost of premiums, paid by the Agency for life insurance in excess of \$50,000 is considered noncash compensation for tax purposes.)
2. It is mandatory that each employee notify the Human Resource Department whenever any desired change in beneficiary data.
3. SOCWA offers employees the option to purchase additional life insurance coverage for themselves, spouse and dependents.

I. UNEMPLOYMENT INSURANCE

Unemployment insurance may be available to qualified employees by the Agency. To apply for benefits or to determine eligibility, employees should contact their nearest Employment Development Department office.

J. RETIREMENT

1. All regular full and part-time employees are covered by the Public Employees' Retirement System (PERS).

- TIER 1** Employees hired prior to February 1, 2011 are on the 2.5% at 55 formula with the employee paying the full employee contribution.
- TIER 2** Employees hired between February 1, 2011 and December 31, 2012, will be on the 2% at 55 formula with the employee paying the full employee contribution.
- TIER 3** Employees hired as of January 1, 2013, that do not qualify as an existing PERS “Classic” employee are on the 2% at 62 formula with the employee paying the full employee contribution.

2. Post-Retirement Health Care

- 2.2 Pursuant to PEMHCA and relevant CalPERS regulations, a retired employee will qualify for retiree medical benefits if his or her retirement from the Agency is effective within 120 days of his or her separation from employment with the Agency and the retired employee receives a retirement allowance from CalPERS resulting from his or her service with the Agency. Retired employees who satisfy the preceding requirements (“Eligible Retirees”) are eligible to continue health coverage with CalPERS for themselves and their eligible dependents. All allowances described in this section shall only be available to Eligible Retirees enrolling in a CalPERS health plan.
- 2.3 The retiree health benefits provided by the Agency vary depending upon an Eligible Retiree’s date of employment with the Agency. The Agency provides retiree health benefits as follows:
- a. Employees hired before July 1, 2017. Eligible Retirees hired before July 1, 2017 will receive a monthly amount from the Agency not to exceed the Health Allowance made available by the Agency to active employees (“Tier I Allowance”). The Tier I Allowance will be paid as follows:
- an amount equal to the PEMHCA Minimum will be paid directly to CalPERS by the Agency; and
 - a reimbursement by the Agency will be paid to the retiree for the monthly health insurance premiums actually paid by the retiree, in an amount not to exceed the difference between the Tier I Allowance and the PEMHCA Minimum.

If an Eligible Retiree subject to this Section J(2.3)(a) enrolls in a CalPERS health plan with a monthly premium that exceeds the Tier I

Allowance, the excess cost will be the Eligible Retiree's responsibility. Conversely, if any Eligible Retirees enrolls in a CalPERS health plan with a monthly premium that is less than the Tier I Allowance, the remainder shall be forfeited.

Eligible Retirees shall be subject to any changes to the health insurance coverage provided by the Agency to the same extent as active employees of the Agency.

b. Employees hired on or after July 1, 2017.

- Eligible Retirees hired on or after July 1, 2017 will receive a monthly amount from the Agency equal to the PEMHCA Minimum, which the Agency will pay directly to CalPERS ("Tier II Allowance"). If an Eligible Retiree subject to this Section J(2.3)(b) enrolls in a CalPERS health plan with a monthly premium that exceeds the Tier II Allowance, the excess cost will be the Eligible Retiree's responsibility.
- In addition, during employment with the Agency, employees hired on or after July 1, 2017 shall receive an Agency contribution equal to \$200 per month to an individual account under a retiree health savings plan. This amount may be subject to change at the Agency's discretion but will not be reduced below \$200. The retiree health savings plan is to be used exclusively to reimburse qualifying medical expenses during retirement. The retiree health savings plan will be administered by a third-party administrator selected by the Agency.

3. Temporary Employees

- 3.1 Temporary employee retirement is covered by the Agency deferred compensation plan.
- 3.2 Temporary employees will be subject to a percentage withholding of their gross salary for retirement as mandated by federal law. Employees must contribute to one of the Agency's deferred compensation plans. The amount must be equal to or greater than the amount which would normally be withheld for Social Security.
- 3.3 If an employee works more than nine hundred sixty (960) hours per fiscal year, he/she will be added to the PERS system. In such an event, the contributions for the employee and employer will be consistent with applicable law.

K. SOCIAL SECURITY – MEDICARE PORTION

All employees are subject to Medicare tax withholding.

L. EDUCATIONAL REIMBURSEMENT

Employees are encouraged to improve their own job effectiveness and opportunity for advancement by taking courses and working for a degree, credentials or licenses. The Agency shall provide employees with funds to cover the cost of tuition and registration fees, regular textbooks, lab fees and parking fees for approved job-related courses, as approved in advance by the General Manager. These courses of study must be taken through accredited colleges, universities, correspondence schools or recognized professional organizations. All textbooks paid through this program become property of the Agency. These courses of study must meet at least one of the following criteria: (1) Directly related to the employee's current position and job duties; (2) Related to their current or related department; or (3) Required for additional professional licenses required within their current or related department.

An employee may receive reimbursement for approved educational expenses up to a maximum of \$750 for any one course and not more than \$3,000 in any one calendar year. No reimbursement will be made until after the completion of the courses and will not be made if reimbursement has been made from any other source.

In order to be eligible for reimbursement an employee must meet all of the following requirements:

- Submit a course approval request to the General Manager prior to starting the course.
- Submit a copy of the "grade card" or similar document from the educational institution, indicating the course of study was completed.
- Receive a passing grade.
- Remain a regular employee with the Agency for a period of one year after the date the course was completed. If the employee does not complete this requirement, the employee must reimburse the Agency upon termination.
- Submit the request for reimbursement to the Finance Department, including original receipts for all eligible expenses.

M. MILEAGE ALLOWANCE

1. Any employee who is required to use a private vehicle in the discharge of his/her duties shall receive the maximum mileage reimbursement as established by the Internal Revenue Service. Such mileage reimbursement shall be made in the next bill payment cycle, after submittal of an approved reimbursement request.

2. The employee shall furnish the Agency and have on file at the office, a current copy of his/her Certificate of Automobile Insurance including Public Liability and Property Damage, minimum coverage (\$30,000, \$60,000, and \$10,000).
3. Use of a private vehicle, for Agency purposes or on Agency property, by an employee is governed by a separate Vehicle and Equipment Policy.

N. DEFERRED COMPENSATION PLAN

Regular full and part-time employees are eligible to participate in the Agency deferred compensation plan(s). The primary purpose of the plan(s) is to provide future payments in lieu of deferred current income upon death, disability, retirement, or other termination of employment. The plan(s) are intended to qualify as eligible State Deferred Compensation Plan(s) within the meaning of Section 457 of the Internal Revenue Code of 1954, as amended. Each employee may elect to become a participant of any Plan(s) and defer payment of part of his/her compensation (within the guidelines of Section 457) by executing the required participation agreement.

The Agency will provide a matching contribution up to \$1,450 per fiscal year.

O. UNIFORMS AND SAFETY EQUIPMENT

The Agency shall provide, as an employee benefit, all full-time field operational personnel with uniforms to be worn while on duty and the necessary Agency owned safety equipment. The Agency shall reimburse full-time field operational personnel, upon date of hire and annually thereafter, up to a maximum amount of \$2400.00 for purchase of steel-toed shoes as required by the Agency separate Injury and Illness Prevention Safety Program included in the Safety Handbook. Field operational personnel may purchase a second pair of shoes if funds remain from the original allocation and, if needed, the employee shall contribute the additional funds required. Employees will be allowed to use this amount to also purchase other work uniform related items such as belts, boot/shoe inserts, laces, etc. If, in the discretion of an employee's department head, the employees work boots are worn out or damaged due to work-related wear-and-tear, the department head may authorize the reimbursement of a second pair of boots within one year.

Laboratory personnel will be allowed an additional \$75 per year to purchase aqua shoes to be used for beach sampling.

It is the responsibility of the employee to provide an original receipt of charges for payment reimbursement. All employees shall present a clean and neat appearance at all times.

The Agency shall continue to report non-safety uniform expenditures on a per pay period basis, not to exceed \$400.00 annually. The allocation is subject to change based on uniform provider, operational safety and requirements as determined by the

General Manager. The foregoing shall be subject to the provisions and limitations under the Public Employees Retirement Law, including prohibitions on reporting the uniform allowance as pensionable compensation for employees deemed “new members” under the Public Employees Pension Reform Act of 2013. The actual per employee, per pay period amount will be established each fiscal year based on an average monthly rental/cost amount paid in the prior fiscal year.

SECTION IV: COMPENSATION

A. EMPLOYEE COMPENSATION

1. All full-time employees shall receive compensation in accordance with the adjusted ranges in the Salary Schedule (Exhibit A) and job classification (Exhibit B), and the same shall be revised from time to time by action of the Agency Board.
2. Pay days are on a biweekly basis - every other Thursday.

B. MERIT POOL

Award of a merit increase is based on a recommendation by the employee's supervisor and department head, and subject to approval of the General Manager. A merit pay pool equal to approximately 3% of the salaries of all employees will generally be established for the purpose of awarding merit increases.

Individual employees may be awarded a salary increase of between zero and five percent (0 – 5%) based on their level of performance. The total amount of meritorious salary increases shall not exceed the 3% merit pay pool in any fiscal year.

In the event an employee receives a merit increase that is less than the total amount awarded during the review process, due to being topped out in their respective salary range, said employee shall receive the remaining review award in a lump sum, [which shall not be considered as reportable compensation to CalPERS.](#)

C. SALARY ADJUSTMENTS

All employees shall receive a [seven-six](#) percent (~~76~~[76](#)%) increase, effective July 1, 202[34](#):

In an effort to remain competitive, SOCWA will review salary ranges against comparator agencies on a bi-annual basis and will adjust ranges if necessary, with the recommendations of the General Manager and approval by the Board. The approved new ranges will be effective at the start of the next fiscal year.

D. INCENTIVE PAY

[Education Certification Incentive Program](#)

[Employees who obtain a job-related educational certificate which exceeds their minimum job requirements are eligible to receive an incentive pay increase and shall be considered as reportable special compensation for each certificate received in accordance with Agency policy. Certificates must be recognized by CWEA, State Water Resource Board and NCCCO.](#)

- [1. For Employees hired prior to July 1, 2017](#)

- a. Full-time continuous employees receiving education certification one step or higher above their existing job classification will be eligible to receive a 2.5% of base pay reported as special compensation.
 - Any Grade III employees may receive an additional 2.5% of base pay reported as educational incentive if they obtain a certification two-steps above their existing job classification (i.e., Grade III Operator with a Grade V certification), as approved by the General Manager. Employees must first make application to their supervisor to be eligible to participate in the incentive program including employees whose job classification may not have corresponding education certification. All applications are subject to approval of the General Manager.
- b. Employees will receive a 2.5% of base pay reported as special compensation upon receiving a NCCCO Crane Certification; and legal ability to drive a crane.
2. Employees hired on or after July 1, 2017, will only be eligible for additional pay certification as follows:
 - a. Employees will receive a one-time lump sum educational incentive of \$800.00 payment on achieving a Grade 2.
 - b. Employees will receive a one-time lump sum educational incentive of \$800.00 payment upon receiving a NCCCO Crane Certification; and legal ability to drive a crane.
 - c. Employees will receive a one-time lump sum educational incentive of \$1200.00 payment upon achieving a Grade 3 or higher certification.
- ~~1. Full-time continuous employees hired prior to July 1, 2017 receiving education certification one step or higher above their existing job classification will be eligible to receive a 2.5% salary increase. Any Grade III employees may receive an additional 2.5% incentive pay if they obtain a certification two-steps above their existing job classification (i.e., Grade III Operator with a Grade V certification), as approved by the General Manager. Employees must first make application to their supervisor to be eligible to participate in the incentive program including employees whose job classification may not have corresponding education certification. All applications are subject to approval of the General Manager.~~
- ~~2. Employees hired prior to July 1, 2017 that hold both a driving and crane certification will be awarded a one-time salary range increase of 2.5%.~~

3. ~~Employees hired on or after July 1, 2017, will only be eligible for additional pay certification as follows:~~
 - a. ~~Employees will receive a one time \$800.00 payment on achieving a Grade 2;~~
 - b. ~~Employees will receive a one-time \$800.00 payment upon receiving a Driving and Crane Certification; and~~
 - c. ~~A one-time \$1200.00 payment upon achieving a Grade 3 or higher certification.~~

E. MERIT ADVANCEMENT

Full-time and/or part-time employees in good standing may be recommended for merit advancement. Merit reviews shall take place on an annual basis upon completion of the probationary period.

An employee in good standing is defined as one who has received a performance evaluation rating which meets or exceeds expected standards and who has not received any of the following disciplinary actions within the past twelve (12) month period:

- a) Letter of reprimand
- b) Probation for disciplinary purposes
- c) Suspension and/or demotion for disciplinary purposes

The merit recommendations, if any, are to be made by the employee's supervisor and must be approved by the Department Director and the General Manager.

F. SPECIAL PERFORMANCE AWARD

In recognition of situations where long-term SOCWA employees have reached the top of the established salary range for their current positions and are consequently, no longer eligible to receive salary advancements under the regular merit pool, such employees may be considered for a special performance award. The employee must have received an overall merit-based performance review rating of at least "Exceeds Expectations" or "Above Standard" for the preceding twelve-month evaluation period. The General Manager shall approve all such performance awards in writing. The decision of the General Manager shall be final. No award granted under this program shall be considered to increase the employee's base salary, nor shall the award limit the employee's ability to receive general cost of living increases, which may be granted from time to time. No employee shall receive an award under this program more frequently than once in any twelve-month period. No award granted under this program shall exceed five percent (5%) of the employee's base salary. The award shall be paid in a lump sum to the employee. No award approved by the General Manager under this

program shall require further approval by the Board of Directors; provided, however, that the General Manager shall annually following the end of the fiscal year provide a summary of the granted award during the previous twelve-month period to the Board of Directors. All employees, whether represented by the SOCWA Employee Association (SEA) or not, including management, supervisory, and confidential employees shall be eligible for this program. The decision of the General Manager to grant or withhold an award under this program shall not be subject to the grievance procedure.

G. OVERTIME

1. All employees who are classified as "non-exempt" employees, as defined under the FLSA, will be eligible for overtime pay. For purpose of defining "non-exempt" employees, the Agency policy shall mean all employees except the employees designated in the Management Division.
2. Administrative nonexempt employees will be paid overtime when they actually work more than 40 hours in a workweek. Overtime pay for bargaining unit employees is defined as that time spent on the job over eight (8) hours in one day for those employees on an eight (8) hour, five (5) day week schedule; or over nine/eight (9/8) hours in one day for those employees on a nine/eighty (9/80) schedule; or over ten (10) hours in one day for those employees on a four/ten (4/10) schedule, or over nine/four (9/4) hours in one day for those employees on a nine/four (9/4), five (5) day per week schedule. The workweek for purposes of overtime calculation shall be: (i) for employees on a nine/eighty (9/80) schedule shall begin at the mid-point of their shift on their eight (8) hour day and end seven (7) days later. In order to be eligible for overtime pay, an employee must have his/her supervisor's approval before working overtime.
3. Overtime pay shall be paid at the rate of one and one-half times the employee's regular rate of pay for hours worked in excess of 40 in the workweek for administrative employees and for bargaining unit employees, hours worked beyond the normal work schedule. Non-exempt employees may accrue up to 45 hours of compensatory time off ("CTO") in lieu of overtime compensation. Employees electing CTO in lieu of overtime compensation must indicate it on their time card. Non-bargaining unit employees must also agree with their supervisor prior to performing the work that it will be CTO. Use of compensatory time off must be pre-approved by the employee's supervisor and cannot be cashed out except upon termination of employment.
4. Time worked on a holiday in excess of the regular shift (eight, nine or ten hours) is paid at triple time rate. This applies to either the regularly scheduled employee or to the employee called in to work.

5. Overtime pay, as defined in paragraph 4 above, will be paid to bargaining unit employees who continuously work up to four (4) hours in excess of their normal work schedule or up to eight (8) hours on their regularly scheduled day off. Double time pay, defined as compensation equal to two times an employee's normal rate of pay, will be paid for those hours worked beyond the four (4) or eight (8) hours described above for bargaining unit employees. Hours must be consecutive in order to receive double-time or triple-time pay.
6. For the purpose of computing overtime pay, the formula shall be as follows: regular rate multiplied by 1.5 for the time and one half or 2.0 for double-time pay and 3.0 for triple-time.
7. When hourly employees are required to work overtime for four (4) hours or more beyond his/her regular work schedule or when hourly employees are called out for work outside their regular work schedule and their meal period occurs during such work, they will be given a reasonable meal allowance or furnished a meal and reasonable work time to eat it. Additional meal allowances or meals will be provided at four (4) hour intervals thereafter during the work period. Employees shall submit a receipt and shall be reimbursed for food and non-alcoholic beverages up to a maximum of \$5.00.
8. Efforts will be made to assign overtime on an equal basis to employees who, in management's discretion, are qualified to perform the overtime work. Work will be scheduled by the Director of Operations or his/her designee in advance if possible.
9. Any employee who works weekends (Saturday and/or Sunday) will receive a differential compensation rate, above their normal rate of pay of \$3.00 per hour.
10. Non-Exempt Employee Use of Communication Devices

Non-exempt employees may perform necessary and authorized work duties on various communication devices (e.g., smartphones, tablets, laptops, PDAs). All such time spent will be considered as hours worked and will count toward overtime eligibility as set forth by applicable law. Accordingly, they are required to report all time spent working after hours. Therefore, to control costs and avoid unnecessary expenses, non-exempt employees shall not use communication devices for work-related purposes outside of their regularly scheduled hours unless they receive prior instruction from management. In other words, non-exempt employees are not required to review, read, send, or respond to work-related emails outside of their regularly scheduled hours unless requested to do so with management authorization. All time spent shall be recorded as time worked.

H. ADMINISTRATIVE LEAVE

The General Manager, or designee, may grant paid administrative leave to employees. This may include, but is not limited to, times when exempt employees are required to work above and beyond their normal working hours on behalf of the Agency without additional compensation.

I. STANDBY PAY

1. When Field Personnel have been designated to be on standby duty after their normal workday, they shall be compensated at a rate of \$500.00 per week for any employee in Operations or Maintenance that covers SOCWA facilities when assigned to standby in addition to their regular pay.
2. Standby duties require OPERATORS to be available upon forty-five (45) minutes notice and Maintenance and Electrical/SCADA to be available upon ninety (90) minutes notice, on a twenty-four-hour basis.
3. A mobile phone will be provided for all personnel designated on standby. Employees will be responsible for the mobile phone while in his/her possession and must replace it if lost or damaged due to a willful act or gross negligence.
4. When an employee is called back to work without prior notice, and the employee has completed their normal work shift and left the plant, the employee shall receive a minimum of two (2) hours call back pay.

The two (2) hour minimum, whether or not actually worked, shall be paid at the rate of one and one half times the employee's regular hourly rate.

J. JURY DUTY

Any regular or probationary employee who is required to serve as a juror or who is subpoenaed as a witness in any court in this state, of the United States, or any administrative board or tribunal, shall submit to his/her supervisor notification of the need for such leave of absence as soon as such employee receives notification himself/herself. Any regular or probationary employee shall be entitled to a leave of absence with pay while performing services as a juror or a witness (witness pay is limited to circumstances set forth in applicable Government Code statutes), provided that any such employee shall pay to the Agency any amount received for jury fees, if any, exclusive of travel and subsistence. All regular or probationary employees shall be allowed time off with pay up to a maximum of fifteen (15) working days for the actual period of service required on such jury. Exempt employee's salary will not be reduced while on jury duty unless they perform no work during the entire work week following the 15 working days of paid jury service. Any jury duty beyond the fifteen (15) days will have to be served under the leave of absence criteria set forth in this policy. Upon

return to work, the employee will present to the General Manager proof of service for the actual days served and have it duly authorized by the court.

K. SALARY SCHEDULE

The Agency current salary schedule is depicted as Exhibit "A" to this policy, which exhibit is attached hereto and by this reference incorporated herein.

L. JOB CLASSIFICATION

Job classifications are determined from time to time by the General Manager, and as of July 1, 2019, with the approval of the Annual Budget, the job classifications approved by the Board of Directors are depicted as Exhibit "B" to this policy. Annually, with the approval of the Budget, the General manager shall submit to the Board of Directors changes in job classifications implemented in the prior year due to promotions and hiring for business needs and/or as proposed to be implemented in the coming fiscal year.

M. FAIR PAY ACT POLICY

The Agency follows all applicable state and federal laws requiring equal pay for employees for substantially similar work. Substantially similar work is a composite of skill, effort and responsibility when performed under similar working conditions. Pay discrimination between employees of the opposite sex or between employees of another race or ethnicity is prohibited. Pay differentials may be valid in certain situations as set forth in applicable law. California's Fair Pay Act and the Agency prohibit discrimination and retaliation against any employee who invokes or assists in the enforcement of the Fair Pay Act. Employees will not be retaliated against for inquiring about or discussing wages.

If you believe you are not being paid the same wage as other employees engaged in substantially similar work of a different race, ethnicity or sex, please report your concerns to the Human Resources Department so that appropriate corrective action may be taken.

ATTACHMENT A

Policy Against Employee Harassment and Discrimination.

1. Policy Statement

The Agency strictly prohibits unlawful harassment and discrimination. This includes harassment and discrimination on the basis of sex, gender, sexual orientation, gender identity, gender expression, genetic information, race, color, ancestry, national origin, religious creed, physical disability, mental disability, medical condition, reproductive health decisionmaking, age (40 or over), marital status, military and veteran status, or any other protected class under applicable law.

2. Application

- A. This policy applies to all phases of the employment relationship, including, but not limited to, recruitment, testing, hiring, upgrading, promotion/demotion, transfer, layoff, termination, rates of pay, benefits, and selection for training.
- B. This policy applies to all officers and employees of the Agency, including, but not limited to, full and part-time employees, per diem employees, temporary employees, and persons working under contract for the Agency.

3. Harassment Defined

- A. Harassment may consist of offensive verbal, physical, or visual conduct when such conduct is based on or related to an individual's sex and/or membership in one of the above-described protected classifications, and:
 - (1) Submission to the offensive conduct is an explicit or implicit term or condition of employment;
 - (2) Submission to or rejection of the offensive conduct forms the basis for an employment decision affecting the employee; or
 - (3) The offensive conduct has the purpose or effect of unreasonably interfering with an individual's work performance or creates an intimidating, hostile, or offensive working environment.
- B. Examples of what may constitute prohibited harassment include, but are not limited to, the following:
 - (1) Kidding or joking about sex or membership in one of the protected classifications;

- (2) Hugs, pats, and similar physical contact;
- (3) Assault, impeding or blocking movement, or any physical interference with normal work or movement;
- (4) Cartoons, posters, e-mails, texts and other materials referring to sex or membership in one of the protected classifications;
- (5) Threats intended to induce sexual favors;
- (6) Continued suggestions or invitations to social events outside the workplace after being told such suggestions are unwelcome;
- (7) Degrading words or offensive terms of a sexual nature or based on the individual's membership in one of the protected classifications;
- (8) Prolonged staring or leering at a person;
- (9) Similar conduct directed at an individual on the basis of race, color, ancestry, national origin, religious creed, physical disability, mental disability, medical condition, reproductive health decisionmaking, age (40 or over), marital status, military or veteran status, sexual orientation, gender, gender identity, gender expression, genetic information, or any other protected classification under applicable law.

4. Procedure

A. Internal Reporting Procedure

- (1) Any employee who believes that he or she has been the victim of sexual or other prohibited harassment or discrimination by co-workers, supervisors, managers, clients or customers, visitors, vendors, or others (including third parties) should immediately notify his or her supervisor or, in the alternative, the General Manager, depending on which individual the employee feels most comfortable in contacting.
- (2) Additionally, supervisors who observe or otherwise become aware of harassment that violates this policy have a duty to report it to the General Manager so the Agency can try to resolve the claim internally.

B. External Reporting Procedure

- (1) Any employee who believes that he or she has been the victim of sexual or other prohibited harassment by coworkers, supervisors, clients or customers, visitors, vendors, or others may file a

complaint with the California Civil Rights Department ("the CRD"). The phone number for the CRD is located in the phone book under government agencies.

5. Investigation

- A. Upon the filing of a complaint with the Agency, the complainant will be provided with a copy of this policy. The complainant shall be notified in a timely manner that their complaint has been received and will be investigated. The General Manager is the person designated by the Agency to investigate complaints of harassment and/or discrimination. The General Manager may, however, delegate the investigation to qualified, impartial personnel at his/her discretion. In the event the harassment or discrimination complaint is against the General Manager; a different investigator shall be appointed by the Chairperson or the Board of Directors. A fair, timely and thorough investigation will be conducted. All parties to the investigation will receive appropriate due process.
- B. Charges filed with the CRD are investigated by the CRD.

6. Internal Documentation Procedure

- A. When an allegation of harassment is made by an employee, the person to whom the complaint is made shall immediately prepare a report of the complaint according to the preceding section and submit it to the General Manager.
- B. The investigator shall make and keep a written record of the investigation, including notes of verbal responses made to the investigator by the person complaining of harassment or discrimination, witnesses interviewed during the investigation, the person against whom the complaint of harassment was made, and any other person contacted by the investigator in connection with the investigation. The investigator's notes shall be made at the time the verbal interview is in progress. Any other documentary evidence shall be retained as part of the record of the investigation. Upon completion of the investigation, the results shall be given to the complainant, the alleged harasser, and the General Manager.
- C. Based on the report and any other relevant information, the General Manager shall, within a reasonable period of time, determine whether the conduct of the person against whom a complaint has been made constitutes unlawful harassment or unlawful discrimination. In making that determination, the General Manager shall look at the record as a whole and at the totality of circumstances, including the nature of the conduct in question; the context in which the conduct, if any, occurred; and the conduct of the person complaining of harassment or discrimination. The determination of whether harassment or discrimination occurred will be

made on a case-by-case basis by the General Manager. All investigations should be closed in a timely manner.

7. Confidentiality

All records and information relating to the investigation of any alleged harassment and resulting disciplinary action shall be confidential, except to the extent disclosure is required by law, as part of the investigatory or disciplinary process, or as otherwise reasonably necessary.

8. Remedies

A. Remedial Action

- (1) If the General Manager determines that the complaint of harassment or discrimination is founded, the General Manager shall take immediate and appropriate disciplinary action consistent with the requirements of law and any personnel rules or regulations pertaining to employee discipline. Other steps may be taken to the extent reasonably necessary to prevent recurrence of the harassment and to remedy the complainant's loss, if any.
- (2) Disciplinary action shall be consistent with the nature and severity of the offense, the rank of the harasser, and any other factors relating to the fair and efficient administration of the Agency's operations.

B. In the event a complaint is filed with the CRD, and the CRD finds that the complaint has merit, the CRD will attempt to negotiate a settlement between the parties. If not settled, the CRD may issue a determination on the merits of the case.

- (1) Where a case is not settled, the CRD may pursue litigation in civil court with the Complainant as the Real Party in Interest. Legal remedies available through the CRD for a successful claim by an applicant, employee, or former employee include possible reinstatement to a former job; award of a job applied for; back pay; front pay; reasonable attorneys' fees; and under appropriate circumstances, punitive damages, out-of-pocket losses, affirmative relief, training, and emotional distress damages.
- (2) In the alternative, the CRD may grant the employee permission to withdraw the case and pursue a private lawsuit seeking similar remedies.

9. Retaliation

Retaliation against anyone for opposing conduct prohibited by this policy or for filing a complaint with or otherwise participating in an investigation, proceeding or hearing conducted by the Agency or the CRD, is strictly prohibited by state regulations. It may subject the offending person to, among other things, disciplinary action, up to and including, termination of employment.

10. Employee Obligation

- A. Employees are not only encouraged to report instances of harassment or discrimination, they are obligated to report instances of harassment.
- B. Employees are obligated to cooperate in every investigation of harassment or discrimination, including, but not necessarily limited to:
 - (1) Coming forward with evidence, both favorable and unfavorable to a person accused of harassment or discrimination; and
 - (2) Fully and truthfully making a written report or verbally answering questions when required to do so during the course of an Agency investigation of alleged harassment or discrimination.
- C. Knowingly, falsely accusing someone of harassment or discrimination or otherwise knowingly giving false or misleading information in an investigation of harassment or discrimination shall result in disciplinary action, up to and including, termination of employment.

11. Training

The Agency will provide training to employees as required by applicable law.

ATTACHMENT B

Your Rights and Responsibilities as a Pregnant Employee

If you are pregnant, have a related medical condition, or are recovering from childbirth, **PLEASE READ THIS NOTICE.**

California law protects employees against discrimination or harassment because of an employee's pregnancy, childbirth or any related medical condition (referred to below as "because of pregnancy"). California law also prohibits employers from denying or interfering with an employee's pregnancy-related employment rights.

The Agency has an obligation to:

- reasonably accommodate your medical needs related to pregnancy, childbirth or related conditions (such as temporarily modifying your work duties, providing you with a stool or chair, or allowing more frequent breaks);
- transfer you to a less strenuous or hazardous position (where one is available) or duties if medically needed because of your pregnancy; and
- provide you with pregnancy disability leave (PDL) of up to four months (the working days you normally would work in one-third of a year or 17 $\frac{1}{3}$ weeks) and return you to your same job when you are no longer disabled by your pregnancy or, in certain instances, to a comparable job. Taking PDL, however, does not protect you from non-leave related employment actions, such as a layoff.
- provide a reasonable amount of break time and use of a room or other location in close proximity to the employee's work area to express breast milk in private as set forth in the Labor Code.

For pregnancy disability leave:

- PDL is not for an automatic period of time, but for the period of time that you are disabled by pregnancy. Your health care provider determines how much time you will need.
- Once the Agency has been informed that you need to take PDL, the Agency must guarantee in writing that you can return to work in your same position if you request a written guarantee. The Agency may require you to submit written medical certification from your health care provider substantiating the need for your leave.
- PDL may include, but is not limited to, additional or more frequent breaks, time for prenatal or postnatal medical appointments, doctor-ordered bed rest, severe

“morning sickness,” gestational diabetes, pregnancy-induced hypertension, preeclampsia, recovery from childbirth or loss or end of pregnancy, and/or post-partum depression.

- PDL does not need to be taken all at once but can be taken on an as-needed basis as required by your health care provider, including intermittent leave or a reduced work schedule, all of which counts against your four-month entitlement to leave.
- Your leave will be paid or unpaid depending on the Agency policy for other medical leaves.
- You may also be eligible for state disability insurance or Paid Family Leave (PFL), administered by the California Employment Development Department.
- At your discretion, you can use any vacation during your PDL.
- The Agency requires you to use any available sick leave during your PDL.
- The Agency is required to continue your group health coverage during your PDL at the same level and under the same conditions that coverage would have been provided if you had continued in employment continuously for the duration of your leave.
- Taking PDL may impact certain of your benefits and your seniority date; please contact Human Resources for details.
- If possible, you must provide at least 30 days’ advance notice for foreseeable events (such as the expected birth of a child or a planned medical treatment for yourself.) For events that are unforeseeable, we need you to notify us, at least verbally, as soon as you learn of the need for the leave. Failure to comply with these notice rules is grounds for, and may result in, deferral of the requested leave until you comply with this notice policy.

Notice Obligations of Employees:

- Give the Agency reasonable notice: To receive reasonable accommodation, obtain a transfer, or take PDL, you must give the Agency sufficient notice for it to make appropriate plans. Sufficient notice means 30 days’ advance notice if the need for the reasonable accommodation, transfer or PDL is foreseeable, otherwise as soon as practicable if the need is an emergency or unforeseeable.
- Provide a Written Medical Certification from Your Health Care Provider. Except in a medical emergency where there is no time to obtain it, the Agency may require you to supply a written medical certification from your health care provider of the medical need for your reasonable accommodation, transfer or PDL. If the need is

an emergency or unforeseeable, you must provide this certification within the time frame the Agency requests, unless it is not practicable for you to do so under the circumstances despite your diligent, good faith efforts. The Agency must provide at least 15 calendar days for you to submit the certification. See Human Resources for a copy of a medical certification form to give to your health care provider to complete.

- PLEASE NOTE that if you fail to give the Agency reasonable advance notice or written medical certification of your medical need, the Agency may be justified in delaying your reasonable accommodation, transfer, or PDL.

You also may be entitled to additional rights under the California Family Rights Act of 1993 (CFRA) if you have more than 12 months of service with us, have worked at least 1,250 hours in the 12-month period before the date you want to begin your leave and work at a worksite with 50 or more employees within 75 miles of that worksite. This leave may be up to 12 workweeks in a 12-month period.. For further information on the availability of CFRA leave, please review your employer's policy regarding the availability of CFRA leave.

This notice is a summary of your rights and obligations under the Fair Employment and Housing Act (FEHA). For more information about your rights and obligations as a pregnant employee, contact Human Resources, visit the California Civil Rights Department's website at www.calcivilrights.ca.gov, or contact the Department at 800-884-1684. The text of the FEHA and the regulations interpreting it are available on the Department's website at www.calcivilrights.ca.gov.

ATTACHMENT C

Employee Rights And Responsibilities Under The Family And Medical Leave Act

Basic Leave Entitlement

FMLA requires covered employers to provide up to 12 weeks of unpaid, job-protected leave to eligible employees for the following reasons:

- for incapacity due to pregnancy, prenatal medical care or child birth;
- to care for the employee's child after birth, or placement for adoption or foster care;
- to care for the employee's spouse, son, daughter or parent, who has a serious health condition; or
- for a serious health condition that makes the employee unable to perform the employee's job.

The 12 month period will be calculated using a rolling 12 month period measured backward from the date the leave is first used.

Military Leave Family Entitlements

Eligible employees whose spouse, son, daughter or parent is on covered active duty or are called to covered active duty status may use their 12-week leave entitlement to address certain qualifying exigencies. Qualifying exigencies may include attending certain military events, arranging for alternative childcare, addressing certain financial and legal arrangements, attending certain counseling sessions, and attending post-deployment reintegration briefings.

FMLA also includes a special leave entitlement that permits eligible employees to take up to 26 weeks of leave to care for a covered service member during a single 12-month period. A covered service member is: (1) a current member of the Armed Forces, including a member of the National Guard or Reserves, who is undergoing medical treatment, recuperation or therapy, is otherwise in outpatient status, or is otherwise on the temporary disability retired list, for a serious injury or illness*; or (2) a veteran who was discharged or released under conditions other than dishonorable at any time during the five-year period prior to the first date the eligible employee takes FMLA leave to care for the covered veteran, and who is undergoing medical treatment, recuperation, or therapy for a serious injury or illness.*

***The FMLA definitions of “serious injury or illness” for current service members and veterans are distinct from the FMLA definition of “serious health condition.”**

Benefits and Protections

During FMLA leave, the employer must maintain the employee's health coverage under any "group health plan" on the same terms as if the employee had continued to work. Upon return from FMLA leave, most employees must be restored to their original or equivalent positions with equivalent pay, benefits, and other employment terms.

Use of FMLA leave cannot result in the loss of any employment benefit that accrued prior to the start of an employee's leave.

Eligibility Requirements

Employees are eligible if they have worked for a covered employer for at least 12 months, have 1,250 hours of service in the previous 12 months, and if at least 50 employees are employed by the employer within 75 miles of the employee making the request.

Definition of Serious Health Condition

A serious health condition is an illness, injury, impairment, or physical or mental condition that involves either an overnight stay in a medical care facility, or continuing treatment by a health care provider for a condition that either prevents the employee from performing the functions of the employee's job, or prevents the qualified family member from participating in school or other daily activities.

Subject to certain conditions, the continuing treatment requirement may be met by a period of incapacity of more than 3 consecutive calendar days combined with at least two visits to a health care provider or one visit and a regimen of continuing treatment, or incapacity due to pregnancy, or incapacity due to a chronic condition. Other conditions may meet the definition of continuing treatment.

Use of Leave

An employee does not need to use this leave entitlement in one block. Leave can be taken intermittently or on a reduced leave schedule when medically necessary. Employees must make reasonable efforts to schedule leave for planned medical treatment so as not to unduly disrupt the employer's operations. Leave due to qualifying exigencies may also be taken on an intermittent basis.

Substitution of Paid Leave for Unpaid Leave

Employees may choose or employers may require use of an accrued paid leave while taking FMLA leave. In order to use paid leave for FMLA leave, employees must comply with the employer's normal paid leave policies.

Employee Responsibilities

Employees must provide 30 days' advance notice of the need to take FMLA leave when the need is foreseeable. When 30 days' notice is not possible, the employee must provide notice as soon as practicable and generally must comply with an employer's normal call-in procedures.

Employees must provide sufficient information for the employer to determine if the leave may qualify for FMLA protection and the anticipated timing and duration of the leave. Sufficient information may include that the employee is unable to perform job functions, the family member is unable to perform daily activities, the need for hospitalization or continuing treatment by a health care provider, or circumstances supporting the need for military family leave. Employees also must inform the employer if the requested leave is for a reason for which FMLA leave was previously taken or certified. Employees also may be required to provide a certification and periodic recertification supporting the need for leave.

Employer Responsibilities

Covered employers must inform employees requesting leave whether they are eligible under FMLA. If they are, the notice must specify any additional information required as well as the employees' rights and responsibilities. If they are not eligible, the employer must provide a reason for the ineligibility.

Covered employers must inform employees if leave will be designated as FMLA-protected and the amount of leave counted against the employee's leave entitlement. If the employer determines that the leave is not FMLA-protected, the employer must notify the employee.

Unlawful Acts by Employers

The FMLA makes it unlawful for any employer to:

- interfere with, restrain, or deny the exercise of any right provided under FMLA; and
- discharge or discriminate against any person for opposing any practice made unlawful by FMLA or for involvement in any proceeding under or relating to FMLA.

Enforcement

An employee may file a complaint with the U.S. Department of Labor or may bring a private lawsuit against an employer.

FMLA does not affect any federal or state law prohibiting discrimination, or supersede any state or local law or collective bargaining agreement which provides greater family or medical leave rights.

CALIFORNIA FAMILY RIGHTS ACT LEAVE

Under the California Family Rights Act of 1993 (“CFRA”), if an employee has more than 12 months of service with the Agency and has worked at least 1250 hours in the past 12 months, and the Agency employs five or more employees, the employee may have a right to CFRA leave.

In computing the 12 month period, the Agency utilizes a rolling 12-month period measured backward from the date leave is used.

If eligible for such leave, an employee may be entitled to take up to 12 work weeks of unpaid, job protected leave in a 12-month period for the birth, adoption, or foster care placement of employee’s child, for an employee’s own serious health condition or to care for employee’s child, parent, parent-in-law, spouse, grandparent, grandchild, sibling, registered domestic partner or “designated person”. (“Designated person” means any individual related by blood or whose association with the employee is the equivalent of a family relationship. An employee is limited to one (1) “designated person” per 12-month period.) In addition, under CFRA an employee may take leave because of a qualifying exigency related to covered active duty or call to covered active duty of an employee’s spouse, registered domestic partner, child or parent in the armed forces of the United States as specified in applicable law.

For CFRA leave, the Agency generally requires the employee to utilize vacation leave and sick leave while on such leave. An exception to this is the employee may not use sick leave during a period of CFRA leave in connection with the birth, adoption or foster care of a child, or to care for a child, parent, parent-in-law, grandparent, grandchild, sibling, spouse, registered domestic partner or designated person unless mutually agreed to by the employee and the General Manager.

Another exception is that employees will not be required to use their sick leave if the employee’s CFRA leave also qualifies as “kin care” under California law. Under these circumstances, it will be the employee’s sole discretion as to whether they wish to utilize sick leave.

While on CFRA leave, the Agency will maintain and pay for coverage under a group health plan, for the duration of the leave, not to exceed 12 workweeks in a 12 month period, commencing on the date leave under CFRA commences, at the level and under the conditions coverage would have been provided if the employee continued employment continuously for the duration of the leave. Employees must continue to pay their portion of group health plan premiums while on CFRA leave.

During CFRA leave, the leave shall not constitute a break in service for any employee benefit plan. An employee shall return with no less seniority than employee had when leave commenced, for purposes of layoff, recall, promotion, job assignment, and seniority related benefits, such as vacation.

If the employee's need for leave is foreseeable, the employee shall provide the Agency with reasonable advance notice of the need for the leave.

If the employee's need for leave pursuant to this section is foreseeable due to planned medical treatments or supervision, the employee shall make a reasonable effort to schedule the treatment or supervision to avoid disruption to the operations of the Agency, subject to the approval of the health care provider of the individual requiring the treatment or supervision.

The Agency requires that an employee's request for leave to care for a child, parent, parent-in-law, grandparent, grandchild, sibling, spouse, registered domestic partner or designated person who has a serious health condition be supported by a certification issued by the health care provider of the individual requiring care. That certification shall be sufficient if it includes all of the following:

- (A) The date on which the serious health condition commenced.
- (B) The probable duration of the condition.
- (C) An estimate of the amount of time that the health care provider believes the employee needs to care for the individual requiring the care.
- (D) A statement that the serious health condition warrants the participation of a family member to provide care during a period of the treatment or supervision of the individual requiring care.

Upon expiration of the time estimated by the health care provider, the Agency requires the employee to obtain recertification, if additional leave is required.

The Agency requires that an employee's request for leave because of the employee's own serious health condition be supported by a certification issued by the employee's health care provider. That certification shall be sufficient if it includes all of the following:

- (A) The date on which the serious health condition commenced.
- (B) The probable duration of the condition.
- (C) A statement that, due to the serious health condition, the employee is unable to perform the function of the employee's position.

The Agency requires that employees obtain subsequent recertification regarding the employee's serious health condition on a reasonable basis, if additional leave is required.

As a condition of an employee's return from leave taken because of an employee's own serious health condition, the Agency requires the employee to obtain a certification from the employee's health care provider that the employee is able to resume work.

CFRA leave provided for in this Policy may be taken in one or more periods.

“Serious health condition” means an illness, injury, impairment, or physical or mental condition that involves either of the following:

- 1) Inpatient care in a hospital, hospice or residential health care facility; or
- 2) Continuing treatment or continuing supervision by a health care provider.

“Health care provider” means any of the following: an individual holding either a physician’s and surgeon’s certificate issued pursuant to California law, an osteopathic physician and surgeon certificate issued pursuant to California law, or an individual duly licensed as a physician, surgeon, or osteopathic physician or surgeon in another state or jurisdiction, who directly treats or supervises the treatment of the serious health condition. In addition, any other person determined by the United States Secretary of Labor to be capable of providing health care services under the FMLA shall also qualify as a health care provider.

The Agency may recover the premiums for such group health plans that it pays on behalf of the employee if both of the following conditions occur:

- 1) The Employee fails to return from leave after the period of leave to which the employee is entitled has expired; and
- 2) The failure of the employee to return from the leave is for a reason other than the continuation, recurrence, or onset of “serious health condition” or other circumstances beyond the control of the employee.

Eligible employees may also take Qualifying Exigency Leave as set forth in California law.

ATTACHMENT D

Weapons/Anti Violence Policy

The Agency has adopted a Zero Tolerance Policy against workplace violence. Consistent with this policy, acts or threats of physical violence, including intimidation, harassment, and/or coercion, which involve or affect the Agency, or which occur on Agency property will not be tolerated.

Acts or threats of violence include conduct which is sufficiently severe, offensive, or intimidating to alter the employment conditions at the Agency or to create a hostile, abusive, or intimidating work environment for one or several Agency employees. Examples of workplace violence include, but are not limited to, the following:

- All threats or acts of violence occurring on the Agency premises, regardless of the relationship between the Agency and the parties involved in the incident.
- All threats or acts of violence occurring off the Agency premises involving someone who is acting in the capacity of a representative of the Agency.
- All threats or acts of violence occurring off the Agency premises involving an employee of the Agency if the threats or acts affect the legitimate interests of the Agency.
- Any acts or threats resulting in the conviction of an employee or agent of the Agency, or of an individual performing services for the Agency on a contract or temporary basis, under any criminal code provision relating to violence or threats of violence which adversely affect the legitimate interests and goals of the Agency.

Specific examples of conduct which may be considered threats or acts of violence include, but are not limited to, the following:

- Hitting or shoving an individual.
- Threatening an individual or his/her family, friends, associates, or property with harm.
- The intentional destruction or threat of destruction of Agency property.
- Harassing or threatening phone calls.
- Harassing surveillance or stalking.
- The suggestion or intimation that violence is appropriate.

- Unauthorized possession or inappropriate use of firearms or weapons.

The Agency's prohibition against threats and acts of violence applies to all persons involved in the Agency's operation, including but not limited to Agency personnel, contract, and temporary workers and anyone else on Agency property. Violations of this policy by any individual on Agency property, by any individual acting as a representative of the Agency while off Agency property, or by any individual acting off of Agency property when his/her actions affect the Agency's business interests will lead to disciplinary action (up to and including termination) and/or legal action as appropriate.

Possession while on duty or bringing onto Agency property unauthorized material, such as explosives, weapons (including, but not limited to, firearms and knives), or other similar items, is strictly prohibited.

Every employee and every person on Agency property is required to report incidents of threats or acts of physical violence or any other violation of this policy of which he/she is aware. The report should be made to the Human Resources Department, the reporting individual's immediate supervisor, or another supervisory employee if the immediate supervisor is not available. Nothing in this policy alters any other reporting obligation established in Agency policies or in state, federal, or other applicable law.

ATTACHMENT E

Rights of Victims of Domestic Violence, Sexual Assault, Stalking, Crimes that Cause Physical Injury or Mental Injury, and Crimes Involving a Threat of Physical Injury; and of Persons Whose Immediate Family Member is Deceased as a Direct Result of a Crime

1. Your Right to Take Time Off:

- You have the right to take time off from work to obtain relief from a court, including obtaining a restraining order, to protect you and your children's health, safety or welfare.
- If your Agency has 25 or more workers, you can take time off from work to get medical attention for injuries caused by crime or abuse, receive services from a domestic violence shelter, program, rape crisis center, receive psychological counseling or mental health services related to an experience of crime or abuse, or participate in safety planning and take other actions to increase safety from future crime or abuse.
- You may use accrued paid sick leave or vacation, personal leave, or compensatory time off that is otherwise available for your leave unless you are covered by a union agreement that says something different. Even if you do not have paid leave, you still have the right to time off.
- In general, you do not have to give your employer proof to use leave for these reasons.
- If you can, you should tell your employer before you take time off. Even if you cannot tell your employer before, your employer cannot discipline you if you give proof explaining the reason for your absence within a reasonable time. Proof can be a police report, a court order, a document from a licensed medical professional, a victim advocate, a licensed health care provider, or counselor showing that you were undergoing treatment for domestic violence related to trauma, or a written statement signed by you, or an individual acting on your behalf, certifying that the absence is for an authorized purpose..

2. Your Right to Reasonable Accommodation:

- You have the right to ask your employer for help or changes in your workplace to make sure you are safe at work. Your employer must work with you to see what changes can be made. Changes in the workplace may include putting in locks, changing your shift or phone number,

transferring or reassigning you, or help with keeping a record of what happened to you. Your employer can ask you for a signed statement certifying that your request is for a proper purpose and may also request proof showing your need for an accommodation. Your employer cannot tell your coworkers or anyone else about your request.

3. Your Right to be Free From Retaliation and Discrimination:
Your employer cannot treat you differently or fire you because:

You are a victim of domestic violence, sexual assault, or stalking, a crime that caused physical injury or mental injury, or a crime involving threat of physical injury, or are someone whose immediate family member is deceased as a direct result of a crime.

- You asked for leave time to get help.
- You asked your employer for help or changes in the workplace to make sure you are safe at work.

You can file a complaint with the Labor Commissioner's Office against your employer if he/she retaliates or discriminates against you.

ATTACHMENT F

Lactation Accommodation Policy

The Agency provides employees the right to request lactation accommodation in accordance with California law. The Agency will provide a reasonable amount of break time to accommodate an employee desiring to express breastmilk for the employee's infant child each time the employee has a need to express milk. The break time shall, if possible, run concurrently with any break time already provided to the employee. Break time for a nonexempt employee that does not run concurrently with the rest time authorized for the nonexempt employee shall be unpaid.

The Agency will provide the employee with the use of a room or other location for the employee to express milk in private. This room may include the place where the employee normally works if it otherwise meets the requirements set forth below.

The room shall be safe, clean and free of hazardous materials. There will be a surface to place a breast pump and personal items as well as a place to sit. The room will have access to electricity or alternative devices, including, but not limited to, extension cords or charging stations, needed to operate an electric or battery-powered breast pump. The employee shall also have access to a sink with running water and a refrigerator suitable for storing milk in close proximity to the employee's workspace. If a refrigerator cannot be provided, the Agency may provide another cooling device suitable for storing milk, such as an Agency-provided cooler. If a multipurpose room is used for the lactation, among other uses, the use of the room for lactation shall take precedence over the other uses, but only for the time it is in use for lactation purposes.

Employees who require lactation accommodation should contact Human Resources. If the Agency cannot provide break time or a location that complies with California law the Agency will provide a written response to the employee. Employees have the right to file a complaint with the Labor Commissioner for any violation of the employee's lactation rights under California law.

Exhibit A
Salary Schedule

EXHIBIT "A"							
SOCWA							
EMPLOYEE HANDBOOK SALARY RANGE SUMMARY							
07/01/2019 - 06/30/2020							
			July 1, 2019	COLA @ 2.7%			1.027
			Ranges	Minimum Hourly Salary	Maximum Hourly Salary	Minimum Monthly Salary	Maximum Monthly Salary
	25.02	31.93	33.0	25.70	32.79	\$4,454.67	\$5,683.60
	25.65	32.72	33.5	26.34	33.60	\$4,565.60	\$5,824.00
	26.26	33.55	34.0	26.97	34.46	\$4,674.80	\$5,973.07
	26.92	34.39	34.5	27.65	35.32	\$4,792.67	\$6,122.13
	27.59	35.21	35.0	28.33	36.16	\$4,910.53	\$6,267.73
	28.28	36.09	35.5	29.04	37.06	\$5,033.60	\$6,423.73
	28.96	36.97	36.0	29.74	37.97	\$5,154.93	\$6,581.47
	29.69	37.88	36.5	30.49	38.90	\$5,284.93	\$6,742.67
	30.40	38.81	37.0	31.22	39.86	\$5,411.47	\$6,909.07
	31.17	39.56	37.5	32.01	40.63	\$5,548.40	\$7,042.53
	31.93	40.76	38.0	32.79	41.86	\$5,683.60	\$7,255.73
	32.72	41.78	38.5	33.60	42.91	\$5,824.00	\$7,437.73
	33.55	42.80	39.0	34.46	43.96	\$5,973.07	\$7,619.73
	34.39	43.89	39.5	35.32	45.08	\$6,122.13	\$7,813.87
	35.21	44.91	40.0	36.16	46.12	\$6,267.73	\$7,994.13
	36.09	46.06	40.5	37.06	47.30	\$6,423.73	\$8,198.67
	36.97	47.18	41.0	37.97	48.45	\$6,581.47	\$8,398.00
	37.88	48.36	41.5	38.90	49.67	\$6,742.67	\$8,609.47
	38.81	49.55	42.0	39.86	50.89	\$6,909.07	\$8,820.93
	39.79	50.78	42.5	40.86	52.15	\$7,082.40	\$9,039.33
	40.76	52.02	43.0	41.86	53.42	\$7,255.73	\$9,259.47
	41.78	53.31	43.5	42.91	54.75	\$7,437.73	\$9,490.00
	42.80	54.62	44.0	43.96	56.09	\$7,619.73	\$9,722.27
	43.90	55.99	44.5	45.09	57.50	\$7,815.60	\$9,966.67
	44.91	57.35	45.0	46.12	58.90	\$7,994.13	#####
	46.06	58.77	45.5	47.30	60.36	\$8,198.67	#####
	47.18	60.21	46.0	48.45	61.84	\$8,398.00	#####
	48.36	61.73	46.5	49.67	63.40	\$8,609.47	#####
	49.55	63.25	47.0	50.89	64.96	\$8,820.93	#####
	50.78	64.80	47.5	52.15	66.55	\$9,039.33	#####
	52.02	66.41	48.0	53.42	68.20	\$9,259.47	#####
	53.31	68.04	48.5	54.75	69.88	\$9,490.00	#####
	54.62	69.72	49.0	56.09	71.60	\$9,722.27	#####
	55.99	71.46	49.5	57.50	73.39	\$9,966.67	#####
	57.35	73.20	50.0	58.90	75.18	#####	#####
	58.77	75.04	50.5	60.36	77.07	#####	#####
	60.21	76.85	51.0	61.84	78.92	#####	#####
	61.72	78.76	51.5	63.39	80.89	#####	#####
	63.25	80.70	52.0	64.96	82.88	#####	#####
	64.80	82.71	52.5	66.55	84.94	#####	#####
	66.39	84.73	53.0	68.18	87.02	#####	#####
	68.07	86.86	53.5	69.91	89.21	#####	#####
	69.71	88.98	54.0	71.59	91.38	#####	#####
	71.45	91.18	54.5	73.38	93.64	#####	#####
	73.20	93.42	55.0	75.18	95.94	#####	#####

EXHIBIT B
JOB CLASSIFICATIONS

EXHIBIT "B"					
SOUTH ORANGE COUNTY WASTEWATER AUTHORITY					
EMPLOYEE HANDBOOK - JOB CLASSIFICATION SALARY SCHEDULE					
7/1/2019 w/COLA of 2.7%					
SEA Represented Classifications					
Classification	Salary Range	Minimum Hourly Salary	Maximum Hourly Salary	Minimum Monthly Salary	Maximum Monthly Salary
<i>Operations Division</i>					
Operator Grade III	43	\$ 41.86	\$ 53.42	\$ 7,255.73	\$ 9,259.47
Operator Grade II	41	\$ 37.97	\$ 48.45	\$ 6,581.47	\$ 8,398.00
Operator Grade I	37	\$ 31.22	\$ 39.86	\$ 5,411.47	\$ 6,909.07
Operator in Training	35	\$ 28.33	\$ 36.16	\$ 4,910.53	\$ 6,267.73
<i>Maintenance Division</i>					
Mechanic Supervisor	44	\$ 43.96	\$ 56.09	\$ 7,619.73	\$ 9,722.27
Maintenance Mechanic III	42.5	\$ 40.86	\$ 52.15	\$ 7,082.40	\$ 9,039.33
Truck Driver/Maintenance Mechanic II	38	\$ 32.79	\$ 41.86	\$ 5,683.60	\$ 7,255.73
Maintenance Mechanic II	38	\$ 32.79	\$ 41.86	\$ 5,683.60	\$ 7,255.73
Maintenance Mechanic I	36	\$ 29.74	\$ 37.97	\$ 5,154.93	\$ 6,581.47
O&M Inventory/Purchasing Specialist	38	\$ 32.79	\$ 41.86	\$ 5,683.60	\$ 7,255.73
<i>Support Services Division</i>					
Sr. Electrician/SCADA Technician	45	\$ 46.12	\$ 58.90	\$ 7,994.13	\$ 10,209.33
Maintenance Mechanic III w/Co-Gen	42.5	\$ 40.86	\$ 52.15	\$ 7,082.40	\$ 9,039.33
Electrical/Instrumentation Technician	42	\$ 39.86	\$ 50.89	\$ 6,909.07	\$ 8,820.93
<i>Laboratory Services</i>					
Laboratory Technician III / Q&A Specialist	44.5	\$ 45.09	\$ 57.50	\$ 7,815.60	\$ 9,966.67
Laboratory Technician III	43.5	\$ 42.91	\$ 54.75	\$ 7,437.73	\$ 9,490.00
Laboratory Technician II	41	\$ 37.97	\$ 48.45	\$ 6,581.47	\$ 8,398.00
Laboratory Technician I	39	\$ 34.46	\$ 43.96	\$ 5,973.07	\$ 7,619.73
Laboratory Aide/Sampler	35	\$ 28.33	\$ 36.16	\$ 4,910.53	\$ 6,267.73
Unrepresented Classifications					
Classification	Salary Range	Minimum Hourly Salary	Maximum Hourly Salary	Minimum Monthly Salary	Maximum Monthly Salary
<i>Operations Division</i>					
Assistant Chief Operator	44	\$ 43.96	\$ 56.09	\$ 7,619.73	\$ 9,722.27
Operations Engineering Associate	37	\$ 31.22	\$ 39.86	\$ 5,411.47	\$ 6,909.07
<i>Maintenance Division</i>					
<i>Support Services Division</i>					
Information Technology Systems Administrator	43	\$ 41.86	\$ 53.42	\$ 7,255.73	\$ 9,259.47
<i>Environmental Compliance / Laboratory Services</i>					
Laboratory Manager	48	\$ 53.42	\$ 68.20	\$ 9,259.47	\$ 11,821.33
Source Control Manager	46	\$ 48.45	\$ 61.84	\$ 8,398.00	\$ 10,718.93
Environmental Compliance Safety Risk Manager	43.5	\$ 42.91	\$ 54.75	\$ 7,437.73	\$ 9,490.00
<i>Administration Division</i>					
Procurement/Contracts Administrator	46	\$ 48.45	\$ 61.84	\$ 8,398.00	\$ 10,718.93
Human Resource Administrator	45.5	\$ 47.30	\$ 60.36	\$ 8,198.67	\$ 10,462.40
Clerk of the Board	43	\$ 41.86	\$ 53.42	\$ 7,255.73	\$ 9,259.47
Administrative Assistant II / III	42	\$ 39.86	\$ 50.89	\$ 6,909.07	\$ 8,820.93
Sr. Accountant	43	\$ 41.86	\$ 53.42	\$ 7,255.73	\$ 9,259.47
Staff Accountant	35	\$ 28.33	\$ 36.16	\$ 4,910.53	\$ 6,267.73
Accounts Payable/Payroll Accountant	35	\$ 28.33	\$ 36.16	\$ 4,910.53	\$ 6,267.73
Professional Classifications					
Classification	Salary Range	Minimum Hourly Salary	Maximum Hourly Salary	Minimum Monthly Salary	Maximum Monthly Salary
<i>Operations Division</i>					
Superintendent of O & M	50	\$ 58.90	\$ 75.18	\$ 10,209.33	\$ 13,031.20
Chief Operator	50	\$ 58.90	\$ 75.18	\$ 10,209.33	\$ 13,031.20
<i>Maintenance Division</i>					
Chief Maintenance Mechanic	50	\$ 58.90	\$ 75.18	\$ 10,209.33	\$ 13,031.20
<i>Support Services Division</i>					
Support Services Manager	50	\$ 58.90	\$ 75.18	\$ 10,209.33	\$ 13,031.20
<i>Environmental Compliance / Laboratory Services</i>					
<i>Engineering Division</i>					
Sr. Engineer	50	\$ 58.90	\$ 75.18	\$ 10,209.33	\$ 13,031.20
Associate Engineer	47.5	\$ 52.15	\$ 66.55	\$ 9,039.33	\$ 11,535.33
<i>Administration Division</i>					
Executive Management Classifications					
Classification	Salary Range	Minimum Hourly Salary	Maximum Hourly Salary	Minimum Monthly Salary	Maximum Monthly Salary
<i>Executive Management Division</i>					
General Manager		Set by the Board by Contract			\$ 19,168.93
Director of Operations	54	\$ 71.59	\$ 91.38	\$ 12,408.93	\$ 15,839.20
Director of Engineering	54	\$ 71.59	\$ 91.38	\$ 12,408.93	\$ 15,839.20
Director of Environmental Compliance	54	\$ 71.59	\$ 91.38	\$ 12,408.93	\$ 15,839.20
Finance Controller	52	\$ 64.96	\$ 82.88	\$ 11,259.73	\$ 14,365.87

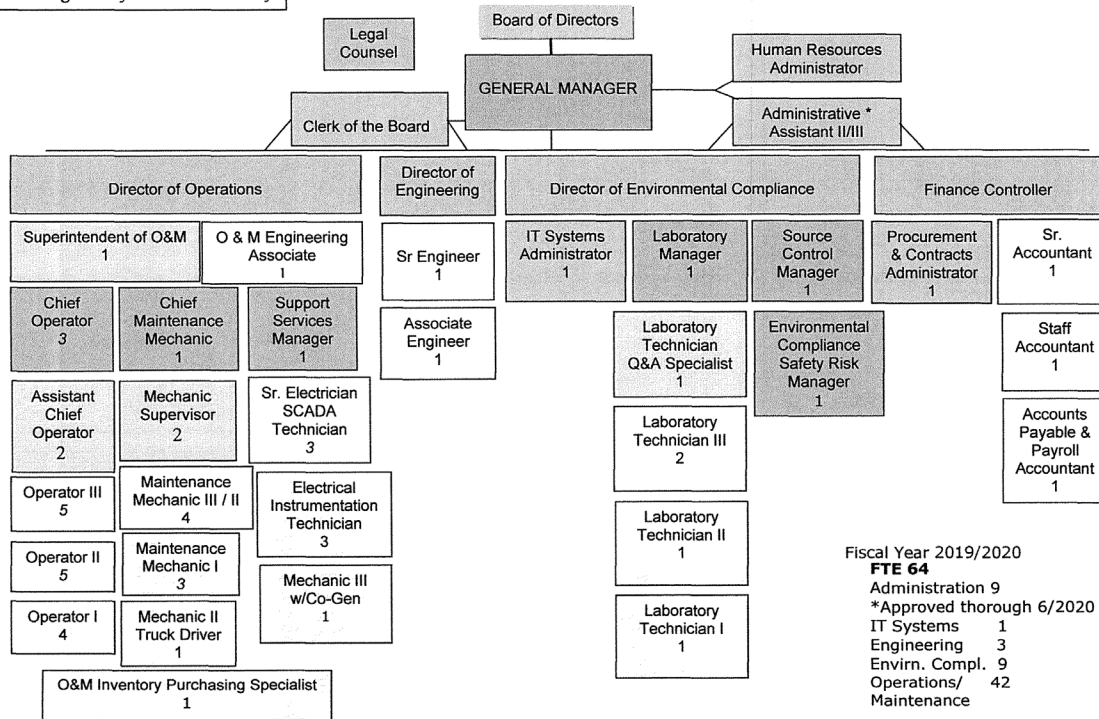
EXHIBIT C

TABLE OF ORGANIZATION

(As approved FY 2019-20, same may be revised from time to time in each FY)



EXHIBIT C



Fiscal Year 2019/2020
FTE 64
 Administration 9
 *Approved thorough 6/2020
 IT Systems 1
 Engineering 3
 Envirn. Compl. 9
 Operations/ 42
 Maintenance

ACKNOWLEDGMENT

I hereby acknowledge that I have received a copy of the SOCWA EMPLOYEE MANUAL (hereinafter "Manual"), 202⁴³, and that I understand that I am to promptly read its contents. I understand that if I have any questions about the Manual or its contents, I am to discuss them with my supervisor or the Human Resources Department.

I recognize that this Manual supersedes and replaces any previous Manuals, and to the extent that provisions of this Manual conflict with previously issued policies or practices, whether or not such policies and practices were contained in an Employee Manual, this Manual shall prevail. I agree that changes in the policies set out in the Manual are not valid unless made and approved, in writing, by the Board of Directors.

Employee's Name (print or type)

Date: _____

Employee Signature

Date: _____

Witness

Agenda Item

6.A.

Board of Directors Meeting

Meeting Date: June 6, 2024

TO: Board of Directors

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

STAFF CONTACT: Roni Grant, Associate Engineer

SUBJECT: Contract Award for Regional Treatment Plant (RTP) Primary and Aeration Areas Gratings and Gates Replacement [Project Committee 17]

Overview

The Regional Treatment Plant (RTP) primary area grating and gates have deteriorated and are not functioning properly. Staff have laid plywood over covers where main foot traffic occurs because of concerns about cover safety. Similarly, the grit chamber influent and effluent channel covers have also failed, and temporary plywood covers have been used as a safety measure.

The existing aeration influent and effluent areas have existing plates as flow-stopping devices. Plates are operated and removed at least once a year. This mitigates the issue of the plates getting stuck on the effluent side. In general, exercising the gates is the primary mitigation measure. Otherwise, the gates will get stuck, making removal challenging.

The project scope of work includes the following:

Primary Area

- Replace grit grating and rebates, primary influent and effluent gates, primary effluent channel grating, and primary area grating.
- Replace existing primary influent slide plates with weir gates with manual operators.
- Replace effluent slide plates with slide gates with manual operators (three per tank).
- Evaluate construction feasibility, bypassing, and sequencing options to minimize disruption to the treatment plant.

Aeration Area

- Where the new gates require modification to the existing deck grating, the design shall replace five (5) feet of grating and substructure around all sides of the new gate to ensure foul air capture is maintained after the gates are installed.

- Replace six influent gates with weirs or slide gates, and evaluate and recommend the best option for this application.
- Modify odor boxes as necessary for installation of gate operator and concrete surface repairs.
- Replace effluent gates and evaluate different alternatives to take the existing structure, grating support, and pipe support into consideration.
- Replace six drain valves in each aeration tank with corrosion-resistant material, including a bulkhead system to seal off the leaking step feed gates.
- Replace the existing gates feeding into the RAS channel and evaluate possible options to replace gates.
- Evaluate construction feasibility, bypassing, and sequencing options to minimize disruption to the treatment plant.

Proposals

SOCWA solicited proposals through PlanetBids on February 22, 2024, from the following firms to provide the final design for the RTP Primary and Aeration Areas Gratings and Gates Replacement:

- Black and Veatch
- Carollo Engineers
- Dudek
- HDR
- Tetra Tech

Two proposals were received from Dudek and HDR, summarized below in Table 1. Staff reached out to the firms that did not propose and were told that the timing of the work did not fit with their workloads.

Table 1 – Summary of Proposals

Firm	Dudek	HDR
Project Manager	Brian Robertson	Teigan Gulliver
Total Labor Hours (Without Subconsultants)	606 (corrected)	1,020
Fee	\$180,000	\$232,330

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Prior Related Project Committee or Board Action (s)

This item was reviewed and discussed by the Engineering Committee on May 9, 2024. The Engineering Committee directed staff to recommend that the PC 17 Board award the contract to HDR.

Cost Allocation

The proposed fee from HDR is \$232,330 for the RTP Primary and Aeration Gates and Grating Replacement. Staff is requesting a 5% contingency in the amount of \$11,617 for a total of \$243,947 to account for potential unknowns during the design process. This project is funded by the Moulton Niguel Water District.

Budget

The Fiscal Year 23/24 budget for 37241L – Grit//Primary Grating/Gate Replacement is \$150,000, and the budget for 37242L – Aeration Influent/Effluent Gate Replacement is \$100,000, for a total budget of \$250,000.

Recommended Action: Staff recommends that the PC 17 Board i) approve the contract to HDR for a total not to exceed \$232,330 and ii) approve a 5% contingency of \$11,617 for the RTP Primary and Aeration Areas Grating and Gates Project.



PROPOSAL

REGIONAL TREATMENT PLANT PRIMARY AND AERATION AREA GRATING AND GATES REPLACEMENT

SOUTH ORANGE COUNTY WASTEWATER AUTHORITY

APRIL 25, 2024

605 Third Street / Encinitas, CA 92024 / 760.942.5147

229

DUDEK

Cover Letter

April 25, 2024

Jeanette Cotinola, CPCM
Procurement/Contracts Manager
South Orange County Wastewater Authority
34156 Del Obispo Street
Dana Point, CA 92629

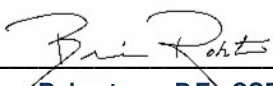
Subject: Proposal for Regional Treatment Plant (RTP) Primary and Aeration Area Grating and Gates Replacement

Dear Jeanette Cotinola:


Dudek is pleased to submit this proposal for the above-referenced project. Our proposal demonstrates our team's informed approach to the SOCWA RTP primary and aeration area grating and gates replacement. Led by Michael Metts and Brian Robertson, with support from internal staff and subconsultant specialists, our team includes industry leaders with project-specific engineering knowledge related to primary and secondary process improvements, structural improvements, plant operations, and more.

Should you have any questions or require additional information, please do not hesitate to contact Project Manager Brian Robertson at 760.479.4845 or brobertson@dudek.com. We value our relationship with SOCWA and look forward to assisting you with this project.

Sincerely,



Brian Robertson, P.E., QSD
Project Manager



Bob Ohlund, P.E.
Vice President

Bob Ohlund is authorized to sign on behalf of Dudek.

DUDEK AT A GLANCE



*Multidisciplinary design,
planning, engineering, and
environmental services*

800+
EMPLOYEES

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CALIFORNIA CORPORATION

**TOP CALIFORNIA
DESIGN FIRM NO. 53**
(Engineering News-Record)

**TOP 50 TRENCHLESS
DESIGN FIRM**
(Trenchless Technology)

12
CALIFORNIA
OFFICES

SOUTH ORANGE COUNTY WASTEWATER AUTHORITY

ADDENDUM No. 1

TO REQUEST FOR PROPOSALS

FOR RTP Primary and Aeration Area Grating and Gates

**THE PROPOSER SHALL EXECUTE THE CERTIFICATION AT THE END OF THE
ADDENDUM AND SHALL ATTACH THE ADDENDUM TO THE PROPOSAL (NOT TO BE
INCLUDED AS PART OF THE PAGE COUNT).**

Revised Scope of Work attached hereto.

DATED: 3/4/2024



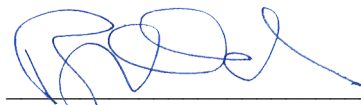
Jeanette Cotinola, CPCM

BIDDER'S CERTIFICATION

I acknowledge receipt of the foregoing Addendum No. 1 and accept all conditions contained herein.

DATED: 4/25/2024

BIDDER:
Dudek

BY: 

Bob Ohlund, P.E.
Vice President

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APPENDIX

A	Resumes
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1.3.1 Identification of Responder

Dudek

Table 1 presents the SOCWA-requested responder information.

Table 1. Dudek Information

Legal name, address and form (e.g., Corporation, LLP, etc.) of company	Dudek Main Office 605 Third Street, Encinitas, CA 92024 A proud California Corporation since 1980 C1210012
Identify any parent companies	Dudek has no parent company
Addresses of principal place of business and, if different, any local office	Main Office 605 Third Street, Encinitas, CA 92024 Orange County 27271 Las Ramblas, Suite 340, Mission Viejo, CA 92691
Name, title, phone, and email address of person to contact about the proposal	Contact Brian Robertson, PE, QSD, Project Manager Address 605 Third Street, Encinitas, CA 92024 Phone 760.479.4845 Email brobertson@dudek.com

DUDEK SERVICES

Agency Permitting
Biological Surveys and Monitoring
CEQA/NEPA Compliance
Climate Action/Adaptation Plans
Coastal Planning/Permitting
Cultural Resources
Civil Engineering
Construction Management

Environmental Planning
Grant Management and Writing
Habitat Restoration and Management
Hazardous Materials Testing
Hydrogeology
Hydrology
Mapping and Surveying

Public Outreach
Urban Design and Planning
Urban Forestry
Wildfire Protection Planning
Water Conservation Planning
Water Infrastructure Planning and Design
Visual Simulations

1.3.2 Approach to the Work

Understanding

We understand that South Orange County Wastewater Authority (SOCWA) is requesting engineering services for the Regional Treatment Plant (RTP) Primary and Aeration Area Grating and Gates Replacement project (Project). The RTP was originally constructed in the early 1980s and has a secondary treatment design capacity of 12 million gallons per day (mgd). Elements of the primary and aeration facilities have experienced significant deterioration and are now in need of improvements in several key areas:

PRIMARY AREA GRATING

In the primary process area, there are typically 4'x3' steel diamond plated gratings that serve for odor control and access to and over the grit influent, grit effluent, and primary channels. A significant portion of this grating, approximately 260 feet, has been identified for replacement as they are heavy, corroded, and flex under foot traffic.

Recognizing these issues, SOCWA staff have implemented safety precautions such as, spot replacements, addition of plywood covers over the grating in high foot traffic areas and avoiding walking over the grating whenever possible. While these temporary solutions have mitigated some risks, they present their own challenges. The spot replacements, for instance, are labor-intensive and disrupt the workflow of operations and maintenance staff. The plywood covers provide temporary prevention of falls into the channels but introduce a tripping hazard. This is particularly concerning as there are routine maintenance activities in the area that require quick maneuvering within short process shutdown periods.



Primary Area Grating

PRIMARY AND AERATION AREA SLIDE PLATES

There are multiple steel influent and effluent slide plates for each of six primary tanks. The plate heights are long (i.e. 5' +/-) compared to the widths which are only 1' or less, a nonstandard size requiring custom fabrication for repairs and replacements. There also appears to be corrosion and/or settlement building along the sliding edges which makes removal/insertion challenging.

The aeration influent and effluent slide plates are larger or wider but have similar design and reported issues with severe corrosion along the galvanized steel bracing. Similar issues are anticipated for the return activated sludge (RAS) gates.

The effluent aeration slide plates are particularly problematic at Aeration Tank 5 and 6, as they are 5' long and multistage with 5 plates in a row (See Figure 1). There have been issues with these plates getting seized or stuck and their removal and



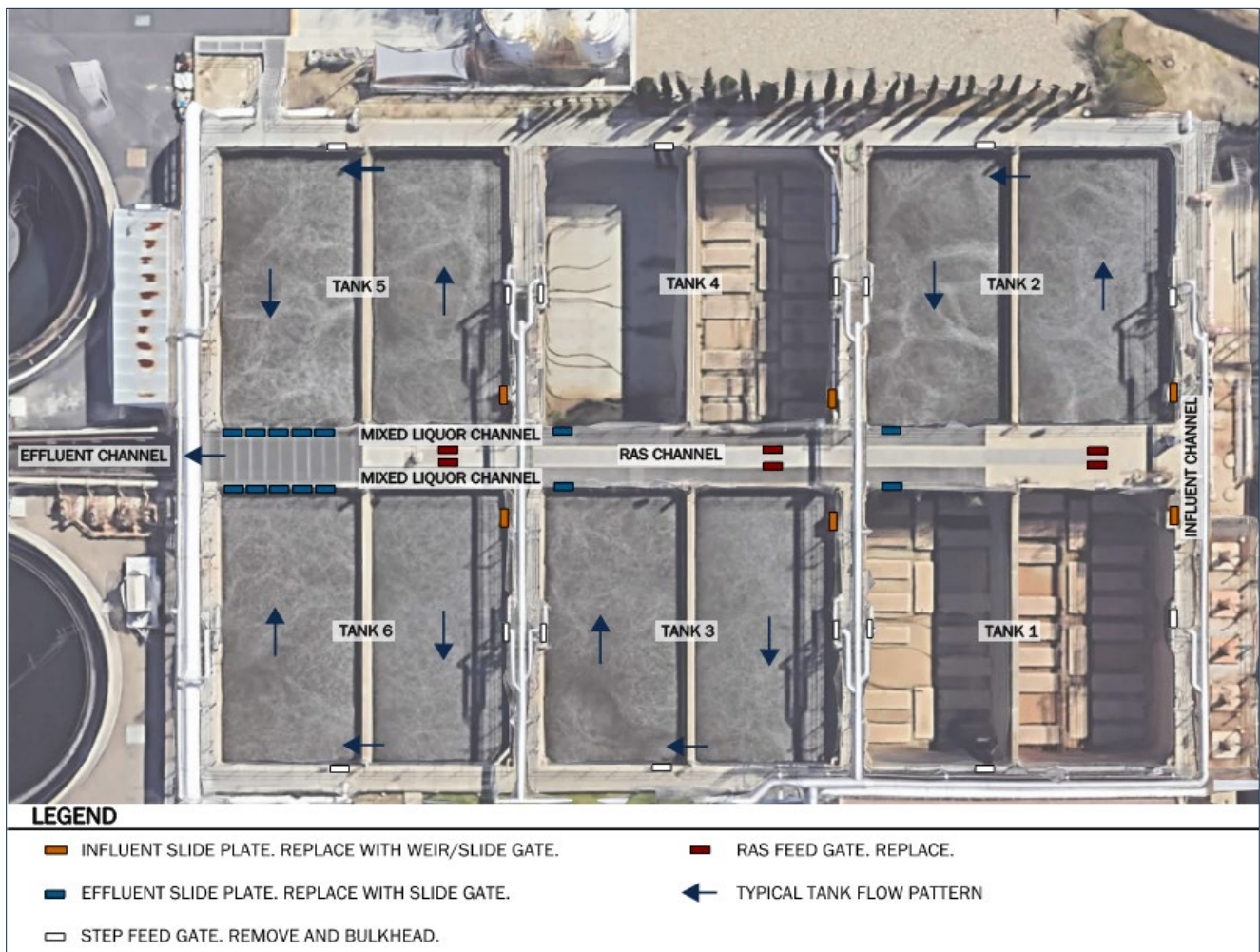
Primary Area Slide Plates

reinsertion require yearly exercising and a team of personnel employing unconventional methods, such as the use of a bottle jack, chain, and I-beam. However, some plates are so firmly stuck that they cannot be removed by staff. This situation interrupts workflow and poses a potential health and safety risk due to weight and lack of permanent gate actuator equipment.

STEP FEED GATES

The existing aeration tanks are currently operating in parallel with a serpentine flow pattern. Step feed operation has been discontinued, so the existing step feed gates are to be removed and the openings are to be sealed with blukhead system such as doveled in concrete or metal plating with gaskets.

Figure 1. SOCWA Regional Treatment Plant Aeration Area



After meeting with SOCWA project management and operations staff, we understand that SOCWA is looking for a robust solution to address existing challenges with health and safety conditions and disruptions to staff time and resource allocation. Given these circumstances, a new permanent grating solution is needed, not only to prevent tripping and falling but also to address the corrosive conditions and repairs to the grating support structures and sealing for odor control. New slide gates with manual operators are needed to increase the reliability of the primary and aeration facilities and accommodate safe access for exercising the gates and cycling tank outages for future maintenance and improvement work.

Approach

Dudek's engineering philosophy is to be an extension and partner for SOCWA in the development of the proposed project. During preliminary design, we seek to bring ideas to the table with a list of pros and cons and workshop those ideas with key SOCWA staff so that their deep understanding of operational needs, capabilities, and risks can be filtered through the proposed options to select the preferred approach. The following sections outline our more detailed technical approach to the project and discuss preliminary options and considerations.

Based on our understanding of the proposed project, several key design focus areas are identified and discussed in the sections below, including:

- Slide Gate Design and Selection
- Maintenance of Plant Operation During Construction
- Structural Considerations

SLIDE GATE DESIGN AND SELECTION

One of the most important outcomes of the project is to select and size slide gate equipment that provides a robust and reliable isolating and conveying solution for SOCWA long-term, minimizing the need for staff to perform unscheduled maintenance and repairs to the equipment and simplify the process for regular exercising of the gates. Our approach is to work collaboratively with qualified slide gate manufacturers (e.g., Waterman, RW Gate, Fontaine Aquanox) and SOCWA staff to understand space and configuration constraints and develop pros and cons and a consensus recommendation for the size, hoist type (e.g., handwheel, handcrank, square nut), material type (e.g., stainless steel 316 or aluminum), and upward or downward opening configuration.

In the initial design phase, we will explore the feasibility of introducing new, standard-sized weir/slide gates with reduced height to enhance cost-effectiveness and lifting access for the primary area gates. Likewise, for the gates of Aeration Tanks 5 and 6, we will seek ways to optimize the gate system, possibly by implementing fewer new gates as opposed to a complete replacement of all 5 gates.

Another important task during preliminary design is to develop and evaluate alternative slide gate mounting locations, to the tank concrete walls and platform framing or within the existing concrete openings for the slide plates and/or decking area, and identify the impacts to the adjacent structures, utilities, odor boxes, baffles, etc.

MAINTENANCE OF PLANT OPERATION DURING CONSTRUCTION

The 24/7 operation of the primary and aeration facilities is crucial, and any prolonged shutdowns can pose significant challenges for plant staff in managing the flows and treatment performance regulatory risk. Maintaining operations during construction is a key concern as the replacement of stop plates with weir and slide gates will cause extended disruption. Our design team will work with plant operations staff to establish acceptable shutdown periods and procedures, and to define responsibilities between the design team, contractor and SOCWA staff.

Our preliminary strategy for maintaining plant operation during construction involves leveraging the redundancy of the existing system and isolation equipment. We plan to develop a suggested sequence of work considering partial shutdown (e.g. no more than 2 primary or aeration tanks outages at a time) and use of temporary bulkheads in the perimeter channels to passively bypass and reduce the need for temporary bypass pumping and

its associated spill risk and additional costs. We will also explore design opportunities that allow the installation of new slide gates around the stop plates, with the existing plates serving as isolation, to further minimize the need for temporary bypass equipment.

Our initial review indicates that installing new slide gates for Aeration Tank 5 and 6 may require special attention. These tanks are where interior channels outlet and comeingle with the aeration tank flow. If the water level in the tanks cannot be drawn down or alternative ideas, such as the installation of temporary coffer dams, prove impractical, bypass pumping may be necessary at this location. We will workshop ideas, such as identifying use of one of the existing Godwin diesel backup pumps for the interstage pumps as a contingency measure during construction.

Our field discussions have revealed that the operations staff have ideas specific to this project on how to isolate the primary and aeration tanks and maintain feed to the interstage pumps. We intend to utilize these insights along with our findings and recommendations and incorporate them into phasing exhibits to foster workshop discussions and obtain consensus that leads to well-defined work restrictions and sequencing guidance in the bid documents that enable SOCWA staff to mitigate construction risks and avoid change orders or conflicts with other concurrent work at the plant.

STRUCTURAL CONSIDERATIONS

Rehabilitation of the Primary and Aeration areas will likely consist of various concrete surface repairs, grating replacement with a more resilient material such as stainless-steel or fiber-reinforced polymer (FRP), gate and equipment frame replacement, anchor bolt replacement, and replacement or modification of impacted utility structures (i.e. pipe supports; odor boxes). The extent of structure deterioration and required repairs will be determined during a site investigation to the extent possible while the areas are in operation. Anticipated repairs include concrete resurfacing by means of epoxy repair mortar, corrosion inhibitors on exposed and/or corroding reinforcement, replacement of nonstructural embeds, frames and supports with 316 stainless steel construction and new 316 stainless steel anchor bolts for all equipment and attachments.

Scope of Services

Tasks are to include the following per the RFP requirements. Dudek's assumptions, clarifications, and recommendations to enhance the scope of work are included below each scope item in *blue italics*:

- I. *Project Management and Progress Meetings.* FIRM shall conduct virtual or in-person monthly progress meetings with SOCWA staff. The primary purpose of the meetings is to review schedule, task progress, and outstanding action items. The FIRM shall prepare the agenda, the action item list, and the decision log for each meeting. FIRM shall plan for a maximum of 9 progress meetings. The kickoff meeting will be conducted in person at the Regional Treatment Plant. For more details on progress meetings please see RFP section 1.7.
- II. *Data Collection and Document Review.* SOCWA will provide the FIRM with available record drawings and previous studies.
 - *Previous site survey and record drawing CAD base files will be provided for Dudek use and field or aerial survey is not needed for the project. CAD basemaps generally cover the entire*

primary and secondary areas. Minor updates to the base files are needed based on findings from field verification and measurements.

- *Complete sets of the record drawings will be provided.*

III. *Design Workshop.* This workshop shall include bypass/sequencing concept plan, and also including gates alternative analysis. SOCWA will take four weeks to review the submittal and return comments. FIRM shall prepare an implementation plan showing how work can be done while maintaining the facility in service.

- *Deliverable: Preliminary Design Memo to document the following:*
 - *Bypass and sequencing concept plan description and accompanying exhibits.*
 - *Summary of key discussions and consensus recommendations for implementation of grating and gate replacements.*
 - *Summary of design criteria, concepts, and approach to final design.*
 - *Preliminary construction cost estimate.*
- *The design workshop will include summary of grating and grate type alternatives development concepts and evaluation. This will be presented in table or slide deck format and included as an attachment to the Preliminary Design Memo.*

IV. *50% Submittal.* This submittal shall address all SOCWA's comments from the Design Workshop. This submittal shall also include comments returned from the Design Workshop with the completed plans, specifications, and cost estimate. SOCWA will take four weeks to review the submittal and return comments.

- *There are 12 primary influent gates and 18 primary effluent gates that will be replaced with slide or weir gates with manual operators.*
- *All work shall conform to the California Building Code (CBC) latest edition and its referenced code documents.*
- *Structural condition assessment is needed but will not require process shutdowns or confined space entry, and destructive methods shall not be performed.*
- *Seismic design/retrofit of the existing Primary or Aeration areas will not be provided.*
- *It is assumed that the new slide gates will not require modifications to major structural members (i.e. concrete beams; walkway platform framing).*
- *It is assumed that required concrete repairs are localized to areas immediately adjacent to deteriorated grating and gates. Extensive structural rehabilitation beyond these areas is not included as part of the Scope of Work. If extensive structural damage is identified during the site investigations, Dudek shall notify SOCWA and an amendment may be developed to address the design of additional concrete repairs.*

- The project will not impact electrical facilities; electrical engineering services are not needed.
- The estimated drawing list is summarized in **Table 2**. We assume that construction sequencing, work restriction, and bypass plan will primarily be addressed in the specifications along with notes and an overall plan on one drawing sheet for each process area (G-5 and G-6). Multiple drawing sheets to identify construction sequencing for each process area are not needed. Preparation of a detailed sequencing plan for the project will be a specification requirement for the contractor to prepare.

Table 2. Estimated Drawing List

No.	Sheet No.	Sheet Name
1	G-1	Title Sheet, Vicinity Map
2	G-2	General Notes and Drawing Index
3	G-3	Symbols, Abbreviations, and Schedules
4	G-4	Overall Site Plan and Contractor Staging Area
5	G-5	Primary Area Maintenance of Plant Operation / Phasing Plan
6	G-6	Aeration Area Maintenance of Plant Operation / Phasing Plan
7	D-1	Primary Area Structural Demolition Plan
8	D-2	Aeration Area Structural Demolition Plan
9	D-3	Demolitions Details - 1
10	D-3	Demolitions Details - 2
11	S-1	Structural General Notes - 1
12	S-2	Structural General Notes - 2
13	S-3	Special Inspections and Notes
14	S-5	Primary Area Structural Repair Plan
15	S-6	Primary Area Structural Repair Sections
16	S-8	Aeration Area Structural Repair Plan
17	S-9	Aeration Area Structural Repair Sections
18	S-10	Structural Typical Details - 1
19	S-11	Structural Typical Details - 2
20	S-12	Structural Details - 1
21	S-13	Structural Details - 2
22	M-1	Symbols, Legend & Abbreviations
23	M-2	Primary Area Mechanical Plan
24	M-3	Primary Area Mechanical Sections
25	M-4	Aeration Area Mechanical Plan
26	M-5	Aeration Area Mechanical Sections
27	M-6	Mechanical Typical Details
28	M-7	Mechanical Details

- V. *90% Submittal.* The 90% submittal shall address all SOCWA's comments from the 50% submittal. This submittal shall also include the same elements as the 50% submittal with the completed plans, specifications, and cost estimate. SOCWA will take four weeks to review the submittal and return comments.
 - *Refer to assumptions for 50% submittal.*

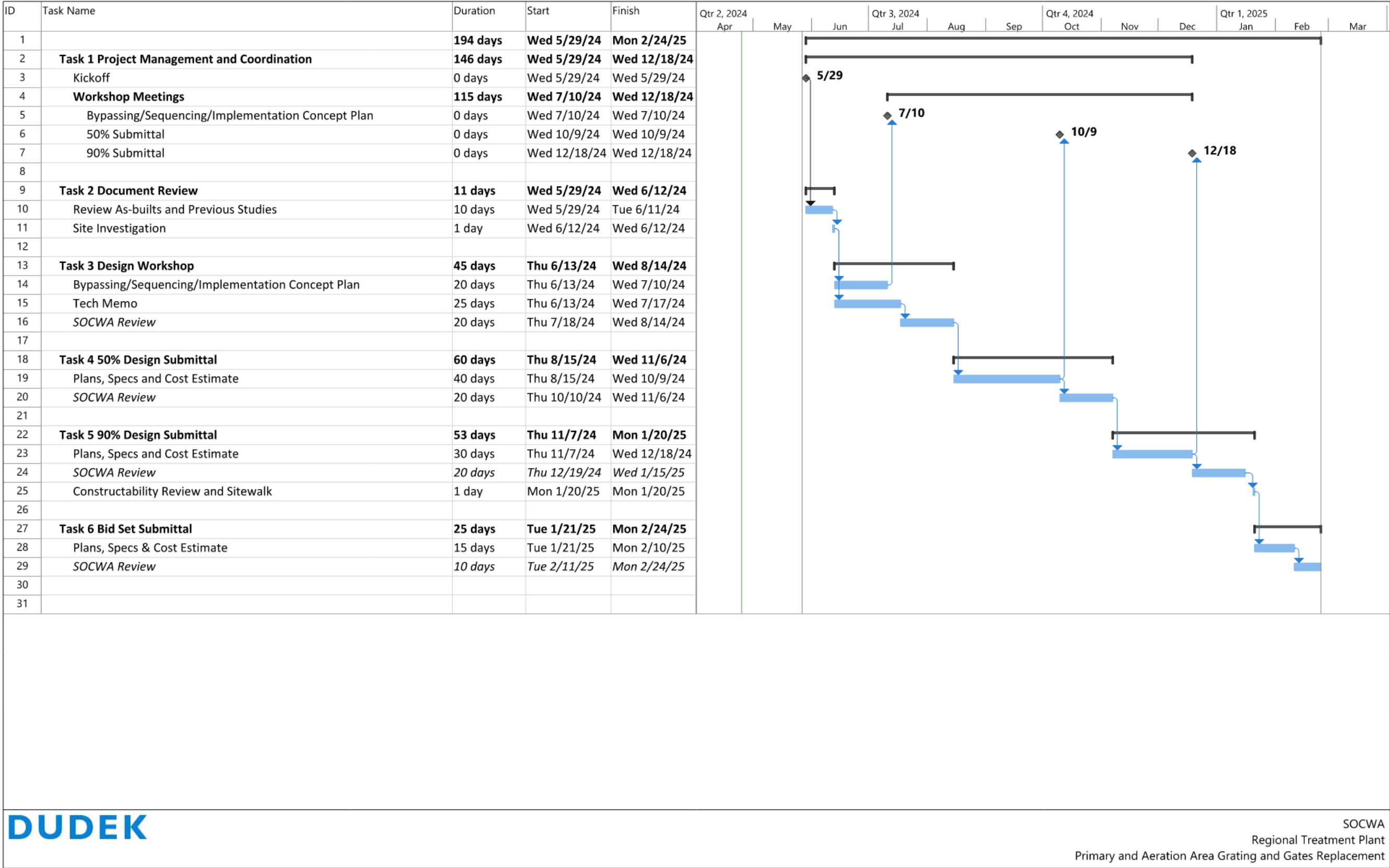
- VI. *Constructability Review.* This shall be in person and a site walk shall be made prior to discussions on Bid Set of documents.
 - *Constructability review will be conducted after SOCWA provides review comments on 90% submittal.*

- VII. *Bid Set.* FIRM shall provide the complete bid set with the completed plans, specifications, and cost estimate. This Bid Set shall include SOCWA's comments from the Design Workshop, 50% Submittal, 90% Submittal and constructability review.
 - *Bid support services and preparation of a conformed set of drawings and specifications will be provided separately if needed. Construction support services will be provided separately if needed.*

- VIII. *Technical Specifications.* SOCWA will provide the FIRM with the listing of standard specifications from Division 1 to be used for the project after the 50% submittals review. FIRM is responsible for preparing Section 01010, Summary of Work and Section 01014, Work Restrictions and Sequence. FIRM shall meet with SOCWA to discuss coordination of specifications sections referenced in the technical specifications. FIRM shall submit required information for review at the 90% submittal.

- IX. *Construction Sequencing and Bypass Plan.* FIRM shall evaluate the need to bypass the influent channel for the grit grating work. Bypass of the primary effluent channel and the ability to feed the interstage pumps. The minimum number of tanks in service and sequence to stagger the work between each tank are some examples of the sequence and bypass.

Figure 2. Work Schedule



Project Management and Quality Control

Regular Project Meetings. We utilize regularly scheduled meetings with the project team, SOCWA staff, and subconsultants to keep all parties apprised of the project's status. All meetings include an agenda prepared by the Dudek project manager and are documented through meeting minutes, with action items clearly identified.

In-Person Meetings, Collaboration, and Technology. The Dudek team offers many tools for efficient and productive in-person and virtual collaboration with the Authority. These include in-person and virtual meetings using Microsoft Teams or Zoom, file sharing/storage via ShareFile, document coauthoring through SharePoint, and client web portals.

Our project teams also utilize collaborative PM software tools that provide real-time task tracking, updates, and communication to reduce the risk of tasks slipping through the cracks, being overlooked, or falling behind schedule.

Scope Definition, Budget, and Schedule. We will work with the Authority to develop the appropriate scope of services to accomplish project goals and objectives, schedules, budgets, and work products. In particular, Dudek understands and appreciates the importance of managing project scope changes and the schedule. Where project changes may disrupt the scope and/or schedule, Dudek documents these changes in a change management log, which is shared with the Authority each month if changes materialize. The change management log includes a summary of the change, the driver for the change, documentation of the date and correspondence for the change, and an estimation of how the change will impact the project's scope, schedule and/or budget.

Proactively managing the project scope, budget, and schedule is critical to the success of any project. Dudek consistently evaluates our project manager's performance based on measurable criteria and provides training, coaching, and mentorship programs to support our project managers. Your success is our success, and our commitment to providing the best training, tools, and resources to our project managers is a key reason our projects outperform other firms in the industry.



Subconsultant Agreements. A well-managed project benefits from frequent, documented communication between all project team members, including subconsultants. We initiate this process with insurance certificates and detailed written scopes of services, schedules, and budgets.

Quality Assurance and Quality Control. Quality assurance is the responsibility of **ensuring the conduct of proper** quality control reviews. Quality assurance is a project management responsibility conducted **following** either the standard quality control practice or a specifically documented quality control plan. For major milestone deliverables, Dudek project managers assign the quality control review to a principal-level engineer who is familiar with the unique aspects or technology related to the project. For this project, the Dudek project manager will assign each deliverable for QC review with an appropriate principal-level engineer to perform review and comment to be incorporated **before** submittal to the Authority.



1.3.3 Experience and Technical Competence

Dudek engineers are recognized experts in the design of wastewater treatment facilities. Our referenced engineering projects are chosen specifically for project similarities and team member involvement. Similarities to the Authority's project include:

HUSTON CREEK WASTEWATER TREATMENT PLANT PRIMARY CLARIFIER AND DEWATERING BUILDING IMPROVEMENTS

Client: Crestline Sanitation District

Reference: Rick Dever, District Manager, 909.338.1751

Period of Performance: 1/10/2019 – 5/21/2021

Proposed Key Personnel: Brian Robertson, Greg Guillen, Agata Bugala

Dudek has completed bid packages and is nearing completion of construction support for a new two-story biosolids dewatering building and primary clarifier for Crestline Sanitation District's 1.0 MGD Huston Creek WWTP. Project includes new structures, process equipment, pumps, primary influent channels and slide gates, electrical systems, a new emergency generator, and more. Project topography required careful structural design along with maintenance of plant operations planning to support new facilities. Project completion will provide the District with improved reliability and performance of the facility for regulatory compliance, mitigated health and safety concerns, and reduced O&M costs.



SAN LUIS REY WATER RECLAMATION FACILITY MAJOR UPGRADES PROJECT

Client: City of Oceanside

Client Reference: Mabel Uyeda, P.E., Principal Water Engineer, 760.479.4107

Period of Performance: 12/3/2014 – 9/30/2016

Dudek Team Members: Justin Scheidel

Dudek was contracted to perform services for a series of improvement projects including developing plans for replacement of aeration basin slide gates, relining the aeration basin influent channel and demolition of abandoned piping and conduits for the 15.4-million-gallon-per-day treatment facility. Design involved working closely with operations staff to develop construction phasing plans that reduced bypass pumping costs while maintaining plant operations during construction. Project provides operations staff with treatment flexibility and optimization while reducing energy costs and facilitating maintenance operations.



WATER RECLAMATION FACILITY 1 AERATION SYSTEM IMPROVEMENTS PROJECT

Client: City of Corona

Client Reference: Alan Zhang, 951.736.2236

Period of Performance: 7/1/2021 – Ongoing

Dudek Team Members: Brian Robertson, Greg Guillen, Agata Bugala

Dudek was contracted by the City of Corona for a new air piping supply and diffuser system for Aeration Basins 1, 2, and 3 at WRF-1A. Detailed design elements included replacing the existing air piping below grade and deck with a new pipe bridge and overhead pipe support system for a new 20" and 12" air piping system with motor operated valves, and flows meters. Design also included development of a phasing plan to maintain air supply and keep 2 of the 3 basins in service during construction and basins upgrades including replacement of the influent and effluent slide gates, replacement of mud valves, new retrievable fine bubble tube diffusers, and supporting electrical control panel and wiring. Dudek is currently providing engineering support during construction services.



SANTA MARIA WASTEWATER TREATMENT PLANT HEADWORKS UPGRADE PROJECT

Client: Ramona Municipal Water District

Client Reference: Erica Wolski, General Manager; 760.789.1330

Period of Performance: 3/28/2017 – Ongoing

Dudek Team Members: Michael Metts, Brian Robertson, Justin Scheidel, Agata Bugala

In 1981, the Ramona Municipal Water District (District) took ownership of the Santa Maria Wastewater Treatment Plant (SMWWTP) from the County of San Diego. In 1995, the Regional Water Quality Control Board approved the expansion of the SMWWTP to a capacity of 1.0 mgd. Since construction, the SMWWTP has not included preliminary treatment. Influent flow is lifted into influent equalization basins before conveyance to the secondary treatment process. The influent pump station has experienced significant ragging challenges, and the equalization basins are regularly taken offline to remove grit accumulation. Dudek designed a new influent lift station utilizing Archimedes-style screw pumps to eliminate ragging concerns, a new headworks structure with channels, slide gates, mechanical screening with sluice and wash/press, a vortex grit chamber with grit pumps and classifier, and an influent flow meter. The design also included relocating the main influent trunk sewer and influent force main to the new headworks facility. Also, a standby generator was designed to provide critical backup power for reliability and uninterrupted operation.



4S RANCH WRF HEADWORKS SCREENING SYSTEM IMPROVEMENTS

Client: Olivenhain Municipal Water District

Client Reference: Lindsey Stephenson, Engineering Manager, 760.753.6466

Period of Performance: 5/21/2021 - Ongoing

Dudek Team Members: Brian Robertson, Michael Metts, Greg Guillen, Agata Bugala

OMWD contracted with Dudek to provide design services for the headworks screening system improvements project. The project will replace the aging mechanical screen and bypass bar rack with two new Parkson AquaGuard mechanical screens, wash-presses, and associated instrumentation and control systems. The scope also includes rehabilitating influent channels and new epoxy liners, replacement of slide gates, odor control improvements, building modifications and access improvements, a new grit classifier, and more. Key project challenges include the existing building's tight space and working conditions and the need for raw influent bypass pumping. During the design, the District also added scope for miscellaneous improvements in the WRF, such as high flow and off-spec diversion pumping and yard piping, to improve operational reliability and emergency contingency measures. The design is currently 90% complete and is scheduled for construction in FY 2024-2025.



1.3.4 Key Personnel and Subconsultants

Dudek will serve as the prime consultant providing overall management and engineering services. **Brian Robertson, PE, QSD**, will serve as your dedicated project manager and the main point of contact for SOCWA. He is a successful project manager with sixteen years of experience providing wastewater infrastructure design and rehabilitation to similar clients. Mr. Robertson will oversee the development and execution of the tasks / projects, tracking budgets and schedules. He understands the importance of good communication, being solution-oriented, and efficient multitasking. He will facilitate the flow of information among the team and with the District's project manager. Supporting Mr. Robertson will be **Michael Metts, PE**, serving as principal in charge. Mr. Metts has 40 years of experience managing, planning, and designing water infrastructure projects throughout California and serves as Dudek's Chief Engineer. **Justin Scheidel, PE**, will provide expert project quality control. He will thoroughly review all deliverables before delivery to the Authority, including those of our sub-consultants.

For this project, Dudek will supplement our team with the services of Kelsey Structural - a firm with whom we have a long-term relationship. Matt Stone, PE, SE of Kelsey Structural will provide structural engineering services. Mr. Stone recently provided structural services for SOCWA's JBL Digester 1 and 2 Manway Access Improvements Design.

We understand that the Authority is considering the Dudek team in its entirety; therefore, we will not make changes in team composition, including the Project Manager, without prior consultation and written approval from the Authority.

Figure 3 illustrates the team organization and lines of communication. Brief biographies for key personnel follow. Focused resumes are provided in **Appendix A**.

Current and Future Workload of Key Staff. We have reviewed the scope of work requirements and have carefully selected a talented, collaborative project team personnel with the capabilities and perseverance to satisfy the needs of the District's contract while meeting the performance schedule. Dudek routinely works on projects of similar scope and scale with public agencies, and we are experts in effectively balancing staff resources and workloads to service your contract. Michael Metts and Brian Robertson will ensure the availability and allocation of staff resources to this contract.

Figure 3. Project Organization Chart





Michael Metts, PE
Principal in Charge

Qualifications

- 40 years of experience in water, wastewater, and recycled water engineering design, permitting, water resources planning, and construction management and assistance
- Project experience encompasses the evaluation and expansion of existing facilities as well as the design of new facilities
- 20+ years serving as District Engineer for various water/wastewater districts
- Strong skills and proven history of tracking, monitoring, team delegation, deliverable quality assurance, engineering guidance, accounting, and subconsultant coordination

Related Experience

- District Engineer, Ramona Santa Maria WRF Headworks
- Principal Engineer, SEJPA WRF Headworks Upgrade
- Principal Engineer, Corona WRF1 and WRF 2 Headworks Upgrades
- Principal, CIP Engineering Services, South Orange County Wastewater Authority

Education & License

BS Civil Engineering
Civil Engineer, CA No. 42586



Brian Robertson, PE, QSD
Project Manager

Qualifications

- Project manager with 17 years' extensive experience in water, wastewater and drainage conveyance systems for cities and districts throughout Southern California
- Received recognition for his work preparing detailed analysis, reports, and PS&E
- Seamless coordination with team members, utilities, and essential governmental agencies.

Related Experience

- Project Manager, Digester Tank Improvements for La Salina Wastewater Treatment Plant, Oceanside Water Department
- Project Manager, WRF 1 Aeration System Improvements, City of Corona
- Lead Engineer, Huston Creek WWTP Dewatering Building and Primary Clarifier, Crestline Sanitation District
- Lead Engineer, Santa Maria WRF Headworks, Ramona Municipal Water District
- Senior Engineer, 4S Ranch WRF Headworks Screening System Improvements, Olivenhain MWD

Education & License

BS Civil Engineering
CA PE C77990
Certified QSD



Gregory Guillen, PE
Process Engineer

Qualifications

- Chemical and environmental engineer with 15 years' experience focused on water and wastewater treatment
- Expertise in advanced membrane materials and processes for separations, including those found in water and wastewater treatment
- Authored several peer-reviewed papers in the field of desalination and membrane filtration
- Holds multiple patents for membrane formation

Related Experience

- Lead Process Engineer, Santa Maria WRF Headworks, Ramona Municipal Water District
- Lead Process Engineer, 4S Ranch Water Reclamation Facility Headworks Screenings System Improvements, Olivenhain Municipal Water District
- Process Engineer, Woods Valley Ranch Water Reclamation Facility Phase 2, Valley Center MWD
- Project Engineer, Pressurization and Odor Control Study, Orange County Sanitation District

Education & License

PhD, Civil Engineering
MS, Civil Engineering
BS Environmental Engineering
Civil Engineer, CA No. 83897

Table 3. Project Team Overview

Name/Role	Education /License	Profile	Relevant Experience
Justin Scheidel, PE Quality Control	San Diego State University MS, Civil Engineering BS, Civil Engineering CA PE No. 82058	Justin Scheidel is a project manager with 21 years' experience specializing in water infrastructure design, wastewater treatment design, and construction management. Mr. Scheidel is responsible for detailed design and layout, civil/mechanical calculations and analysis, equipment selection, cost estimation, and development of plans and specifications. He is experienced in all phases of engineering, including planning, design, and construction	<ul style="list-style-type: none"> San Luis Rey Water Reclamation Facility Major Improvements, City of Oceanside, California Santa Maria Water Reclamation Plant Clarifier No. 4, Ramona Municipal Water District, California. FE14-07 Primary Influent Channel Repairs, Orange County Sanitation District, Fountain Valley, California San Vicente Third Stage Reverse Osmosis, the Ramona Municipal Water District, Ramona, California.
Agata Bugala, EIT, ENV SP Project Engineer	The City College of New York BE, Environmental Engineering Engineer-in-Training No. 173501 Envision Sustainability Professional (ENV SP) No. 47181	Ms. Bugala has 3 years' professional experience as a water/wastewater engineer specializing in the design of water and wastewater treatment systems, including planning and process engineering.	<ul style="list-style-type: none"> 4S Ranch WRF Headworks Screening System Improvements, Olivenhain MWD Various Projects, Orange County Sanitation District Separate Industrial Wastewater Reclamation Facility, City of Gonzales
Matt Stone, PE, SE Structural Engineering <i>Kelsey Structural Group</i>	University of California San Diego MS & BS, Structural Engineering CA PE No. 78488 CA SE No. 6183	Matt Stone has over 13 years of project management and structural design work encompassing infrastructure, water, wastewater, and military projects. He specializes in assessing, designing, and retrofitting water and wastewater treatment, storage, and conveyance facilities.	<ul style="list-style-type: none"> Dudek City of Gonzales Industrial Water Reclamation Facility Dudek Westside Water Reclamation Plant; Victor Valley WRA Dudek City of Corona WRF-1A Aeration Improvements

KELSEY STRUCTURAL FEE SCHEDULE



STRUCTURAL ENGINEERING SERVICE PROPOSAL

APPENDIX C
RATE SCHEDULE

SOCWA RTP Primary and Aeration Grating and Gates Replacement

April 2024

HOURLY RATES

Principal	\$235.00
Project Manager	\$210.00
Senior Engineer	\$190.00
Project Engineer	\$170.00
Assistant Engineer	\$150.00
CAD Technician	\$140.00
Administration	\$105.00

Hourly rates include provisions for normal overhead costs such as fringe benefits, office rental, utilities, insurance, clerical services, equipment, normal supplies and materials, and in-house reproduction services. Mileage shall be reimbursed at a rate equivalent to the current calendar year's IRS standard mileage rate. Rates shown are valid through December 31, 2024.

1.3.6 Conflicts of Interest

ATTACHMENT D AFFIDAVIT CERTIFYING NO CONFLICTS OF INTEREST

The undersigned declares:

I am the Vice President of Dudek ("Proposer"), the party making the foregoing bid.

As a California public agency, SOCWA is subject to conflicts of interest rules under the Political Reform Act ("PRA") and California Government Code Section 1090 ("Section 1090").

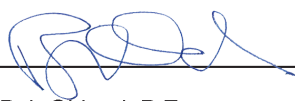
The PRA prohibits a public official at any level of state or local government from making, participate in making, or in any way attempt to use their official position to influence a governmental decision in which the official has a financial interest. A public official has a financial interest in a decision if it is reasonably foreseeable that the decision will have a material financial effect on the public official, a member of the public official's immediate family, or on: (a) a business in which the public official has a direct or indirect investment worth \$2,000 or more; (b) real property in which the public official has a direct or indirect interest worth \$2,000 or more; (c) any source of income of \$500 or more received within 12 months prior to the time when the decision is made; (d) a business in which the public official is a director, officer, partner, trustee, employee, or has a management position; or (e) the donor of a gift to the public official of \$250 within 12 months prior to the time when the decision is made.

Section 1090 provides that public officials and public employees may not be "financially interested" in "any contract made by them in their official capacity."

By signing below, Bidder acknowledges that it (i) has considered persons with whom it has business relationships as to the potential for such persons to have a conflict of interest, (ii) has considered the requirements and provisions of the PRA and Section 1090, (iii) certifies that it does not know of any facts which constitute a violation, or should be further investigated to prevent a violation of those provisions, and (iv) agrees that Bidder will immediately notify SOCWA if it becomes aware of any such fact at a later date.

Any person executing this declaration on behalf of a Bidder that is a corporation, partnership, joint venture, limited liability company, limited liability partnership, or any other entity, hereby represents that he or she has full power to execute, and does execute, this declaration on behalf of the Bidder.

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct and that this declaration is executed on April 25, 2024 [date], at Encinitas [city], California [state].

Signature: 
Bob Ohlund, P.E.

Title: Vice President

1.3.7 Non-Collusion Affidavit

ATTACHMENT B NON-COLLUSION AFFIDAVIT


The undersigned declares:

I am the Vice President of Dudek, the party making the foregoing bid.

The bid is not made in the interest of, or on behalf of, any undisclosed person, partnership, company, association, organization, or corporation. The bid is genuine and not collusive or sham. The bidder has not directly or indirectly induced or solicited any other bidder to put in a false or sham bid. The bidder has not directly or indirectly colluded, conspired, connived, or agreed with any bidder or anyone else to put in a sham bid, or to refrain from bidding. The bidder has not in any manner, directly or indirectly, sought by agreement, communication, or conference with anyone to fix the bid price of the bidder or any other bidder, or to fix any overhead, profit, or cost element of the bid price, or of that of any other bidder. All statements contained in the bid are true. The bidder has not, directly or indirectly, submitted his or her bid price or any breakdown thereof, or the contents thereof, or divulged information or data relative thereto, to any corporation, partnership, company, association, organization, bid depository, or to any member or agent thereof, to effectuate a collusive or sham bid, and has not paid, and will not pay, any person or entity for such purpose.

Any person executing this declaration on behalf of a bidder that is a corporation, partnership, joint venture, limited liability company, limited liability partnership, or any other entity, hereby represents that he or she has full power to execute, and does execute, this declaration on behalf of the bidder.

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct and that this declaration is executed on April 25, 2024 [date], at Encinitas [city], California [state].

Signature: 
Bob Ohlund, P.E.

Title: Vice President

1.3.8 Certifications

Each respondent must include the following signed certifications with its proposal:

1. Respondent certifies that it is not aware of any actual or potential conflict of interest that exists or may arise by executing the contract or performing the work that is the subject of this RFP.
2. Respondent certifies that it is willing and able to obtain all insurance required by the form contract included as Attachment C.
3. Respondent certifies that it has conducted a reasonable and diligent inquiry concerning the minimum and/or prevailing wages required to be paid in connection with the performance of the work that is the subject of this RFP and certifies that the proposed pricing includes funds sufficient to allow respondent to comply with all applicable local, state, and federal laws or regulations governing the labor or services to be provided.
4. Respondent acknowledges and agrees with all terms and conditions stated in the RFP, except as expressly noted below.
5. Respondent certifies that all information provided in connection with its proposal is true, complete, and correct.

Dudek respectfully requests the Authority's consideration of the following *exceptions* to the SOCWA Agreement for Professional Services.

Section 4.3: *Add a performance standard after the first sentence: "Consultant shall perform the services with the skill and care ordinarily exercised by members of the same profession operating under similar circumstances."*

Section 6.1: *Add the following after paragraph 6.1.3: "Notwithstanding the foregoing, with respect to any professional liability claim or lawsuit, this indemnity does not include providing the primary defense of SOCWA Indemnitees, provided, however, Engineer shall be responsible for SOCWA Indemnitees' defense costs to the extent such costs are incurred as a result of Engineer's negligence, recklessness or willful misconduct."*

Appendix A

Resumes

Michael Metts, PE

PRINCIPAL IN CHARGE

Michael Metts is a principal engineer and manager of Dudek's engineering services with 40 years' experience in civil engineering and is a registered engineer in the State of California. Mr. Metts' engineering experience encompasses water, wastewater and recycled water engineering design, permitting, water resources planning, facility design, and construction management and assistance. He has provided project management and principal in charge services throughout the southwestern United States. Mr. Metts' project experience encompasses the evaluation and expansion of existing facilities as well as the design of new facilities, allowing him to anticipate project challenges, to the benefit of his clients. He is committed to maintaining clear and open communication with the client, while maintaining control of the project budget and schedule, as well as proactively delivering cost-effective and innovative project solutions.

Project Experience

Ramona Municipal Water District, Ramona, California. (14 years) Provides district engineering and engineering department management services under the direction of the general manager. Services include evaluating and recommending improvements to the District's Engineering Department operations to maximize efficiency and streamline daily functions; and providing day-to-day management of RMWD engineering operations, including capital budget, water resources planning, support facilities planning, environmental services, quality control, construction, developer designed and constructed facilities, negotiating developer funded improvements and agreements, managing Legislative Code revisions, coordination with other RMWD departments and outside agencies, rate and fee studies assistance, urban water and stormwater management plans, mitigation programs, assessment district formation, evaluation and assistance with grant and loan applications, and attendance at board meetings.

Wastewater Treatment

Coastal Treatment Plant Tertiary System Upgrades, South Orange County Wastewater Authority, Laguna Niguel, California. Principal engineer for design of upgrades to the 2.5 MGD Advanced Water Treatment facility, including repairs and recoating of the steel filter tanks and supports, replacement of filter media, pneumatic valves, and level transmitters for the Evoqua sand filters, a new horizontal centrifugal filter supply pump, the addition of an ultrasonic level sensor and VFDs for enhanced pumping control, replacement of chlorine contact tank vertical mixers, and replacement of the motor control center for the tertiary treatment system. The design phases was accelerated to meet a narrow plant shutdown window during the low water demand winter months.



Education

University of Kentucky
BS, Civil Engineering,
1983

Certifications

Professional Civil
Engineer (PE),
CA No. 42586

Professional Affiliations

American Public Works
Association (APWA)
American Society of Civil
Engineers
American Water Works
Association
California Water
Environment Association
National Society of
Professional Engineers
Water Environment
Federation

Influent Sewer Line Collapse – Emergency Services, South Orange County Wastewater Authority, Dana Point, California. Served as the project manager and Principal in Charge for an emergency project where two force mains, 20-inch and 16-inch, collapsed due to extensive corrosion damage. Dudek evaluated the situation and quickly developed innovative solutions for reinstatement of the force mains. We coordinated with SOCWA and MNWD to correlate pump station constraints with need to shut down the force mains for repair. The solution involved transferring all flow from one force main to the other during limited duration low flow conditions in the middle of the night. Each force main was repaired in consecutive night periods to reinstate the force mains without damage to other portions of the Techite force mains due to increased pressure. The project also involved coordination of excavating the plant roadway to maintain scheduled deliveries of biosolids to the plant, operations that required extremely heavy truck transport within the construction zone.

Design Services Emergency Replacement of Export Pipeline, South Orange County Wastewater Authority, Dana Point, California. Served as project manager and provided field evaluation of emergency conditions, provided engineered solution to emergency situation, coordinated closely with client and contractor to develop engineering solution in limited schedule, provided quality control review of deliverables and engineering efforts, assisted in field during construction, acted as primary contact for client. The project involved the emergency repair of two 4-inch sludge transport pipelines within an ecologically sensitive area of Orange County. Development of the engineering repair documents was required under a very short time schedule. Dudek developed the repair document and worked closely with the contractor to get the repair completed within time constraints to avoid trucking of sludge through the adjacent heavily used park.

Santa Maria WWTP Headworks Upgrade, Ramona Municipal Water District, California. Principal in Charge for the design of a new headworks facility at the Santa Maria WWTP. The plant's existing influent lift station and downstream processes have been affected by rags and grit due to a lack of headworks screening and grit removal for the plant. The project included relocation of the influent truck sewer, a new headworks structure with influent screw pumps, mechanical screenings equipment, grit removal, and a new emergency generator. Various project challenges included construction phasing, large equipment and structures, utility relocation, and connections to existing facilities.

4S Ranch WRF Digester Support and Oxidation Ditch Optimization, Olivenhain Municipal Water District, Encinitas, California. Served as project principal engineer for engineering and operational support services at the 4S Ranch WRF to support ongoing efforts to optimize the oxidation ditch biological treatment process and digester performance. The District faced process upset conditions after transitioning from aerobic to facultative digestion and turned to Dudek for process support. With the Dudek team performed microscopic examination of the activated sludge, analyzed water quality, operational, and process control data, and developed interim operational recommendations to improve biological and digester performance, reduce sulfide off-gassing during dewatering, and maintain plant operations during upset conditions. Currently, Dudek is assisting the District in implementing process instrumentation and control improvements to optimize the oxidation ditch performance in an effort to reduce operating costs while producing higher quality treated effluent.

Concept Level Facility and Process Review of 3A Wastewater Treatment Plant, Moulton Niguel Water District, Laguna Niguel, California. Served as project principal engineer for the preparation of a concept-level facility and process review report for the plant to define the current and future capacity and process capabilities for the facility after the District assumed operations of the facility. Scope of work includes the review and consolidation of previous reports and studies, review and comments on the waste discharge requirements, and treatment process evaluation and facility constraints analysis.

Justin Scheidel, PE

QUALITY CONTROL

Justin Scheidel is a project manager with 21 years' experience specializing in water infrastructure design, wastewater treatment design, and construction management. Mr. Scheidel is responsible for detailed design and layout, civil/mechanical calculations and analysis, equipment selection, cost estimation, and development of plans and specifications. He is experienced in all phases of engineering, including planning, design, and construction. As a project manager, Mr. Scheidel is responsible for the tracking, monitoring, team delegation, deliverable quality assurance, engineering guidance, accounting, and client and subconsultant coordination associated with each project, including final stamp and signature of project plans and specifications.

Project Experience

San Luis Rey Water Reclamation Facility Major Improvements, City of Oceanside, California. Served as project engineer for a series of improvement projects including developing plans for replacement of aeration basin influent and effluent gates, relining the aeration basin influent channel and demolition of abandoned piping and conduits for the 15.4-million-gallon-per-day treatment facility. Design involved working closely with operations staff to develop construction phasing plans that reduced bypass pumping costs while maintaining plant operations during construction. Project provides operations staff with treatment flexibility and optimization while reducing energy costs and facilitating maintenance operations.

FE14-07 Primary Influent Channel Repairs, Orange County Sanitation District, Fountain Valley, California. Served as project manager for the preparation of design plans and specifications for construction of expansion joint repairs for Channels 1 and 3 for the Primary Influent Channels at Plant 1.

San Vicente Third Stage Reverse Osmosis, the Ramona Municipal Water District, Ramona, California. Served as project manager for the development off a third stage reverse osmosis system for the San Vicente Water Reclamation Facility. The additional reverse osmosis stage increased recycled water production and reduced total brine volume up to 50%. Reduction in brine volumes significantly reduced plant operational costs associated with brine hauling and disposal costs. Final design included a fully automated third stage with separate instrumentation, control, and chemical facilities. Upgrades to the shade structure and equipment pads were included as part of final design.

Santa Maria Water Reclamation Plant Clarifier No. 4, Ramona Municipal Water District, California. Designed improvements to the one-million-gallon-per-day plant including addition of a 45-foot diameter secondary clarifier, flow splitter box modification, and recirculating aquaculture system and scum pumping changes. Responsible for detailed design development of yard piping, mechanical systems, and construction phasing allowing uninterrupted plant operation.



Education

*San Diego State University
MS, Civil Engineering
BS, Civil Engineering*

Certifications

*Professional Civil Engineer (PE),
CA No. 82058*

Professional Affiliations

*American Society of Civil Engineers
California Water Environment Association
Water Reuse Association*

Sewer System Odor Control Study, City of Oceanside, California. Aided in collection and interpretation of field data as part of an odor control study of the City of Oceanside collection system and treatment facilities. Collected data included ambient H₂S concentrations, dissolved sulfides, differential sewer pressures, wastewater and manhole wall pH, and wastewater oxidation-reduction potential. Analyzed data to determine adequacy of existing odor control measures and develop recommendations for improvements.

Simsbury Sewer Extension – Lift Station Abandonment Study and Design, City of Carlsbad, California. Project included development of an adjoining lot, which prompted the evaluation of potential re-alignment of the existing sewer and abandonment of the existing pump station, creating a complete gravity sewer system. The preliminary evaluation of the project determined that the conversion was feasible by re-directing the sewer through the development. Drastic changes in elevations between the two sites prompted installation of the connection piping through the trenchless jack and bore method. Completion of the project eliminated the need for a pump station, reducing energy and maintenance costs.

Lift Station Condition Assessment, Elsinore Valley Municipal Water District, Elsinore Valley, California. Quality control reviewer for a comprehensive condition assessment of five of the district's aging sewer lift stations (20–49 years old) and associated force mains. A record data review, hydraulic analysis, and field inspection were required for each lift station to determine deficiencies and develop recommendations for a prioritized list of capital improvement projects to rehabilitate/replace the evaluated stations. Dudek recommended and strategically prioritized long-term improvement projects to stagger the full replacement of lift stations and force mains over the next 3–7 years.

Solana Beach Pump Station Design, City of Solana Beach, California. Served as lead engineer and project manager for the rehabilitation and upgrade of a 4.9-million-gallon sewer pump station within the San Elijo Lagoon. This pump station is the final tie between the collection systems of the City of Del Mar and Solana Beach and the San Elijo Water Reclamation Facility. The project included installation of a new 130,000 gallon emergency storage wetwell, two new duty wetwells, five new pumps including two low-flow submersibles and three high-flow dry pit submersibles, and all new electrical and controls equipment to operate the new pump station. Dudek provided support to the city from preliminary design through the completion of construction over the course of 5 years. Unique challenges included constructing the project within the environmentally sensitive lagoon and extracting, treating, and discharging groundwater through a National Pollutant Discharge Elimination System permit through the Regional Water Quality Control Board.

Coast Pump Station and Force Main Rehabilitation Design and Construction Management, City of Encinitas, California. Project manager/construction manager for this complete pump station overhaul. Rehabilitation included structural repairs of the existing wet well; replacement of the submersible pumps, including all mechanical, electrical, and instrumentation upgrades; and construction of a new valve vault, including isolation and bypassing equipment. The project also included installation of a 2-barrel 100% redundant 800-foot 4-inch force main under a lagoon and railroad tracks by horizontal directional drilling. The use of trenchless methods substantially reduced environmental issues, shortening the project design/permitting period and lowering construction costs.

Reservoir Condition Assessment, Elsinore Valley Municipal Water District, Elsinore Valley, California. Project manager for a condition assessment of seven potable and one non-potable storage reservoir for the district. The evaluation included structural, seismic, mechanical, cathodic protection, hydraulic, and hazardous materials assessment of these reservoirs. Based on the acquired information and assessment results, these reservoirs were ranked based on current condition. The reservoir ranking was used to assign a rehabilitation priority and recommended schedule of improvements. These recommended improvements were divided into immediate concerns, short-term concerns, and long-term concerns to help the district allocate resources to ensure immediate and long-term reliability of the water systems.

Brian Robertson, PE, QSD

PROJECT MANAGER

Brian Robertson has 17 years' project engineering experience in planning and design of infrastructure projects. Mr. Robertson has developed a reputation for delivering high-quality work on time and within budget. He has extensive experience in water, wastewater and drainage conveyance systems for cities and districts throughout Southern California and has received recognition for his work preparing detailed analysis, reports, drawings, specifications, and cost estimates. Mr. Robertson has developed an excellent rapport for seamless coordination with team members, various utilities, and essential governmental agencies. He brings a high level of professionalism while delivering project design packages with other services, including development review and staff augmentation.



Education

*Cal Poly State University,
San Luis Obispo
BS, Civil Engineering,
2006*

Certifications

*California PE 77990
Certified QSD*

Project Experience

WRF 1 Aeration System Improvements, City of Corona, California. Project Manager for a new air piping supply system and new diffuser grid in aeration basins 1, 2, and 3 at WRF-1A. The improvements include relocation of the existing air headers with a new overhead alignment, including a pipe bridge and other overhead structural support systems. Design plans and sequence of construction specifications were developed to minimize construction cost and maintain plant operation and performance during installation of the new diffusers, along with miscellaneous aeration basin upgrades including replacement of the influent and effluent slide gates, mud valves, and supporting electrical, instrumentation and control facilities.

Santa Maria WWTP Headworks Upgrade, Ramona Municipal Water District, Ramona, California. Lead engineer for civil and mechanical design of a new headworks facility at the Santa Maria WWTP. The plant's existing influent lift station and downstream processes have been affected by rags and grit due to a lack of headworks screening and grit removal for the plant. Project includes relocation of influent truck sewer, new headworks structure with influent screw pumps, mechanical screenings equipment, grit removal, and new emergency generator. Various project challenges include construction phasing, large equipment and structures, utility relocation, and connections to existing facilities.

Headworks Screening System Improvements, Olivenhain Municipal Water District, Encinitas, California. Serves as a project engineer for condition assessment and improvements of the existing headworks facility including installation of new mechanical bar screen units, grit classifiers, odor control system, slide gates and influent channel improvements and lining. He has guided bypassing approach and will support through completion of the project.

Digester Tank Improvements for La Salina Wastewater Treatment Plant, Oceanside Water Department, Oceanside, California. Project Manager for improvements and rehabilitation of the primary and secondary digester tanks. Design was prepared for new above grade circulation lines from the heat exchangers to the digesters to address clogging, leaking, and access issues. Design also included digester tank rehabilitation and upgrades to the gas over-pressurization system to increase the system reliability and safety. Current responsibilities include engineering support during construction.

Huston Creek WWTP Dewatering Building and Primary Clarifier, Crestline Sanitation District, Crestline, California.

Project Engineer for the final design of a new two-story biosolids dewatering building, sludge holding tank, and primary clarifier for the District's 1 MGD Huston Creek WWTP. Project includes new structures, pumps, polymer feed system, odor control system, channels, electrical systems, and new emergency generator. Project site conditions required careful structural, civil, and mechanical design to support new facilities in challenging topographic conditions and other requirements to maintain plant operation during construction. His services included preparation of final design packages and engineering services during bidding and construction.

Trickling Filter Valve Replacement at Plant No. 1, Orange County Sanitation District, Fountain, California.

Project Manager for the design of a valve replacement for the piping system that connects the trickling filter clarifiers to the sludge and scum pump station. The valve is buried deep and surrounded by a net of utilities which required extensive alternatives development and evaluation, constructability reviews, and other design considerations to protect existing structures from settlement due to deep excavation and shallow groundwater conditions.

Edinger Pump Station Rehabilitation Study, Orange County Sanitation District, Huntington Beach, California.

Project Engineer responsible for assessment and development of planning studies to determine feasible options for the rehabilitation, replacement, relocation, or abandonment of the Edinger Pump Station. Project elements included assessment of geotechnical, structural, hydraulic, and mechanical conditions. Multiple alternative pump station sites and configurations were developed and evaluated extensively with engineering and operations staff.

Highbury Pump Station Rehabilitation, Bureau of Engineering, Wastewater Conveyance Engineering Division, Los Angeles, California.

Project Engineer for the rehabilitation design of the existing pump station. Tasks included utility research, site design, pump system hydraulics, evaluation of new pumping and equipment options, preparation of the preliminary design report, workshop presentations, and preparation of the Plans, Specifications, and Estimates (PS&E) package.

Final Effluent Sampler and Building Area Upgrades (J-110), Orange County Sanitation District, Huntington Beach, California.

Project Engineer for a new final effluent water quality sampler facility; improvements to the ocean outfall system; and other miscellaneous mechanical, electrical, and instrumentation improvements for Plant No. 2. Responsibilities included development of a work plan to implement inspection of the 120-inch Short Ocean Outfall and other associated large diameter yard piping and bulkheads. Responsibilities included coordination with subconsultants and operations staff, evaluation sampling and metering equipment options, evaluation of pipeline rehabilitation alternatives, preparation of civil site and mechanical design for bid packages.

Farmersville Wastewater Treatment Plant Design, City of Farmersville, California.

Project Engineer for a new wastewater treatment plant, including the following elements: headworks, mixing chamber, aeration basins, clarifiers, holding tanks, return activated sludge pump station, digester tanks, and a solids handling building. Responsibilities included the design and preparation of drawings for the influent pump station, yard piping, and other conveyance design elements.

Planning Area 18 North Capital Improvement Facilities, Irvine Community Development Company (ICDC), Irvine, CA.

Project engineer for the capital facilities associated with the ICDC Planning Area 18 North development project, in coordination with the Irvine Ranch Water District (IRWD). Facilities design included 12-inch domestic water pipelines; 6-inch, 8-inch, 24-inch, and 36-inch reclaimed water pipelines; and turnout improvements. This project included close coordination with IRWD and ICDC to accomplish the tight project schedule and maintain the budget.

Gregory Guillen, PhD, PE

PROCESS ENGINEER

Gregory Guillen is a chemical and environmental engineer with 11 years' experience focusing on water and wastewater treatment. Dr. Guillen's education covered the fundamentals of chemical and environmental engineering, with an emphasis on water and wastewater treatment. His graduate work focused on advanced membrane materials and processes for separations, including those found in water and wastewater treatment. Dr. Guillen has authored several peer-reviewed papers in the field of desalination and membrane filtration, holds multiple patents for membrane formation, and has lectured in the Department of Civil and Environmental Engineering at University of California, Los Angeles.

Project Experience

Santa Maria WWTP Headworks Upgrade, Ramona Municipal Water District, California. Lead process engineer for the design of a new headworks facility at the Santa Maria WWTP. The plant's existing influent lift station and downstream processes have been affected by rags and grit due to a lack of headworks screening and grit removal for the plant. The project included relocation of the influent truck sewer, a new headworks structure with influent screw pumps, mechanical screenings equipment, grit removal, and a new emergency generator. Various project challenges included construction phasing, large equipment and structures, utility relocation, and connections to existing facilities.

4S Ranch Water Reclamation Facility Headworks Screenings System Improvements, Olivenhain Municipal Water District, Encinitas, California. Lead process engineer for the design of a new headworks improvements project, including replacement of mechanical screens, a grit classifier, odor control system improvements, channel rehabilitation, slide gate replacements, building structural modifications, and new instrumentation and controls. Key design considerations included working around a tight building and working space, which led to maintenance of plant operation and construction phasing challenges. The result is an improvement in screenings performance and reliability, as well as the replacement of corroded and obsolete process equipment.

Woods Valley Ranch Water Reclamation Facility Phase 2, Valley Center MWD, California. Dr. Guillen designed secondary, tertiary, and disinfection processes for the Woods Valley Ranch Water Reclamation Facility Phase 2 expansion. Secondary wastewater treatment consists of an Aero-Mod extended aeration system capable of full nitrification and denitrification. Tertiary treatment consists of coagulation, flocculation, and cloth disk filters. Dr. Guillen developed a tracer study protocol in coordination with the California Department of Public Health that will be used to recertify the existing chlorine contact basins to determine their ultimate capacities. The water reclamation facility will continue to produce Title 22 quality effluent.



Education

University of California,
Los Angeles

PhD, Civil Engineering
MS, Civil Engineering

University of California,
Riverside

BS, Environmental
Engineering

Certifications

Professional Civil
Engineer, CA No. 83897

Professional Affiliations

California Water
Environment Association
WaterReuse Association

Bay Bridge Pump Station Replacement Odor Control Facility, Orange County Sanitation District, Newport Beach, California. Dr. Guillen evaluated multiple gas- and liquid-phase hydrogen sulfide (odor) treatment technologies for implementation at the new Bay Bridge Pump Station. Calcium nitrate, magnesium hydroxide, and carbon scrubbers were selected for on-site and downstream odor control based on the results of a life-cycle model analysis. Dr. Guillen provided preliminary design of the odor control facility, including chemical demands, storage requirements, preliminary site layouts, and construction cost estimates.

Pressurization and Odor Control Study, Orange County Sanitation District, Newport Beach, California. Dr. Guillen investigated the causes of odor, pressurization events, and explosive gases in seven Orange County Sanitation District pump station wet wells in Newport Beach. Dr. Guillen developed protocols and performed field monitoring of hydrogen sulfide and differential pressure in these wet wells. A technical memorandum was developed that identified the causes of the observed issues and made recommendations on wet-well improvements.

Pump Station Pressurization Improvements, Orange County Sanitation District, Newport Beach, California. Dr. Guillen provided preliminary design of odor and pressurization mitigation improvements at six Newport Beach pump stations. The improvements included adding passive carbon scrubbers at each pump station. The scrubbers allowed treated air to exit and enter the wet wells without emitting odors or causing pressurization of the wet wells. A ferrous chloride storage and dosing facility was also designed at 15th Street Pump Station to provide downstream liquid phase hydrogen sulfide removal.

Odor Control Analysis, Olivenhain MWD, Encinitas, California. Dr. Guillen helped evaluate multiple liquid- and gas-phase hydrogen sulfide treatment systems for Olivenhain MWD's Del Dios force main. Recommendations were made to the District based on treatment efficacy and a life-cycle cost analysis.

Separate Industrial Treatment Concept Alternatives Project, City of Gonzales, California. Dr. Guillen served as lead treatment engineer in the evaluation of industrial treatment alternatives. Projected industrial wastewater flow generation and water quality, water reuse opportunities, and effluent water quality requirements. Provided conceptual industrial WWTP locations, layouts, and cost estimates.

Wastewater Treatment and Collection System Master Plan, Crestline Sanitation District, California. Dr. Guillen served as lead treatment engineer for the Wastewater Master Plan for the Crestline Sanitation District. Utilized a series of workshops to facilitate a COFA to identify the most critical and high-risk failure scenarios at all three of the District's WWTPs and two lift stations, as well as the root cause of those failures. Additionally, Dr. Guillen performed a thorough process evaluation on each unit process of all three of the District's WWTPs to determine individual process capacity and performance in comparison to design criteria and industry standard ranges. The project culminated in a comprehensive list of capital improvement projects, prioritized by risk and paired with available funding opportunities.

Ventura Water Reclamation Facility Process Evaluation and Capital Improvement Plan, City of San Buenaventura, California. Dr. Guillen assisted in the Failure Mode and Effects Analysis workshops with Ventura Water Reclamation Facility staff. The workshops identified unit processes within the water reclamation facility, identified their modes of failure, and scored the criticality of those failures. The Failure Mode and Effects Analysis process, in conjunction with the water reclamation facility treatment process analysis, identified constraints within the facility and helped develop the City's Capital Improvement Plan.

Agata Bugala, EIT, ENV SP

PROJECT ENGINEER

Agata Bugala (*ah-GATA boo-GA-LA; she/her*) is a project engineer with 3 years' professional experience as a water/wastewater engineer specializing in the design of water and wastewater treatment systems, including planning and process engineering. Ms. Bugala's technical skills include aeration process modeling and energy optimization in BioWin, report and proposal preparation, drawing preparation in AutoCAD, and bench-scale and pilot-scale studies.

Relevant Previous Experience

Consequence of Failure Analysis, South Orange County Wastewater Authority, Dana Point, California. Project engineer for the preparation of a Consequence of Failure Analysis for the South Orange County Wastewater 6.7-million-gallon-per-day coastal treatment plant. Assisted in site visits and workshops to identify the most critical and high-risk failure scenarios at the city's WWTP. Evaluated and prepared a report describing short-term and long-term WWTP upgrades, maintenance, and replacement components.

4S Ranch Water Reclamation Facility Headworks Screenings System Improvements, Olivenhain Municipal Water District, Encinitas, California. Project engineer for the design of a new headworks improvements project, including replacement of mechanical screens, grit classifier, odor control system improvements, channel rehabilitation, and slide gate replacements.

Industrial Wastewater Treatment Facility, City of Gonzales, California. Project engineer for the design of a new 1-million-gallon-per-day industrial wastewater treatment facility. The new plant includes an influent pump station, headworks with screenings and grit removal, aerated treatment ponds, and effluent infiltration basins. Performed process calculations, wastewater treatment plant design (e.g., process flow diagrams), and cost estimates.

Consequence of Failure Analysis, Moulton Niguel Water District, Laguna Niguel, California. Project engineer for the preparation of a Consequence of Failure Analysis for the Moulton Niguel Water District. Assisted in site visits and workshops to identify the most critical and high-risk failure scenarios at the city's WWTP. Evaluated and prepared a report describing short-term and long-term WWTP upgrades, maintenance, and replacement components.

La Salina Wastewater Treatment Plant Digester Rehabilitation, City of Oceanside, California. Project engineer for the design of anaerobic digester cleaning and rehabilitation for both the primary and secondary digesters at the La Salina Wastewater Treatment Plant (WWTP) in Oceanside. The scope of work included digester cleaning specifications; replacement of blocked heat exchanger piping and valves; replacement of leaking overflow piping; replacement of corroded access manway, cover, bolts, and nuts on the digester roof; and replacement of gas protection equipment, including all piping, pressure safety valves, flame arrestor, flame trap, and valves.



Education

The City College of New York
BE, Environmental Engineering, 2018

Certifications

Engineer-in-Training (EIT), No. 173501

Envision Sustainability Professional (ENV SP) No. 47181

Professional Affiliations

Santa Ana River Basin Section, Director

Water Environment Association, Active Member

City of Redlands Master Plan, Redlands, California. As project engineer, performed full-scale capacity assessment of the existing equipment of major unit operation processes. Evaluated the existing system to identify key performance parameters of the WWTP and recommend potential ways to increase operations efficiency while reducing electrical costs of the facility, including power costs associated with pumps, blowers, and cogeneration.

Nano-Aeration Demonstration Testing, Municipal Wastewater Treatment Plant, City of Gonzales, California. Assisted in the evaluation of nano-aeration technology (NanO2) at the City of Gonzales WWTP. Prepared a conceptual design for a NanO2 system on how to remove nitrogen in the efficient and cost-effective way rather than traditional biological treatment processes.

WWTP Capacity and Condition Assessment, City of Banning, California. Performed full-scale field condition and capacity assessment of the existing equipment of major unit operation processes (i.e., pumps) and pipes throughout the WWTP using a portable ultrasonic flow meter. Evaluated and prepared a report describing short-term and long-term WWTP upgrades, maintenance, and replacement components.

Nitrogen Removal Feasibility Study, City of Banning, California. Assisted with the design and evaluation of the wastewater treatment systems for nitrogen removal to achieve California Code of Regulations Title 22 requirements. Performed cost analysis for the secondary treatment including trickling filters, conventional activated sludge, MBR, moving bed biofilm reactor, and integrated fixed-film activated sludge.

Food and Beverage Facility, Wastewater Treatment Feasibility Study, Anaheim, California. Assisted with evaluation, design (process flow diagrams and site layouts), preparation of life cycle cost estimates, and recommendation of wastewater treatment systems to reduce surcharge fees. Evaluated liquid and solid treatment components such as sequencing batch reactor, upflow anaerobic sludge blanket, anaerobic membrane bioreactor, dissolved air floatation, centrifuge, screw press, and belt filter press.

Wastewater Treatment Feasibility Study, Manufacturing Wastewater Facility, Ohio. Assisted in improving performance of an existing dewatering system for high total dissolved solids and high pH. Evaluated the feasibility of various solid and liquid separation treatment alternatives. Assisted in performing process calculations, preliminary construction and annual operations and maintenance costs of equalization, and evaluating filtration, dewatering, and pH adjustment systems.

Wastewater Treatment Feasibility Study, Danone Facility, Virginia. Assisted with the evaluation of treatment alternatives and preliminary design to improve an on-site wastewater treatment system and reduce incoming high organic loading rates generated from a dairy production line. Drafted process flow diagrams and site layouts for dissolved air floatation system and upflow anaerobic sludge blanket system. Prepared sections of the final technical memorandum.

Plant Optimization, Water-Energy-Food Nexus Project, Germany and New York. Assessed the feasibility of implementing demand response strategies and integrating on-site renewable energy sources as an alternative to grid-supplied electricity for the operation of WWTP in Germany and New York. Modeled and optimized energy consumption at the Haldenmühle Water Resource Recovery Facility, Stuttgart, Germany.

Co-Digestion Evaluation, Newtown Creek Water Resource Recovery Facility, New York. Evaluated how including additional solid-waste streams impacted digester egg performance. Performed biomethane potential tests to evaluate production rates.



Matt Stone, PE, SE **Senior Project Manager**

Mr. Stone is a currently licensed California SE with over 13 years of project management and structural design work encompassing commercial, infrastructure, water, wastewater and military projects. He has performed many

complex structural and seismic designs for new and existing buildings utilizing the latest design standards and philosophies. His work has included the preparation of structural drawings, specifications, and

calculation packages, project coordination and management, technical report writing, cost estimating and construction support services. He specializes in the assessment, design and retrofit of water and wastewater treatment, storage and conveyance facilities.

Education/Professional Registration

BS, Structural Engineering, 2008, UCSD

MS, Structural Engineering, 2009, UCSD

Civil Engineer in California, 2011, No. 78488

Structural Engineer in California, 2014, No. 6183

Relevant Project Experience

City of Corona WRF-1A Aeration Improvements – Corona, CA – Project Manager – Kelsey Structural – 2023

Mr. Stone provided the structural design for a series of aeration pipe supports at the City of Corona's existing WRF-1A treatment plant. Design includes various custom pipe supports for 20" and 12" diameter stainless steel air piping including cantilever frames and kicker supports at the existing Aeration Basins and a 25' long pipe bridge spanning over an existing access road. Modifications at the existing Blower Building were required to accommodate the new piping penetrations through the CMU walls. Design considerations for expansion couplers, large thrust loads, existing structure loading and anchorage required detailed coordination with the client and design team to help ensure minimal impacts to the existing facility and operations.

VVWRA Septage Receiving Stations – Victorville, CA – Project Manager – Kelsey Structural – 2023

Mr. Stone is currently providing the structural design of two new septage receiving stations to be constructed at the Victor Valley Wastewater Reclamation Authority's (VVWRA) Westside Water Reclamation Plant (WWRP). Due to long lead times in the procurement of precast concrete structures, VVWRA has requested the buried vault structures be constructed from cast-in-place concrete to accelerate the overall schedule. Structural design consists of two 50'L x 8'W x 8'H buried rectangular concrete vaults to be utilized for unloading of septic vehicles into the WWRP treatment system. The structures are designed to resist H-20 vehicular loading on the roof slab and associated wall surcharge pressures and include interior weir walls with debris screening to capture any large debris prior to conveyance to the existing Septic Equalization Tank. Engineering services being provided as part of the project include the development of structural drawings, specifications, calculations and opinion of probable construction cost.

WMWD Magnolia Avenue Interconnection – Riverside, CA – Project Manager – Kelsey Structural – 2023

Mr. Stone provided the structural design of the new Magnolia Avenue Interconnection Vault for Western Municipal Water District. The vault consisted of a below-grade, cast-in-place rectangular concrete vault with stairway and custom hatch access located in a roadway median along Magnolia Avenue. The structure was designed for H20 vehicular loading, lateral wall surcharge, high seismic forces and required precise reinforcing layout in the top slab to accommodate the oversized access hatch and pump hatch penetrations. The design required minimized foundation bearing pressures and small foundation slab footprint to prevent surcharge and disturbance of adjacent storm drain vaults and pipelines. Tight reinforcing spacing was utilized to minimize temperature, shrinkage and service loading cracking to help ensure the longevity of the vault structure.

CVWD Lift Station 55-11 Capacity Upgrade – Mecca, CA – Project Manager – Kelsey Structural – 2023

Mr. Stone provided the structural design for the Coachella Valley Water District Lift Station Capacity Upgrade project located in Mecca, CA. The project included preliminary and final design for the complete replacement and upgrade of the lift station's mechanical and electrical systems and utilized the existing wet well at the site for emergency storage. Structural design included a new 16' diameter x 35' deep precast concrete wet well, new premanufactured electrical building and foundation, odor reducing station with dry-media bed concrete basin, and an emergency generator with custom aluminum platform access. The precast wet well utilized the largest diameter precast sections available in the United States and require two semi-circular precast sections to be joined in-field with a grouted connection. Additional considerations for shallow groundwater and flood plain elevations required the design of a large cast-in-place mat foundation for the wet well to resist buoyancy and uplift forces.

USIBWC SBIWTP Assessment and Facility Planning – San Diego, CA – Structural Engineer – Kelsey Structural – 2023

Mr. Stone served as the Lead Structural Engineer for the condition assessment of over 120 structures at the USIBWC South Bay International Wastewater Treatment Plant (SBIWTP) located in San Diego, CA. The assessment involved fast-paced field investigations, which documented the structural conditions of various primary, secondary and support facilities throughout the plant.



Condition scores were assigned to each structural asset with associated improvement recommendations, prioritization and cost-estimate review documented in a structural technical memorandum. The assessment identified several key structures with severe deterioration requiring repairs in the immediate future to facilitate the future expansion of the plant.

EMWD Ellis Tank Assessment and Repair – Perris, CA – Project Manager – Kelsey Structural – 2022

Mr. Stone provided the structural assessment and repair design for Eastern Municipal Water District's (EMWD) existing 0.26 MG Ellis Tank. The reservoir is an AWWA D100 welded steel reservoir that was in the process of being recoated when Kelsey Structural was brought in to perform an assessment of the existing structure once old coatings were removed. Mr. Stone discovered severe deterioration of the roof framing system and column supports, which halted construction work and required an emergency repair design of a new roof framing system and strengthening of the existing structure. Expedited design work helped minimize construction delays and efficient detailing allowed for quick repair of the tank roof structure.

City of Poway Clearwell Bypass, Poway, CA – Project Manager – Kelsey Structural – 2022

Mr. Stone provided the structural design of a new pump station, pipe gallery retrofits and AWWA D103 bolted steel tank review for the City of Poway's Clearwell Bypass project. Recent failures of the existing clearwell have prompted replacement of the aging concrete storage basin, requiring temporary bypass of all treatment plant water while the new clearwells are constructed. To implement this bypass, Kelsey Structural has provided a new slab-on-grade pump station design and retrofits to an existing pipe gallery structure to facilitate bypass pumping and new piping to the temporary steel storage tanks. Structural design has included reinforced concrete slab-on-grade with deepened perimeter footings to accommodate the site slope, concrete pedestal pipe supports, and retrofit concrete wall construction requiring demo and replacement of an existing below-grade vault wall.

City of Gonzales Industrial Water Reclamation Facility – Gonzales, CA – Project Manager – Kelsey Structural – 2022

Mr. Stone is provided the structural design of a new Industrial Water Reclamation Facility for the City of Gonzales. Structural design is being provided for multiple treatment facilities including an 1,800 sqft. concrete-masonry unit Operations Building, below grade reinforced concrete Wet Well and Pump Station, Headworks facility, Grit Chamber, Blower Building and miscellaneous site structures and equipment foundations. Extremely poor soil conditions at the site coupled with high groundwater and flood plain required all structures to be supported on mat foundations capable of spanning voids beneath the structures and resisting large differential settlements that may occur due to liquefaction during seismic events.

OMWD Neighborhood No.1 Sewer Pump Station – 4S Ranch, CA – Structural Engineer – Kelsey Structural – 2021

Mr. Stone provided structural engineering design services for a new pump station and electrical building to be constructed in the 4S Ranch neighborhood of San Diego, CA. The project included structural design of a below-grade, rectangular reinforced concrete pump station and an above grade CMU electrical building with steel framed roof structure. The pump station measured approximately 28'x27' and is buried approximately 25' below grade. Design challenges included HS-20 vehicular loading at the long-span roof slab which also supported one of the walls of the CMU electrical building. A heavily reinforced concrete beam was required to support the roof structure and required loads.

JBLTP Digester 1 And 2 Manway Improvement Project – Dana Point, CA – Project Manager – Kelsey Structural – 2021

Mr. Stone provided the structural design of four retrofit access manway doors and strengthening of existing Digesters at the existing SOCWA J.B. Latham Treatment Plant. The retrofit design required sawcutting the existing circular reinforced concrete Digester walls to provide new and enlarged access penetrations to improve ventilation and accessibility during maintenance. Fiber wrap strengthening of the existing structure was required to accommodate the new penetrations and resist hydrostatic and seismic hoop forces in the walls concentrated around the openings.

EVWD 18 Reservoir Structural and Seismic Analysis – San Bernardino, CA – Project Manager – Kelsey Structural – 2021

Mr. Stone performed the structural and seismic analysis of a total of 18 existing reservoirs including AWWA D110 prestressed concrete and AWWA D100 welded steel reservoirs for East Valley Water District. Analysis of the reservoirs' essential structural elements was performed to identify critical code deficiencies and vulnerabilities. Critical steel reservoir analysis included tank shell thickness, anchorage and stability, ringwall foundations and sloshing/freeboard requirements. Critical prestressed reservoir analysis included concrete core walls, vertical and horizontal prestressing, seismic cables, two-way concrete roof slab, columns and foundations. A summary report was developed for each of the reservoirs identifying notable deficiencies with recommendations for possible retrofits, strengthening and lowered operating water levels, which would mitigate the code deficiencies and improve structural performance and reliability.



DUDEK

800.450.1818 | HELLO@DUDEK.COM

[DUDEK.COM](https://www.dudek.com)



1.3.5 Pricing

Dudek states that this proposal and pricing information will remain in full force and effect for one-hundred and twenty (120) days after the submission deadline of April 25, 2024. The prices quoted shall include all costs required to complete the work requested by this RFP including, but not limited to, any delivery, hauling, handling or disposal fees, tax, insurance, bonds and permits for the contract period.

The Kelsey Structural fee is based on 250 hours billed according to the Kelsey Rate Schedule found on page 18.

		PIC QA/QC	Project Manager	Process/Odor Engineer	Project Engineer	CAD Designer	Admin	Kelsey Structural				
Project Team Role:		Team Member:										
		M. Metts J. Scheidel	B. Robertson	G. Guillen	A. Bugala	N. Hunter	M. Kinney	TOTAL DUDEK	DUDEK LABOR	M. Stone	OTHER DIRECT	
Billable Rate :		\$280	\$255	\$255	\$210	\$200	\$150	HOURS	COSTS	Fee	COSTS	TOTAL FEE
Task 1	Project Management and Coordination											
	Project Management								\$ -			\$ -
	Monthly Progress Reports, Invoices, Adminisatration		20				20	40	\$ 8,100	\$3,240		\$ 11,340
	Monthly Progress Meetings (3 In-Person)		16					16	\$ 4,080	\$1,390	\$ 145	\$ 5,615
	Workshop Meetings (2 In-Person)		8	4	12			24	\$ 5,580			\$ 5,580
	Subtotal Task 1		44	4	12		20	80	\$ 17,760	\$ 4,630	\$ 145	\$ 22,535
Task 2	Data Collection and Document Review											
	Review As-builts and Previous Studies		4	4	12	12		32	\$ 6,960	\$2,050		\$ 9,010
	Site Investigation		4	4	8	8		24	\$ 5,320	\$1,680	\$ 145	\$ 7,145
	Subtotal Task 2		8	8	20	20		56	\$ 12,280	\$ 3,730	\$ 145	\$ 16,155
Task 3	Design Workshop											
	Bypassing/Sequencing/Implementation Concept Plan	2	8	8	8			26	\$ 6,320			\$ 6,320
	Preliminary Design Memo	2	4	4	12			22	\$ 5,120	\$5,090		\$ 10,210
	Subtotal Task 3	4	12	12	20			48	\$ 11,440	\$ 5,090	\$ -	\$ 16,530
Task 4	50% Design Submittal											
	Plans	2	8	8	48	90		156	\$ 32,720	\$9,100		\$ 41,820
	Specifications (Updated Technical and Division 1)	2	8	8	24			42	\$ 9,680	\$4,550		\$ 14,230
	Cost Estimate	2	2		8			12	\$ 2,750	\$1,520		\$ 4,270
	Subtotal Task 4	6	18	16	80	90		210	\$ 45,150	\$ 15,170	\$ -	\$ 60,320
Task 5	90% Design Submittal											
	Drawings	2	8	8	32	50		100	\$ 21,360	\$8,980		\$ 30,340
	Specifications	2	8	8	16			34	\$ 8,000	\$4,490		\$ 12,490
	Cost Estimate	2	2		4			8	\$ 1,910	\$1,500		\$ 3,410
	Constructability Review and Site Walk	4	4	4	4			16	\$ 4,000		\$ 100	\$ 4,100
	Subtotal Task 5	10	22	20	56	50		158	\$ 35,270	\$ 14,970	\$ 100	\$ 50,340
Task 6	Bid Set Submittal											
	Drawings		4		8	24		36	\$ 7,500	\$1,540		\$ 9,040
	Specifications		4		8			12	\$ 2,700	\$770		\$ 3,470
	Cost Estimate		2		4			6	\$ 1,350	\$260		\$ 1,610
	Subtotal Task 6		10		20	24		54	\$ 11,550	\$ 2,570	\$ -	\$ 14,120
Total Hours and Fee		20	134	80	248	204	20	710	\$ 133,450	\$ 46,160	\$ 390	\$ 180,000

114 60 208 184 606



P R O P O S A L

Regional Treatment Plant (RTP) Primary and Aeration Area Grating and Gates Replacement

April 25, 2024

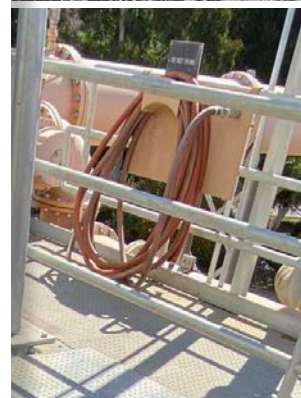




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April 25, 2024

South Orange County Wastewater Authority (SOCWA)
Attn: Jeanette Cotinola, Procurement/Contracts Manager
34156 Del Obispo Street
Dana Point, CA 92629

RE: Proposal for the Regional Treatment Plant (RTP) Primary and Aeration Area Grating and Gates Replacement Project

Dear Members of the Selection Committee,

We are excited to present our proposal for the Regional Treatment Plant (RTP) Primary and Aeration Area Grating and Gates Replacement project. Providing continuous and reliable operation to maintain resilient and robust treatment while improving the condition of critical treatment processes and personnel safety is paramount. The RTP is a critical part of the larger water reclamation system in South Orange County. The key to success on this project is attention to detail and tailoring improvements on a case-by-case basis to prepare a thorough set of construction documents. The HDR team brings the following benefits to the project:

A Driven Project Manager to Accomplish Your Goals. Our proposed Project Manager, **Teigan Gulliver**, has a firm understanding of the purpose, goals, and scope of the project. She will keep the team focused to meet your timeline and budget. Teigan brings her technical experiences on primary and secondary treatment process from working at LA Sanitation's Terminal Island Water Reclamation Plant, LA Sanitation's Hyperion Water Reclamation Plant, and Orange County Sanitation District's Plant No. 1. Teigan will be supported by people you know and trust. Our Principal In Charge, **Amy Omae**, has worked with SOCWA and understands the project workflow, deliverable requirements, and preferences. Amy and Teigan will provide consistency and continuity to keep the project on-track and achieve your goals.

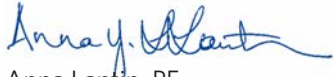
Maintaining Plant Operations During Construction. Maintaining plant operation is critical to the success of this project during construction to minimize the impact to the plant staff and the level of treatment. **Gregorio Estrada** will lead this effort and use his extensive treatment knowledge to streamline a comprehensive construction sequencing plan. Gregorio has lead construction sequencing efforts successfully for dozens of our water reclamation plant projects including the recent Tertiary Filters Project for Irvine Ranch Water District.

Listen First, Deliver Quality. This project will address safety and operability issues at the plant. At HDR, we listen first, which results in a deep understanding of the unique needs, concerns, and wants to deliver a high-quality product that addresses those needs. The Design Workshop and in-person meetings identified in the project scope align perfectly with our culture. This workshop will be a collaborative environment with SOCWA and HDR staff to address all aspects of the project, to set design in the right direction.

We are excited for the opportunity to work with you on this project. If you have any questions, please do not hesitate to reach out to Teigan Gulliver via phone at 612.244.4769 or email teigan.gulliver@hdrinc.com.

Sincerely,

HDR Engineering, Inc.

A handwritten signature in blue ink, appearing to read "Anna Lantin".

Anna Lantin, PE
Vice President

A handwritten signature in black ink, appearing to read "Teigan Gulliver".

Teigan Gulliver, PE
Project Manager

1.

Identification of Responder



01 Identification of Responder

LEGAL NAME & ADDRESS

HDR Engineering, Inc.
3230 El Camino Real, Suite 200
Irvine, CA 92602

FORM OF COMPANY

S-Corporation

PARENT COMPANY

HDR, Inc.

ADDRESS OF PRINCIPAL PLACE OF BUSINESS AND ANY LOCAL OFFICE

Headquarters: 1917 S 67th Street,
Omaha, NE 68106
See Southern California office locations below.

PRIMARY POINT OF CONTACT

Teigan Gulliver, PE
Project Manager
P: 612.244.4769
E: Teigan.Gulliver@hdrinc.com

HDR'S SOUTHERN CALIFORNIA OFFICES

Irvine

3230 El Camino
Real
Suite 200
Irvine, CA 92602

Long Beach

100 Oceangate
Suite 1120
Long Beach, CA
90802

San Diego

591 Camino de la
Reina, Suite 300
San Diego, CA
92108

Santa Ana

1851 East First St.,
Suite 1400
Santa Ana, CA
92705

Ventura

200 E Santa Clara
St., Suite 220
Ventura, CA
93001

San Diego DT

401 B. Street
Suite 1110
San Diego,
CA 92101

Los Angeles

350 S. Grand Ave.
Suite 2900
Los Angeles, CA
90071

Claremont

431 W. Baseline Rd.
Claremont,
CA 91711

Riverside

2280 Market St.
Suite 100
Riverside, CA
92501

The project will be managed from our Irvine office, located 30 minutes from SOCWA's Regional Treatment Plant.

Company Background & History

A global architecture, engineering and construction (A/E/C) firm established in 1917, HDR is headquartered in Omaha, Nebraska, and maintains more than 200 offices throughout the U.S. and abroad. We are an employee-owned corporation with more than 12,000 employees. In the state of California, we have 1,200+ professional staff — over 320 of whom specialize in water wastewater, and water resources services.

HDR has been providing engineering and architectural consulting in Southern California since 1960, including planning, design, and construction management for water agencies throughout Southern California. Over the years, HDR has expanded to nine Southern California offices: Irvine, Santa Ana, Los Angeles, Long Beach, Ventura, Riverside, Claremont, and San Diego. **HDR's Irvine office is located within 25 miles of SOCWA's office and 18 miles of SOCWA's Regional Treatment Plant.**

Technical Services & Capabilities

HDR is a leader in planning and design of water infrastructure assets, with the depth and breadth of our expertise spanning condition assessment and rehabilitation of treatment facilities, pipelines, pump stations, storage reservoirs, groundwater wells, and more. We are well-versed in wastewater treatment, recycling, and reuse, hydraulic modeling, and have successfully delivered various engineering services under numerous contracts in Southern California and beyond.

Our advanced expertise covers the full cycle of one water management, from water supply to treatment to reuse, and all manners of conveyance and storage. Our years of experience give us an in-depth understanding of various regulatory, environmental, and geographic conditions. This broad range of capabilities and experience enables HDR professionals to plan and design easily operable, cost-effective facilities that meet the needs of our clients and communities, as well as local, state, and federal requirements. The HDR project team is ready and able to hit the ground running.

- Water, Recycled Water, and Wastewater Treatment
- Facility Rehabilitation, Replacement, Upgrade, and Expansion
- Asset Management, Condition and Corrosion Assessment
- Civil Engineering
- Groundwater & Wellhead Treatment
- Planning Studies
- Start-Up and Operator Training
- Hydraulic Modeling
- Advisory Services Policy and Funding Resources
- Strategic Communications
- Regulatory and Permitting
- Collaborative Delivery
- Program Management

2.

Approach to the Work




02

Approach to the Work

Project Understanding

The grating in the grit basin, primary sedimentation, and aeration areas are corroded, and even unsafe for plant staff to step on in some locations. In fact, the staff has covered some grating locations with plywood because of these safety concerns. Additionally, the isolation slide plates in the primary sedimentation tanks and aeration basins are challenging to remove and can become stuck in place. The plant staff has taken the initiative to mitigate these problems by operating the plates on a regular basis to keep the plates from becoming stuck. The aeration basin plates are large, heavy, and require multiple people to remove them. The slide plates on the north reactors are over a grating platform, which adds an additional challenge and safety concern to the plate removal process. Providing a different isolation method that is easier to remove would streamline operability of the system for both the primary and aeration processes. By completing this project, these operational and safety issues will be mitigated. **The key challenges map on this page identifies specific areas that require close attention to detail.**

Ideas Built on Benefiting You

 Our approach looks for ways to benefit SOCWA. Throughout our proposal, we've included an idea icon where our team has thought of innovative ideas that provide creative technical enhancements or alternatives to consider for your project.



In order to deliver a successful project, the team must understand both the project itself and the drivers behind it. We toured the site multiple times, analyzed the available data, and have already identified opportunities for innovation. We have also started evaluating the constructibility of our concepts to verify they can be implemented economically and efficiently. We are ready to start this project and begin delivering value to SOCWA.

KEY CHALLENGES

- 1

Grit influent/effluent, primary influent/effluent, and aeration influent/effluent are common channels that cannot be entirely shutdown or isolated.
Approach: Develop a detailed construction sequence that incorporates bulkheads to perform rehab work in certain sections of the channel for certain phases of construction and minimize bypass pumping. Facilitate workshops with RTP staff to discuss and review the construction sequence to vet ideas and obtain stakeholder buy-in.
Benefit: Maintain plant operations during construction with a clear understanding and buy-in from plant staff regarding the sequence of construction.
- 2

Ancillary plant flows (grit and secondary scum, plant drain, sump, DAF overflow, centrate, digester overflow, and AWT overflow) return into the grit influent, primary influent, and primary effluent channels.
Approach: For the intermittent return flows (plant drain, basement sump, digester overflow, and AWT overflow), we will indicate in our construction sequence when certain phases will need to be coordinated to stop those flows from entering the channels. For continuous return flows (grit and secondary scum, DAF overflow, and centrate) that cannot be stopped, we will analyze RTP's system to potentially identify points to redirect those flows to a different area of the plant or develop the construction sequence to include bypass pumping to convey those flows to a different section of the channel to continue executing the rehab work.
Benefit: The plant can continue treatment of wastewater and handling solids with minimal to no disruption to existing processes and staff operation.
- 3

Space constraints at primary effluent channel may be further strained by replacing existing stop gates with slide gates and manual operators (3 per tank, total of 18).
Approach: Upward rising gates would exacerbate the space constraint on top of the deck. Downward opening slide gates would keep the gate frame below deck with only the manual handwheel actuator above deck.
 **Innovative Idea:** Instead of installing a new slide gate in the primary effluent channel, our team can evaluate the feasibility of installing a valve (with a square nut manual actuator with hinged opening in the covers) on the submerged effluent piping inside the primary sedimentation tanks.
Benefit: Avoids potential accessibility and safety issues.
- 4

Deciding a seated or unseated gate at each location.
Approach: Discuss the pros/cons regarding performance and implementation challenges of the seated or unseated gate for each location at the Design Workshop and facilitate the process for SOCWA to make an informed decision.
Benefit: Implement the right solution for each location and not assume a one-type-fits-all approach to the project.
- 5

Aeration basin effluent stop plates (5 per tank, approx. 5-ft wide x 4-ft high) are large and difficult to handle. Staff remove them once per year to prevent them from sticking.
Approach: Replacing the existing stop plates with slide gates and manual handwheel actuators would save staff significant effort to isolate the basins.
 **Innovative Idea:** Evaluate hydraulics of the plant to permanently enclose 1 or 2 of the existing stop plates with concrete to reduce the number of new slide gates to as low as 3 per tank.
Benefit: Reduce O&M costs.
- 6

Aeration area has bouncy grating and handrail inconsistency.
Approach: Structural design to provide sufficient supports for grating and consider manageable grating sizes for smaller spans. Coordinate location of handrails and toeguards with location of new gates, grating, covers, and odor boxes.
Benefit: Grating will be less likely to bounce/warp over time because of the smaller spans, and it will be easier for staff to lift and remove grating. Attention to detail and reducing conflicts between new gates and handrail will make O&M activities easier.
- 7

Odor boxes (6 total) are custom built by RTP staff.
Approach: HDR will rely on any potential as-builts for the design of those odor boxes. If none exist, then a combination of field visits and staff interviews will be performed to obtain information needed to replace the odor boxes in kind, in consideration of any potential piping conflicts that need to be accommodated.
Benefit: Avoid re-creating the wheel if it works great already to be more efficient.

Project Approach

Project Management and Quality Control/Quality Assurance

Our project management approach is built on trust, a clear definition of shared goals, and the mutual understanding of the necessary steps to achieve those goals and exceed your expectations. **Our proposed Project Manager, Teigan Gulliver, is dedicated to listening first, setting project goals and expectations, and continuously reaffirming them.** Through diligent planning, effective communication, and adept problem-solving, Teigan successfully led project teams to meet all milestones on schedule, with seamless coordination on the Long Beach Utility District S-7 Rehabilitation Project and the City of Los Angeles Hyperion Modeling Project.

Our Principal In Charge, **Amy Omae**, has worked with SOCWA previously and understands the project workflow, deliverable requirements, and preferences. She will provide project oversight, support the team, and check-in with you to discuss project progress and any potential issues. **Amy and Teigan have worked closely together on several projects, and will provide consistency and continuity to keep the project on-track and achieve your goals.**

Managing the Project. At the start of any project, HDR requires the project manager to prepare a Project Management Plan (PMP). This PMP is a living document that defines the project management and control protocols to be used throughout the life of the project. As Project Manager, Teigan will develop, execute, and update the PMP, which includes the purpose and goals of the

project, the scope of work and deliverables, the work plan and staffing assignments, budget, schedule milestones, contact information and communication plan, as well as quality control check points and assignments.

Teigan will be your main point of contact throughout the life of the project. She will host bi-weekly check-ins and provide monthly invoices and status reports containing progress updates as well as identifying potential risks early to mitigate cost or schedule impacts. Teigan will also review decisions and action logs to fortify the direction and clear communication in the project.

Delivering Quality. Our approach to quality assurance and quality control (QA/QC) starts on day one of the project. Our QA/QC Plan will be presented at the kickoff meeting and implementation of the plan will be documented throughout the project. The QA/QC Program promotes prevention rather than detection and being proactive rather than reactive. The QA/QC program covers communications, project filing, reviews, delivery of documents, CAD production standard, GIS standards, and project close-out.

We understand the importance of a strong technical QA/QC review. All deliverables will receive rigorous QC reviews before submittal. In addition, the management team will perform regular quality assurance (QA) audits of the project files, technical evaluations, details, specifications, invoices, progress reports, and correspondence to confirm the procedures and systems put in place by the PMP are being followed. If deviations are found, corrective measures will be made or the PMP will be modified to memorialize the new procedures. For this project, HDR is committing **Mandira Sudame** and **Tom Hamlin** to perform quality assurance and control checks throughout the life of the project, so that both HDR's and SOCWA's high-quality expectations will be met.

Deliverables:

- Monthly Invoices
- Monthly Status Reports
- Meeting Agendas
- Action Item Log
- Decision Log

Assumptions:

- Key HDR staff attending meetings include the project manager and two project engineers.
- The preliminary kickoff meeting will be an in-person meeting at the RTP.

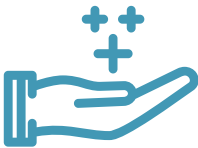


Teigan brings the ideal combination of technical and leadership skills, which produce projects that are staff-owned and cost-effective. She aims to understand key drivers of every project and the desires of all stakeholders involved.

We Understand the Importance of Meeting Project Schedules.

Often the most difficult aspect of a project is keeping it moving forward promptly. Our project manager understands the criticality of project milestones and knows the required documentation and workflow to successfully deliver your project on schedule. *The proposed schedule for the RTP Primary and Aeration Area Grating and Gates Replacement project, based on the scope of work, can be found below.*

ACTIVITY	Jun 2024	Jul 2024	Aug 2024	Sept 2024	Oct 2024	Nov 2024	Dec 2024	Jan 2025	Feb 2025	Mar 2025
Task 1: Project Management & QA/QC										
Task 1.1: Kickoff Meeting (In Person)		M								
Task 1.2: Project Management Plan		D								
Task 1.3: Project Meetings & Coordination										
Task 1.4: Project Monitoring & Reporting										
Task 1.5: Quality Assurance / Quality Control Plan		D								
Task 2: Records Review										
Task 2.1: Record Drawing, Reports, and Data Review										
Task 2.2: Site Visit and Staff Interviews		M								
Task 3: Preliminary Design										
Task 3.1: Bypass/Sequencing Conceptual Plan										
Task 3.2: Gates Alternatives Analysis										
Task 3.3: Structural Improvements Analysis										
Task 3.4: Design Workshop				M						
Task 3.5: Implementation Plan					F					
Task 4: Final Design										
Task 4.1: 50% Design Deliverable (inc. drawings, specs, cost estimate)						D				
Task 4.2: 90% Deliverable (inc. drawings, specs, cost estimate)								D		
Task 4.3: Bid Set Deliverable (inc. drawings, specs, cost estimate)										F
Task 4.4: Constructability Review									M	
Task 4.4: Construction Sequencing and Bypass Plan										D



SOCWA has communicated that each deliverable should allow for one month review period. Our approach is to start developing the blank spaces in the project while already submitted content is being reviewed. To streamline efforts between the preliminary design phase and the final design phase, our approach is to take a prominent role in facilitating the design workshop, carefully documenting all decisions, action items, and directions to the project. **This approach maintains a fast schedule, and keeps the momentum going with the project team while the submittal is under review.**

Legend:

M = Meeting or Workshop

D = Draft Deliverable

F = Final Deliverable

SOCWA Staff Review

Data Collection and Document Review

The Right First Steps with Pre-assessment Efforts.

To find the best solutions, we need to understand the staff safety and process concerns. Understanding the condition, performance, and reliability helps determine the specific evaluation and rehabilitation needs of a system. Our first effort will be to request, compile, and review available information, including record drawings and relevant reports. A critical source of information is from the treatment plant staff. We will conduct staff interviews to provide a foundational understanding of the grit, primary, and aeration system. On the site visit, we will also tour the site, using asbuilt drawings to record notes and details of every project element. **We will ask to open many of the basin covers to identify any discrepancies between basin trains. this approach minimizes potential change orders in the construction phase of the project.**

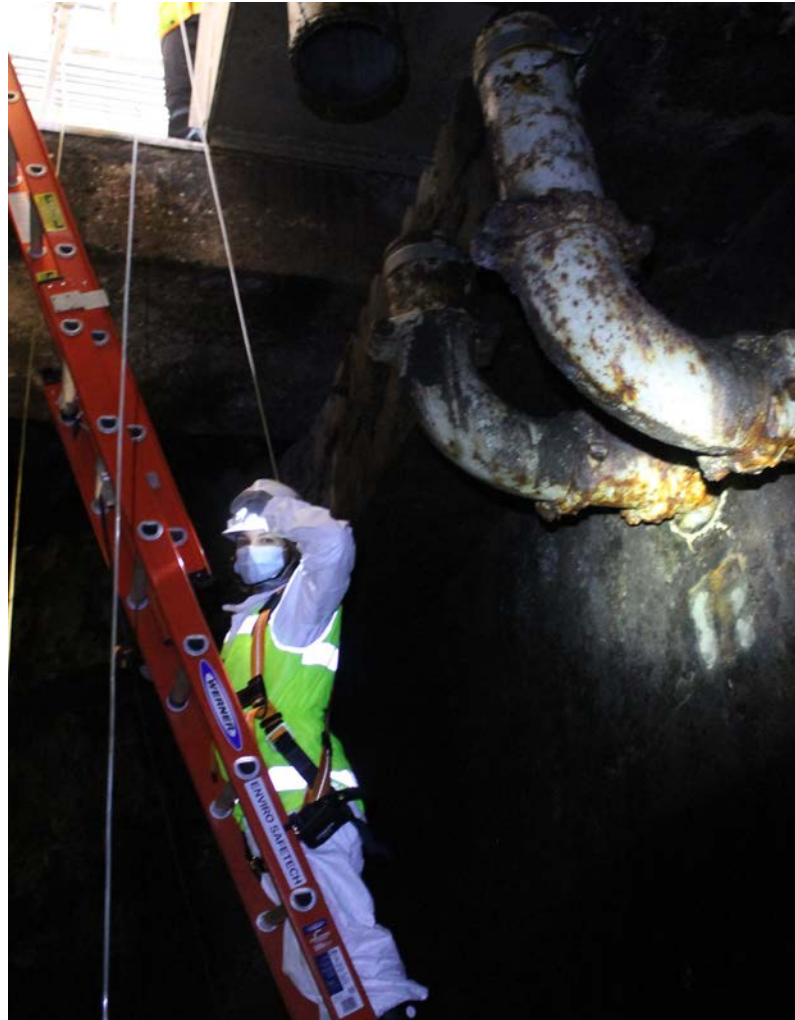
Preliminary Design Phase

Structural

With all water retaining structures, corrosion and concrete degradation are serious concerns that if left untreated can result in substantial retrofit. To develop the best approach, HDR will visit the project site to visually observe, document and understand the level of damage present. While there are specific areas that have been recently replaced/rehabilitated, there are many areas where severe corrosion exists in some of the elements. Most of these elements are beyond repair and need to be removed and replaced. This will require local removal to competent material and rebuilding of concrete elements to place the new embedded items including gate frames and grating/cover plate rebates. In some cases, as shown in Figure 1, the channels are lined with T-lock. Where T-lock liner must be removed as part of our repairs, the exposed concrete behind the T-lock will be repaired and sealed for protection of the structural concrete. The exposed concrete will be coated. We will develop methods for properly removing and sealing the edges of the T-lock. It is also possible that rebar corrosion has developed to a point that additional concrete damage has occurred and will require more concrete removal than would be necessary if only the embed items are being replaced.




Figure 1. Primary Sedimentation Tank with T-lock Lined Interior



Field investigations are critical. They assist us in identifying necessary repairs. We look at the current structural conditions and degradation. This information plays into the coordination with mechanical in determining the appropriate repair measures and field limitations. **Crystal Starr, our Structural Lead, is often in the field doing condition assessments. She reviews existing structural conditions and develops structural repair methods. For example, she recently inspected a tank for the City of San Mateo, as part of the Wastewater Treatment Plant Expansion and Nutrient Removal Upgrades.**

To provide the best retrofit possible, the following approach will be considered for the final design. Steel elements will be of materials that have a naturally more anti corrosive property. Galvanizing thickness will be evaluated, and the best protective thickness chosen for the specific elements. Concrete mix designs will be developed that include corrosion admixtures as well as waterproofing (crystalline) admixtures and be designed specifically for water tightness and crack control. Any exposed existing rebar encountered will be treated with a corrosion inhibitor to protect the rebar from further corrosion susceptibility. In conjunction with developing the repair and replacement procedures, HDR will work with SOCWA to develop the phasing approach required to keep the plant operational during construction.



 Our extensive experience and successful execution of similar tasks on the Central Contra Costa Sanitary District (Central San) Aeration Improvements Project directly translate to tangible benefits for SOCWA. The structural enhancements, mechanical upgrades, and meticulous construction sequencing carried out at Central San mirror the requirements of SOCWA's project, ensuring robust infrastructure, improved operational efficiency, and minimal disruption during implementation. **By leveraging the lessons learned and best practices from our Central San project, we are poised to deliver exceptional results that align seamlessly with SOCWA's objectives, ultimately enhancing the facility's performance and reliability.**



Removal and replacement of the existing corroded embedded slide gate frames and steel support members will provide an opportunity to pick materials with long-term corrosion resistance and structural strength. This is also an opportunity to strengthen and repair concrete encountered during repairs especially in the more susceptible vapor space at the top of the channels.



Figure 2. Primary Sedimentation Tank Slide Plate

Mechanical

Basin isolation is an important part of treatment process operability. The existing slide plates for basin isolation in the grit tanks, primary sedimentation tanks, and aeration basins are difficult to seat. The slots are corroded and plates do not seat correctly. There are several options that can be considered to isolate basins as shown in Figure 6. **We will work with you to evaluate basin isolation mechanisms that will allow of full, effective, and easy isolation of basins.**

The primary sedimentation tank effluent slide plates are in a challenging location because there is limited space above the deck with the primary effluent channel being only three feet wide. Installing new slide gates with manual handwheel actuators (three per tank) would reduce the space above deck even further and make access difficult for plant staff. To alleviate some space above deck, the primary effluent slide plates will be replaced with downward opening slide gates inside the primary effluent channel with manual handwheel actuators above deck.



Figure 3. Slide plates are challenging to seat, especially in corroded slots. Replacing plates with manually operated slide gates eases operability of the system.



There are three primary effluent pipes with submerged holes to allow for water flow through the pipe. Installing valves on each effluent line instead of replacing slide plates would provide a safer and more compact solution for staff mobility around the process area. Stainless steel knife gate valves or butterfly valves could be installed on these pipes with a rising stem that stops just below the access cover with a square nut. This would avoid potential obstructions above the deck and create more accessible space for staff.

During the Design Workshop, we will evaluate providing isolation via knife gate valves to provide improved access and safety, while maintaining the maximum amount of free walking clearance on the deck level.



Figure 4. Primary Sedimentation Tank Effluent Pipes

Aeration Basins

Aeration is the backbone of the liquid stream processes. Isolation of each basin is key to plant operations so regular maintenance activities can occur. Isolation plates, such as the six influent gates, effluent plates, basin drain valves, step feed gates, and RAS channel feed plates will be evaluated for replacement options. Figure 6 shows an example of comparing replacement options for basin isolation. We will work with SOCWA to select the best solution for each area of isolation, taking into account personnel safety, existing structure modifications, isolation options, grating and grating supports, materials, and ease of operability.



Slide Plates are large and cumbersome. Removal and handling is challenging.

Replacing with slide gates require sufficient structural supports to set the gates. **We will evaluate the hydraulic capacity of providing 3 of the 5 openings shown in Figure 5 and fill two cells with concrete.**

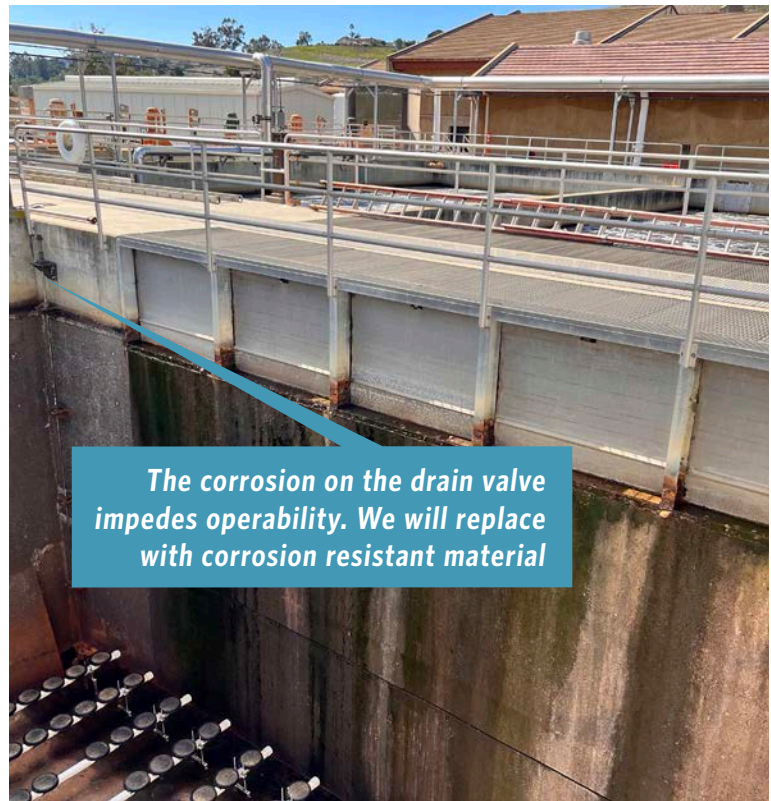


Figure 5. Aeration Basin Mechanical Improvements. We will evaluate the hydraulic capacity of three openings and replace slide plates with manually operated slide gates to reduce costs and O&M effort.

MECHANICAL GATE REPLACEMENT ALTERNATIVES ANALYSIS





Stainless Steel Gates	Aluminum Gates	Stop Gates	Stop Logs
			
<ul style="list-style-type: none"> + Durable and corrosion resistant - Expensive to install 	<ul style="list-style-type: none"> + Lightweight and easy to install - May not withstand heavy-duty applications 	<ul style="list-style-type: none"> + Simple to design and low cost - Requires more frequent maintenance and has limited lifespan due to wear and tear 	<ul style="list-style-type: none"> + Flexible installation and removal, custom fit to various opening sizes - Not suitable for high pressure applications and has limited lifespan - Requires more labor to install and remove

Figure 6. Slide Plate Replacement Example Alternatives Evaluation

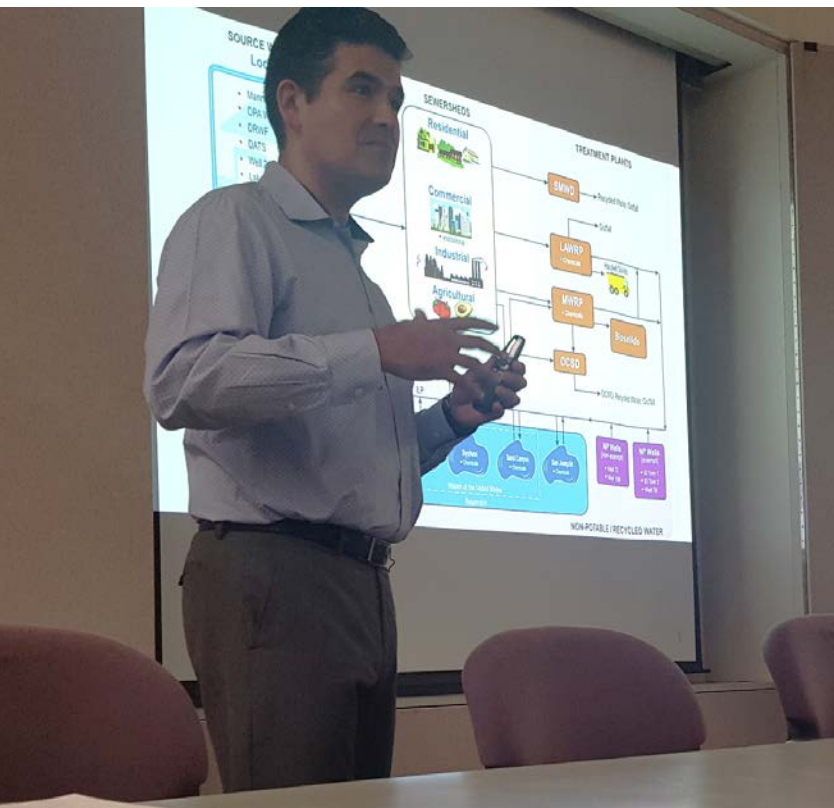
Detailed Construction Sequencing for Consistent and Reliable Treatment Performance during Construction

During construction, keeping the plant in service is essential. Primary sedimentation and aeration processes are the heart of any water reclamation facility. We will work with you to craft a sequencing approach that prioritizes operational safeguards while meeting your schedule constraints. Based on historical wet weather events, the plant should be able to comfortably take one grit tank, two primary sedimentation tanks, and one aeration basin offline and still meet water quality standards.

There are two key aspects of developing a robust sequencing plan: a detailed construction sequence that is tied to schedule performance requirements in the contract documents, and an operational plan that includes mitigation strategies should something unexpected occur. Developing a “routine” procedure to replace the grating and gates at the each tank while the remaining tanks maintain normal operation will improve consistency in the quality and efficiency of the Contractor’s work. **Each phase of work will include an isolation/decommissioning step to confirm reliable operation of the remaining**

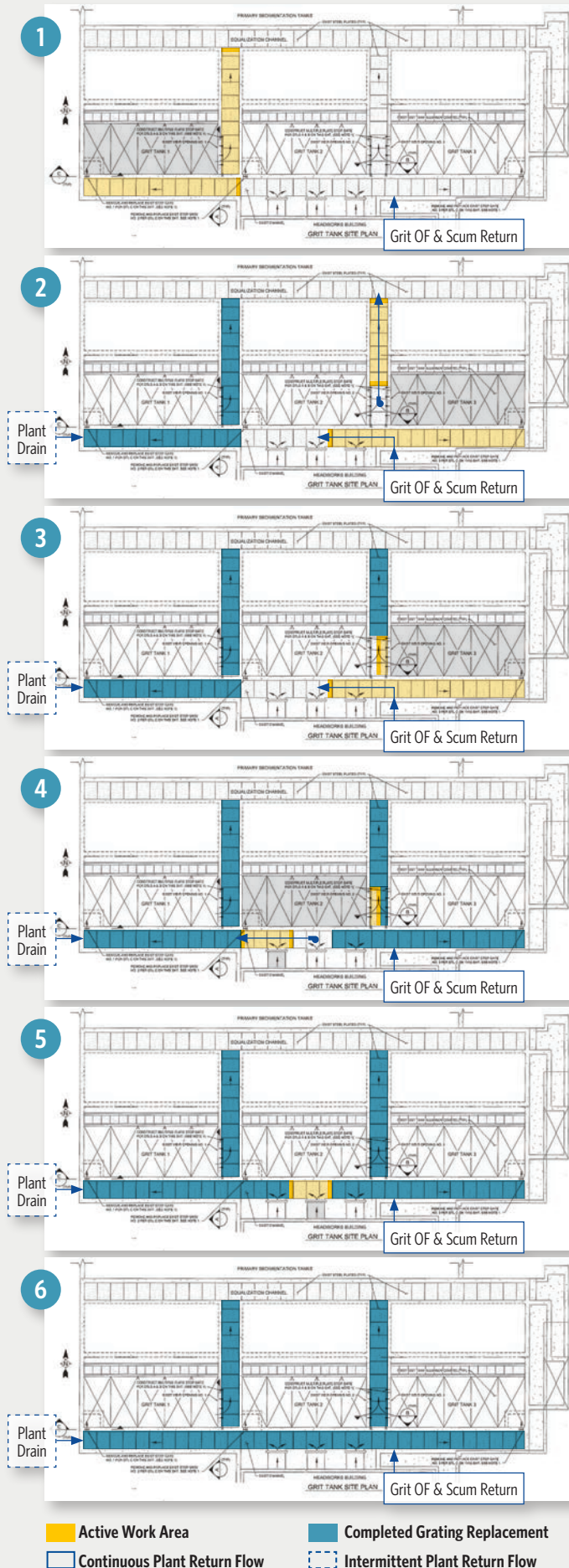
tanks before work begins, and a commissioning step to confirm reliable operation before the next one is taken offline. The construction sequencing plan must also include contingency plans to account for unexpected and prolonged disruptions in operation.

Our construction sequencing lead, **Gregorio Estrada**, brings 20 years of experience designing and commissioning wastewater treatment facilities. Gregorio is an adept facilitator and consensus builder, who will facilitate planning and coordination workshops meetings with SOCWA staff to develop and review the construction sequence based on our combined knowledge of the RTP treatment limitations, capacities, and staff needs for reliability and redundancy. The outcome will be a detailed construction sequence with clearly defined tasks, anticipated work durations, and that identifies opportunities or limitations to performing concurrent work. Additionally, we will discuss potential risks associated with the work to avoid doing high risk work during the wet season or anticipated storms. A clear understanding of the sequence of work and durations to execute the plan will minimize surprises and maintain compliance. We will work with you to identify the isolation points and limitations to avoid or limit the need for temporary bypass pumping and piping if possible.



We plan to dive into the details of the bypass and sequencing of the project in the Design Workshop. A workshop-based approach to construction sequencing development allows for collaborative discussion of operational, electrical, controls, and compliance limitations and opportunities. The result is a comprehensive and robust sequencing plan that protects the plant, while providing the contractor with flexibility in execution so that creative cost-saving solutions can be implemented. **Gregorio has the ability to bring groups to consensus, and has successfully used this approach on multiple projects for SOCWA, Irvine Ranch Water District, and Santa Margarita Water District.**

Figure 7. Example Construction Sequencing Schematic



Head Start on Construction Sequencing and the Implementation Plan

We understand the importance of a thorough construction sequencing plan. Because of that, we have already started evaluating the constructability of our concepts to verify they can be implemented economically and efficiently to keep a minimum number of basins online during construction. Figure 7 is an example construction sequencing schematic we would develop for the grit influent and effluent area, which also considers the continuous and intermittent return flows from other areas of the plant into the common channels. **This head start allows us to begin delivering value to SOCWA right after NTP.**

We are committed to working with you to develop phasing and sequencing options that do not disrupt ongoing plant operations or other projects underway while minimizing O&M impacts. Sequencing schematics, similar to Figure 7, will be presented and discussed at the Design Workshop for all work areas.





As part of the IRWD Michelson Tertiary Filter Rehabilitation, Gregorio Estrada facilitated multiple workshops with operations, engineering, maintenance, electrical services and staff to develop a comprehensive sequencing plan that is being implemented now as part construction. We will bring lessons learned from that project and deliver a robust sequencing plan for SOCWA's RTP.

Design Workshop


SOCWA has identified using the Design Workshop for documenting preliminary design actions and decisions in lieu of a preliminary design report. This method will provide the direction to final design while being efficient with preliminary design efforts. As part of the workshop, we will develop mechanical improvements alternatives, and structural improvements alternatives, methodically presenting each area of work, potential improvements, the recommended improvement, and a construction sequencing conceptual plan. We will document the discussions, actions items, and decisions made for each of the areas of work. After the workshop, we will include an implementation plan with the design workshop meeting minutes, slide deck, and an actions/decisions log.


Proposed discussion topics for the design workshop include, but are not limited to the following:


 **Hydraulic Profile.** A hydraulic evaluation could allow us to see if all aeration basin effluent gates are needed or if we could reduce the number of gates. This would save money by reducing O&M and future replacement costs.


 **Seated vs. Unseated Gates.** The original design of the RTP grit tanks, primaries, and aeration basins incorporated embedded slide plates at the wall openings. Because many of these have become corroded and inoperable, slide plates were installed on the face of the wall, which are now also corroded. Replacing these isolation plates with slide gates will require demolition of the slide plate and associated embedded tracks and likely demolition of concrete. In some cases, the steel rebar and channel liner will have to be rehabilitated as well. The extent of demolition, general space constraints within the structure, top deck accessibility, and construction sequencing will be considered when evaluating the location of the new slide gates.

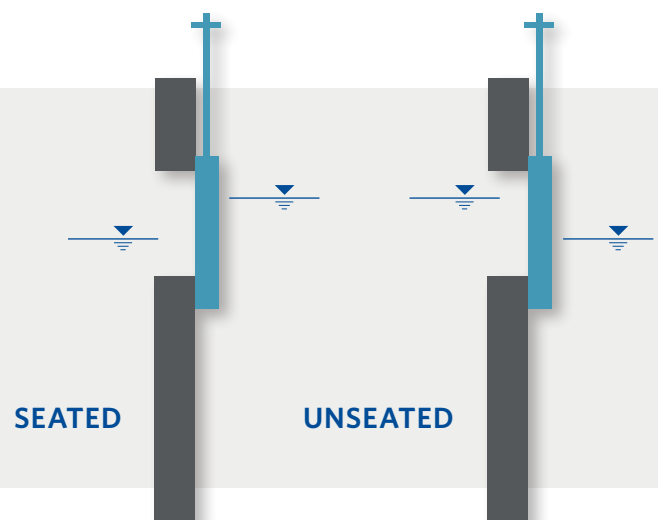
In most cases, a seated gate is preferred to an unseated gate because the hydrostatic pressure of the water assists in keeping the gate sealed against the wall. **During the Design Workshop, we will determine what is or is not feasible or cost-effective for each location.**

 **Location of Gates.** Each primary sedimentation tank has three submerged primary effluent pipes with slide plates to stop flow into the common primary effluent channel. Replacing the slide plates with slide gates and a manual handwheel actuator would significantly reduce accessibility due to space constraints on top of the deck. Adding a knife gate valve to each of the primary effluent pipes inside the tanks could be another option worth considering.

 **Construction Sequencing and Temporary Bypass Requirements.** Based on our combined knowledge of your plant and needs, we will develop a draft construction sequence approach for implementation that reduces the overall construction duration and minimizes temporary bypass pumping while maintaining plant operations. We will work with you to confirm the best approach to execute the work and identify potential concurrent paths.

 **Materials of Construction.** Upstream of the aeration basins, the headspace for wastewater channels is a highly corrosive environment. As such, our team will provide options to consider for construction materials depending on the location. Our general suggestion would be to incorporate stainless steel in the highly corrosive environment, and then aluminum in less corrosive areas. Stainless steel costs more than aluminum, but aluminum corrodes faster.

 **Access Cover Lifting Location.** Some of the access covers over the channels have hand holds to lift the covers more easily. Our team will consider other above-deck obstructions (such as close proximity to a wall or curb) and likely placement of the covers during O&M activities to identify the orientation of those hand holds for lifting the covers.



HDR will facilitate the Design Workshop to present feasible alternatives, discuss the advantages and disadvantages, and the effects of these decisions to understand the potential risk. The objective of the workshop is to obtain multiple perspectives, identify the concerns/issues, and achieve consensus on the approach to advance into Final Design. **Our team will work with you to tailor this project to efficiently meet your needs.**

Deliverables:

- Design Workshop Presentation Slides
- Design Workshop Meeting minutes
- Actions/Decisions log

Assumptions:

- No drawings will be provided in this phase
- Workshop will be held in person at the SOCWA RTP
- HDR Project Manager and three design leads will attend
- SOCWA PM and RTP staff will be able to attend and provide input on direction of the project

Final Design and Bid Documents

Based on the recommendations in Design Workshop Phase, HDR will prepare contract documents during the Final Design phase for the 50-percent, 90-percent, and Bid Set submittals. The design will clearly identify components (Grating, slide blocks, etc.) to be replaced as well as components (e.g. platform frame) to be repaired and the method of repair as applicable. Our team has a long history of working with SOCWA and are familiar with your standards and expectations. We will engage your staff in several discussions to identify limitations/constraints, communicate design intent, collaborate on strategy, and obtain consensus on the project direction.

Our approach for Final Design includes writing specifications that include items and details of the projects that are deemed to be critical in making it a success. It has been our experience that detailed specifications avoid opportunities for contractor misinterpretation, avoid inappropriate substitutions of alternate materials and maintain the design intent along with SOCWA control throughout the construction process.

Assumptions:

- HDR will provide electronic PDF submittals
- Drawing size will be 11x17
- SOCWA will review and provide comments for each submittal within 4 weeks

- SOCWA will provide Division 1 specifications
- HDR will prepare Section 01010, Summary of Work and Section 01014, Work Restrictions and Sequence

50% Design Documents

For the project concept selected from the preliminary design phase, the HDR team will prepare 50-percent design contract documents for the project, providing one electronic version. The 50-percent design phase will put the key building blocks in place for the complete set of contract documents and design documentation deliverable for the project. It will establish the framework for the drawings and specifications. As needed, the designs of the different features will be performed by different teams working in a parallel fashion to expedite the schedule. Development of the 50 percent drawings will provide an opportunity for project reviews and to make refinements and address project issues before a more detailed design is developed. HDR will coordinate and conduct a meeting with SOCWA and plant staff to review the 50 percent documents and to obtain their comments and concurrence.

Deliverables:

- 50% Drawings
- 50% Specifications
- AACE Class 4 Cost Estimate



90% Design Documents

Similar to the 50% design documents, HDR will prepare 90-percent design contract documents for the project, submitting one electronic version to SOCWA. The set will incorporate all comments from the Design Workshop and the 50% design set. Development of the 90 percent drawings will provide the details associated with the improvements and provides SOCWA the opportunity to review specific details prior to construction.

Deliverables:

- 90% Drawings
- 90% Specifications
- AACE Class 4 Cost Estimate

Constructability Review

A good constructability review before construction starts safeguards that the overall design is not flawed, the environmental permitting requirements are properly integrated in the plans and specifications and the long-lead delivery products are properly addressed. HDR provided the constructability reviews for the following projects, which aid in avoiding construction delays:

- Orange County Sanitation District (OC San), P1-140 Activated Sludge-1 & Secondary Clarifier Rehabilitation
- Irvine Ranch Water District, Michelson Water Recycling Plant Phase 2 Expansion
- SOCWA, JB Latham Aeration and Cogeneration Improvements
- Santa Margarita Water District, Chiquita Water Reclamation Plant Influent Screening and Lift Station Upgrades

Construction Sequencing and Bypass Plan

Taking the discussions and review of the Implementation plan and the Design Workshop, HDR will prepare a detailed construction sequencing and Bypass Plan. This will document how the project will be phased in order to maintain plant operations during construction. We know that there are several flows, such as the dewatering centrate and DAF return flow, and are sidestream flows that enter the primary sedimentation process that operate 24/7. Developing a highly detailed construction sequencing plan with flow rates, durations, and tie-in locations will minimize bypass pumping issues during the construction phase of the project.

Construction Bid Set

The construction bid set will be a fully completed set of drawings and specifications that incorporates SOCWA comments and advances in the project design. HDR will deliver an electronic version to SOCWA for review. Included will be the necessary direction and provisions for the rehabilitation and improvements. This set will be revised, if necessary, to address any final comments prior to bidding. This deliverable will include a written basis of estimate. The AACE Class 5 cost estimate will consist of a summary and detailed cost reports delivered in PDF. This task includes the work associated with producing a final bid-ready package for the project. HDR will finalize the plans and specifications and submit a bid-ready set of documents to SOCWA.

Deliverables:

- Construction bid set Drawings
- Construction bid set Specifications
- Class 5 cost estimate
- AACE Class 3 Cost Estimate



For IRWD's Filter Pump Station No. 2 (FPS-2) at the Michelson Water Recycling Plant, a temporary bypass system was necessary to continue to convey flow for the conventional train and provide reliable backup to the MBR treatment train. **HDR engaged with IRWD stakeholders to develop a detailed construction sequence, temporary bypass pumping implementation and testing plan, and startup plan for the FPS-2 pumps during the design phase.**

3.

Experience and Technical Competence



Experience and Technical Competence

Delivering Excellence Through Experience

Our dynamic and integrated team lives here and works here. We recognize the importance of adding value to our local community by solving tough challenges and inspiring positive change. We have been providing services in California since 1960 and have built solid working relationships with the majority of state agencies. Through our local offices, we have a strong familiarity with a solid and in-depth understanding of the requirements and constraints involved in state projects, and specifically those in Southern California. We will utilize our local knowledge and resources to deliver projects on time and within budget.

Our depth of wastewater design expertise brings the ability to identify the right improvements for your system with a focus on operational efficiency, long term reliability, and institutional independence. The following pages demonstrate our expertise on previous projects with SOCWA and other similar projects. Detailed project descriptions and client reference information can also be found on the following pages.

PROJECTS	GATE REPLACEMENT	STRUCTURAL REHAB	BYPASS	CONSTRUCTION SEQUENCING	COST ESTIMATING
JB Latham Aeration and Cogeneration Improvements* SOCWA 🔹	●	●	●	●	●
Chiquita Water Reclamation Plant Influent Screening and Lift Station Upgrades* Santa Margarita Water District 🔹	●	●	●	●	●
Michelson Water Recycling Plant Phase 2 Expansion* Irvine Ranch Water District 🔹		●	●	●	●
Wastewater Treatment Plant Expansion & Nutrient Removal Upgrades* City of San Mateo, CA			●	●	●
Marin Plant Digester Cleaning and Rehabilitation* Sanitary District No 5 of Marin County		●	●	●	●
Aeration Basins Diffuser Replacement & Seismic Upgrades* Central Contra Costa Sanitary District	●	●		●	
Michelson Water Recycling Plant Tertiary Filters Rehabilitation Irvine Ranch Water District 🔹	●	●	●	●	●
Plant 3A Aeration Upgrade SOCWA 🔹				●	
Michelson Water Recycling Plant Filter Pump Station No. 2 (FPS-2) Header Replacement Design Irvine Ranch Water District 🔹			●	●	●
P1-140 Activated Sludge-1 & Secondary Clarifier Rehabilitation Orange County Sanitation District (OC San)	●	●	●	●	●
Wastewater Nutrient Upgrade and Expansion City of Billings, MT				●	
Ventura Water Reclamation Facility Aeration Blower Project City of Ventura, CA				●	●
Ventura Ocean Outfall Pump Station City of Ventura, CA			●	●	●

**** Full project descriptions and client references are included on the following pages

“🔹” Similar experience working with SOCWA & its member agencies



JB Latham Treatment Plant (JBLTP) Aeration and Cogeneration Improvements

**SOUTH ORANGE COUNTY
WASTEWATER AUTHORITY**

CLIENT CONTACT

South Orange County
Wastewater Authority
Roni Young Grant,
Associate Engineer
rgrant@socwa.com,
949.234.5411

DATES

Design
2015 - 2018



HDR designed an efficient and flexible aeration system that meets current demands and can accommodate anticipated changes in influent loadings. HDR served as SOCWA's partner from the facility planning phase through final design and construction phase services.

HDR performed process evaluation, optimization, and design of improvements for SOCWA's JB Latham Treatment Plant (JBLTP), including the development of a Facility Plan. As part of the Facility Plan, our team developed a Biotran process model for JBLTP. The team used this model to determine aeration demands for various scenarios, and evaluated diffusers based on diffuser characteristics and resultant air demands and energy use. The model was also used to determine the required number of diffusers per zone and resulted in optimization of the reactor configuration to create selector zones and reduce aeration demand.

The new aeration system consisted of new fine bubble air diffusers (membrane disc), high efficiency turbo blowers, and full automation through upgrades to control valves, air flow meters, and DO sensors to efficiently control air flow based on dissolved oxygen in the aeration basin influent and effluent zones.

Key elements of the project included the following:

- Evaluation of diffuser and blower equipment to create an optimized aeration system
- Development of a construction phasing and sequencing plan so the plant had sufficient

available aeration capacity throughout construction

- Structural repair of basin walls, walkways, and supports
- Safety improvements throughout the site including repair of existing and installation of new guardrail at the aeration basins
- Repair and replacement of existing equipment, including basin isolation gates
- Electrical design of improvements including new MCCS, instrumentation, and back-up generation. Power feed was connected to the on-site co-generation system.

Construction sequencing of the project required careful planning with operations such that capacity was not impacted. The sequencing plan developed was tailored to operational needs of the plant, and addressed changes in aeration demand and capacity at each phase and impacts to electrical load and upgrades to the MCCs.

The project had an aggressive schedule, which required parallel work paths and close coordination with plant operations staff. Regular meetings, and group review of the plan was essential so that all team members understood the impacts to plant operation at each phase of work.



Chiquita Water Reclamation Plant Influent Screening and Lift Station Upgrades

SANTA MARGARITA WATER DISTRICT

CLIENT CONTACT

Santa Margarita Water District
Tricia Butler, Chief Engineer
triciab@smwd.org,
949.459.6400

DATES

Design
2020-2024



Structural Improvements, Mechanical Gate Replacement, and detailed construction sequencing were crucial components of this project. We bring this relevant experience to the project.

The Chiquita Water Reclamation Plant (CWRP) Influent Screening and Lift Station Upgrades project included major facility modifications and equipment upgrades to address deficiencies to the screening and influent pumping facilities for Santa Margarita Water District's largest treatment plant. The project included analysis of historical influent flows and projections of future flows, and analysis of peak storm conditions to establish design criteria. The preliminary design included an evaluation of screening technologies, and development of configuration alternatives that addressed the physical limitations of the existing structure relative to modern screening technologies, and mitigate the hydraulic impacts to the downstream pumping systems.

The influent lift station upgrades included evaluation of existing conditions, including the construction of a physical model of the lift station to identify hydraulic constraints and develop mitigation strategies to ensure optimal hydraulic performance of the lift station under various conditions. The hydraulic modeling and analysis resulted in modifications to the pump station design.

The final design for the screening facility included modifications to the structure to accommodate the selected screening equipment, and new screening and washing/compacting equipment, new gate controls, odor control upgrades, complete electrical systems replacement, and new safety features. In addition, the design included architectural upgrades to integrate the headworks building with the overall plant scheme. HDR provided planning, design, and construction phase services.



Michelson Water Recycling Plant Phase 2 Expansion

IRVINE RANCH WATER DISTRICT

CLIENT CONTACT

Irvine Ranch Water District
 Rich Mori, Engineering Manager
 for Capital Group,
 mori@irwd.com,
 949-453-5571

DATES

Design	Construction
2006 - 2008	2008 - 2012



HDR led this award-winning expansion with included innovative strategies to construct a new primary influent splitter box and sedimentation basins while eliminating shutdowns. We bring this maintenance of plant operations experience to your project.

HDR provided planning, evaluation, permitting support, public outreach, and preliminary and final design for improvements, as well as provided construction-phase services and facilitated operator training.

Expansion included design of a new treatment train consisting of a membrane bioreactor (MBR) followed by ultraviolet disinfection. To establish reliable operation, we designed a parallel treatment train that required hydraulic and controls integration with existing processes. The MBR was designed to meet a TN limit of 10 mg/L, included alkalinity addition to fully denitrify, and a provision to incorporate methanol as an additional carbon source, when needed.

We engaged Operations staff to create a combined commissioning team comprised of Contractor, Operator, and Design Engineers to keep the plant operational through construction and commissioning. We developed a comprehensive construction sequencing plan to address complex implementation requirements while maintaining plant operations. We effectively engaged and worked with District staff on

critical items. All bypass and isolation measures were integrated with SCADA to provide Operations staff with continuous monitoring of the system. We used temporary bypass and bulkheads to isolate a portion of the process without the need for extended shutdowns.

The expansion of the existing aeration blower system involved serving a nitrification/denitrification conventional activated sludge facility. We evaluated blower technologies and designed aeration system for process air and MBR scour air. We also pre-procured MBR blowers and assigned the procurement contract to the Contractor, which would hold them responsible to coordinate delivery and installation requirements of the equipment. This also allowed the manufacturer warranty to flow through the Contractor's contract.

We identified a comprehensive equipment procurement strategy for cost control and schedule risk mitigation to eliminate uncertainty in costs and which allowed manufactures to start production of major equipment items early.



Wastewater Treatment Plant Expansion and Nutrient Removal Upgrades

CITY OF SAN MATEO, CA

CLIENT CONTACT

City of San Mateo, CA
 Brad Underwood, Former Public Works Director,
 bbu@ivgid.org,
 775-832-1269

DATES

Design	Construction
2016 - 2020	2019 - Est. 2024



Lessons learned on construction sequencing and maintaining plant operations is valuable experience that we bring to your project.

HDR is providing the City with a state-of-the-art, reliable wastewater treatment plant that will be known as the “Gem of the Bay.”

HDR completed schematic design and final design for the entire liquid wastewater treatment plant stream. We are currently providing engineering services during construction. We evaluated greenhouse gas emissions to recommend treatment optimization, sidestream treatment, and treatment upgrades. Upgrades involved headworks, primary sedimentation tanks, equalization basin, biologically active ballasted sedimentation (BioActiflo™) for wet weather treatment, chemical storage and feed facilities, BNR and MBR treatment, disinfection and Title 22 recycled water facilities, a two-story administration and operations building, a warehouse, and other treatment plant support facilities.

The BNR and MBR were designed to handle peak flows during normal conditions. The BNR design was based on meeting a TN limit of 10 mg/L with potential expansion to

meet a TN limit of 4 mg/L and TP limit of less than 1 mg/L. This allows the plant to be fully compliant with their NPDES permit and potential stricter nutrient limits.

We worked closely with the Contractor, O&M, and the City's Program Manager during schematic design, final design, permitting, subcontractor and vendor bidding, and construction. By working with the O&M staff and construction team, we were able to minimize any shutdowns needed. We closely coordinated with Operations staff to convert the existing aeration basins into flow equalization basins during project implementation to maintain continuous plant operation while performing needed repairs and improvements for the process conversion.

We hosted progress and design review meetings to collaborate on key decisions with the City, Program Manager, and CMAR Contractor. The BIM 3D model provided reviewers with a deeper understanding of the integrated consolidated design to facilitate design reviews, change impacts, and mitigate risks.



Main Plant Digester Cleaning and Rehabilitation

SANITARY DISTRICT NO 5 OF MARIN COUNTY

Sanitary District No.5 of Marin County (District) owns and operates the Main Treatment Plant, which provides secondary treatment of domestic and commercial wastewater collected from the Town of Tiburon and the City of Belvedere and surrounding, unincorporated areas. The Main Plants collection system consists of 28.5 miles of gravity sewer line, 2.4 miles of force main and 22 pump stations within its service area.

HDR designed rehabilitation improvements to the secondary and primary digesters, which included lids and pipelines to the digester. Both digesters were taken out of service to be cleaned and inspected.

CLIENT CONTACT

Sanitary District No.5 of Marin County
 Mr. Tony Rubio, District Manager,
 415-435-1501,
 trubio@sani5.org

DATES

2022 - 2024



Structural enhancements and mechanical upgrades formed substantial components of this project, and aimed to fortify infrastructure integrity and enhance operational efficiency.



Aeration Basins Diffuser Replacement & Seismic Upgrades

CENTRAL CONTRA COSTA SANITARY DISTRICT (CENTRAL SAN)

HDR provided detailed design and bid phase services for the recommended aeration basins improvements identified in the preliminary design report prepared by HDR, which included aeration basin and north and south selector channels seismic and structural improvements, air wasting valve system improvements, aeration basin diffuser replacement and aeration system improvements, aeration basin drainage and gate rehabilitation, north and south selector channel rehabilitation, return activated sludge (RAS) pipeline improvements, and mixed liquor channel gate replacement.

CLIENT CONTACT

PDR PHASE
 Nitin Goel,
 Senior Engineer
 925-229-7301
 ngoel@centralsan.org

DESIGN & CONST. PHASES
 Will Grant,
 Associate Engineer
 925-229-7189
 wgrant@centralsan.org

DATES

PDR	DESIGN	CONSTRUCTION
2019 - 2022	2022 - 2023	2023 - Ongoing



Aeration basins are a critical process for water reclamation facilities and need to be maintained during construction. HDR upgraded Central San's aeration basins with long-term function and structural enhancement in mind.

4.

Key Personnel and Sub-Consultants



Key Personnel & Sub-Consultants

We have assembled an experienced team of fully committed staff that will work in partnership with your staff. The organizational chart to the right provides the names of each proposed team member. The individuals proposed for this project represent our best and most qualified staff to support SOCWA with this important project. Personnel profiles for key team members are provided on the following pages. Complete resumes for key personnel listed on our organizational chart are available in the Appendix.

The Right Leadership for Successful Project Delivery

Our team is built around a simple yet powerful concept: Put the best individuals into the roles where they can add the highest value to SOCWA's RTP Primary and Aeration Area Grating and Gates Replacement project. **Teigan Gulliver** will serve as our Project Manager and be your primary point of contact for this project. She has demonstrated technical expertise, leadership and ability to deliver this Project. With projects like this, it's easier for staff to get lost in the details and find other areas in which the process can be improved, especially without a clear direction given. Teigan has a firm understanding of the purpose, the goal, and the scope of the project. She will keep the project goal in front of the team throughout the life of the Project. Teigan brings her technical experiences on primary and secondary treatment process from working at LA Sanitation's Terminal Island Water Reclamation Plant, LA Sanitation's Hyperion Water Reclamation Plant, Orange County Sanitation District's Plant No. 1, City of Westminster's Big Dry Creek Wastewater Treatment Plant, and the St. Vrain Wastewater Treatment Plant. Teigan will lead the HDR team and partner with SOCWA staff to envision innovative ideas and cost effective solutions for your wastewater facility.



PRINCIPAL IN CHARGE

Amy Omae,
PE, LEED AP

PROJECT MANAGER

Teigan Gulliver, PE

QUALITY CONTROL

Tom Hamlin, PE, SE
Mandira Sudame, PE

TECHNICAL TEAM

STRUCTURAL

Crystal Starr, PE, SE
Mark Harper, PE, SE

MECHANICAL

Teigan Gulliver, PE
Riddhima Kumar, EIT

CONSTRUCTION SEQUENCING

Gregorio Estrada, PE

COST ESTIMATING

Kirk Johnson

LEGEND Key Staff



**TEIGAN
GULLIVER, PE**

Project Manager

What truly sets Teigan apart is her approachability and her genuine passion for knowledge sharing. She's not only an expert in her field but also a team player who goes the extra mile to ensure that everyone involved is on the same page. "

- QUYNH HO,
LA SANITATION (LASAN)

Teigan is a proven Project Manager with over 15 years of experience in water/wastewater design. Teigan has the demonstrated project management and leadership skills necessary to manage the team of technical experts and deliver this important replacement project. Her dedication to delivering quality projects has made her one of our most trusted project managers.

As Project Manager, Teigan will be involved in all aspects of the project from design through construction. She will monitor and track project progress and direction to deliver the project successfully, while identifying and mitigating potential risks as early as possible. Being based in Southern California, Teigan is readily available and able to meet as frequently as needed and is committed to the project through its entire duration.

Delivery-Focused Team

The personnel profiles below highlight the qualifications of key personnel who bring valuable insights to your project. Majority of them have either worked on projects for SOCWA and/or its member agencies, and all have worked on similar projects locally and nationally with similar agencies. Our team includes people you know and trust, including Amy Omae, Gregorio Estrada, and Tom Hamlin. **The team is excited and dedicated to continue our work with SOCWA and the success of this project.**



	<p>Amy Omae, PE, LEED Principal In Charge</p> <p>Amy is a proven Project Manager/Professional Engineer with nearly two decades of experience in wastewater and water master planning, design, and engineering services during construction projects throughout California. Amy promotes a collaborative and transparent environment to receive stakeholder input and understand project drivers. She recognizes that the institutional knowledge retained by SOCWA's engineering, operations, and maintenance staff is extensive and invaluable. As Principal-in-Charge, Amy will provide oversight and assistance to the team to maintain efficient delivery of the work. Amy is dedicated to delivering a quality project that meets or exceeds SOCWA's expectations. She will confirm that quality goals are met and budgets and schedule are maintained.</p>	<p>RELEVANT QUALIFICATIONS</p> <ul style="list-style-type: none"> ✓ SOCWA, Plant 3A Aeration Improvements ✓ IRWD, Michelson Water Recycling Plant Tertiary Filters Improvements ✓ IRWD, Michelson Water Recycling Plant Ph. 2 Expansion ✓ City of San Mateo, Wastewater Treatment Plant Expansion and Nutrient Removal Upgrades
	<p>Mandira Sudame, PE Quality Control</p> <p>Mandira has more than 20 years of experience in planning, design, construction, condition assessment, and management of wastewater and recycled water facilities. Specialization includes wastewater process design for biological nutrient removal, membrane technology, disinfection, and solids handling. Mandira recently served as the QA/QC Lead for the City of Thousand Oaks' Tertiary Filter Rehabilitation Project and the Filter Performance Investigation Lead for Irvine Ranch Water District's Michelson Water Recycling Plant Tertiary Filters Improvements. As QC Manager, Mandira will offer technical advice, as well as availability for engagement by the project team on a continual basis.</p>	<p>RELEVANT QUALIFICATIONS</p> <ul style="list-style-type: none"> ✓ SOCWA, Plant 3A Onsite Energy Generation ✓ IRWD, Michelson Water Recycling Plant Tertiary Filters Improvements ✓ IRWD, Michelson Water Recycling Plant Ph. 2 Expansion ✓ City of San Mateo, Wastewater Treatment Plant Expansion and Nutrient Removal Upgrades
	<p>Tom Hamlin, PE, SE Quality Control</p> <p>Tom's 20 years of experience as a structural engineer includes condition assessments, structural investigations, design, plan development, QC reviews, and construction administration for a wide range of structure types, including water/wastewater facilities, mining, industrial, data center, and federal facilities. Tom has extensive experience in performing structural investigations and rehabilitations of existing water/wastewater facilities for clients, including SOCWA, Irvine Ranch Water District, Orange County Sanitation District and City of San Diego. Tom is familiar with SOCWA's facilities and treatment systems having served as the Structural Engineer on SOCWA's JBLTP Aeration System Upgrades and Plant 3A Aeration Pipe Header Re-routing projects. He will leverage his knowledge and experience with SOCWA's systems to provide thorough and detailed quality reviews.</p>	<p>RELEVANT QUALIFICATIONS</p> <ul style="list-style-type: none"> ✓ SOCWA, JB Latham Treatment Plant (JBLTP) Aeration System Upgrades ✓ SOCWA, Plant 3A Aeration Pipe Header Re-routing ✓ IRWD, Michelson Water Recycling Plant Tertiary Filters Improvements ✓ OC SAN, Sludge Dewatering and Odor Control at Plant No. 1 Job No. P1-101 ✓ City of Billings, Billings Wastewater Nutrient Upgrade and Expansion



Crystal Starr, PE, SE | Structural

RELEVANT QUALIFICATIONS

Crystal is a senior structural engineer with more than 19 years of experience in structural evaluation, engineering, design, and construction support of infrastructure projects related to water, wastewater, municipal utilities, and hydropower. The majority of her expertise in structural design and retrofit of building and tank structures is located in high seismic regions in California, and along the west coast. **Crystal was the Lead Structural Engineer for Central Contra Costa Sanitary District's Diffuser Replacement Seismic**

- ✓ *Central Contra Costa Sanitary District, Diffuser Replacement Seismic Upgrades Project*
- ✓ *City of San Mateo, Wastewater Treatment Plant Expansion and Nutrient Removal Upgrades*
- ✓ *City of Livermore, Condition Assessment at Livermore Water Reclamation Plant*
- ✓ *City of Richmond and Veolia Water, WWTP Critical Improvements Project*

Upgrades Project, which included the seismic retrofit of the existing Aeration Basin structure and replacement of the existing diffuser system and replacement of various slide gates and finger weirs. Crystal will leverage her experience and knowledge to provide lessons learned and best practices when working with SOCWA staff on this important project.



Gregorio Estrada, PE | Construction Sequencing

RELEVANT QUALIFICATIONS

Gregorio is a recognized leader in wastewater treatment with experience in facility planning, design, construction, and operational management. Gregorio specializes in wastewater treatment processes and has extensive experience managing construction-phase services on complex wastewater projects. Gregorio brings extensive experience delivering projects for SOCWA, including the JB Latham Aeration and Cogeneration Improvements and several projects at Plant 3A under SOCWA. In addition, Gregorio

- ✓ *IRWD, Michelson Water Recycling Plant Tertiary Filters Improvements*
- ✓ *City of Thousand Oaks, Tertiary Filter Rehab*
- ✓ *SOCWA, JB Latham Aeration and Cogeneration Improvements*
- ✓ *SOCWA, Plant 3A Aeration Improvements*
- ✓ *IRWD, Michelson Water Recycling Plant Ph. 2 Expansion*
- ✓ *City of San Mateo, Wastewater Treatment Plant Expansion and Nutrient Removal Upgrades*

brings 24 years of experience delivering projects at treatment plants across Southern California. Gregorio has also worked alongside your member agencies – Irvine Ranch Water District and Santa Margarita Water District. **Gregorio served as the Principal in Charge and Construction Sequencing Lead for Irvine Ranch Water District's Michelson Water Recycling Plant Tertiary Filters Improvements. Gregorio's first-hand experience addressing issues in the field during construction, coupled with his design expertise, makes Gregorio the ideal candidate to lead construction sequencing for this project.**



Kirk Johnson | Cost Estimating

RELEVANT QUALIFICATIONS

Kirk has 30 years of experience in commercial, industrial, and public works construction; most recently, he was responsible for at risk design-build estimating and consulting in the Western United States with a primary focus on alternative delivery for water and wastewater projects. His background includes management roles, consulting, conceptual cost estimation, bidding, and negotiating on projects as large as \$1 billion. He is proficient in several industry-focused software packages: Sage Timberline Estimating and Accounting,

- ✓ *Eastern Municipal Water District, Regional Wastewater Reclamation Facilities Rehab Study*
- ✓ *US Army Corps of Engineers, FY13 Wastewater Treatment Plant, Joint Base Lewis McChord*
- ✓ *Naval Facilities Engineering Command (NAVFAC) Pacific, FY08 Wastewater Treatment Plant Repairs & Upgrade*

HCSS HeavyBid, MCACES/MII (USACE), Success Estimator (NAVFAC), Primavera P6 / PCM Contract Management, Microsoft Project and AutoCAD, Civil 3d, and Assemble. **Kirk will be responsible for providing estimates of probable construction costs and will utilize his expertise in cost estimating process and procedures to prepare SOCWA for future costs.**

5.

Pricing



05
Pricing



South Orange County Wastewater Authority
Primary and Aeration Area Grating and Gates
Estimated Level of Effort and Fee

TASKS		LEVEL OF EFFORT														FEE				
No.	Description	Principal In Charge	Project Manager	QAQC	Structural Lead	Mechanical Lead	Construction Sequencing Lead	Cost Estimator	Sr. Project Engineer	Project Engineer	CADD Staff	CADD Manager	Doc Prod Spec	Project Accountant	Total Labor	Labor	Subs	Direct Costs	Total	TOTAL
Client Billing Rates		\$320	\$275	\$340	\$320	\$275	\$340	\$280	\$265	\$180	\$150	\$245	\$140	\$200	\$228		Calc	Calc	Calc	-1
1	Project Management																			
1.1	Kickoff Meeting (in person)		8		3		4								15	\$4,520	\$0	\$287	\$4,807	
1.2	Project Management Plan		11										11		22	\$4,565	\$0	\$91	\$4,656	
1.3	Project meetings & coordination		20												20	\$5,500	\$0	\$110	\$5,610	
1.4	Project monitoring & reporting		20											27	47	\$10,900	\$0	\$218	\$11,118	
1.5	QA/QC & PARR	11	6	11	12										40	\$12,750	\$0	\$255	\$13,005	
Subtotal 1 Project Management		11	65	11	15	0	4	0	0	0	0	0	11	27	144	\$38,235	\$0	\$961	\$39,196	\$39,200
2	Data Collection and Document Review																			
2.1	Request, Compile & Review Data		4		4	4	4		4	6			4		30	\$7,540	\$0	\$151	\$7,691	
2.2	Site Visit and staff interviews (one day)		4		4		3		4	3					18	\$5,000	\$0	\$833	\$5,833	
Subtotal 2 Data Collection and Document Review		0	8	0	8	4	7	0	8	9	0	0	4	0	48	\$12,540	\$0	\$984	\$13,524	\$13,520
3	Preliminary Design																			
3.1	Bypass/Sequencing Conceptual Plan						11			16					27	\$6,620	\$0	\$132	\$6,752	
3.2	Gates Alternatives Analysis					11				33					44	\$8,965	\$0	\$179	\$9,144	
3.3	Structural Improvements Analysis				17				16	33					66	\$15,620	\$0	\$312	\$15,932	
3.4	Design Workshop		11		4	5	5		5	22					52	\$12,665	\$0	\$552	\$13,217	
3.5	Implementation Plan		5	4		3	11			22					45	\$11,260	\$0	\$225	\$11,485	
Subtotal 3 Preliminary Design		0	16	4	21	19	27	0	21	126	0	0	0	0	234	\$55,130	\$0	\$1,400	\$56,530	\$56,530
4	Final Design																			
4.1	50% Design Deliverable (inc. drawings, specs, cost estimate)		11	6	11	22	4	6	22	77	77	11			247	\$51,610	\$0	\$1,065	\$52,675	
4.2	90% Deliverable (inc. drawings, specs, cost estimate)		11	6	11	22	3	6	22	66	66	4			217	\$45,925	\$0	\$951	\$46,876	
4.3	Bid Set Deliverable (inc. drawings, specs, cost estimate)		11	5	11	11	2	5	11	44	44	3			147	\$31,520	\$0	\$663	\$32,183	
4.4	Constructability Review		9		5	3	3	3	2	17					42	\$10,350	\$0	\$506	\$10,856	
4.5	Construction Sequencing and Bypass Plan		9	2			11			17					39	\$9,955	\$0	\$199	\$10,154	
Subtotal 4 Final Design		0	51	19	38	58	23	20	57	221	187	18	0	0	692	\$149,360	\$0	\$3,384	\$152,744	\$152,740
TOTAL, hours		11	140	34	82	81	61	20	86	356	187	18	15	27	1,118					
TOTAL, dollars																\$255,265	\$0	\$6,729	\$261,994	\$261,990

6.

Conflicts of Interest



ATTACHMENT D
AFFIDAVIT CERTIFYING NO CONFLICTS OF INTEREST

The undersigned declares:

I am the Vice President of HDR Engineering, Inc. ("Proposer"), the party making the foregoing bid.

As a California public agency, SOCWA is subject to conflicts of interest rules under the Political Reform Act ("PRA") and California Government Code Section 1090 ("Section 1090").

The PRA prohibits a public official at any level of state or local government from making, participate in making, or in any way attempt to use their official position to influence a governmental decision in which the official has a financial interest. A public official has a financial interest in a decision if it is reasonably foreseeable that the decision will have a material financial effect on the public official, a member of the public official's immediate family, or on: (a) a business in which the public official has a direct or indirect investment worth \$2,000 or more; (b) real property in which the public official has a direct or indirect interest worth \$2,000 or more; (c) any source of income of \$500 or more received within 12 months prior to the time when the decision is made; (d) a business in which the public official is a director, officer, partner, trustee, employee, or has a management position; or (e) the donor of a gift to the public official of \$250 within 12 months prior to the time when the decision is made.

Section 1090 provides that public officials and public employees may not be "financially interested" in "any contract made by them in their official capacity."

By signing below, Bidder acknowledges that it (i) has considered persons with whom it has business relationships as to the potential for such persons to have a conflict of interest, (ii) has considered the requirements and provisions of the PRA and Section 1090, (iii) certifies that it does not know of any facts which constitute a violation, or should be further investigated to prevent a violation of those provisions, and (iv) agrees that Bidder will immediately notify SOCWA if it becomes aware of any such fact at a later date.

Any person executing this declaration on behalf of a Bidder that is a corporation, partnership, joint venture, limited liability company, limited liability partnership, or any other entity, hereby represents that he or she has full power to execute, and does execute, this declaration on behalf of the Bidder.

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct and that this declaration is executed on 04/25/24, at Irvine [city], CA [state].

Signature: 

Title: Vice President

7.

Non-Collusion Affidavit



ATTACHMENT B
NON-COLLUSION AFFIDAVIT


The undersigned declares:

I am the Vice President of HDR Engineering, Inc., the party making the foregoing bid.

The bid is not made in the interest of, or on behalf of, any undisclosed person, partnership, company, association, organization, or corporation. The bid is genuine and not collusive or sham. The bidder has not directly or indirectly induced or solicited any other bidder to put in a false or sham bid. The bidder has not directly or indirectly colluded, conspired, connived, or agreed with any bidder or anyone else to put in a sham bid, or to refrain from bidding. The bidder has not in any manner, directly or indirectly, sought by agreement, communication, or conference with anyone to fix the bid price of the bidder or any other bidder, or to fix any overhead, profit, or cost element of the bid price, or of that of any other bidder. All statements contained in the bid are true. The bidder has not, directly or indirectly, submitted his or her bid price or any breakdown thereof, or the contents thereof, or divulged information or data relative thereto, to any corporation, partnership, company, association, organization, bid depository, or to any member or agent thereof, to effectuate a collusive or sham bid, and has not paid, and will not pay, any person or entity for such purpose.

Any person executing this declaration on behalf of a bidder that is a corporation, partnership, joint venture, limited liability company, limited liability partnership, or any other entity, hereby represents that he or she has full power to execute, and does execute, this declaration on behalf of the bidder.

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct and that this declaration is executed on 04/25/24, at Irvine [city], CA [state].

Signature: 

Title: Vice President

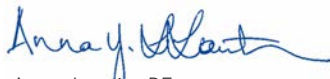
8.

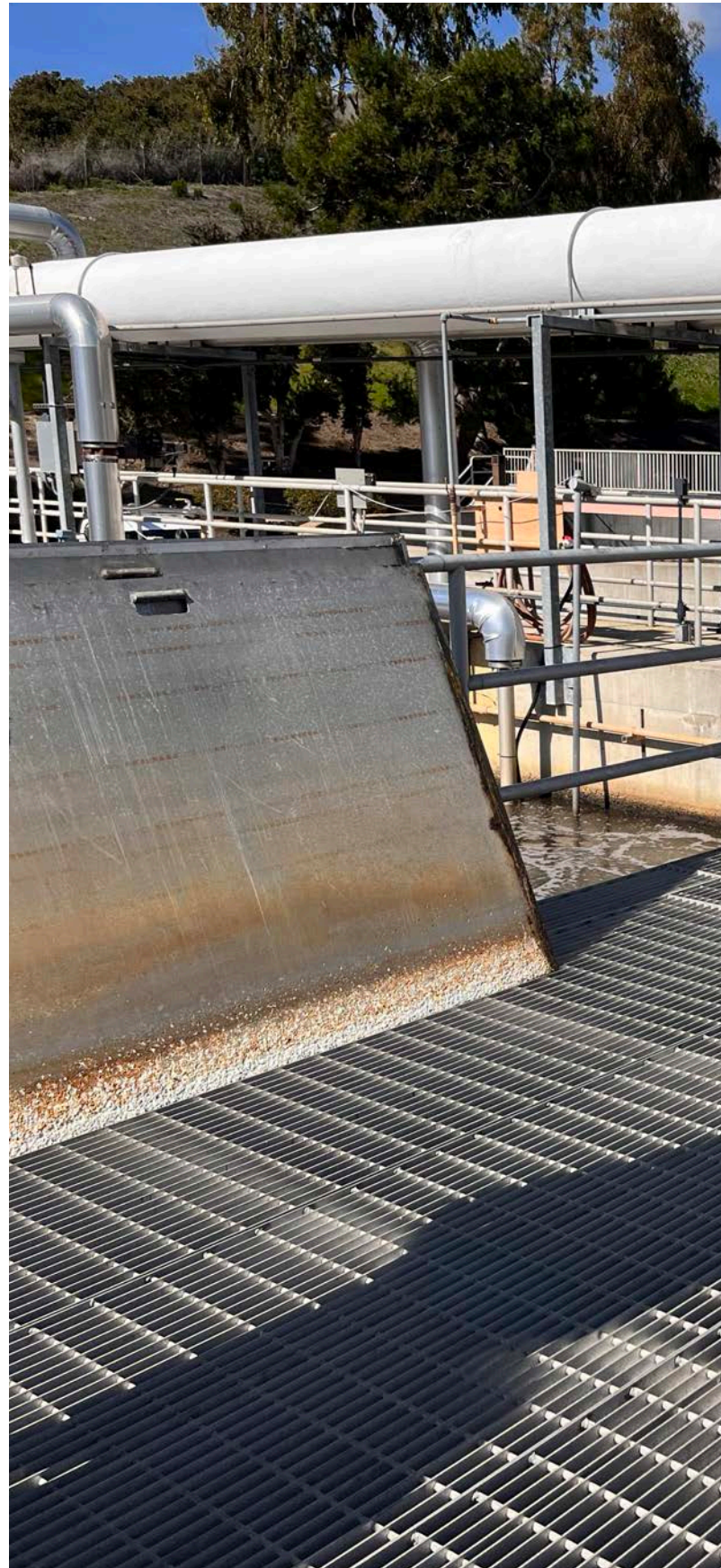
Certifications



08 Certifications

- ✓ HDR is not aware of any actual or potential conflict of interest that exists or may arise by executing the contract or performing the work that is the subject of this RFP.
- ✓ HDR meets or is capable of the insurance requirements specified in the RFP. A sample of HDR's Certificate of Liability Insurance is included on the following page.
- ✓ All HDR field personnel will be paid no less than the prevailing wage during the assessment and construction of this project. HDR will comply with all with all applicable local, state, and federal laws or regulations governing the labor or services to be provided.
- ✓ HDR has reviewed and understands SOCWA's standard professional services agreement. Upon selection, HDR would appreciate the opportunity to discuss some of the contract terms with SOCWA. Per the RFP, respondents must list any exceptions or suggested modifications to the form of contract in its proposal. Please see our proposed modifications in the Appendix.
- ✓ To our knowledge, all information provided within our proposal is true, complete and correct.


Anna Lanth, PE
Vice President



Insurance

HDR has maintained professional liability insurance in force continually since 1958 for the protection of clients and us. HDR meets or is capable of the insurance requirements specified in the RFP. A sample of HDR's Certificate of Liability Insurance is below.

		CERTIFICATE OF LIABILITY INSURANCE		DATE (MM/DD/YYYY) 06/16/2021															
THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.																			
IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).																			
PRODUCER Willis Towers Watson Midwest, Inc. c/o 26 Century Blvd P.O. Box 305191 Nashville, TN 372305191 USA			CONTACT NAME: Willis Towers Watson Certificate Center PHONE (A/C, No, Ext): 1-877-945-7378 FAX (A/C, No): 1-888-467-2378 E-MAIL ADDRESS: certificates@willis.com																
INSURED HDR Engineering, Inc. 1917 South 67th Street Omaha, NE 68106			<table border="1"> <tr> <th>INSURER(S) AFFORDING COVERAGE</th> <th>NAIC #</th> </tr> <tr> <td>INSURER A: Liberty Mutual Fire Insurance Company</td> <td>23035</td> </tr> <tr> <td>INSURER B: Ohio Casualty Insurance Company</td> <td>24074</td> </tr> <tr> <td>INSURER C: Liberty Insurance Corporation</td> <td>42404</td> </tr> <tr> <td>INSURER D:</td> <td></td> </tr> <tr> <td>INSURER E:</td> <td></td> </tr> <tr> <td>INSURER F:</td> <td></td> </tr> </table>			INSURER(S) AFFORDING COVERAGE	NAIC #	INSURER A: Liberty Mutual Fire Insurance Company	23035	INSURER B: Ohio Casualty Insurance Company	24074	INSURER C: Liberty Insurance Corporation	42404	INSURER D:		INSURER E:		INSURER F:	
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INSURER C: Liberty Insurance Corporation	42404																		
INSURER D:																			
INSURER E:																			
INSURER F:																			
COVERAGES		CERTIFICATE NUMBER: W21262337		REVISION NUMBER:															
THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.																			
INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR VVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS												
A	<input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR <input checked="" type="checkbox"/> Contractual Liability Deductible: \$100,000 GEN'L AGGREGATE LIMIT APPLIES PER: <input type="checkbox"/> POLICY <input checked="" type="checkbox"/> PROJECT <input checked="" type="checkbox"/> LOC OTHER:	Y	Y	TB2-641-444950-031	06/01/2021	06/01/2022	EACH OCCURRENCE \$ 2,000,000 DAMAGE TO RENTED PREMISES (Ea occurrence) \$ 1,000,000 MED EXP (Any one person) \$ 10,000 PERSONAL & ADV INJURY \$ 2,000,000 GENERAL AGGREGATE \$ 4,000,000 PRODUCTS - COMP/OP AGG \$ 4,000,000												
A	AUTOMOBILE LIABILITY <input checked="" type="checkbox"/> ANY AUTO <input type="checkbox"/> OWNED AUTOS ONLY <input type="checkbox"/> SCHEDULED AUTOS NON-OWNED <input type="checkbox"/> HIRED AUTOS ONLY <input checked="" type="checkbox"/> AUTOS ONLY Ded. \$1,000 <input checked="" type="checkbox"/> Comp/Col	Y	Y	AS2-641-444950-041	06/01/2021	06/01/2022	COMBINED SINGLE LIMIT (Ea accident) \$ 2,000,000 BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (Per accident) \$ \$												
B	<input type="checkbox"/> UMBRELLA LIAB <input checked="" type="checkbox"/> OCCUR <input checked="" type="checkbox"/> EXCESS LIAB <input type="checkbox"/> CLAIMS-MADE DED <input checked="" type="checkbox"/> RETENTION \$ 0	Y	Y	EUO(22)57919363	06/01/2021	06/01/2022	EACH OCCURRENCE \$ 10,000,000 AGGREGATE \$ 10,000,000 \$												
C	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below	Y/N No	N/A	WA7-64D-444950-011	06/01/2021	06/01/2022	<input checked="" type="checkbox"/> PER STATUTE <input type="checkbox"/> OTH-ER E.L. EACH ACCIDENT \$ 1,000,000 E.L. DISEASE - EA EMPLOYEE \$ 1,000,000 E.L. DISEASE - POLICY LIMIT \$ 1,000,000												
DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required) Workers Compensation Deductible - \$250,000 Certificate Holder is named as Additional Insured on General Liability, Automobile Liability and Umbrella/Excess Liability on a Primary, Non-contributory basis where required by written contract. Waiver of Subrogation applies on General Liability, Automobile Liability, Umbrella/Excess Liability and Workers Compensation where required by written contract. Umbrella/Excess policy is Follows Form over General Liability, Auto Liability and Employers Liability.																			
CERTIFICATE HOLDER				CANCELLATION															
Sample				SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS. AUTHORIZED REPRESENTATIVE 															

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SR ID: 21227135

BATCH: 2132293



APPENDIX

APPENDIX INCLUDES THE FOLLOWING

- ✓ Contract
- ✓ Addenda Acknowledgment
- ✓ Resumes

Contract

HDR and SOCWA have executed several agreements in the past. We recommend these agreements be used as the basis for this project, which will facilitate a quick start of work. HDR has reviewed and understands SOCWA's standard professional services agreement. Upon selection, **HDR would appreciate the opportunity to discuss some of the contract terms with SOCWA.** HDR respectfully proposes the following modifications to SOCWA's standard professional services agreement. We propose deleting the strikethrough language highlighted in yellow and adding/ revising the language **bolded in red**. We are available to discuss any of the requested changes with you.



No.	Section Title	Recommendations to Agreement
2.1	Specific Services	CONTRACTOR shall perform those services which are described in the Scope of Work described in Exhibit A hereto, which is incorporated by reference (the "Scope of Work"), in connection with the _____ (the "Project"). SOCWA shall make available to CONTRACTOR at no cost all technical data in SOCWA's possession, including maps, past reports, prior studies, operating data, and other information reasonably required by CONTRACTOR to perform the Scope of Work. CONTRACTOR is entitled to rely upon the accuracy and completeness of such technical data, provided that CONTRACTOR shall provide SOCWA prompt notice of any known defects in such technical data. CONTRACTOR will determine the method, details and means of performing the Scope of Work. The standard of care for CONTRACTOR's services shall be the care and skill ordinarily used by members of CONTRACTOR's profession practicing under the same or similar circumstances at the same time and in the same locality.
5.6	Required Provisions	5.6.4 The general liability and automobile liability policies required hereunder shall be endorsed to include contractual liability.
5.7	Deductibles	Any deductibles or self-insured retentions must be declared in writing and approved by SOCWA. At the option of SOCWA, either: the insurance provider(s) shall reduce or eliminate such deductibles or self-insured retentions as respects the SOCWA and its Member Agencies, and each of their directors, officers, employees, and representatives; or the CONTRACTOR shall provide a financial guarantee satisfactory to SOCWA guaranteeing payment of losses and related investigations, claim administration and defense expenses.
6.1	General Indemnity	6.1.1 CONTRACTOR shall cooperate with and do whatever is necessary to protect SOCWA Indemnites from any such Claims. CONTRACTOR will be compensated for such support unless the Claim is subject to CONTRACTOR's indemnification obligations in this Section 6.

6.1	General Indemnity	6.1.2 CONTRACTOR shall defend SOCWA Indemnitees, at CONTRACTOR's own cost, expense and risk, from any and all such aforesaid Claims or other proceedings of any kind that may be brought or instituted against SOCWA Indemnitees that are subject to CONTRACTOR's indemnification obligation as set forth in Section 6.1 above. The cost to defend charged to CONTRACTOR shall not exceed the CONTRACTOR's proportionate percentage of fault, except that in the event that one or more defendants is unable to pay its share of defense costs due to bankruptcy or dissolution of the business, CONTRACTOR must meet and confer with the other parties regarding unpaid defense costs. CONTRACTOR and SOCWA Indemnitees shall be jointly represented by legal counsel, unless there is a conflict of interest, and CONTRACTOR shall pay SOCWA Indemnitees' reasonable attorneys' fees and costs as they are incurred. SOCWA Indemnitees shall be consulted regarding and shall approve the selection of legal counsel. Should separate legal counsel be necessary for SOCWA Indemnitees, as determined by SOCWA, CONTRACTOR shall pay for the reasonable attorneys' fees and costs including expert witness fees, as such fees and costs are incurred and within thirty (30) days of receipt of an invoice, for SOCWA Indemnitees' legal counsel in addition to CONTRACTOR's own legal fees and costs. In all circumstances, SOCWA Indemnitees reserve the right to retain their own attorneys at its own cost. CONTRACTOR shall not agree without SOCWA Indemnitees' prior written consent to any settlement on SOCWA Indemnitees' behalf.
6.1	General Indemnity	6.1.4 CONTRACTOR shall pay and satisfy, in accordance with CONTRACTOR's degree of fault, any judgment, award, liability or decree that may be awarded, imposed or rendered against Indemnified Parties as a result of any Claims whether legal, administrative or otherwise, including any settlement related thereto.
7.1	Termination for Default	If either party defaults in the performance of this Agreement or materially breaches any of its provisions, and if such default or breach is not cured within a period of ten (10) days following written notice thereof, the non-breaching party may immediately terminate this Agreement by giving written notification to the breaching party. Termination will take effect immediately on receipt of notice by the breaching party or five (5) days after mailing of notice, whichever occurs first. For the purposes of this paragraph..
8.1	Documents and Drawings Prepared by CONTRACTOR	All original drawings and other documents, including detailed calculations developed for the Project and/or as part of the services provided herein, shall be furnished to and become the property of SOCWA upon payment in full or as otherwise provided herein. These materials are furnished for SOCWA's use in connection with the Project and/or work provided for in this Agreement and shall become SOCWA's property upon receipt. Any modification or reuse of such materials for purposes other than those intended by this Agreement shall be at SOCWA's sole risk and without liability to CONTRACTOR. All documents and information generated by CONTRACTOR and any of CONTRACTOR's subcontractors pursuant to this Agreement shall remain confidential and shall not be copied, distributed, or otherwise provided or referenced by CONTRACTOR or CONTRACTOR's subcontractors to any third parties other than with SOCWA's written consent, or as compelled by court order. CONTRACTOR may retain a copy of all reports and documents for its files.

Addenda Acknowledgement

Appendix B

SOUTH ORANGE COUNTY WASTEWATER AUTHORITY

ADDENDUM No. 1

TO REQUEST FOR PROPOSALS

FOR RTP Primary and Aeration Area Grating and Gates

**THE PROPOSER SHALL EXECUTE THE CERTIFICATION AT THE END OF THE
ADDENDUM AND SHALL ATTACH THE ADDENDUM TO THE PROPOSAL (NOT TO BE
INCLUDED AS PART OF THE PAGE COUNT).**

Revised Scope of Work attached hereto.

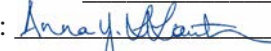
DATED: 3/4/2024


Jeanette Cotinola, CPCM

BIDDER'S CERTIFICATION

I acknowledge receipt of the foregoing Addendum No. 1 and accept all conditions contained herein.

DATED: April 25, 2024

BIDDER: HDR Engineering, Inc.
BY:  Vice President

ATTACHMENT A REVISED 2.29.2024

BACKGROUND/GOAL/SCOPE OF WORK

BACKGROUND

The Regional Treatment Plant (RTP) is a conventional activated sludge treatment plant with a secondary treatment design capacity of 12 million gallons per day (MGD). The plant was constructed in 1982. The Primary Sedimentation Tanks remove both settleable solids and floatable materials from the influent wastewater. Water sprays move the floating materials towards a helical style scum collection system to remove floatable solids in the primary settling process. A portion of the secondary effluent is reclaimed for irrigation. All effluent not reclaimed is charged to the Pacific Ocean through the Aliso Creek Ocean Outfall. RTP also receives solids from the Coastal Treatment Plant and El Toro Water District for digestion, dewatering and ultimate disposal.

The primary area grating, and gates have deteriorated and are not functioning properly. Staff have laid plywood over covers where main foot traffic occurs because of concerns about cover safety. Similarly, the grit chamber influent and effluent channel covers have also failed, and temporary plywood covers have been used as a safety measure.

The existing aeration influent and effluent have existing plates as flow stopping devices. Plates are operated and removed at least once a year. This mitigates the issue of the plates getting stuck on the effluent side. In general, exercising the gates is the primary mitigation measure. Otherwise, the gates will get stuck and making removal challenging.

PROJECT ELEMENTS

Primary Area

- Replace grit grating and rebates, primary influent and effluent gates, and primary effluent channel grating, and primary area grating.
- Replace existing primary influent slide plates with weir gates with manual operators.
- Replace effluent slide plates with slide gates with manual operators (three per tank).
- Evaluate construction feasibility, bypassing, and sequencing options to minimize disruption to the treatment plant.

Aeration Area

- Where the new gates require modification to the existing deck grating, the design shall replace five (5) feet of grating and substructure around all sides of the new gate to ensure foul air capture is maintained after the gates are installed.
- Replace six influent gates with weirs or slide gates, evaluate, and recommend best option for this application.

- Modify odor boxes as necessary for installation of gate operator and concrete surface repairs.
- Replace effluent gates, evaluate different alternatives to take the existing structure, grating support and pipe support into consideration.
- Replace six drain valves in each of the aeration tank with corrosion resistant material, including bulkhead system to seal off the leaking step feed gates.
- Replace the existing gates feeding into the RAS channel and evaluate possible options to replace gates.
- Evaluate construction feasibility, bypassing, and sequencing options to minimize disruption to the treatment plant.

SCOPE OF SERVICES

Tasks are to include the following:

- I. Project Management and Progress Meetings. FIRM shall conduct virtual or in-person monthly progress meetings with SOCWA staff. The primary purpose of the meetings is to review schedule, task progress, and outstanding action items. The FIRM shall prepare the agenda, the action item list, and the decision log for each meeting. FIRM shall plan for a maximum of 9 progress meetings. The kickoff meeting will be conducted in person at the Regional Treatment Plant. For more details on progress meetings please see RFP section 1.7.
- II. Data Collection and Document Review. SOCWA will provide the FIRM with available record drawings and previous studies.
- III. Design Workshop. This workshop shall include bypass/sequencing concept plan, and also including gates alternative analysis. SOCWA will take four weeks to review the submittal and return comments. FIRM shall prepare an implementation plan showing how work can be done while maintaining the facility in service.
- IV. 50% Submittal. This submittal shall address all SOCWA's comments from the Design Workshop. This submittal shall also include comments returned from the Design Workshop with the completed plans, specifications, and cost estimate. SOCWA will take four weeks to review the submittal and return comments.
- V. 90% Submittal. The 90% submittal shall address all SOCWA's comments from the 50% submittal. This submittal shall also include the same elements as the 50% submittal with the completed plans, specifications, and cost estimate. SOCWA will take four weeks to review the submittal and return comments.
- VI. Constructability Review. This shall be in person and a site walk shall be made prior to discussions on Bid Set of documents.

VII. Bid Set. FIRM shall provide the complete bid set with the completed plans, specifications, and cost estimate. This Bid Set shall include SOCWA's comments from the Design Workshop, 50% Submittal, 90% Submittal and constructability review.

VIII. Technical Specifications. SOCWA will provide the FIRM with the listing of standard specifications from Division 1 to be used for the project after the 50% submittals review. FIRM is responsible for preparing Section 01010, Summary of Work and Section 01014, Work Restrictions and Sequence. FIRM shall meet with SOCWA to discuss coordination of specifications sections referenced in the technical specifications. FIRM shall submit required information for review at the 90% submittal.

IX. Construction Sequencing and Bypass Plan. FIRM shall evaluate the need to bypass the influent channel for the grit grating work. Bypass of the primary effluent channel and the ability to feed the interstage pumps. The minimum number of tanks in service and sequence to stagger the work between each tank are some examples of the sequence and bypass.



Teigan Gulliver, PE | Project Manager / Mechanical

Teigan is a proven Project Manager with over 14 years of experience in water/wastewater design. Teigan has the demonstrated project management and leadership skills necessary to manage the team of technical experts and deliver this important replacement project. Her dedication to delivering quality projects has made her one of our most trusted project managers. As Project Manager, Teigan will be involved in all aspects of the project from design through construction. She will monitor and track project progress and direction to deliver the project successfully, while identifying and mitigating potential risks as early as possible. Being based in Southern California, Teigan is readily available and able to meet as frequently as needed and is committed to the project through its entire duration.

EDUCATION

Masters, Environmental Engineering, Colorado School of Mines, 2017

Bachelors, Civil Engineering, University of Minnesota, Twin Cities, 2008

REGISTRATIONS

Professional Engineer - Civil, CA, No. 95859

Professional Engineer - Civil, CO, No. 0049979

PROFESSIONAL AFFILIATIONS

American Society of Civil Engineers (ASCE)

Engineers Without Borders

Water Environment Federation

INDUSTRY TENURE

15 years

RELEVANT EXPERIENCE

Los Angeles Bureau of Engineering, Staff Augmentation | Los Angeles, CA

Project Manager. Teigan is leading efforts to provide staff augmentation for BOE on several water and wastewater tasks. Teigan is responsible for overseeing staff engineering efforts, assigning appropriate engineers for BOE tasks, and overseeing subconsultant efforts.

Orange County Sanitation District, Sludge Dewatering and Odor Control at Plant No. 1 Job No. P1-101 | Fountain Valley, CA

Project Engineer. The project includes the design and construction support services for replacement of the existing sludge dewatering systems with a new system. Teigan's responsibilities involved, start-up, optimization, O&M system training, and commissioning services during construction.

St. Vrain Sanitation District, Wastewater Treatment Plant Expansion | Firestone, CO

Discipline Lead Engineer. Following the recommendations of the Master Plan Update prepared by HDR, SVSD and HDR designed and constructed the liquid and solids recommended improvements from the Master Plan with a CMAR alternative delivery method. Teigan lead teams to design the new solids processes, including WAS storage, thickening, ATAD, dewatering, odorcontrol, and solids loadout facilities.

Long Beach Utilities District, S-7 Sewer Rehabilitation Project | Long Beach, CA

Project Manager. Design and Construction Services for the rehabilitation of LBWD's S-7 sewer lift station located at 349 Lakeview Ave., in the City of Long Beach. The station was constructed in 1929 and last rehabilitated in 2000. Currently the lift station is equipped with two dry pit, 14-HP submersible pumps, an 8-inch DIP FM, and a 2,600-gal wet well.

Los Angeles County Department of Public Works, Surfrider Pump Station | Los Angeles County, CA

Deputy Project Manager. HDR provided a conceptual design report for the implementation of a new sewer pump station and forcemain for the Sewer Maintenance Division. The project proposed alternatives, provided cost estimates, facilitated collaborative workshops, developed a bypass and sequencing plan, and developed a final conceptual design report. Teigan's role as Deputy Project Manager performed PM duties with project team coordination, project schedule updates, presenting alternatives and facilitating workshops, and development of the final report.

TEIGAN GULLIVER (CONTINUED)

Los Angeles County Department of Beaches & Harbors, Condition Assessment Project | Los Angeles County, CA

Deputy Project Manager. HDR performed a high level condition assessment of 11 sewer pump stations, owned by the LA County Department of Beaches and Harbors. The project involved development of an assessment plan, performing field work, development of condition results, development of site-specific alternatives for each pump station, facilitating collaborative workshops, and development of final report with recommendations. Teigan's role as Deputy Project Manager performed PM duties with project team coordination, project schedule updates, presenting alternatives and facilitating workshops, and development of the final report.

Los Angeles Bureau of Engineering, Hyperion Headworks Hydraulic Modeling | Los Angeles County, CA

Project Manager. HDR provided hydraulic modeling services to the City of LA on the Hyperion Headworks Overflow Bypass Project. Flow scenarios were developed in collaboration with plant staff and results presented. Plant staff and engineering staff were involved in the decision-making process for best alternative selection. Teigan's role involved facilitation the collaboration process, development of model, and documentation of project outcomes.

Parker Water & Sanitation District, South Water Reclamation Facility Treatment Master Plan | Parker, CO

Deputy Project Manager. HDR provided engineering services for the development of a South Water Reclamation Facility (SWRF) Treatment Master Plan. The District's long term goal for water reclamation previously included the decommissioning of the SWRF upon completion of any one of the ongoing and/or planned expansions of the North Water Reclamation Facility (NWRF). During the permitting phase of the current NWRF expansion, revised permitting requirements were documented by the Colorado Department of Public Health and Environment (CDPHE). Since the District's discharge permits for the NWRF and the SWRF are combined, continued operation of the SWRF must be evaluated. This assessment shall include an evaluation of existing regulatory requirements, evaluation of permit compliance based on current and future flows, and an alternatives analysis to identify potential treatment process upgrades to maintain continued operation. Reevaluating the District's long term goal for water reclamation is being driven by regulatory conditions along with a rapid increase in service area development, which requires non-interruptible treatment of wastewater.



Amy Omae, PE, LEED AP | Principal in Charge

Amy is a proven Project Manager/Professional Engineer with nearly two decades of experience in wastewater and water master planning, design, and engineering services during construction projects throughout California. Amy promotes a collaborative and transparent environment to receive stakeholder input and understand project drivers. She recognizes that the institutional knowledge retained by her clients' engineering, operations, and maintenance staff is extensive and invaluable.

EDUCATION

Masters, Environmental Engineering, University of Miami, 2006

Bachelors, Chemistry, University of Miami, 2004

REGISTRATIONS

Professional Engineer - Civil, CA, No. 76824

LEED Accredited Professional, No. 10328834

PROFESSIONAL AFFILIATIONS

Water Environment Federation

Orange County Water Association

American Society of Civil Engineers (ASCE)

WaterReuse Association

INDUSTRY TENURE

19 years

RELEVANT EXPERIENCE

South Orange County Wastewater Authority, 3A Treatment Plant Aeration Header Rerouting

Project Engineer. Responsible for design of aeration header rerouting and providing engineering services during construction. This project included rerouting the aeration header that conveys air to the secondary aeration basins and distribution channel above-grade because the existing header was leaking due to uneven settling. A detailed construction sequence was developed to minimize plant downtime due to the critical nature of this treatment process to the overall plant operation. HDR provided engineering services during construction for submittal reviews and RFIs.

South Orange County Wastewater Authority, Joint Regional Treatment Plant Effluent System Evaluation

Staff Engineer. Responsible for supporting engineering tasks, and compiling and organizing data. SOCWA has contracted HDR to evaluate the JRTP effluent disposal system. JRTP secondary effluent can be either disposed of to the Pacific Ocean or further treated and used to supply the recycled water system serving MNWD. The purpose of the evaluation is to identify a cost-effective alternative to augment the JRTPs effluent disposal system hydraulic capacity and to increase the equalization (EQ) basin storage capacity to eliminate the potential for overflows during peak wet-weather flow events.

Irvine Ranch Water District, Michelson Water Recycling Plant Tertiary Filter Improvements | Irvine, CA

Project Manager, Senior Engineer. Amy was responsible for managing the project team, developing the rehabilitation design for the most complex design area, which had limited access, unknown conditions, and requiring multiple shutdowns as well as developing the construction sequence for the project. IRWD contracted HDR to perform the preliminary and final design for the rehabilitation of the tertiary filtration system and consists of the tertiary filters, backwash supply, spent backwash, air scour blower, and air compressor.

City of San Mateo, Nutrient Removal and Wet Weather Flow Management Upgrade and Expansion | San Mateo, CA

Task Lead. As a task lead, Amy was responsible for coordinating the technical issues and evaluating equipment technology and layout alternatives related to the expansion in the biological nutrient removal and membrane bioreactor areas. She collaborated with other task leads to make the new elements fit and interconnect with other facilities on this multi-faceted project. HDR provided schematic design, final design, and bid phase services for \$400 million in improvements to the San Mateo/Estero Municipal Improvement District (EMID) Wastewater Treatment Plant. The project included a new headworks, primary sedimentation basins, biological nutrient removal (BNR) and MBR facility, electrical building, warehouse.

AMY OMAE (CONTINUED)

Irvine Ranch Water District, Filter Pump Station 2 Header Replacement | Irvine, CA **Project Manager and Project Engineer.**

Amy was responsible for coordinating and collaborating with Irvine Ranch Water District (IRWD), managing the project work, schedule, and team, and developing the design and construction sequence to replace the pump discharge header. HDR was selected to develop the design to replace the corroded discharge header for the Michelson Water Recycling Plant (MWRP) Filter Pump Station No. 2 (FPS-2). FPS-2 is a critical part of the MWRP conventional treatment train to convey up to 22 mgd of secondary effluent. HDR developed a detailed construction sequencing and bypass pumping plan to execute the work while keeping the plant in operation. The resulting transition occurred smoothly and without incident.

Irvine Ranch Water District, Michelson Water Reclamation Plant Phase 2 Expansion | Irvine, CA **Project Engineer and Field Engineer.**

Responsible for design of the headworks, channel mixing aeration system, primary influent splitter box, and site civil and grading. During construction, Amy performed field engineering services to address RFIs, change orders, submittal reviews, and provide startup and inspection services. HDR provided conceptual design, preliminary design, final design, and construction services for this award-winning \$114 million project that expanded capacity of the Michelson Water Recycling Plant to 33 mgd. Improvements included: influent sewers, new headworks, expansion of the primary sedimentation tanks, new primary effluent pumping station and flow control, modified flow equalization basins, secondary treatment expansion with new membrane bioreactor (MBR) facility, new high-rate clarifier to treat filter backwash, new ultraviolet (UV) disinfection system, reclaimed water pumping, modifications to chlorine contact basins, chemical feed systems, new pumping and other ancillary facilities, and electrical modifications.

City of San Buenaventura, Ventura Water Recycling Facility (VWRF) Blower Project | Ventura, CA

Deputy Project Manager and Project Engineer. Responsible for monitoring project metrics, managing the team, leading the preliminary and final design effort, and leading the Aeration Verification Study. The City contracted HDR to evaluate the existing and future air demands and design a more efficient aeration system to replace the existing single-stage aeration blowers. The project involved demolition of the existing aeration blowers and building, construction of a new blower building with high-speed turbo blowers, large-bubble mixing for anoxic tanks, and centrate transfer pumps. HDR developed a biological process model using BioWin to determine current and future aeration requirements in consideration of the City's plan to evaluate simultaneous nitrification-denitrification for increased nitrogen removal. HDR designed modifications to the existing aeration droplegs to accommodate flow control valves and meters to facilitate this evaluation and allow the City more automated control and operational flexibility.

Camarillo Sanitary District, Alternatives Study and Condition Assessment of SS-5037 Pleasant Valley Road Sewer Force Main Assessment and Preliminary Design Services, Camarillo, CA

Deputy Project Manager and Senior Engineer. Amy performed physical condition assessment and alternatives evaluation (pipeline and overflow basin) to determine if there are other alternatives to constructing a secondary parallel pipeline estimated at \$16M. She developed the pre-design for the recommended alternative and updated the Emergency Response Plan for PVR FM.



Mandira Sudame, PE | Quality Control

Specializing in pump station project and sewer pipelines, Mandira understands how to design wastewater facilities that staff can easily operate and run efficiently. Her project experience includes condition assessment, pump station and large pipeline design, and construction support services. Recently, Mandira managed the condition assessment and recommended upgrades for 23 sewer pump stations for the City of San Diego. She possesses 23 years of experience in projects throughout Southern California. With her experience and creativity, and strong technical background, Mandira offers our clients a practical design approach as well as easy-to-operate facilities.

EDUCATION

Masters, Civil Engineering,
Pennsylvania College of
Technology, Penn State, 2000

Bachelors, Civil Engineering,
Birla Vishvakarma
Mahavidyalaya Engineering
College (BVM), 1998

REGISTRATIONS

Professional Engineer, CA,
No. 70397-C

PROFESSIONAL AFFILIATIONS

Society of Women Engineers
California Water Environment
Association (CWEA)
WaterReuse Association

INDUSTRY TENURE

23 years

RELEVANT EXPERIENCE

South Orange County Wastewater Authority, Plant 3A Onsite Energy Generation | Dana Point, CA

Project Engineer. Ms. Sudame served as the lead engineer to evaluate the impact of adding Fats, Oil and Grease (FOG) to the existing anaerobic digesters gas production. Also, developed a preliminary FOG receiving station design along with facility construction cost.

Irvine Ranch Water District, Michelson Water Recycling Plant Phase 2 Expansion | Irvine, CA

MBR Design Lead. Mandira was the Lead Design Engineer for the 10 mgd MBR including fine screening, aeration system, mixed liquor pumping system, and membrane system. She provided coordination and review of submittals and RFIs. HDR provided conceptual design, preliminary design, final design, and construction services for this award-winning \$114M project that expanded capacity of the Michelson Water Recycling Plant to 33 mgd. Improvements included: influent sewers, new headworks, expansion of the primary sedimentation tanks, new primary effluent pumping station and flow control, modified flow equalization basins, secondary treatment expansion with new MBR facility, new high-rate clarifier to treat filter backwash, new ultraviolet disinfection system, reclaimed water pumping, modifications to chlorine contact basins, chemical feed systems, new pumping and other ancillary facilities, and electrical modifications.

Irvine Ranch Water District, Michelson Water Recycling Plant Tertiary Filters Improvements | Irvine, CA

Filter Performance Investigation Lead.

IRWD contracted HDR to perform the preliminary and final design for the rehabilitation of the tertiary filtration system and consists of the tertiary filters, backwash supply, spent backwash, air scour blower, and air compressor. An investigation into the poor performance of Filter No. 7 and a condition assessment of the concrete backwash supply and spent backwash tanks were also performed to better inform the extent of the rehab design and make modifications to potentially improve filter performance.

City of San Mateo, Wastewater Treatment Plant Expansion and Nutrient Removal Upgrades | San Mateo, CA

MBR Lead. Mandira was the MBR lead for the project. HDR provided schematic design, final design, and bid phase services for \$400 million in improvements to the San Mateo/ Estero Municipal Improvement District Wastewater Treatment Plant. The project was delivered using a Construction Manager at Risk delivery method.

OC SAN, Activated Sludge Rehabilitation for Plant No. 1, Project No. P1-82 | Fountain Valley, CA

Project Engineer. Mandira oversaw the project for the entire duration of the project. HDR provided design, construction and start up services to rehabilitate the 92mgd Plant No. 1. AS-1 facility This modification improved the water quality provided to the GWRS and resolved several reliability condition capacity and hydraulic issues.

MANDIRA SUDAME (CONTINUED)

OC SAN, Sludge Dewatering and Odor Control at Plant No. 1, Project No. P1-101 | Fountain Valley, CA

Project Manager and Design Lead.

Mandira led a team of 35+ engineers and 8+ subconsultants to design a \$105M solids handling facility that encompassed up to nine of the largest high solids centrifuges in the world. She was responsible for design of the thickening and dewatering centrifuge systems including feed pumping, thickened sludge pumping, dewatered cake conveyance, polymer systems and ancillary equipment. She also served as project lead for interdisciplinary coordination and BIM production management. She played a major role in developing the Engineering Study Report and Preliminary Design Report for the project, including the development and coordination of operating philosophies and control strategies.

City of San Diego, As-Needed Engineering Wastewater Facilities Condition Assessment | San Diego, CA

Project Manager. Mandira provided as-needed corrosion engineering and condition assessment services for the city's sewer pipeline system, which included pipelines ranging from 8 to 120 inches in diameter force mains and trunk sewers. Task orders have included a rigorous evaluation of the consequence of failure and a thorough analysis of the likelihood of failure combining both field condition data and statistical analysis. Work included the use of closed-circuit television to gather review and validate all available data and update the existing closed-circuit television tool box. Other tasks performed included preparation of a condition assessment work plan field data collections and preparation of a repair/rehabilitation and replacement action plan that included a comprehensive financial analysis projected timeline and cost estimate for each pipeline implementation.

OC SAN, PS21-03 Process Model for Denitrification Alternatives at Activated Sludge | Fountain Valley, CA

Principal-in-Charge. Mandira oversaw the engineering study that evaluated alternatives to improve denitrification at AS-1 using the previously calibrated P1-82 process model. The team reviewed existing operational data to update the influent characterization in the process model. They compared the results with those from the process verification report. The study included a workshop and a Technical Memorandum.

City of San Diego Public Utilities Dept., Pure Water Program's North City Conveyance System (NCCS) Civil Engineering Services | San Diego, CA

Project Engineer. Design the \$130 million North City Conveyance System for its Pure Water Program. The project is a key component of the program and will convey highly treated wastewater effluent from the North City AWTP to either the San Vicente Reservoir for indirect potable reuse or the Miramar WTP and Reservoir for direct potable reuse.

Port of Long Beach, Pier B Port-wide Stormwater Infrastructure Master Plan, | Long Beach, CA

Task Leader. Mandira completed condition assessment of 20 stormwater pump stations ranging from 1 to 53 mgd. She inspected and provided condition assessment for 50 miles of storm drains, 500 manholes and 900 catch basins. POLB hired HDR to develop a stormwater infrastructure master plan and prepare a 20-year capital improvement program (CIP). POLB engaged HDR to update the stormwater GIS maps and data accurately survey the locations of inlets and catch basins; inspect pipelines larger than 18-inches in diameter using closed circuit television (CCTV) methods; inspect and evaluate existing pump stations; evaluate hydraulic models and select one; develop the model; and identify improvements.



Tom Hamlin, PE, SE | Quality Control

Tom's 19 years of experience have focused primarily within the water/wastewater industry, including structural design, plan development, QC reviews, and construction administration for a wide range of structure types. He also has extensive experience performing structural investigations, condition assessments, and rehabilitation of existing water/wastewater facilities. For the past 14 years, he has served as the lead structural engineer for Tucson Water's Reservoir Management Program, which includes condition assessment, rehabilitation, and overall asset management for Tucson Water's 34 large-capacity concrete reservoirs and 34 steel tanks ranging in size from 1 MG to 60 MG in capacity.

RELEVANT EXPERIENCE

South Orange County Wastewater Authority, JB Latham Aeration and Cogeneration Improvements | Dana Point, CA

Structural Engineer. A seismic analysis of the existing structural system was conducted after the initial condition assessment was completed. Several deficiencies were identified in the load paths at the existing concrete walkways. As such, the project consisted of demolishing the existing concrete walkways and replacing them with new aluminum walkways that were designed for the anticipated differential seismic deflections between adjacent supporting walls of the aeration basin. Other various concrete repairs at the existing aeration basins and blower buildings were also designed. Also responsible for engineering services during construction.

Irvine Ranch Water District, Michelson Water Recycling Plant Tertiary Filters Improvements | Irvine, CA

Structural Engineer. IRWD contracted HDR to perform the preliminary and final design for the rehabilitation of the tertiary filtration system and consists of the tertiary filters, backwash supply, spent backwash, air scour blower, and air compressor. An investigation into the poor performance of Filter No. 7 and a condition assessment of the concrete backwash supply and spent backwash tanks were also performed to better inform the extent of the rehab design and make modifications to potentially improve filter performance.

South Orange County Wastewater Authority, JBLTP Aeration Cogeneration Structural Improvement | Dana Point, CA

Structural Engineer. HDR was retained by South Orange County Wastewater Authority to design a new 'ration system to replace the 20 year old diffuser system.

City of Billings, Billings Wastewater Nutrient Upgrade and Expansion | Billings, MT

Structural Engineer. Responsible for overseeing preparation of the structural contract documents for the upgrades to the existing wastewater treatment facilities. Upgrades are required at the plant to meet upcoming nutrients requirements in the discharge permit and will also expand the current plant to the ultimate capacity of 34 MGD. The structural upgrades include modifications to the existing aeration basin splitter structure, substantial demolition work inside of the existing aeration basins and final clarifiers and construction of new cast-in-place concrete baffle and divider walls to convert the treatment into plug-flow bioreactors, new cast-in-place stiffening beams at the exterior of the existing structures to resist additional loads from increased water surface elevation, a new precast/prestressed Electrical Building supported on the existing pipe gallery, three new 140-foot diameter cast-in-place circular secondary clarifiers, a new cast-in-place concrete secondary splitter structure, and modifications to the existing UV Disinfection facility.

EDUCATION

Masters, Civil Engineering,
South Dakota State
University, 2004

Bachelors, Civil Engineering,
South Dakota State
University, 2003

REGISTRATIONS

Professional Engineer - Civil,
CA, No. 71864

Professional Engineer - Civil,
MT, No. PEL-PE-LIC-27040

Professional Engineer -
Structural, AZ, No. 54311

Professional Engineer -
Structural, HI, No. PE-16088

PROFESSIONAL AFFILIATIONS

Structural Engineers
Association

INDUSTRY TENURE

20 years

TOM HAMLIN (CONTINUED)

OC SAN, Sludge Dewatering and Odor Control at Plant No. 1, Project No. P1-101 | Fountain Valley, CA

Structural Engineer. Tom assisted in the preparation of the structural contract documents for an expansion of the current wastewater treatment facility. Reviewed finite element modeling and assisted in structural detailing of the new sludge dewatering structure, new utility tunnels, new precast screen wall system, new 84-foot long pipe bridge structure, new scrubber facility, and modifications to the existing solids storage facility. The new sludge dewatering structure consists of a 29,000 SF cast-in-place below-grade basement structure with a cast-in-place mat slab foundation supported on cast-in-place drilled shafts. The above grade portion of the new sludge dewatering structure consists of a 21,000 SF structural steel special moment frame system approximately 40 feet in height. The above-grade building has an intermediate mezzanine that contains an office, labs, and electrical control rooms. The building also has a 20-ton bridge crane that spans approximately 91 feet across the building's width. The project location is in a high seismic zone with highly liquefiable soils. As such, all structures are supported on deep foundations that consist of cast-in-place drilled shafts. Responsibilities also include performing all construction phase design services for the structural discipline.

Victor Valley Wastewater Reclamation Authority Otoe Lift Station Assessment and Rehabilitation | Apple Valley CA

Structural Engineer for the condition assessment and rehabilitation of an existing sewage lift station and above-grade masonry building. Modifications include relocation of an existing diesel generator, installation of CFRP strengthening, installation of a new HS20 load rated concrete slab over the existing wet well, and various concrete repairs.

City of San Mateo, Nutrient Removal and Wet Weather Flow Management Upgrade and Expansion | San Mateo, CA

Structural Engineer. Provided structural engineering support for the following structures throughout schematic design and final design as a part of the \$400 million in improvements to the San Mateo/Estero Municipal Improvement District (EMID) Wastewater Treatment Plant: (1) four new covered rectangular primary clarifiers, with primary sludge pumps, scum pumps, and a primary effluent pumping station; (2) bioactiflo for wet weather treatment, consisting of a biological contact tank and high rate clarification process, along with associated mixers, aeration, blowers and pumps; (3) chemical storage and feed facility; (4) biological nutrient removal (BNR) and membrane bioreactor (MBR) treatment facilities, mechanical/electrical building (pumps and blowers), with associated piping; (5) odor control for new headworks and primary clarifiers; (6) an influent junction box/channel; (7) preliminary screens with sluiceway, and screenings washing and compacting equipment; (8) aerated grit removal tanks with grit pumps, blowers, and grit washing and dewatering equipment; (9) fine screens with sluiceway, and screenings washing and compacting equipment; (10) screening and grit handling building; and (11) electrical building. The project site is located on Bay Mud, so facilities are pile supported.



Crystal Starr, PE, SE | Structural Lead

Crystal is a licensed Structural Engineer with over seventeen years of experience in structural design, analysis, evaluation, and retrofit of structures. Crystal's structural engineering expertise include infrastructure projects related to water, wastewater, municipal utilities, and hydropower. As a Senior Structural Engineer, Crystal is experienced in leading structural detailed design efforts for building structures, water containing facilities, civil structures and pipeline stress analysis. She maintains knowledge of current industry codes and standards for structural design, evaluations and retrofit.

EDUCATION

Bachelor of Science, Civil Engineering, University of the Pacific, Stockton, CA 2006

REGISTRATIONS

Professional Engineer - Civil, CA, No. 75661

Professional Engineer - Structural, CA, No. 6337

Professional Engineer - Structural, NV, No. 21184

Structural Engineer, ID, No. 21810

INDUSTRY TENURE

19 years

RELEVANT EXPERIENCE

Central Contra Costa Sanitary District, Diffuser Replacement Seismic Upgrades Project | Martinez, CA

Lead Structural Engineer. Crystal was the lead Structural Engineer for this project which includes the seismic retrofit of the existing Aeration Basin structure and replacement of the existing diffuser system and replacement of various slide gates and finger weirs. The seismic retrofit scheme is based on the structural evaluation findings. The retrofit design includes the installation of a new reinforced concrete floor slab and FRP (fiber reinforced polymer) strengthening of the existing walls. The Aeration Basin structure is approximately 300 feet by 450 feet.

City of San Mateo, Immediate Action Projects, Package III | San Mateo, CA

Lead Structural Engineer. Crystal was the structural lead for this project which included structural improvements to the existing Effluent Pump Station (EPS).

City of Vallejo, Engineering Services for Concrete Tanks Condition Assessment

Lead Structural Engineer. Crystal was the lead Structural Engineer for this condition assessment project which includes the condition assessment of 6 prestressed concrete tanks. The condition assessment includes field assessment and the preparation of a report to summarize findings and provide recommendations for repair. The repair recommendations were categorized into repair timeframes to help the City plan for future capital improvements and to advise the Contractor with immediate repairs as part of this project.

Central Contra Costa Sanitary District, Steam and Blowers Renovation Project | Martinez, CA

Structural Lead. Crystal was the structural lead for this project.

Central Contra Costa Sanitary District, Pump Stations Upgrades Phase 2 | Martinez, CA

Structural Lead. Crystal was the structural lead for this project.

City of San Mateo, Nutrient Removal and Wet Weather Flow Management Upgrade and Expansion | San Mateo, CA

Structural Engineer. Crystal was a project Structural Engineer on the largest project implemented by the Clean Water Program. The project upgrades the WWTP's aging infrastructure with new advanced liquid treatment process facilities and general plant upgrades. The new liquid treatment process facilities include headworks, primary treatment, five-stage biological nutrient removal/membrane bioreactor process, biological and chemically enhanced treatment process, and other general plant upgrades. Her design responsibilities included the design of the primary treatment structure and primary effluent pump station. The structure consists of reinforced concrete walls and foundation slab with overall dimensions of 265' by 100'. The structure is supported on precast prestressed concrete driven piles. The structure itself is adjoined with adjacent structures and separated by expansion joints. Additional responsibilities include specification development, pipe support and platform designs.

CRYSTAL STARR (CONTINUED)

City of Livermore, Condition Assessment at Livermore Water Reclamation Plant

Structural Engineer. Crystal was the Structural Engineer performing condition assessments for various structures at the plant including the Primary Effluent Pump Wet Well, Influent Manhole, Mixed Liquor Box, Secondary Clarifier, Equalization Basin and Headworks channels. A Tier 1 assessment was performed with some additional nondestructive testing of concrete and metallic surfaces. Crystal helped in preparing the condition assessment reports. The reports summarized findings and provided recommendations for improvement where required. A series of condition assessment reports were submitted to the Client.

San Francisco Public Utilities Commission, Southeast Plant- Site Preparation Project and New 250-MGD Headworks | California

Lead Structural Engineer. Crystal was lead Structural Engineer facilitating the preparation of the site and flow diversion to demolish the existing O11 Headworks and construct the new SEP 020 Headworks facility. The extreme site constraints and limited available footprint present several challenges for developing the facility layout as well as for completing construction. A detailed construction sequence and phasing approach was developed with the team requiring innovative structural designs to facilitate the sequencing. Additional lead responsibilities included overseeing the design of some supporting structures throughout the site designed by the structural team. Design responsibilities included an approximately 30' high by 250' long structural steel pipe rack stacked with large diameter force mains. Developed a finite element analysis model for the individual pipes on the pipe rack considering their relative displacements, and connections to structures. Specialty articulated fittings on the pipelines were selected to relieve relative structure displacements. *(Prior to HDR)*

City of Richmond and Veolia Water, WWTP Critical Improvements Project | California

Lead Structural Engineer. Crystal was the lead Structural Engineer for the upgrade of the City's Water Pollution Control Plant. The Secondary Clarifiers were updated for more efficient sludge removal. Condition assessment of the Clarifier concrete, launders, and weirs were conducted during shut down of each Clarifier. Additionally, the project included the design of a new headworks facility with two layout alternatives utilizing two different grit removal technologies. The layouts each incorporate future expansion of the facility. In addition, the structural team designed a new blower building and electrical building for the site. *(Prior to HDR)*

Sewer Agency of Southern Marin, Five Year CIP Updates Project | California

Lead Structural Engineer. Crystal was the lead Structural Engineer for the capital improvements update project for the SASM wastewater treatment plant. The structural team designed improvements for various areas identified as requiring rehabilitation and/or replacement throughout the facility. The project began with condition assessment of concrete surfaces within the Headworks, Primary Clarifiers and Secondary Clarifiers to identify concrete repairs. Condition assessment was conducted for the aluminum structural framing in the two Trickling Filters, Primary Clarifiers and Headworks channels. The project improvements included new bar screens, screenings conveyor, baffle to grit basin and new skylights to install the bar screens in the Headworks Building. A new design for the two Trickling Filters was prepared due to the onset of corrosion at the stainless steel to aluminum contact surfaces. Primary Clarifiers were rehabilitated with new sludge collector drives, primary sludge and scum pumps, and replacement of guardrails. *(Prior to HDR)*



Gregorio Estrada, PE | Construction Sequencing

Gregorio has extensive experience in the planning, design, construction, and management of wastewater, water, and stormwater projects throughout Southern California. He is an adept leader in wastewater treatment processes and has particular interest in advanced treatment solutions including: nutrient removal, filtration, membranes, and disinfection. He has successfully delivered large-scale projects in advanced treatment such as IRWD's \$167M Michelson Water Recycling Plant Biosolids and Energy Recovery Facilities as well as IRWD's \$87.5M Michelson Water Recycling Plant's MBR Facility. He is also highly-skilled in building group-consensus amongst key stakeholders with differing agendas, performing economic evaluations and risk assessments, and assisting in negotiations with regulatory agencies.

RELEVANT EXPERIENCE

Irvine Ranch Water District, Michelson Water Recycling Plant Tertiary Filters Improvements | Irvine, CA

Principal in Charge & Construction Sequencing Lead. IRWD contracted HDR to perform the preliminary and final design for the rehabilitation of the tertiary filtration system (originally constructed in 1978) and consists of the tertiary filters, backwash supply, spent backwash, air scour blower, and air compressor. An investigation into the poor performance of Filter No. 7 and a condition assessment of the concrete backwash supply and spent backwash tanks were also performed to better inform the extent of the rehab design and make modifications to potentially improve filter performance.

South Orange County Wastewater Authority, JB Latham Aeration and Cogeneration Improvements | Dana Point, CA

Project Manager. HDR performed process evaluation, optimization, and design of improvements for SOCWA's JB Latham Treatment Plant (JBLTP), including the development of a Facility Plan. As part of the Facility Plan, our team developed a Biotran process model for JBLTP. The team used this model to determine aeration demands for various scenarios, and evaluated diffusers based on diffuser characteristics and resultant air demands and energy use. The model was also used to determine the required number of diffusers per zone and resulted in optimization of the reactor configuration to created selector zones and reduce aeration demand. As Project Manager, Gregorio was responsible for the successful execution of the project and provided oversight to the project deliverables.

South Orange County Wastewater Authority, Plant 3A Aeration Header Reroute | Mission Viejo, CA

Project Manager. HDR prepared a conceptual design and bid documents for an alternate routing of the existing aeration and channel agitation air piping to mitigate the impact of differential settlement on the pipe integrity. The project was completed on a fast-track schedule and required coordination with plant operation and maintenance personnel to establish the sequence of work and ensure that the proposed routing would not interfere with plant operation or process control. As Project Manager and Lead Designer, Gregorio worked closely with SOCWA Engineering and Operations staff to successfully deliver the project under budget.

City of Thousand Oaks, Tertiary Filters Rehabilitation | Thousand Oaks, CA

Construction Sequencing Lead. HDR was selected by City of Thousand Oaks to perform a filter media study and condition assessment of the structural, mechanical, and electrical components of the tertiary treatment system at Hill Canyon Treatment Plant (HCTP). HDR is approaching the tertiary filters rehab in multiple ways to conduct a comprehensive, cost-effective condition assessment. Rehabilitation and repair recommendations will be provided. HDR's in-house condition assessment experts are NACE/AMPP certified engineers and inspectors who are familiar with HCTP and its construction. Mechanically, the team will verify operability of valves in condition assessment phase.

EDUCATION

Bachelors, Civil Engineering,
Stanford University, 2001

REGISTRATIONS

Professional Engineer - Civil,
CA, No. 67066

LEED Accredited Professional

INDUSTRY TENURE

22 years

GREGORIO ESTRADA (CONTINUED)

Irvine Ranch Water District, Michelson Water Reclamation Plant Phase 2 Expansion | Irvine, CA

Task Manager during conceptual design, preliminary design, and final design phases, and resident engineer during construction of the award-winning \$87.5 million Phase 2 expansion of the Michelson Water Reclamation Plant to 33 mgd. Improvements included influent sewers, headworks, expansion of the primary sedimentation tanks, new primary effluent pumping station and flow control, modified flow equalization basins, secondary treatment expansion with membrane bioreactors (MBRs), new high-rate clarifier to treat filter backwash, effluent filtration, new ultraviolet (UV) disinfection system, reclaimed water pumping, modifications to chlorine contact basins, chemical feed systems, new pumping and other ancillary facilities, and electrical modifications.

City of San Mateo, Wastewater Treatment Plant Expansion and Nutrient Removal Upgrades | San Mateo, CA

Design Manager & Secondary Treatment Facilities Lead. Provided schematic design, final design, and bid phase services for \$400 million in improvements to the San Mateo/Estero Municipal Improvement District (EMID) Wastewater Treatment Plant, which included (11) electrical and standby power, including fuel systems to supply the standby power; The headworks facility includes: (1) an influent junction box/channel; (2) preliminary screens with sluiceway, and screenings washing and compacting equipment; (3) aerated grit removal tanks with grit pumps, blowers, and grit washing and dewatering equipment; (4) fine screens with sluiceway, and screenings washing and compacting equipment; (5) screening and grit handling building; and (6) electrical building. The project site is located on Bay Mud, so facilities are pile supported. The project was delivered using a Construction Manager at Risk (CMAR) delivery method.

Santa Margarita Water District, Chiquita WRP Headworks Improvements | Rancho Santa Margarita, CA

Project Manager. The project included analysis of historical influent flows and projections of future flows, and analysis of peak storm conditions to establish design criteria. The preliminary design included an evaluation of screening technologies, and development of configuration alternatives that addressed the physical limitations of the existing structure relative to modern screening technologies, and mitigate the hydraulic impacts to the downstream pumping systems. The influent lift station upgrades included evaluation of existing conditions. The hydraulic modeling and analysis resulted in modifications to the pump station design. The final design for the screening facility included modifications to the structure to accommodate the selected screening equipment, and new screening and washing/compacting equipment, new gate controls, odor control upgrades, complete electrical systems replacement, and new safety features. In addition, the design included architectural upgrades to integrate the headworks building with the overall plant scheme.

Victor Valley Wastewater Reclamation, Regional Wastewater Treatment Plant Phase III Expansion | Victorville, CA

Task Manager. Gregorio was responsible for the final design of upgrades to the primary clarifiers and oversight on the civil design. HDR completed approximately 80 percent of the design to expand the West Regional Water Reclamation Plant utilizing a MBR facility to provide high-quality reclaimed water. The expansion will use ultraviolet light to achieve disinfection without creating disinfection byproducts. The original intent of the expansion was to provide a system capable of producing effluent with total nitrogen concentrations of less than 10 mg/L for an average flow of 22 MGD.



TRAINING

US Government Systems,
Project Time and Cost,
MCACES Second Generation
PACES, Success Estimator

Saddle Island Institute,
Construction Schedule
Analysis & Evaluation of
Delay Damages

Common Sense Safety,
Inc. Accident and Incident
Investigation Techniques

Idsys, Inc., Timberline
Estimating Extended,
Timberline Estimating
Workflow, Timberline Report
Writer and Advanced Report
Design

DRMcNatty & Associates,
Inc. Planning and Scheduling
with Primavera Project
Planner

HCSS, Inc.

HeavyBid Estimating

CompUSA Management
Company, Advanced
Microsoft Excel,

Advanced Microsoft Access

YCA Solutions for Project
Success, Registered
PMI Provider, Project
Management: The

Project Success Method

YCA Solutions for Project
Success, Microsoft Project
Advanced Tools

INDUSTRY TENURE

38 years

Kirk Johnson | Cost Estimating

Kirk has 30 years of experience in commercial, industrial, and public works construction; most recently, he was responsible for at risk design-build estimating and consulting in the Western United States with a primary focus on alternative delivery for water and wastewater projects. His background includes management roles, consulting, conceptual cost estimation, bidding, and negotiating on projects as large as \$1 billion. Kirk has a diverse background, including value engineering and constructability review experience on many projects, journey level field experience in multiple trades, and professional instructor on construction topics. He is proficient in several industry-focused software packages: Sage Timberline Estimating and Accounting, HCSS HeavyBid, MCACES/MII (USACE), Success Estimator (NAVFAC), Primavera P6 / PCM Contract Management, Microsoft Project and AutoCAD, Civil 3d, and Assemble. Kirk is also proficient using Microsoft Excel, including macro programming, and has advanced database programming skills with decades of source composition in many languages.

RELEVANT EXPERIENCE

City of San Diego, Indirect Potable Reuse/Reservoir Augmentation Demo Project | San Diego, CA

Cost Estimator. Kirk was the estimator for civil/structural. This design-build project was a demonstration-scale advanced water treatment plant including microfiltration, nanofiltration, RO, ion exchange, and UV treatment. The 1 MGD system is designed to demonstrate the process for a large-scale plant expansion to 40 MGD.

City of Morro Bay, Morro Bay Water Reclamation Facility | Morro Bay, CA

Cost Estimator. Two Step JV design-build project to construct a complete replacement to the city's existing plant constructed in 1953. The new plant is designed to treat 1 MGD of wastewater through full advanced treatment for groundwater replenishment and the total awarded bid was over \$65 million.

GB Energy Park, Gordon Butte Pumped Storage Hydro Project | Meagher County, MT

Cost Estimator. A new 420 MW (3x140 GE Francis Hydro Turbines) hydroelectric generation and pumping facility. Under a design-build JV the project includes newly constructed reservoirs, intake penstock tunnels and powerhouse. Kirk was estimator for structural and mechanical on this project and the total project capital construction cost was over \$1 billion.

City of Houston, Northeast Water Purification Plant Expansion | Houston, TX

Cost Estimator. Kirk was the estimator for structural/civil on this progressive design-build of a conventional water treatment plant expansion to 320 MGD. Includes a lake intake, 96-inch influent piping, jet mix, floc/sed, biological media filters, ozone and UV. Total design-build project value was over \$1 billion.

City of Stockton, Delta Water Supply Project | Stockton, CA

Cost Estimator. Kirk was the estimator for structural/mechanical/pipeline on this progressive design-build of a 30 MGD Ozone, Floc/Sed plus UF Membrane Treatment Plant and 18 miles of large diameter pipeline with value greater than \$190 million.

California American Water, Monterey Peninsula Water Supply Project | Monterey, CA

Cost Estimator. Kirk was the chief estimator for this 9.6 MGD design-build seawater desalination plant. This project is being constructed in response to Cease and Desist orders by the State Water Resources Control Board that Cal Am reduce surface water diversions from the Carmel River with a value slightly less than \$100M

KIRK JOHNSON (CONTINUED)

US Army Corps of Engineers, Water Treatment and Distribution System | Fort Irwin, CA

Cost Estimator. Kirk was the chief estimator for this 6 MGD Electro Dialysis Reversal (EDR) water treatment plant designed to meet 99.6% recovery in order to ensure the longest possible groundwater supply from the available aquifer within Fort Irwin Army Training Center.

Coachella Valley Water District, Avenue 62 Trunk Sewer Project | Coachella, CA

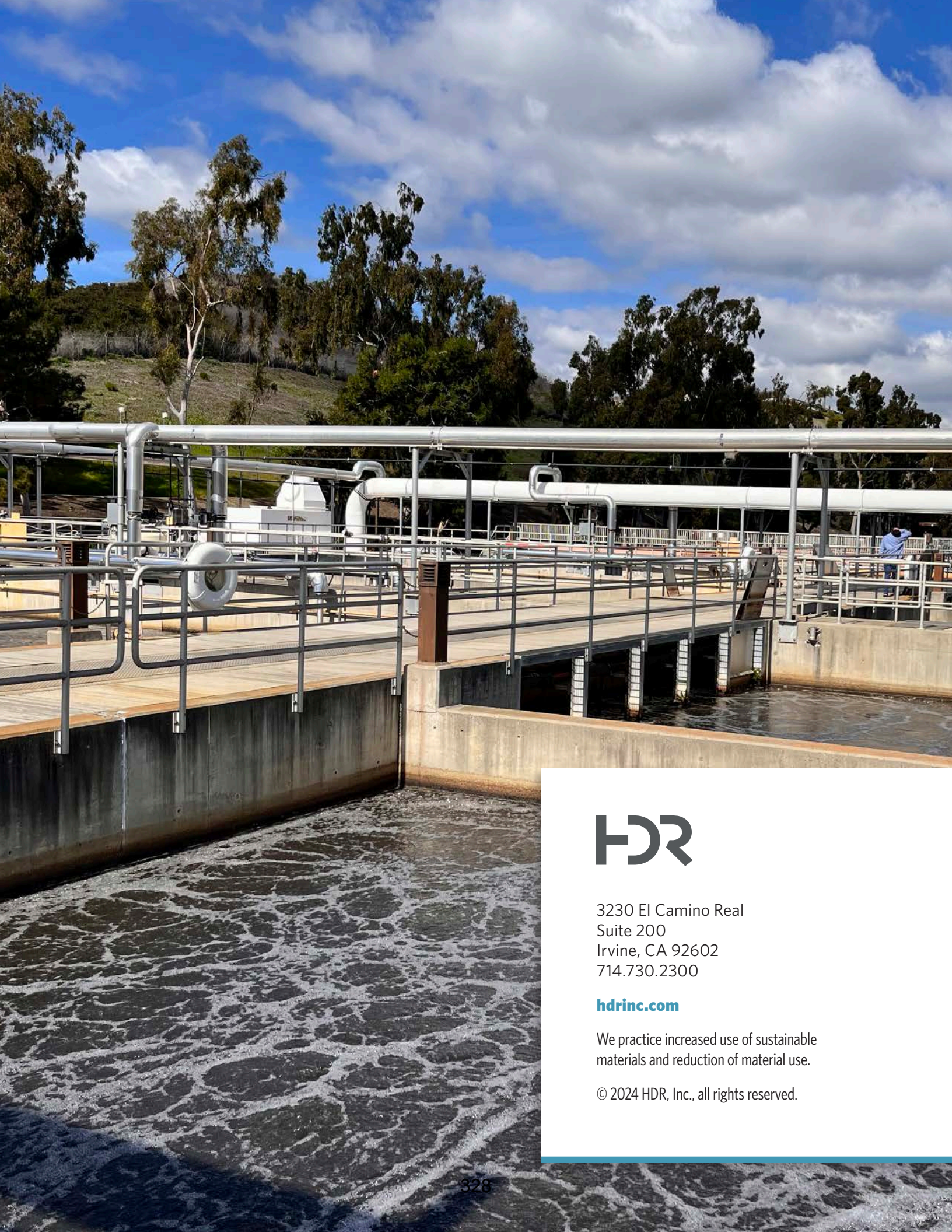
Cost Estimator. Kirk was the lead estimator for the design-build removal and replacement (7,500 lf) of 33- and 42-inch diameter deep clay sewers in city streets with fiberglass (HOBAS) pipe. This project also included repairs of 33-inch and 42-inch sewer pipeline (24,000 lf) with Cured-in-Place Pipe (CIPP) lining.

US Department of Homeland Security/ United States Coast Guard, Wastewater Facilities | Petaluma, CA

Cost Estimator. Kirk was the chief estimator for this design-build installation of new AeroMod Sequox Biological Nutrient Removal (BNR) system as part of a complete plant including earthen basins, grit removal, chlorine contact, UV system, and large spray-fields.

Southern California Edison, Peaker Generating Unit Project | Mira Loma, CA

Cost Estimator. Kirk was the chief estimator on this project featuring five 45 MW Single Cycle General Electric LM6000 gas turbine generators. After award Kirk served as the construction manager for the Etiwanda and Mira Loma sites. Four of the five peaker plants were constructed concurrently under fast track design-build. These plants provide power under peak demand and include selective catalytic reduction (SCR) emission controls. The generators include black-start capability without power from the grid and were operational in five months.



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TASKS		LEVEL OF EFFORT														FEE				
		Principal In Charge	Project Manager	QAQC	Structural Lead	Mechanical Lead	Construction Sequencing Lead	Cost Estimator	Sr. Project Engineer	Project Engineer	CADD Staff	CADD Manager	Doc Prod Spec	Project Accountant	Total Labor	Labor	Subs	Direct Costs	Total	TOTAL
No.	Description																			
	Client Billing Rates	\$320	\$275	\$340	\$320	\$275	\$340	\$280	\$230	\$180	\$150	\$245	\$140	\$165	\$223		Calc	Calc	Calc	-1
1	Project Management																			
1.1	Kickoff Meeting (in person)		8		3					4					15	\$3,880	\$0	\$267	\$4,147	
1.2	Project Management Plan		11										11		22	\$4,565	\$0	\$83	\$4,648	
1.3	Project meetings & coordination		20												20	\$5,500	\$0	\$99	\$5,599	
1.4	Project monitoring & reporting		20											27	47	\$9,955	\$0	\$178	\$10,133	
1.5	QA/QC & PARR	11	6	11	12										40	\$12,750	\$0	\$224	\$12,974	
1.6															0	\$0	\$0	\$0	\$0	
Subtotal 1 Project Management		11	65	11	15	0	0	0	0	4	0	0	11	27	144	\$36,650	\$0	\$851	\$37,501	\$37,500
2	Data Collection and Document Review																			
2.1	Request, Compile & Review Data		4		4	4	4		4	6			3		29	\$7,260	\$0	\$113	\$7,373	
2.2	Site Visit and staff interviews (one day)		4				3		4	3					14	\$3,580	\$0	\$72	\$3,652	
2.3															0	\$0	\$0	\$0	\$0	
Subtotal 2 Data Collection and Document Review		0	8	0	4	4	7	0	8	9	0	0	3	0	43	\$10,840	\$0	\$185	\$11,025	\$11,030
3	Preliminary Design																			
3.1	Bypass/Sequencing Conceptual Plan					5	10			15					30	\$7,475	\$0	\$125	\$7,600	
3.2	Gates Alternatives Analysis					12				32					44	\$9,060	\$0	\$163	\$9,223	
3.3	Structural Improvements Analysis				15				15	32					62	\$14,010	\$0	\$273	\$14,283	
3.4	Design Workshop		13		5	5	4		4	17					48	\$11,890	\$0	\$505	\$12,395	
3.5	Implementation Plan		4	3		6	5			20					38	\$9,070	\$0	\$168	\$9,238	
3.6															0	\$0	\$0	\$0	\$0	
Subtotal 3 Preliminary Design		0	17	3	20	28	19	0	19	116	0	0	0	0	222	\$51,505	\$0	\$1,234	\$52,739	\$52,740
4	Final Design																			
4.1	50% Design Deliverable (inc. drawings, specs, cost estimate)		12	5	6	24	3	5	15	65	70	6			211	\$43,060	\$0	\$856	\$43,916	
4.2	90% Deliverable (inc. drawings, specs, cost estimate)		12	5	6	17	3	5	15	55	60	3			181	\$37,100	\$0	\$707	\$37,807	
4.3	Bid Set Deliverable (inc. drawings, specs, cost estimate)		11	5	5	10	2	5	10	45	40	3			136	\$28,290	\$0	\$561	\$28,851	
4.4	Constructability Review		8			2	2	5	1	20					38	\$8,660	\$0	\$468	\$9,128	
4.5	Construction Sequencing and Bypass Plan		8	3		6	8			20					45	\$11,190	\$0	\$172	\$11,362	
4.6															0	\$0	\$0	\$0	\$0	
Subtotal 4 Final Design		0	51	18	17	59	18	20	41	205	170	12	0	0	611	\$128,300	\$0	\$2,764	\$131,064	\$131,060
TOTAL, hours		11	141	32	56	91	44	20	68	334	170	12	14	27	1,020					
TOTAL, dollars																\$227,295	\$0	\$5,034	\$232,329	\$232,330

Agenda Item

6.B.

Board of Directors Meeting

Meeting Date: June 6, 2024

TO: Board of Directors

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

STAFF CONTACT: Roni Grant, Associate Engineer

SUBJECT: Contract Award for J.B. Latham Treatment Plant (JBL) 2 Headworks Upgrade Design [Project Committee 2]

Overview

The current Plant 2 Headworks Building at the J.B. Latham Plant (JBL) was constructed in 1999, and it includes process equipment, a ventilation system, and electrical and instrumentations. The two bar screens were replaced as part of the 2012 miscellaneous improvements. The roof and the covered bar screen channels are corroded and in need of rehabilitation. The concrete supporting the bar screen channel covers failed when an employee walked over them. During the temporary repair, staff discovered severe corrosion of the metal roof and could not use the lifting eyes in the roof that are normally used to work in the screen channels.

This project was not a part of the 2021 Consequence of Failure Analysis (CoFA) because the CoFA only focused on prioritizing the existing Capital Improvement Plan (CIP) projects listed in the 2021 CIP.

The project elements include the following:

- Roof replacement includes ceiling-mounted conduits, lifting eyes, roof access hatch, supply fan, foul air ducting, and anything attached to the roof.
- Concrete repair/replacement in the bar screens channel.
- Replacement of channel covers.
- Temporary bypass of influent or the junction structure.
- Odor control measures (temporary and permanent system modifications).
- Electrical modifications as needed: The roof replacement will require replacing electrical-related items on the roof and inside the building that cannot be protected in place or reused.

Proposals

SOCWA solicited proposals through PlanetBids on January 4, 2024, from the following firms to provide the final design to rehabilitate the Plant 2 Headworks Building:

- Black and Veatch
- Brown and Caldwell
- Carollo Engineers
- Dudek
- HDR
- Tetra Tech

Two proposals were received from Carollo and Dudek, summarized below in Table 1. Staff reached out to the firms that did not propose and were told that the timing of the work did not fit with their workloads.

Table 1 – Summary of Proposals

Firm	Carollo	Dudek
Project Manager	Jeff Weishaar	Brian Robertson
Total Labor Hours (Not including sub-consultants)	953	680
Fee	\$203,970	\$208,100

Prior Related Project Committee or Board Action (s)

This item was reviewed and discussed by the Engineering Committee on May 9, 2024. The Engineering Committee directed staff to recommend that the PC 2 Board of Directors award the contract to Dudek.

Cost Allocation

The proposed fee from Dudek is \$208,100 for the JBL Plant 2 Headworks Upgrades. Staff is requesting a 10% contingency in the amount of \$20,810 for a total of \$228,910 to account for potential unknowns during the design process. Table 2 shows the allocation of costs by member agency.

Table 2 – Cost Allocation by Member Agency, including the 10% Contingency

Agency	Cost
South Coast Water District	\$66,018.00
Santa Margarita Water District	\$110,060.00
Moulton Niguel Water District	\$5,2832.00
Total	\$228,910.00

Budget

The Fiscal Year 23/24 budget for 32243L is \$200,000. Staff is requesting adding an additional \$30,000 to the project budget for a revised total budget of \$230,000.

Recommended Action: Staff recommends that the PC 2 Board i) increase the project budget by \$30,000 for a total revised budget of \$230,000 and ii) award the contract to Dudek for a total not to exceed \$ 208,100 for the JBL Plant 2 Headworks Upgrades Project.



PROPOSAL

J.B. Latham Treatment Plant

Plant 2 Headworks Rehabilitation Final Design

RFP No. SOC006 / February 2024



3150 Bristol Street, Suite 500
Costa Mesa, California 92626
714-593-5100
carollo.com

February 29, 2024

Jeanette Cotinola
South Orange County Wastewater Authority
34156 Del Obispo Street
Dana Point, CA 92629

**Subject: Proposal for J.B. Latham Treatment Plant (JBL) Plant 2 Headworks Rehabilitation
Final Design Engineering Services**

Dear Ms. Cotinola:

The South Orange County Wastewater Authority (SOCWA) continues to move forward rehabilitation and upgrade projects to the JBL. SOCWA has made a significant commitment to protect the assets installed at the JBL in order to maintain a safe working environment while providing high quality effluent. The Plant 2 Headworks Facility is the next area for upgrades.

This project is critical as the headworks process area serves as the first line of odor capture and treatment, trash removal, and equipment protection for the facility. Having completed a similar rehabilitation project at SOCWA's Regional Treatment Plant, we understand the challenge and unique approach required to maintaining an operating treatment facility while replacing structural roof components and minimizing nuisance odors. You need a design team that understands these implications and can produce a timely and effective design that will last. **We are that team.**

The Carollo team, led by Jeff Weishaar, has significant knowledge of the JBL operations, staff, and preferences. We are also intimately familiar with the cost and risk associated with bypassing pumping and SOCWA's preference to minimize bypass pumping as much as possible. Our approach will focus on limited shutdowns that can be achieved with gravity flow bypassing of the headworks. Our team includes structural and infrastructure experts who have worked on your projects in the past.

As your project manager for this Headworks Rehabilitation Final Design project, please contact me at any time at 858-245-6081 or jweishaar@carollo.com, if you have any questions regarding this proposal or if you need any additional information.

Sincerely,
CAROLLO ENGINEERS, INC.

A handwritten signature in black ink that reads "Jeff A. Weishaar".

Jeff Weishaar, PE
Project Manager / Vice President

Identification of Responder

Carollo is dedicated to providing exceptional services to our clients. Our single focus on water allows us to develop best-in-class solutions for the rehabilitation of plants like the JBL.

Firm Overview

Throughout our 90-year history, Carollo has earned a reputation for applying sound, proven engineering principles to advance the application of drinking water, wastewater, recycled water, and stormwater technologies and engineering excellence. For SOCWA, this means expertise and experience that deliver enhanced performance, increased reliability, minimized risk, and value-added improvements—helping you stay ahead of potential issues

As a result, we are known to provide outstanding “nuts and bolts” designs that deliver robust, cost-effective, and easy to operate and maintain facilities. We currently maintain 50+ offices in North America and our staff numbers exceed 1,400 employees, which includes more than 850 registered engineers and specialists.

Proven Headworks Technical Expertise

Carollo's headworks experience is unmatched, with more than 200 new or improved facilities, with peak flows ranging from less than 1 mgd to more than 300 mgd. Our overall firm experience rehabilitating substantial headworks facilities is largely held by the same team we are proposing for your project. **This provides SOCWA with the following benefits:**

- Customized innovative solutions specific to your needs.
- Valuable lessons learned to increase reliability and reduce project risk.
- An understanding of how to incorporate the latest and most robust technology.
- Operations and maintenance (O&M)-focus resulting in improved safety, O&M friendly work environment, and lower long-term costs.
- Complete information provided to SOCWA staff that will expedite consensus building and decision making.

CAROLLO ENGINEERS, INC. CORPORATE ADDRESS

2795 Mitchell Dr.
Walnut Creek, California 94598

ADDRESS OF PRINCIPAL PLACE OF BUSINESS

3150 Bristol Street, Suite 500
Costa Mesa, California 92626

FORM OF COMPANY

Corporation

PARENT COMPANIES

NA

CONTACT PERSON

Jeff Weishaar, PE

Project Manager

Ph: 858-245-6081

Email: jweishaar@carollo.com

BY THE NUMBERS



1

singular focus
—water is all
we do!



91

year
history



30K+

wastewater/
water projects



50+

offices in
North America



1,400+

nationwide
employees



60+

headworks and
clarifier projects in
the last 10 years

Approach to the Work

Project Approach

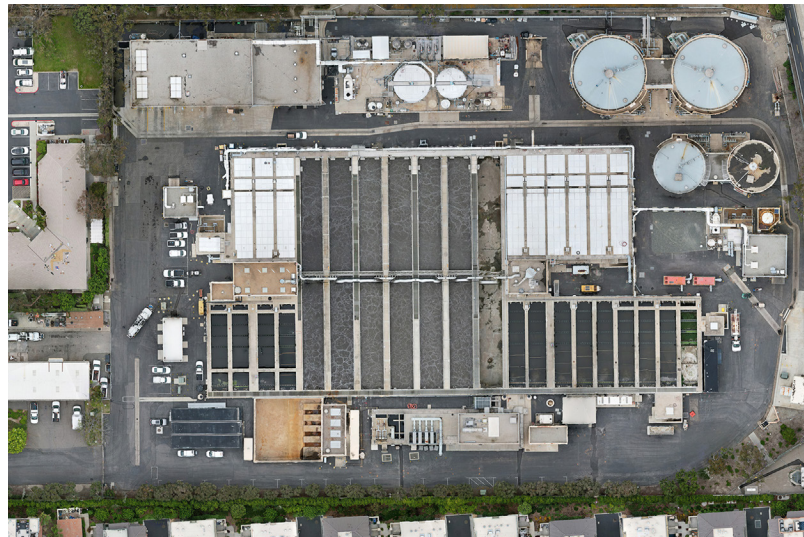
The headworks at a wastewater treatment facility sees one of the harshest environments in the whole plant and can be one of the most maintenance intensive processes. Your existing Plant 2 Headworks is nearly 25 years old. The existing roof system has shown signs of deterioration and is in need of replacement. Additionally, the bar screen channel concrete, covers, and gates are in need of replacement. Improving reliability of the system provides a good opportunity to look at the existing process, facility, and equipment, and make improvements.

We have identified **three major objectives** for this rehabilitation project:

- ① **Increase reliability**
- ② **Optimize existing treatment systems**
- ③ **Improve safety**

Our approach will address these goals in a practical and efficient manner to maximize your investment.

One of the key components of our approach will be to continue the collaborative process with SOCWA staff that has been so successful. We know from experience that the most successful projects are those that involve all stakeholders, especially O&M staff, in the decision-making process, as it fosters a feeling of ownership in the final product. This is especially true for rehabilitation projects that seek to solve problems with the existing systems. Who knows better than the plant O&M staff what the problems are and what changes would help them most? For this project, we will engage staff to speak directly about the Plant 2 Headworks, which is particularly important when considering how to maintain plant operations.



Technical Approach

Our technical approach centers around applying our team's vast knowledge of headworks facilities to address problems and identify potential areas of improvement. We will work closely with staff to identify and address your specific headworks issues at each of the following steps of this rehabilitation project:

- Evaluate condition of existing facility.
- Identify O&M problems with existing system.
- Develop and evaluate improvement alternatives.
- Identify recommended improvements.

Our team members bring the knowledge and background that can only be acquired from recently completed headworks design and retrofit projects. Like the Plant 2 Headworks project, the common design goals of all of Carollo's projects are to increase reliability, reduce O&M requirements and odors, and improve safety. We understand the benefits of working closely with plant staff to address their concerns and provide a more operator friendly facility. Your project will benefit from the extensive knowledge we have gained from recent evaluations and projects.

Roof Replacement

The harsh environment of a headworks facility can take its toll on structural members over time. Protection of the newly installed roof system will be critical to a long lasting solution. The roof itself will be a standard built-up roof with a support system underneath that is exposed to the headwork's environment. Selecting the appropriate materials to support the roof and prevent corrosion will help to safeguard the new system. Options for roof structural support materials include:

- Fiberglass reinforced plastic (FRP).
- Aluminum.
- Galvanized steel.
- Coated galvanized steel.
- 316 Stainless steel.

FRP beams have excellent corrosion resistance however require larger beams compared to steel. Higher grade steel options are available at a significant cost. Finding the correct balance of cost, maintenance and spatial impact is critical to providing the best option for the new roof.

ROOF STRUCTURAL SUPPORT MATERIAL OPTIONS

Material	Corrosion Resistance	Cost
FRP	Excellent	\$ \$
Aluminum	Good	\$ \$
Galvanized Steel	Good	\$ \$
Coated Galvanized Steel	Excellent	\$ \$ \$
316 Stainless Steel	Excellent	\$ \$ \$

We went above and beyond to provide coated galvanized steel at the Regional Treatment Plant!

Concrete Channel and Covers

Structural repair details will be developed to identify various conditions that may be encountered depending on the depth of concrete corrosion that has occurred. The various conditions are tabulated below along with the repair approach. Repair materials will include a structural concrete repair material, a high-solids epoxy polyurethane coating, and occasional crack injection and reinforcing steel replacement. High quality and durable coatings will be specified along with high strength concrete repair materials. Construction sequencing will make sure that materials are cured and tested for proper sealing to limit future deterioration.

CONCRETE REPAIR APPROACH

Concrete Condition (After Power Washing)	Repair Approach
Concrete corrosion less than 1/4-inch depth	<ul style="list-style-type: none"> ▪ Use coating material to fill voids.
Concrete corrosion greater than 1/4-inch but less than 3 inches	<ul style="list-style-type: none"> ▪ Fill voids with structural concrete repair materials ▪ Apply coating.
Concrete corrosion greater than 3 inches	<ul style="list-style-type: none"> ▪ Fill voids with fast set concrete mix. ▪ Apply coating.
Exposed to rebar, minimal steel corrosion	<ul style="list-style-type: none"> ▪ Chip out all around bar. ▪ Coat bar with anti-corrosion material. ▪ Repair and coat concrete per above.
Exposed rebar, loss of steel greater than 15 percent	<ul style="list-style-type: none"> ▪ Chip out concrete to expose unaffected steel on each end. ▪ Remove corroded steel. ▪ Lap splice new rebar over exposed healthy steel. ▪ Repair and coat concrete per above.

Additional Improvements

While the focus of this proposal has been on the roof replacement and the channel concrete and covers, we recognize that the scope of the project extends throughout the Plant 2 Headworks. Although the existing odor control system is not due for replacement, we consider this an area that could be improved with minimal investment. SOCWA noted an imbalance between the supply air flow and the foul air collection causing issues. Dampeners and/or duct modifications can be evaluated to improve the air balance of the facility. Additionally, foul air suction piping should be evaluated to extend across the room from the existing location and pull directly from the channels or directly above the screenings bin. Lighting with the new roof can also be reviewed for improvements with a possibility of adding more natural light. Additional improvements will also be identified as a result of any planned modification to the Plant 2 Headworks.

Construction Sequencing

Any rehabilitation to a treatment facility is hampered by the fact that the plant cannot shut down for an extended period of time to allow for construction. The JBL is no different and it will be important to identify construction sequencing and restrictions early on. Work within the channels will require a bypass. Our initial thought is to break the construction sequencing into two phases



At SOCWA's Regional Treatment Plant we thought outside the box to develop a creative approach to keep the facility running.

Our initial thoughts are to follow the approach used at the SOCWA Regional Treatment Plant where the roof was replaced at the headworks facility. With the use of a cable and tarp system to encapsulate the building, odor control measures can be employed to lessen potential nuisance odors. Clear contract requirements for an odor control plan will guide the contractor towards success and Carollo's experience with this approach will help streamline the design process.

of work. A bypass could potentially be done using the existing diversion structure. The Plant 2 Headworks can be isolated and flow in the 36-inch influent piping can accumulate until the level is high enough to backflow to the diversion structure and ultimately to Plant 1 Headworks. A pump would only be required during periods of high flow and the pump capacity and piping can be sized only for the additional flow capacity required reducing cost.

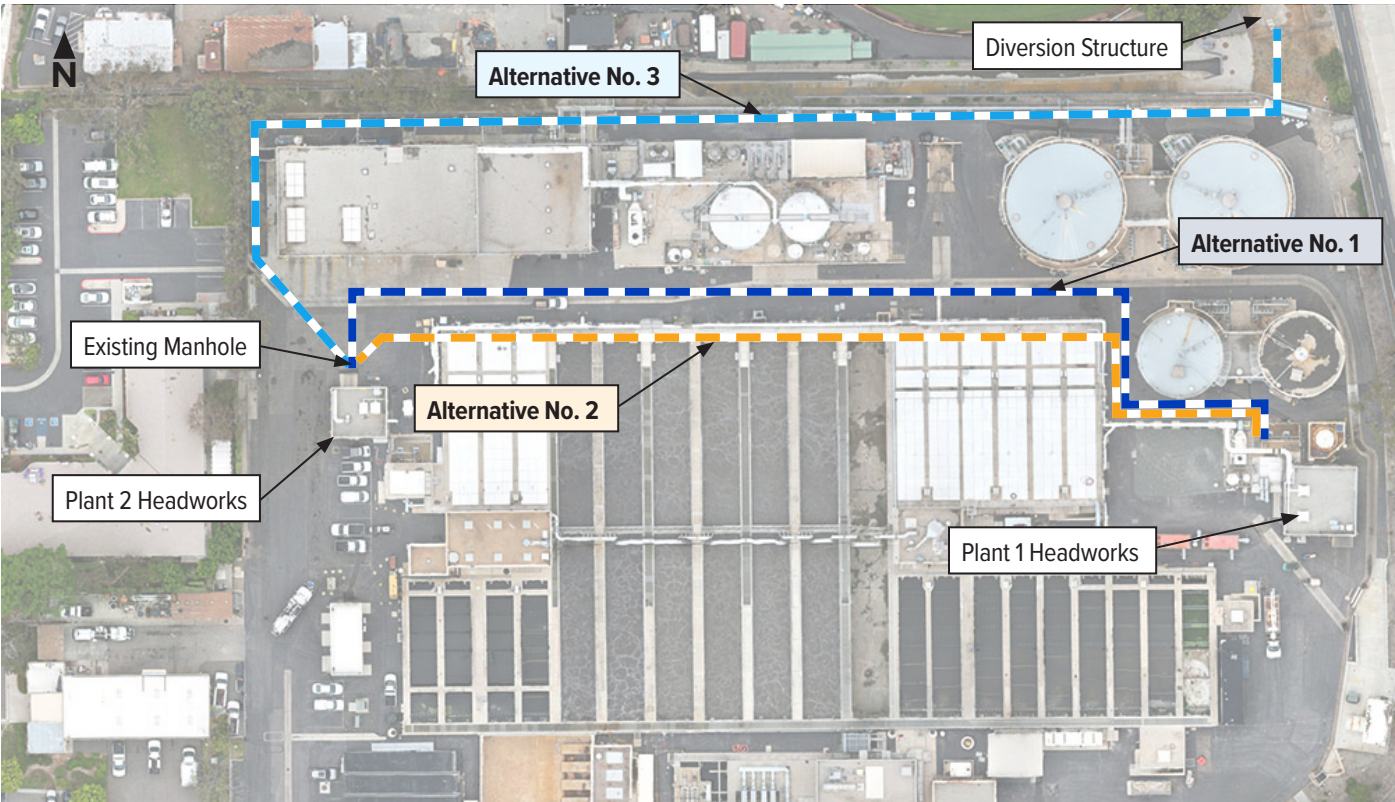
A possible sequence of work could include:

Phase 1: Roof Rehabilitation - Plant 2 Headworks in Operation:

1. Protect existing facilities and set up temporary utilities.
2. Install temporary odor control collection and treatment measures.
3. Relocate electrical equipment or wiring support from existing roof structure.
4. Salvage and remove existing headworks roof and associated equipment.
5. Install new roofing system and reinstallation of existing roof equipment.
6. Remove temporary odor control system.

Phase 2: Concrete Channel Rehabilitation - Plant 2 Headworks Shutdown:

1. Install new bypass pumping and piping system for high flow periods.
2. Shutdown and isolate Plant 2 Headworks with high pressure plug.
3. Remove and store existing screen.
4. Clean channel and repairs.
5. Reinstall new screen.
6. Startup Plant 2 Headworks.



JBL Bypass Alternatives

The main mechanism to divert flow from Plant 2 is the use of the gravity bypass previously discussed. However, during periods of high flow a pump may be required to reroute the additional flow that cannot gravity flow back to the diversion structure. Three different alternatives have been identified for potential pipe routing.

	PROS	CONS
<div><div></div><div>Alternative 1 Bypass along roadway to Plant 1</div></div>	<div><div>1. Accessible piping.</div><div>2. Simple installation.</div><div>3. Piping within fence line.</div></div>	<div><div>1. Block vehicle or pedestrian traffic.</div></div>
<div><div></div><div>Alternative 2 Bypass along basin deck to Plant 1</div></div>	<div><div>1. Avoid vehicle traffic.</div><div>2. Piping within fence line.</div><div>3. Most Direct Route.</div></div>	<div><div>1. Potential to impair foot traffic.</div><div>2. Requires complicated layout.</div></div>
<div><div></div><div>Alternative 3 Bypass to diversion structure</div></div>	<div><div>1. Accessible piping.</div><div>2. Simple installation.</div><div>3. Minimize access issues along boundary.</div></div>	<div><div>1. Longest pipe run.</div><div>2. Outside fence line.</div><div>3. Ramp required for vehicle crossing.</div></div>

Plan for Organizing the Work

The key feature of our approach is to involve all the stakeholders in the decision-making process. We recommend that the stakeholders include O&M staff. They are the actual “client” in the process, and the success of the project will be judged with respect to ease of O&M during and after the work. We can build on past and current communications with staff to add this work with the most efficient use of your time.

The kick-off meeting will be a key early step in formalizing the project’s goal. The meeting has two objectives:

1. Review and discuss material options available for roof rehabilitation and temporary odor control measures.
2. Review sequencing of construction to identify SOCWA's preferred level of comfort and discuss how the JBL might be affected.

The meetings will be led by our project manager, **Jeff Weishaar**, and key team members will attend and present their portion of the work. The meetings will serve as the primary means of presenting information and creating dialogue between the stakeholders to build consensus and make informed decisions. We will present our experience with various approaches and latest available solutions and discuss potential implementation at the JBL.

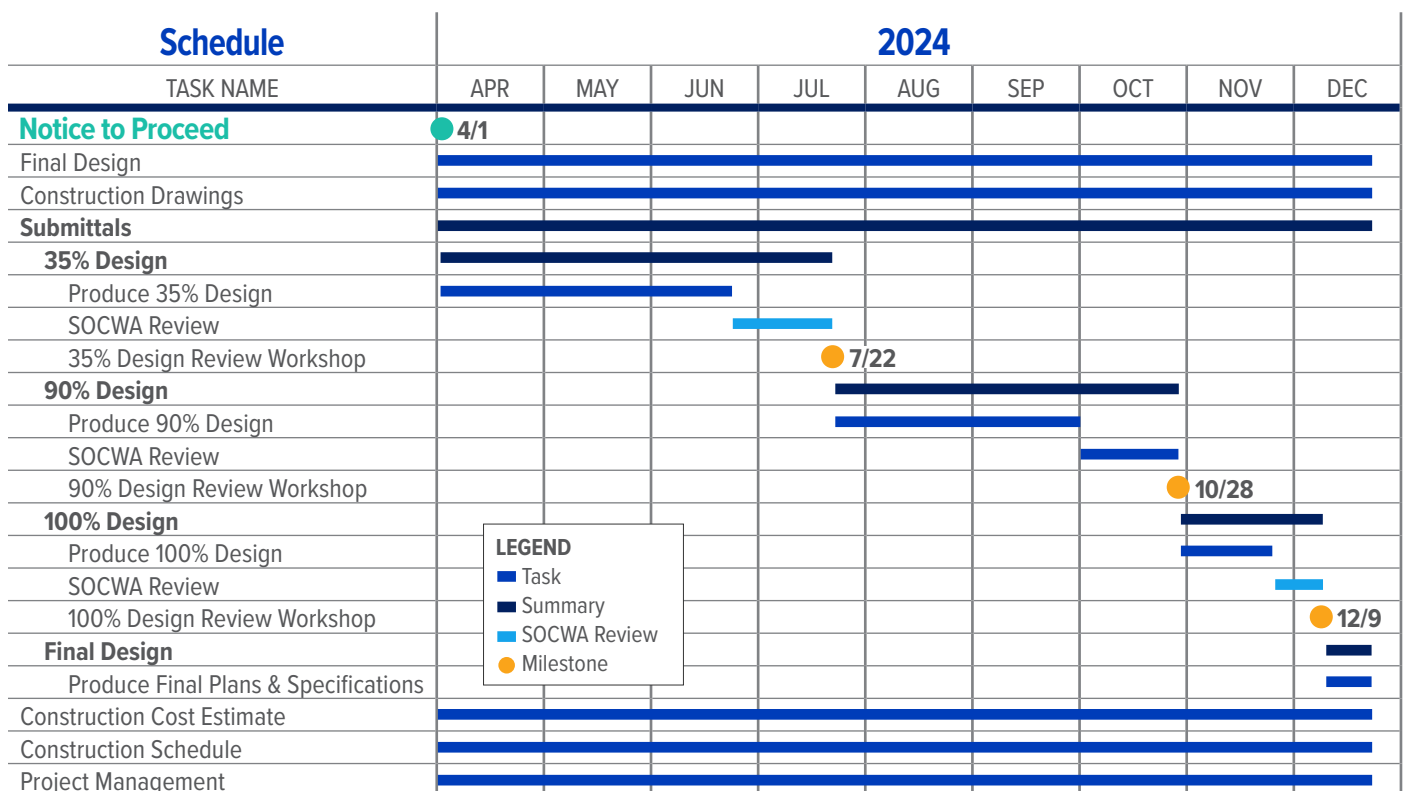
The goal of each meeting is a list of decisions and action items to guide our team’s work in preparation of the final design. Decisions and action items will be recorded in conference memoranda and issued within one week of the meeting.



Stakeholder Meetings

We will conduct stakeholder meetings to facilitate efficient and effective stakeholder input and involvement. Each meeting will be held at crucial milestones:

- **Meeting No.1** - Design Kickoff
- **Meeting No.2** - Review of 35% Design
- **Meeting No.3** - Review of 60% Design
- **Meeting No.4** - Review of 100% Design



Experience and Technical Competence

Carollo has experience in rehabilitation across California. The following pages include a few examples of our expertise.



Regional Treatment Plant Headworks Upgrade

South Orange County Wastewater Authority, Dana Point, CA

Carollo provided evaluation and design for the rehabilitation of SOCWA's aging headworks and performed significant mechanical and structural improvements, including modifications to the bar screens, screenings conveyor, compactor, electrical, instrumentation and controls (EI&C), concrete lining, roof, influent screening layout, and influent channels covers.

In an effort to increase cost-effectiveness, the project included analysis of screening alternatives and a screen rehabilitation life-cycle cost against replacement life-cycle cost to determine the most beneficial screening alternatives recommendations for SOCWA. The alternative selected was the most economical and practical solution for the client and maintained a high degree of performance. After evaluation, screenings conveyance and compaction were significantly improved with the addition of new belt conveyors and screenings compactor, which reduced operator work time in the facility.

Odors were reduced through careful planning and new layout of the duct system within the facility, as well as new intake and exhaust fans.

CONTACT

Brian Peck
P: 949-246-8338

DATE INITIATED/DATE COMPLETE

Jan 2008/Dec 2010

CONTRACT VALUE

\$300K

TEAM MEMBERS

Jeff Weishaar, Project Engineer
James Doering, Structural Engineer

WORK PERFORMED

- Structural improvements
- Evaluation of screening alternatives
- Odor control
- EI&C
- Screenings conveyance
- Compaction improvements



Cogeneration Building Wall Structural Repair

Encina Wastewater Authority, CA

In 2018, corrosion was discovered along the westerly wall of the cogeneration building that houses critical aeration blowers, cogeneration engines, and the

electrical gear providing power to the blowers, digesters, dryer building, and other critical processes at the Encina Water Pollution Control Facility.

Carollo was brought on for initial investigations into the extent of corrosion to assist in determining the proper steps for rehabilitation of the wall. Subsequently, the wall was found to be in a state of corrosion so that replacement was required. Carollo provided engineering design and construction management (CM) services to work with EWA's emergency contractor. Using a phased and cautionary approach, the building was shored and the wall was successfully replaced. The project was completed successfully, with the wall returned to like-new condition, no safety accidents, and with minimal change orders.

CONTACT

James Kearns
P: 760-268-9114

DATE INITIATED/DATE COMPLETE

November 2018/November 2021

CONTRACT VALUE

\$3M

TEAM MEMBERS

Jeff Weishaar, Project Manager
James Doering, Structural Engineer

WORK PERFORMED

- Investigation of corrosion for rehabilitation
- Design and CM services



Primary Effluent Conveyance System Rehabilitation

Encina Wastewater Authority, CA

Carollo was selected to provide design and CM services for Encina's Primary Effluent (PE) Conveyance System Rehabilitation. Cured-in-

place pipe (CIPP) was selected for pipe repair based on the overall strength of the repair, the useful life of the pipe after the repair, and cost. The bypass plan considered where and how to place pumps and piping to allow access for construction and to minimize effects to plant processes. The plan was installed and operated with a zero-leakage policy. Construction of the CIPP occurred over three days. Due to size and weight of the liner, it was necessary to perform the resin injection wet-out onsite. The wet-out facility was constructed at the location of liner insertion. Water was used to invert the liner into the host pipe and then heat-cure the liner into a hardened pipe.

During bypass operations, significant concrete repair and coating occurred throughout the PE conveyance system. Rebar replacement occurred in areas where it was found to have rotted away, and unsound concrete was replaced prior to coating. A 30-foot-long section of wall was replaced completely using quick-set, high early strength concrete to achieve strength in less than three days. This limited the impacts to the bypass pump operation. Epoxy polyurethane coating was applied to protect the repaired areas and limit future corrosion. The project was completed within the scheduled 18 months with the pump bypass duration completed in 43 days. The project was completed with no spills, no process impacts, no noise complaints, and no odor complaints.

CONTACT

James Kearns
P: 760-268-9114

DATE INITIATED/DATE COMPLETE

December 2017/December 2019

CONTRACT VALUE

\$4.65M

TEAM MEMBERS

Jeff Weishaar, Project Manager
James Doering, Structural Engineer

WORK PERFORMED

- Design and CM services for rehabilitation
- Various repairs and replacements
- Limited impacts to bypass pumping operations



This project was awarded the 2020 Outstanding Wastewater Project from San Diego ASCE and the 2020 Award of Excellence for Innovation and Resiliency from the California Association of Sanitation Agencies!



Plant No. 2 Headworks Replacement

Orange County Sanitation District,
Fountain Valley, CA

Carollo provided design of 183,000-cfm foul air odor control facilities that include two-stage treatment systems consisting of biotowers followed by chemical scrubbers with associated sodium hypochlorite and caustic feed equipment. This \$192 million project included a preliminary engineering report and preliminary and final design for a new headworks facility at Plant No. 2. The new headworks has a rated capacity of 340 mgd.

Carollo implemented an extensive two-phase odor control system using biotowers followed by chemical scrubbers, in addition to covering channels and equipment to contain odor at the source. Transportation and disposal costs were reduced with the ability to dispose of washed and dewatered screenings at a closer landfill compared to the unwashed/under-watered screenings from the existing headworks.

We also evaluated screening alternatives including impacts of smaller bar spacing including capacity, hydraulics, screening removal rates, and screen performance; and various screenings handling alternatives for conveyance (belt conveyors, shaftless screw conveyors, hydraulic conveyance), and washing/dewatering equipment. The screenings handling system was improved to provide reliable, clean conveyance of screenings to reduce odor generation and housekeeping requirements.

CONTACT

James Herberg
P: 714-962-2411

DATE INITIATED/DATE COMPLETE

Oct 2001/Jun 2013

CONTRACT VALUE

\$15.1M

TEAM MEMBERS

Walid Karam, Project Manager
Mary-Ellen Esquer, Design Manager
James Doering, Structural Engineer

WORK PERFORMED

- Screenings alternatives and screenings handling alternatives for conveyance evaluation
- Odor improvements
- Construction sequencing plan



Headworks Screening Replacement

City of Santa Barbara, CA

Carollo was retained to retrofit an existing headworks with a combination of modern equipment and upgrades to existing electrical infrastructure, while improving system reliability, reducing maintenance, and implementing process automation. Grinder/auger screens were replaced with new chain-and-rake bar screens and existing gates at the headworks that had reached the end of their useful life were also replaced. Carollo carefully navigated existing facility constraints that impacted equipment selection and configuration. The bar screen opening size was selected to increase screenings removal without affecting collection system hydraulics and a new screenings handling system increased reliability and reduced O&M requirements.

Due to extremely high organic content in the screenings, screenings washer/compactors were selected to provide a high-degree of washing and that also reduces odor. Carollo completed a comprehensive construction sequencing plan, developed in collaboration with plant staff, to maintain operations during construction.

CONTACT

Todd Heldoom
P: 805-568-1003

DATE INITIATED/DATE COMPLETE

Apr 2010/Jul 2013

CONTRACT VALUE

\$660K

TEAM MEMBERS

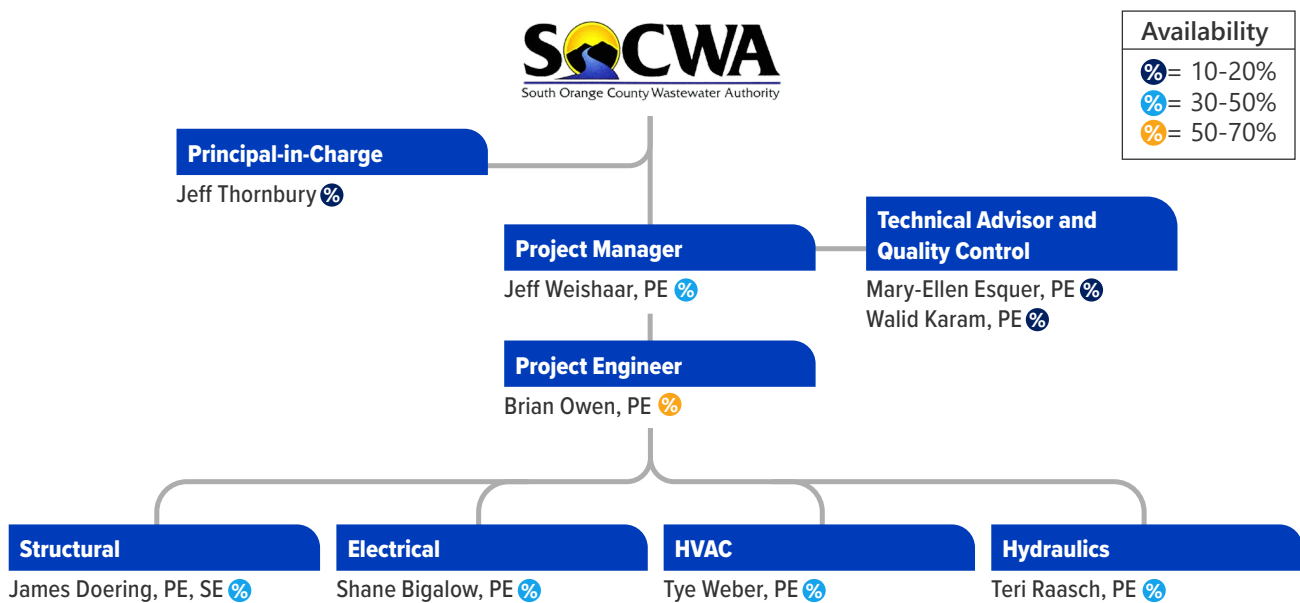
Walid Karam, Technical Advisor/OA
Mary-Ellen Esquer, Technical Advisor/OA
James Doering, Structural Engineer
Jeff Weishaar, Staff Engineer

WORK PERFORMED

- Equipment selection
- New screening handling system
- Odor control
- Construction sequencing

Key Personnel and Sub-Consultants

The Carollo team was hand-selected by project manager, Jeff Weishaar, to provide you with a team of experts who know and understand the needs of this project.



Carollo does not expect to use of subconsultants to complete this work.

Proposed Key Team Members



Jeff Weishaar, PE

PROJECT MANAGER

★ Jeff is a proven project manager and a senior wastewater treatment planning and design engineer with 20 years of experience. He has held a leadership role in projects involving nearly all aspects of wastewater treatment processes and facilities. As project manager, he will be responsible for maintaining the overall schedule, directing and supporting the activities of the engineering specialists, and will serve as your primary point of contact throughout the project.

EXPERIENCE

- Project engineer for the JBL Facility Plan for the SOCWA.
- Project engineer for the JBL Digester 3 Repairs for SOCWA.
- Project engineer for the Regional Treatment Plant Headworks Upgrade for SOCWA.

Proposed Key Team Members (continued)



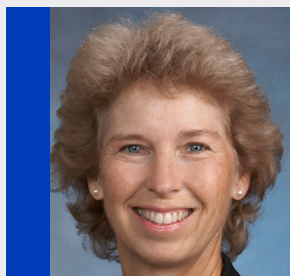
Jeff Thornbury

PRINCIPAL-IN-CHARGE

★ Jeff's 40 years of civil engineering and environmental experience allows him to anticipate challenges that arise during any project. As principal-in-charge, his role will be to provide cost-effective solutions by taking on a proactive role in the completion of project on time and within budget.

EXPERIENCE

- Project director for the Preliminary and Final Design of the Secondary Aeration Basin Rehabilitation project, Encina Wastewater Authority, CA.
- Principal-in-charge at the Water Pollution Control Facility for the Fiscal Year 2012 Major Plant Rehabilitation, Encina Wastewater Authority, CA.



Mary-Ellen Esquer, PE

TECHNICAL ADVISOR/QUALITY CONTROL

★ Mary-Ellen has 37 years of experience in process engineering related to headworks design for WWTPs. As one of Carollo's process leaders for influent screening and screenings handling Mary-Ellen will be available to review decisions and work products at critical stages to maintain project continuity and technical quality.

EXPERIENCE

- Project engineer for Headworks Rehabilitation at Moreno Valley and Temecula Valley Regional Water Reclamation Facilities for the Eastern Municipal Water District, CA.
- Project engineer for the Plant No. 1 Headworks Assessments for the Orange County Sanitation District, CA.



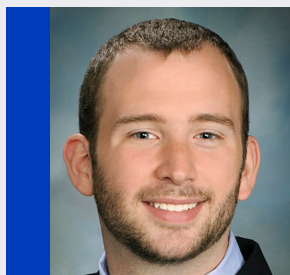
Walid Karam, PE

TECHNICAL ADVISOR/QUALITY CONTROL

★ Over the past 35 years, Walid has engineered and managed headworks upgrade projects that included screening and grit removal systems of various technologies for the highest profile headworks projects in the West. Having led the preliminary and final design of over 15 headworks projects of all sizes, Walid brings a wealth of experience and understanding of the technologies, options, and issues particular to systems at WWTPs.

EXPERIENCE

- Project/design manager for the Southeast Plant's new 250-mgd Headworks Project Conceptual Engineering Report and Preliminary and Final Design, San Francisco Public Utilities Commission, CA.
- Design technical advisor for the Water Pollution Control Plant Headworks Primary Replacement Facility, City of Sunnyvale, CA.



Brian Owen, PE

PROJECT ENGINEER

★ Brian has 10 years of experience in wastewater treatment design, construction management, and providing multi-disciplinary services for municipal clients. As project engineer Brian will be working on this project day-to-day alongside Jeff.

EXPERIENCE

- Project engineer for the Ralph W. Chapman Water Reclamation Facility Disinfection Improvements, Otay Water District, CA.
- Project engineer for Owners Agent for Horsetheif Canyon Water Reclamation Facility Expansion Project City of Lake Elsinore, CA.

Proposed Key Team Members (continued)



James Doering, PE, SE

STRUCTURAL ENGINEER

★ James, a registered structural and civil engineer, has experience performing structural design and evaluations for large and small wastewater projects. He has 30 years of experience in structural analysis, design, seismic retrofit, rehabilitation, review, and assessment for a variety of structures, such as wastewater treatment facilities. James will focus on the structural aspects of this headworks project.

EXPERIENCE

- Structural engineer for the JBL Digester No. 3 Upgrades for the SOCWA.
- Structural engineer for the JBL Facility Improvements Package B, SOCWA.



Tye Weber, PE

HVAC ENGINEER

★ Tye has 10 years of experience in evaluating and designing mechanical, plumbing, HVAC, odor control, and fire protection systems at wastewater treatment facilities. Tye will lead the evaluation and design of HVAC improvements that may be required to comply with NFPA 820 standards for air changes in a the headworks facility.

EXPERIENCE

- Mechanical engineer for Final Design and Construction Support Services for the Headworks Bar Screen Project, City of Hayward, CA.
- Staff professional for the Water Pollution Control Facility Headworks Rehabilitation, City of Hayward, CA.



Shane Bigelow, PE

EI&C

★ Shane is a senior electrical engineer with 20 years of experience in the water and wastewater industry. His expertise is in medium- and low-voltage power distribution systems including power generation facilities, developing process and instrumentation diagrams, motor control centers, lighting, and instrumentation.

EXPERIENCE

- Instrumentation and controls engineer for the Veolia Water West Operating Services Headworks and Primary Clarifier Upgrade Project in Palm Springs, CA.
- Lighting design for PAR 1225 South Headworks & Grease Process Improvements Project, Metro Water Recovery, CO.



Teri Raasch, PE

HYDRAULICS

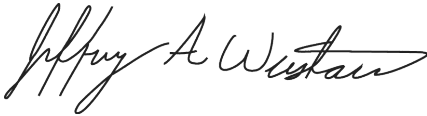
★ Teri has experience planning, designing, rehabilitating, and improving many headworks facilities with specific focus on design of headworks and solids handling systems, and screening. Teri provides extensive experience working on more than six large headworks facility projects—both new and retrofit—throughout her career.

EXPERIENCE

- Hydraulics engineer for the JBL Facility Plan, SOCWA.
- Project manager for the Headworks Conceptual Design Study and the Grit Rehabilitation Project for El Toro Water District, California.

Certifications

1. Carollo certifies that it is not aware of any actual or potential conflict of interest that exists or may arise by executing the contract or performing the work that is the subject of this Request for Proposals (RFP).
2. Carollo certifies that it is willing and able to obtain all insurance required by the form contract included as Attachment C on the RFP.
3. Carollo certifies that it has conducted a reasonable and diligent inquiry concerning the minimum and/or prevailing wages required to be paid in connection with the performance of the work that is the subject of the RFP and certifies that the proposed pricing includes funds sufficient to allow Carollo to comply with all applicable local, state, and federal laws or regulations governing the labor or services to be provided.
4. Carollo acknowledges and agrees with all terms and conditions stated in the RFP.
5. Carollo certifies that all information provided in connection with its proposal is true, complete, and correct.



Jeff Weishaar, PE
Project Manager / Vice President

Contract Comments

Carollo will maintain the required insurance during the life of the project. We agree to the contract language with the changes previously requested and accepted for the Regional Treatment Plant (RTP) AWT No. 2 Reconstruction Design and Construction Support Services contract dated August 4, 2022. We would be happy to re-submit those previously requested changes, if needed, and discuss further with SOCWA.

Appendix

Resumes

Form



Jeffrey A. Weishaar, PE

Jeff Weishaar, a civil and environmental engineer with Carollo Engineers, has worked on various wastewater projects, including elements of analysis, design, and construction.

Education

MS Environmental Engineering, University of Missouri, Rolla, 2006

BS Civil Engineering, University of Missouri, Rolla, 2004

Licenses

Civil Engineer, California

Professional Affiliations

American Society of Civil Engineers

Society of American Military Engineers

Water Environment Federation

Relevant Experience

→ Project engineer for the J.B. Latham Wastewater Treatment Plant Digester 3 Repairs for the South Orange County Wastewater Authority, California. The project included delivery of a preliminary design report analyzing the necessary repairs to the digester's mechanical appurtenances and instrumentation to improve safety and operations reliability. Drawings and specifications were prepared for concrete repair and recoating, piping and valve modifications, and instrumentation upgrades.

→ Project engineer for the Regional Treatment Plant Headworks Upgrade for the South Orange County Wastewater Authority, California. The project involved production of drawings and contract documents for replacement of the headworks building roof; rehabilitation of the existing mechanical bar screens; installation of new conveyors, screenings dewatering equipment, level measurement equipment in the existing channels for bar screen controls, and gas analyzers; channel concrete repair; odor control; and electrical and instrumentation modifications and upgrades. Roof replacement also incorporated a temporary odor control system with focus on the contractor's responsibility in capturing odors. He provided construction management services, submittal review, and responses to contractor requests for information.

→ Project engineer for the J.B. Latham Wastewater Treatment Plant Digester Capacity Evaluation for the South Orange County Wastewater Authority, California. The project included analysis of digester performance and operations to determine digester capacity for select goals. These included Class B biosolids, gas production for cogeneration, process stability, and emergency storage.

→ Project engineer for the J.B. Latham Treatment Plant Facility Plan for the South Orange County Wastewater Authority, California. The Facility Plan provided a 20-year planning window for liquid and solids treatment, flow analysis, odor control, energy management, site planning, and regulatory issues. Project duties included flow and plant capacity analysis, solids treatment analysis for thickening and digestion, site planning, cost estimating, and report preparation.

→ Project engineer for the Coastal Treatment Plant Return Activated Sludge Flow Control Analysis for the South Orange County Wastewater Authority, California. The plant operates two sets of aeration basins, with different depths and no automatic control for adjusting the flow split and flow rate of return activated sludge (RAS). The analysis evaluated methods of improving the existing RAS system. The project also included recommendations for six improvement projects with various degrees of cost and difficulty. The client approved three of these for design.

→ Project engineer for the Coastal Treatment Plant Return Activated Sludge (RAS) System and Headworks Upgrades for the South Orange County Wastewater Authority, California. Preliminary design included identification of reliable rotary drum screen manufacturers for raw wastewater screening including customer surveys, site visits, cost estimating, and detailed review of manufacturer specifications. Plans and specifications were prepared for replacement of the existing drum screens, replacement of the headworks influent force main knife gate valves, and other minor modifications to the headworks building. The plans and specifications also included design improvements to the return activated sludge system as previously identified in the RAS Flow Control Analysis. He provided construction management services, submittal review, and responses to contractor requests for information.

Jeffrey A. Weishaar, PE

→ Project engineer for the Coastal Treatment Plant Aeration Blower Capacity Analysis for the South Orange County Wastewater Authority, California. The plant operates two sets of aeration basins with different depths, air demands, and blower discharge pressures. The study involved analysis of the existing blowers, plant flows, aeration basin loading, and dissolved oxygen levels to determine the air demands for the various configurations of aeration basin operation. Blower upgrade alternatives were developed and analyzed for life-cycle costs based on capital and annual costs for power and cooling water consumption. Installation of turbine blowers was recommended to allow better control of air delivery to the aeration basins.

→ Project manager for the Coastal Treatment Plant Export Sludge Equalization Basin Design-Build Project for the South Orange County Wastewater Authority, California. The project included preliminary design of a sludge holding tank, export pumping station, and electrical building for storage and pumping of the Coastal Plant's primary and thickened sludges. The sludges are pumped approximately 4 miles to a nearby facility for processing. Preparation of the design-build procurement package included development of plans and specifications to a 60-percent completion level, preparation of the design-build agreement, agreement forms, and the request for proposals. Bids were received and evaluated from multiple design-build teams. Carollo is currently operating as the Owner's representative in overseeing the final design and construction and providing inspection services.

→ Project engineer for the Digester Gas Alternative Uses Evaluation for the South Orange County Wastewater Authority, California. Two treatment plants currently use engine generators to provide beneficial use of digester gas. This project evaluated existing and new technologies that would allow the plants to continue to utilize biogas under new, more stringent air quality emissions standards. The project recommended installation of new low emissions engine generators.

→ Project engineer for the Water Reclamation Plant Headworks Upgrades for the City of San Clemente, California. The design included drawings and contract documents for concrete repair and relining of the headworks influent channels and grit basins and replacement of mechanical bar screens. Relining of channels required design of a temporary bypass facility, including manual bar screens and odor control, with focus on the contractor's responsibility to maintain and operate the facility. He provided construction management services, submittal review, and responses to contractor requests for information.

→ Project engineer for the City of Barstow, California. Wastewater Treatment Plant Improvements Phase 1 Project. This project covered multiple subtasks including condition assessment of the wastewater treatment plant, project development and ranking, process modeling, preliminary design and final design. The Phase 1 construction project includes rehabilitation of the aeration basins, secondary clarifiers, and gravity thickener, as well as SCADA upgrades, a new dewatering facility and new standby generator and additional miscellaneous site piping, electrical and instrumentation upgrades. The Phase 2 construction project will include upgrades to the primary clarifiers and aerobic digesters as well as a new influent pump station, a new electrical control building and additional SCADA, electrical, and instrumentation upgrades.

→ Project engineer for the El Estero Wastewater Treatment Plant Screening Evaluation for the City of Santa Barbara, California. The project evaluated screening technologies to replace the existing grinder and auger system at the influent pump station facility. Over a dozen screens were evaluated to fit into a high-flow, low-head loss environment with limited installation requirements. Use of multi-rake climber screens, over 20 feet in height, was recommended to remove debris from the incoming flow. The recommendations came after extensive evaluations including interviews of existing facilities that have the screens in service.



Jeffrey R. Thornbury

Jeff Thornbury's 37 years of civil engineering and environmental experience allows him to anticipate challenges that arise during the course of any project. His commitment to providing cost-effective solutions by taking on a proactive role in projects will result in the completion of projects on time and within budget. He encourages an open line of communication between the client and project manager in order to create innovative solutions to challenges.

Education

BS Civil Engineering,
University of Arkansas,
1983

Professional Affiliations

American Society of Civil
Engineers

National Society of
Professional Engineers

His experience ranges from water and wastewater engineering design, permitting, water resources and stormwater management, facility design, water and wastewater process, to construction design build. He has been project manager and principal in charge throughout the southwestern United States on more than 120 environmental management projects, 150 wastewater and civil/environmental projects, and 80 hazardous and solid waste management projects.

Relevant Experience

→ Project director for the Encina Wastewater Authority, California, preliminary and final design of the Secondary Aeration Basin Rehabilitation project at the Encina Water Pollution Control Facility. This project adds anaerobic selectors to the activated sludge process to improve secondary sludge settling for a capacity of 40.5 mgd. Baffle walls and mixers are added to the existing aeration basins to create anaerobic zones. The project also includes rehabilitation of the basins influent channels and washdown water system, gate replacement, and addition of a new standby RAS pump. Aeration basin covers are modified to provide improved access and safety provisions. Carollo's WASAC process was evaluated to identify potential energy and chemical savings and overall feasibility.

→ Principal-in-charge for the 2015 Major Plant Rehabilitation at Encina Wastewater Authority, Carollo is providing engineering services for the EWA to design repairs and rehabilitation to the Influent Junction Structure (IJS). The design includes a new bypass structure and bypass pumping of more than an average of 20-mgd of raw wastewater to provide access to the structure. The structural repairs include demolition of the concrete roof deck, removal of the existing liner, deteriorated concrete, and exposed and corroded rebar.

→ Principal-in-charge at the Encina Water Pollution Control Facility for the Fiscal Year 2012 Major Plant Rehabilitation for the Encina Wastewater Authority, California. The FY 2012 project consists of replacement of existing agitation air piping and diffusers, installing temporary bypass pumping system capable of approximately 70-mgd to allow structural repair work on the influent junction structure, cure in place lining of four 48-inch influent lines, new slide gates with electric actuators, foul air axial fan and piping, constructing vector truck dump station, rehabilitating existing plant drainage pump station, replacement of existing grit separating equipment, site grading drainage v-ditches, replacement of concrete sidewalks, asphalt pavement, curbs, and gutters.

→ Principal-in-charge for the design of the North City Pure Water Facility, City of San Diego, California. This fast-track design project was successfully managed and completed for construction bidding of this \$250 million project within 11-months. The project required extensive coordination with City departments, permitting agencies and stakeholders.

→ Principal-in-charge for the Stormwater Recovery for Pure Water Facilities, City of San Diego, California. Provided planning and preliminary design of combined sewer systems, and evaluation of treatment alternatives at wastewater reclamation plants to provide additional source water for the City's Pure Water Program.

Jeffrey R. Thornbury

- Principal-in-charge for the Encina Wastewater Authority, California, Process Master Plan for the Encina Water Pollution Control Facility. Carollo prepared a process master plan to evaluate existing process operations, recommend necessary enhancements, and ensure the Encina Wastewater Authority continued operation with up-to-date technologies while maintaining effective reuse of Encina's water, biofuel, and biosolid resources.
- Project director for the Wastewater Treatment and Stormwater Investigation and Design for United Airlines at San Francisco International Airport, California. The project included planning, investigations, design, and construction efforts related to stormwater collection, detention, and treatment at the San Francisco International Airport Aircraft Maintenance Facilities. The study area totaled 300 acres, covering onsite and offsite airport properties.
- Principal-in-charge for the Irvine Ranch Water District, California, Rattlesnake Reservoir Chlorine Gas System Replacement. Carollo is providing engineering services to replace the existing chlorine gas system with a bulk sodium hypochlorite system. Developed and evaluated alternative layouts for the new sodium hypochlorite storage and feed system, including three initial layouts for tank and pumping configurations.
- Principal-in-charge for North City Renewable Energy Pipeline Design, City of San Diego, California. Provided planning and design of the City's landfill gas pipeline from the existing Miramar Landfill to the North City Water Reclamation Plant as a component of the North City Renewable Energy Project.
- Principal-in-charge for the RP-4 Pump Station Design project for the Inland Empire Utilities Agency, California. The project consisted of upgrading an existing pump station by adding three 300-hp vertical turbine pumps and constructing a new booster pump station with five 300-hp horizontal split case pumps and approximately 800 feet of 36- and 48-inch diameter discharge pipeline.
- Principal-in-charge for the Rincon del Diablo Municipal Water District, California, Rockhoff Pump Station Replacement. This project consisted of the replacement of a pump station building and station modification to replace vertical turbine pump units with centrifugal skid-mounted pumps.
- Principal-in-charge for the Otay Water District, California, 870-2 Pump Station Replacement. Carollo designed a pump station facility that feeds two separate pressure zones one of which serves as a recirculation line for a 37 MG reservoir. An extensive cost analysis of life cycle costs and system reliability was performed looking at gas vs. electric drive pumps. Site constraints required special attention to keep all facilities within the property limits yet also plan for a future build-out phase that would double the facility's pumping capacity and accommodate future transmission mains crossing the site.
- Principal-in-charge for the Miramar Pump Station Condition Assessment project for the San Diego County Water Authority, California. The project included condition assessment and renewal decision analysis for the pump station.
- Client services manager for the Carlsbad Desalination Conveyance Pipeline and Flow Control Facility for the San Diego County Water Authority, California.
- Principal-in-charge for the Sweetwater Authority, California, Robert A. Perdue Water Treatment Plant Facilities Master Plan Update. Carollo completed a detailed condition assessment plan and investigation to create an overall asset list for installed equipment at the plant, including structural, mechanical, electrical, and instrumentation assets. The project also includes process improvement evaluations to explore safer use of chemicals on site; replaces the aging clearwell facility; improves chemical handling, conveyance, and mixing; upgrades the intake structure to reduce manpower needed for operational tasks; and assesses potential regulatory requirements that could alter the treatment process at the plant.



Mary-Ellen Esquer, PE

Mary-Ellen Esquer, an associate, has provided process engineering on water and wastewater projects involving planning, design, and construction management services.

Education

BS Civil Engineering,
California State
University, Long Beach,
1987

Licenses

Civil Engineer, California

Professional Affiliations

California Water
Environment Association
Water Environment
Federation

Relevant Experience

→ Project engineer for the Plant No. 1 Headworks Assessments for the Orange County Sanitation District, California. The study identified rehabilitation and improvement needs of the 24-year-old, 320-mgd headworks facility. Process improvements included replacement of the existing climber bar screens and screenings handling system; improvements to grit removal and grit handling systems; increasing influent pumping capacity; improving primary flow metering, odor control; and electrical upgrades. An important part of the study was to modernize the grit removal and handling facilities and identify construction sequencing requirements to keep existing facilities in operation during inspection and construction of needed repairs and modifications.

→ Project engineer on the Orange County Sanitation District, California, Plant No. 1 Secondary Treatment Expansion project. This project included a retrofit of the existing aeration basins with internal baffles for operation with "selectors," new fine bubble diffusers, an automated dissolved oxygen control system, and provisions for step-feed operation. The project also included new and retrofit rectangular secondary clarifiers, RAS and WAS pumping, DAF thickeners, and aeration blowers. Her responsibilities included design of new secondary clarifiers with automatic sludge withdrawal and scum collection systems; modifications to existing secondary clarifiers, RAS collection system, and flow distribution channels and structures; and analysis of plant hydraulics. She also designed a programmable logic controller-based flow distribution and control system consisting of splitter boxes, flowmeters, and control valves to control influent flow to the secondary plant.

→ Prepared the preliminary design report for a 60-mgd primary clarifier expansion project for the Orange County Sanitation District, California. This included refining design criteria; preliminary design and layout of rectangular clarifier basins, flow splitting and distribution structures; and analysis of influent and effluent hydraulics. The hydraulic analysis included future plant expansions for a total capacity of 180 mgd.

→ Project engineer for Headworks Rehabilitation at Moreno Valley and Temecula Valley Regional Water Reclamation Facilities for the Eastern Municipal Water District, California. The project included final design, construction services, and start-up assistance to replace existing screens and screenings conveyors and adding new screenings washing/dewatering equipment at the Temecula Valley and Moreno Valley Regional Water Reclamation Facilities. New bar screens replaced existing unreliable and maintenance-intensive equipment. At the Moreno plant, which removes an extremely high amount of fecal matter with the screenings, the existing belt conveyor was replaced with a covered shaftless screw conveyor that transports the screenings to a new washer/compactor that produces a much cleaner and less odorous product for disposal. The design addressed space constraints in existing facilities and sequencing requirements to keep existing facilities in operation during construction. The control system provided full automation of equipment for unattended operation and integration with the existing plant-wide process control system.

→ Design technical advisor for the City of San Leandro, California, WPCP Rehabilitation Project. This project included design of new screens, compactors, screw conveyors, grit removal, influent pump station, primary clarifiers, and fixed film reactors. Retrofitted project elements included secondary clarifiers, digesters, corroded concrete, and the 12 KV electrical distribution system.

Awards

Outstanding Private Sector Civil Engineering Project - Honorable Mention, American Society of Civil Engineers, Los Angeles Section, 2013, City of Santa Barbara El Estero Wastewater Treatment Plant Headworks Screening Replacement

Project of the Year, American Society of Civil Engineers, Santa Barbara/Ventura Branch, 2012, City of Santa Barbara El Estero Wastewater Treatment Plant Head-works Screening Replacement Project

Engineering Research Achievement Award, Santa Ana River Basin Section of the California Water Environment Association, 2005, Orange County Sanitation District Plant No. 2 Headworks Replacement Project, P2 66

Engineering Research Achievement Award, California Water Environment Association, 2005, Orange County Sanitation District Plant No. 2 Headworks Replacement Project, P2 66

Mary-Ellen Esquer, PE

→ Project engineer for the conceptual engineering report and the preliminary and final design of San Francisco Public Utilities Commission (SFPUC), California, Southeast Plant's new 250-mgd Headworks project. The project replaces two existing headworks facilities with a single new headworks to significantly increase screening and grit removal and to provide plant staff and the surrounding community with the highest level of standards for reliability, aesthetics, odor control, and noise abatement. The project addresses major challenges including very tight site space, high groundwater, poor soils, heavy urban setting, extremely high influent grit loads from this combined sewer system, and protecting SFPUC's major investment in state-of-the art solids treatment and handling facilities. Headworks facilities include an influent junction/metering structure, bar screen facility, screenings handling, grit basins, grit handling, flow splitting/distribution structures, odor control scrubbers, chemical addition, and electrical/control buildings. The design employs innovative solutions to optimize process performance and hydraulics, confirmed through computational fluid dynamic (CFD) and physical modeling of various hydraulic structures.

→ Design technical advisor on the Water Pollution Control Plant Headworks Primary Replacement Facility for the City of Sunnyvale, California. The state-of-the-art \$100 million headworks facility is designed to meet very stringent goals for screening, grit removal, and odor control. The design also includes a complete retrofit and extension of the plant tunnel system. Additional project details include a fully automated, operation and maintenance (O&M)-friendly, screening and screenings handling facility using multi-rake screens with 3/8-inch bar spacing; shaftless screw conveyors and high-performance screenings washers compactors; new HeadCell® grit basins and COANDA fine grit washers; a 60-mgd influent pump station; a foul air bioscrubber system; and retrofit/extension of the existing plant tunnel system.

→ Design technical advisor for the Sewerage Agency of Southern Marin, California, Five-Year CIP Upgrades Project. This project includes predesign and final design of facility improvements for headworks, primary clarifiers, primary sludge/scum pumps, trickling filters, secondary clarifiers, and digester improvements.

→ Project engineer for the Water Recycling Plant Reconstruction project for El Toro Water District, California. The project included replacement and upgrade of various components of the existing 6-mgd plant to meet Title 22 reliability requirements. The project included influent equalization basins, influent pump station, aeration basins, standby power engine generator, aeration blowers, flow distribution structures, odor control facilities, modifications to existing secondary clarifiers to improve sludge removal, and replacement of sludge pumps and irrigation pumps. The new activated sludge facilities were designed for future denitrification and operation using selectors. The aeration basins included internal tank baffles, provisions for step feed, and operation using an anoxic zone. An important part of the design involved developing a sequence of construction to allow construction and start-up of the new facilities without compromising plant operations. The project also involved assisting the District with an application for low-interest financing under the State of California's Revolving Loan Fund program.

→ Process engineer on the Camrosa Water District, California, Water Reclamation Facility Expansion Project. Ms. Esquer developed the facility layout and completed preliminary design of the new influent pump station, oxidation ditches with anoxic basins, sludge pump station, tertiary filters, and a sodium hypochlorite disinfection system to replace an existing gaseous chlorine system. She also completed final design of the tertiary treatment facilities including continuous backwash filters, flocculation basins, and flow distribution facilities.



Walid T. Karam, PE

Walid Karam, a senior project manager and senior vice president with Carollo Engineers, has 35 years of experience as a sanitary engineer in areas such as preliminary, primary, secondary, and tertiary treatment. For the past 25 years, he has worked extensively on planning and designing large and complex headworks facilities throughout the Western United States that involve screening, grit removal, and pumping systems. Walid is Carollo's technical practice leader for all headworks projects, and is a Subject Matter Expert for grit removal, grit washing/degritting, and grit handling systems.

Education

MS Sanitary Engineering,
University of California,
Berkeley, 1988

BS Civil Engineering,
American University of
Beirut, Lebanon, 1987

Licenses

Civil Engineer, California,
Oregon

Professional Affiliations

American Society of Civil
Engineers (ASCE)

California Water
Environment Association
(CWEA)

Water Environment
Federation

Relevant Experience

→ Project/design manager for the conceptual engineering report and the preliminary and final design of San Francisco Public Utilities Commission (SFPUC), California, Southeast Plant's new 250-mgd Headworks project. The project replaces two existing headworks facilities with a single new headworks to significantly increase screening and grit removal and to provide plant staff and the surrounding community with the highest level of standards for reliability, aesthetics, odor control, and noise abatement. This project received an Envision Gold Award in 2019 for its innovation in supporting sustainability. Headworks facilities include an influent junction/metering structure, bar screen facility, screenings handling, grit basins, grit handling, flow splitting/distribution structures, odor control scrubbers, chemical addition, and electrical/control buildings.

→ Design technical advisor on the Water Pollution Control Plant Headworks Primary Replacement Facility for the City of Sunnyvale, California. The state-of-the-art headworks facility was designed to meet very stringent goals for screening, grit removal, and odor control. The design also included a complete retrofit and extension of the plant tunnel system. Additional project details include a fully automated, operation and maintenance (O&M)-friendly, screening and screenings handling facility using multi-rake screens with 3/8-inch bar spacing; shaftless screw conveyors and high-performance screenings washers/compactors; new HeadCell® grit basins and COANDA fine grit washers; a 60-mgd influent pump station; a foul air bioscrubber system; and retrofit/extension of the existing plant tunnel system.

→ Design manager for the County of Hawaii, Hawaii, Hilo WWTP Phase 1 Improve-

ments. Managed the design of a new headworks, rehabilitated solids thickening and dewatering facilities, and new digesters for the Hilo WWTP.

→ Project/design manager for the Plant No. 1 Headworks Assessments for the Orange County Sanitation District, California. The study identified rehabilitation and improvement needs of the 24-year-old, 320-mgd headworks facility. Process improvements included replacement of the existing climber bar screens and screenings handling system; improvements to grit removal and grit handling systems; increasing influent pumping capacity; improving primary flow metering, odor control; and electrical upgrades. An important part of the study was to modernize the grit removal and handling facilities and identify construction sequencing requirements to keep existing facilities in operation during inspection and construction of needed repairs and modifications.

→ Design advisor/quality manager for the El Estero WWTP Headworks Screening Replacement for the City of Santa Barbara, California. On this award-winning project, he was part of the solution to the complex replacement located in a 35-foot-deep basement. As part of the team, he introduced five-section, 90-degree vertical screens to overcome constraints to the existing structure and extremely compact footprint. The project also involved installing new mechanical bar screens, a screenings conveyor, screenings washer/compactors, a smart motor control center, and replacing all existing cast-iron sluice gates. The new control system provides full automatic control of the new screening system.

→ Project director for the Plant 1 Headworks Rehabilitation and Expansion for the Orange County Sanitation District, California. The project provides major upgrades to

Walid T. Karam, PE

the 25-year-old, 320-mgd headworks facility. Improvements include structural repairs for the plant's influent metering and diversion structures, replacement of the existing climber bar screens and screenings handling system; improvements to both the grit removal and grit handling systems; increasing influent pumping capacity; replacement of primary influent flow metering, a new 100,000-cfm odor scrubber system; and major electrical and controls upgrades.

→ Lead engineer on the Grit and Screenings Handling Study for the Encina Wastewater Authority, California. He provided a condition assessment of the 40.5-mgd plant headworks including screening and grit removal, evaluation of alternative equipment and process technologies, and recommendation of rehabilitation improvements. He developed and evaluated alternatives for improving grit removal and handling within the limits of the existing facilities. The selected alternative included upgrades to the existing aerated grit chambers and complete replacement of the grit pumping and handling system.

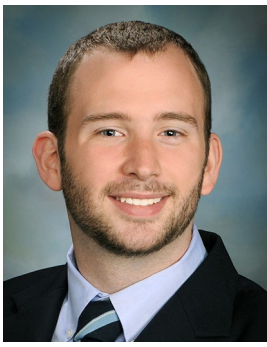
→ Grit process lead for the South Headworks and Grease Processing Improvements at the Robert W. Hite Treatment Facility for the Metro Wastewater Reclamation District, Denver, Colorado. This 145-mgd headworks retrofit and grease processing improvements project involved preliminary design, final design, and bidding phase services for the existing structure expansion, including the addition of two new bar screen channels and a new electrical system. Key project elements where his decisions were instrumental include construction sequencing, overseeing the existing facilities phased installations, maximizing operation and maintenance (O&M) elements on the project through standardization in equipment configuration, and operational strategies throughout client facilities.

→ Design engineer on the Columbia Boulevard WWTP Headworks Replacement for the City of Portland, Oregon. His primary responsibility was focused on the hydraulic design of this project, which involved a new 300-mgd headworks to replace the existing facilities. Project elements included an influ-

ent pump station, climber bar screens, screenings washer/compactor for each bar screen, belt conveyor, vortex-type grit basins, SlurryCup™/Grit Snail® grit washer, bin loading facility, packed bed scrubbers for odor control, and chemical facilities. Monitoring and automatic control of all equipment was provided through a SCADA system.

→ Lead design engineer for the Clark County Water Reclamation District, Nevada, Central Plant Bar Screen Facility Conceptual and Final Design. The new headworks and chemical feed (ferric chloride) facilities were designed for a peak capacity of 260-mgd to supplement and replace existing headworks facilities. The project involved unit processes that included bar screens, screenings washing/dewatering and conveyance, aerated grit basins, grit dewatering, ferric chloride and sodium hypochlorite chemical feed systems, and foul air treatment by soil bed scrubbers. During predesign, he completed hydraulic modeling through the existing and new facilities to fit the new headworks "hydraulically" between existing upstream and downstream limits. He also managed the pilot testing program to select site specific BAT which included testing of screenings washing/compactor, shaftless screw conveyors, and grit washing equipment. He completed design of metering and diversion facilities, conveyor systems for screenings transport and truck loading, a fully automated grit pumping system for new and existing grit basins, grit washing/dewatering, and a truck loading facility.

→ Project manager for the preliminary engineering report and final design of the Replacement Headworks at Orange County Sanitation District, California, Plant No. 2. His duties included managing a large multi-discipline design team and 10 subconsultants. The replacement headworks design has a capacity of 340-mgd and includes influent flow metering and diversion, bar screens, screenings handling, influent pumping, grit basins, grit handling, primary influent flow splitting and metering, odor control scrubbers, chemical facilities, and an electrical building.



Brian R. Owen, PE

Brian Owen joined Carollo in June 2017. His experience includes water and wastewater treatment design, as well as construction management providing multi-disciplinary services for municipal clients.

Education

MS Civil Engineering with emphasis on Environmental Engineering, University of Wisconsin, Madison, 2016

BS Civil Engineering with emphasis on Environmental Engineering, University of Wisconsin, Madison, 2014

Licenses

Civil Engineer, California

Professional Affiliations

American Water Works Association

Relevant Experience

→ Project engineer for City of Twentynine Palms, Owners agent for Septic to Sewer conversion. Carollo was tasked with developing a conceptual design report to be used for the basis of bridging documents for a design-build of a new water reclamation facility. Responsibility included data analysis for flow requirements and peaking factors, raw water quality development, potential plant layout, comparison of membrane bioreactor treatment with conventional clarifiers and development of hydraulic profile.

→ Project engineer for the evaluation and replacement of reclaimed water UV disinfection for the Olivenhain Municipal Water District, California, 4S Ranch Water Reclamation Plant. Carollo was tasked with replacement of existing UV system. Work efforts included equipment preselection coordination and packaging, detail design including equipment layout, discipline coordination, authoring of specifications, startup & commissioning to meeting Title 22 requirements, and permitting of a new UV system for Title 22 water reuse.

→ Project engineer for disinfection improvement for Otay Water District, California, Ralph W. Chapman Water Reclamation Facility. The work included replacing existing chlorine contact tank disinfection for Title 22 system with new UV disinfection system. Ancillary components included conversion from chlorine gas system to sodium hypochlorite and replacement of backwash supply pumping. Responsibilities included data analysis for UV system sizing, authoring preselection package, authoring preliminary engineering report, detailed design for layout, discipline coordination and authoring of specifications to meet Title 22 requirements.

→ Project engineer for City of Lake Elsinore, Owners agent for Horsetheif Canyon Water Reclamation Facility expansion Project. Carollo was tasked with developing request for proposal documents for the design-build to expand the existing facility. Responsibly included review of design builder qualifications and checking references, authoring of bridging document design criteria for secondary treatment, tertiary treatment, site civil, odor control and chemical systems.

→ Project engineer for City of Solvang California, aeration improvements project. Work efforts included replacement of existing jet aeration system in sequencing batch reactors to fine bubble diffusion. Responsibilities included flow and loading analysis for sizing of blower system, design and layout of blowers, large bubble mixing system and tube style diffusers. Detailed design included ability to build on upgrades for future flow expansion to meet additional treatment capacity or further treatment.

→ Project engineer for City of Los Angeles, California, Hyperion MBR Pilot Facility Design. Project consisted of design services for MBR to RO pilot system to explore full scale expansion of potential reuse for client. Work efforts included design and test plan for pilot system with MBR treatment followed by RO treatment. Responsibility included test plan for different RO recovery set points, RO projections for multiple operating scenarios, flexible RO skid design to accomplish range of testing parameters, development of monitoring system, layout and pumping requirements.

→ Project engineer for Sweet Water Authority, Robert A. Perdue Water Treatment Plant Master Plan Update. Carollo was asked to perform a condition assessment of the existing surface water treatment facility to estimate remaining useful life, provide recommendations for repairs and prioritization of equipment replacements. Plant regulations and population projections were reviewed to provide recommendations for

Brian R. Owen, P E

future treatment requirements and capacity. Efficiency of the treatment system and improvements, along with specific project evaluations were analyzed to recommend future CIP project with planning level budgets.

→ Project engineer for Sweet Water Authority, Robert A. Perdue Water Treatment Plant Hydro Mechanical Evaluation. Carollo was asked to perform a condition assessment for the hydro-electric turbine system to investigate causes for piping failure. Visual assessment and potential causes were evaluated with recommendations for repair along with opinion of cost.

→ Project engineer for the City of San Diego, California, Alvarado Water Treatment Plant Chemical Piping Condition Assessment. Carollo was tasked with performing a condition assessment for the City to determine the any rehabilitation required and estimate remaining useful life. 1,300 feet of chemical trench was inspected with multiple chemical service and line sizes assessed. Piping type was mainly PVC and condition of the concrete trench along with piping was assessed. The result of the condition assessment provided recommendations for fixing pipe supports, double containment and identification and repair for chemical leaks, as well as concrete structural cracks. Based on the conclusions of the condition assessment, minor repairs were needed for pipe supports to prevent future stresses on the existing pipe.

→ Project engineer for the City of San Diego, California, Alvarado Water Treatment Plant Stainless Steel Piping Condition Assessment. Carollo was asked to perform a condition assessment for the City to determine the condition of all the gallery piping and estimate useful remaining life. However, only the wash water supply piping was assessed due to hydraulic issues with valving not holding flow and limited shutdown time. The wash water supply piping is 30 inches in nominal diameter and is constructed of Type 304L stainless steel. The results of the condition assessment will be used to determine if rehabilitation or replacement of the Type 304L stainless steel piping is recommended. Based on the conclusions of the

condition assessment rehabilitation and replacements options considered, rehabilitation of the piping was determined not feasible.

→ Assistant project engineer for the City of San Diego, California, \$367M North City Pure Water Facility Project. This facility will treat tertiary, filtered effluent from the North City Water Reclamation Plant, in compliance with Title 22 regulations for surface water augmentation indirect potable reuse (IPR), to discharge into the Miramar Reservoir. The new advanced water treatment plant will produce 34 mgd of safe, high-quality drinking water using a proven five-step water purification process of ozonation, BAC filters, membrane filtration, RO, and UV disinfection with sodium hypochlorite advanced oxidation. When complete, the AWTP will be California's first surface water augmentation project. Responsibilities included preliminary engineering and design of reverse osmosis treatment process. Responsibilities included selecting pumps to meet flow, service and pressure requirements, routing chemicals pipes through yard and process areas, designing safety features around corrosive chemicals, coordinating with different processes for appropriate chemical usage.

Project engineer for South Adams, Colorado. Carollo was tasked with developed softening treatment process with up flow pellet reactors followed by chemical conditioning and filtration. Responsibilities included chemical usage calculation, chemical pump metering hydraulics, chemical bulk storage design and layout of chemical facility. Chemicals included were sodium hypochlorite for disinfection, carbon dioxide for ph adjustment and caustic soda for use in pellet generation.



James A. Doering, PE, SE

James Doering, a registered structural and civil engineer, is Carollo's structural lead engineer in Southern California. He manages structural design and evaluations for large and small projects. He has 30 years of experience in structural analysis, design, seismic retrofit, rehabilitation, review, and assessment for a variety of structures, such as wastewater and water treatment facilities, pump stations, reservoirs, tanks, clarifiers, large pipe supports, retaining walls, operations and maintenance facilities, office buildings, parking structures, post tensioned concrete structures, retail shopping centers, and warehouses.

Education

MS Civil Engineering,
University of California,
Berkeley, 1994

BS Civil Engineering,
University of California,
Irvine, 1993

Licenses

Structural Engineer,
California, Oregon, Utah,
Washington

Civil/Structural Engineer,
South Dakota

Civil Engineer, California,
Colorado

Professional Affiliations

American Concrete
Institute

American Institute of
Steel Construction

Relevant Experience

→ Structural engineer for the J.B. Latham Wastewater Treatment Plant Digester No. 3 Upgrades for the South Orange County Wastewater Authority, California. The project included rebuilding of the interior concrete surface at the upper walls and bottom of the roof slab with shotcrete and the provision of a protective liner.

→ Structural engineer for the JB Latham Treatment Plant Facility Improvements Package B, South Orange County Wastewater Authority, California. This project included capacity and condition assessment of the existing liquid treatment trains, evaluation of effluent management options, cost modeling, process modeling, hydraulic modeling, and capacity analyses of solids thickening and digestion processes. Improvements included repair of damaged concrete surfaces at influent and effluent channels with application of a protective coating. Work was sequenced and included bypass pumping to maintain plant operations.

→ Structural engineer for the J.B. Latham Treatment Plant Strategic Plan for South Orange County Wastewater Authority, California. The scope of work included a visual concrete condition assessment and a seismic risk evaluation of the existing plant structures that included aeration basins, primary and secondary clarifiers, solids-handling building, and digesters. Finite element analysis was used to evaluate the aeration basins walls at areas of high-stress concentration. Findings and recommendations were presented to the client in a workshop and a comprehensive technical memorandum.

→ Structural engineer for the RP-4 Primary Clarifier and Process Rehabilitation Project, Inland Empire Utilities Agency, Rancho Cucamonga, California. This project included condition assessment and repair of the existing influent pump station, grit chambers, primary clarifiers 1 and 2, primary influent diversion structure, and aeration basins. Improvements included repair of damaged concrete surfaces with a high-strength cementitious mortar and application of a protective coating. Work was sequenced and included bypass pumping to maintain plant operations.

→ Structural engineer for the P1-105 Headworks Rehabilitation and Expansion at Plant No. 1 Project for the Orange County Sanitation District, California. Serving as the lead structural engineer for 320-mgd headworks facilities, he oversaw development of over 277 structural drawings for a \$222 million CIP Project, which is now in construction. The scope includes several new buildings and rehabilitation to existing M&D, IPS, bar screen building, grit chambers, and utility tunnels. Concrete repairs were also specified for the M&D influent box and downstream channels. Bypass pumping was designed to accommodate work on existing structures. Additionally, a Tier 1/2 seismic evaluation was prepared during pre-design for the existing structures in the scope per ASCE 41-13. Findings were used for project planning and development of mitigation strategies.

→ Structural engineer for the design of Encina WPCF 2012 Major Plant Rehabilitation Project for Encina Wastewater Authority, San Diego County, California. The project included the rehabilitation of the plant's influent junction structure that involved concrete repair, coating, and the replacement of the top concrete slab with a new

Open for Quote

"Without a doubt James Doering added a tremendous value to the Carollo team and was absolutely a contributing factor to the overall success of these critical projects at the EWPCF."

- James Kearns, Capital Projects Manager, Encina Wastewater Authority, referring to the EWPCF Influent Junction Structure Rehab and Ocean Outfall-Landfall Inspection projects

James A. Doering, PE, SE

aluminum cover, which required regrading of an adjacent slope to reduce the loading. The work required a full plant bypass that included construction of a permanent bypass vault and hot-tap into a 60-inch diameter HOBAS influent sewer line.

→ Structural engineer for the La Salina Wastewater Treatment Plant Upgrades for the City of Oceanside, California. The project included rehabilitation and upgrades to the following facilities: headworks, primary clarifiers, aeration basin/secondary clarifier, digestion, dissolved air flotation thickener, and administration building.

→ Structural engineer for the design of Primary Effluent Conveyance System Rehabilitation Project for Encina Wastewater Authority, California. The project included the rehabilitation of the concrete primary effluent channels, junction boxes, and associated piping, which had experienced hydrogen sulfide corrosion with severe structural damage. Facilities were provided with structural repair mortars, new protective coatings, and concrete replacement using high-early strength solutions to limit bypass pumping costs.

→ Structural engineer for the preliminary and final design of the Secondary Aeration Basin Rehabilitation project at the Encina Water Pollution Control Facility for the Encina Wastewater Authority, California. The project included rehabilitation of the basins' influent channels and washdown water system, and gate replacement. Aeration basin covers were replaced with new aluminum flat covers and designed to provide improved anchorage of the equipment.

→ Structural engineer for El Estero Wastewater Treatment Plant Digester Nos. 1 and 2 Rehabilitation for the City of Santa Barbara, California. The project included identification of cracks at the interior of the digesters requiring repairs/sealing and preparation of associated details and repair procedures. The interior concrete was also repaired and coated with a polyurethane spray-on liner.

→ Structural engineer for the La Salina Wastewater Treatment Plant Upgrades for the City of Oceanside, California. The project included rehabilitation and upgrades to the following facilities: headworks, primary clarifiers, aeration basin/secondary clarifier, digestion, dissolved air flotation thickener, and administration building.

→ Structural engineer for the Seismic Evaluation of Sunset Reservoir No. 1 for Pasadena Water and Power, California. The project involved the seismic/structural evaluation of a 5.6 million gallon, elliptical-shaped reservoir with a hopper bottom and wood-framed roof originally constructed in 1888. Operational strategies, rehabilitation/retrofit, and replacement alternatives were considered. Findings and recommendations were presented in a report with conceptual level cost estimates.

→ Structural engineer for the Plant 1 Headworks Channel Internal Repairs for the Orange County Sanitation District, California. Work involved providing new stainless steel waterstops around the interior perimeter of two existing headworks effluent channels to stop leakage between the channels at an existing expansion joint. Repair work also included packing the existing expansion joints with Oakum and polyurethane resin grout to serve as a joint filler.

→ Structural engineer for the PS15-06 Seismic Evaluation of Plant 1 and 2 Facilities for Orange County Sanitation District in Orange County, California. The scope of work included evaluating more than 60 structures following ASCE 41 and ACI 350 procedures. Structures included single and multi-story process and admin/service buildings, as well as, digesters, aeration basins, surge towers, and gas holders. Both ground shaking and the response to ground deformations due to liquefaction were evaluated to identify vulnerabilities. Conceptual structural and geotechnical mitigation strategies were then developed and prioritized to assist the District with implementation into their Master Plan.



Education

MS Engineering (with Electrical Specialty), Colorado School of Mines, 2008

BS Electrical and Mechanical Engineering, Colorado School of Mines, 2004

Licenses

Professional Engineer, Colorado

Professional Affiliations

Institute of Electrical and Electronics Engineers

Shane K. Bigelow, PE

Shane Bigelow is a Senior Electrical Engineer at Carollo and has 20 years of experience in electrical, instrumentation, and controls engineering for water and wastewater projects and engineering services during construction. Experience includes electrical system studies in ETAP and Paladin DesignBase, medium- and low-voltage power distribution systems including standby power generators, developing process and instrumentation diagrams (P&IDs), motor controls, lighting, and instrumentation. He is experienced in the coordination of electrical work with civil, structural, and mechanical work, during both design and construction phases of a project.

Relevant Experience

→ Instrumentation and controls engineer for the Veolia Water West Operating Services Headworks and Primary Clarifier Upgrade project in Palm Springs, California. Responsibilities included developing P&IDs, network block diagram, and control schematics, developed around using Rockwell Automation intelligent motor control centers with EtherNet/IP communication and Device Level Ring technology.

→ Lighting design for the Metro Water Recovery PAR 1225 South Headworks & Grease Process Improvements project in Commerce City, Colorado. Responsibilities included selecting LED luminaires, creating lighting models for multiple buildings and outdoor areas.

→ Senior electrical engineer for the City of Turlock Regional Water Quality Control Facility Secondary Clarifier No. 5 and Denitrification Project in Turlock, California. Responsibilities included new motor control centers, VFDs, and pre-fabricated electrical building to power new mixers and MLR pumps in existing aerations basins, a new RAS Pump Station, and a new secondary clarifier. VFD cables and VFD output filters were used for long cable lengths to motors.

→ Senior electrical engineer for the Metropolitan Water District of Southern California MWDSC Advanced Water Treatment Demonstration Facility in Carson, California. Responsibilities included design for a pre-fabricated electrical building with 480 V switchboard, motor control center, and panelboards to support reverse osmosis, ultraviolet, microfiltration, and chemical systems through an elevated cable tray system. The design included an intelligent motor control center, fiber optic, copper Ethernet, and Profibus network cabling, and lighting.

→ Electrical engineer for the Sedona Wastewater Reclamation Plant A+ Upgrades Project in Sedona, Arizona. Design included secondary improvements and aerobic digester upgrades including aeration basin instrumentation, aeration blower facility, RAS/WAS pump station improvements, digester blower facility, and new electrical building. New switchboards and motor control centers were added, and existing motor control centers were modified.

→ Lead electrical, instrumentation, and controls engineer for the California Men's Colony Wastewater Treatment Plant Disinfection Upgrade Project in San Luis Obispo, California. Design elements included modifications to controls for existing VFDs, power distribution and conduit routing for new fine screens, effluent pumping and metering, tertiary filter pump station, and UV disinfection basin, and lighting and grounding. Construction support included shop drawing submittal review, factory acceptance testing witnessing for the UV control panel, and review of the SCADA system and assistance with fine-tuning the control system.

→ Electrical system modeler for the EchoWater Tertiary Treatment Facilities (TTF) project for Sacramento Regional City Sanitation District, Sacramento, California using Paladin DesignBase. Tasks included modeling new medium voltage distribution, new medium- and low-voltage SWGR, MCCs, panelboards, transformers, VFDs, and motors.

Shane K. Bigelow, PE

→ Electrical system modeler for the EchoWater Heavy Equipment Maintenance Building (HEMB) project for Sacramento Regional City Sanitation District, Sacramento, California using Paladin DesignBase. Tasks included modeling medium voltage distribution, new SWBD, panelboards, transformers, and motors, and producing a protective device coordination study.

→ Electrical system modeler for the EchoWater Return Activated Sludge Pumping (RAS) project for Sacramento Regional City Sanitation District, Sacramento, California using Paladin DesignBase. Tasks included modeling existing and new MCCs, panelboards, transformers, VFDs, and motors, and producing a protective device coordination study.

→ Electrical system modeler for the EchoWater Nitrifying Sidestream Treatment Plant (NST) project for Sacramento Regional City Sanitation District, Sacramento, California using Paladin DesignBase. Tasks included modeling new medium voltage distribution, new SWGR, MCCs, panelboards, transformers, VFDs, and motors, and producing a protective device coordination study.

→ Electrical system modeler for the EchoWater Flow Equalization (FEQ) project for Sacramento Regional City Sanitation District, Sacramento, California using Paladin DesignBase. Tasks included modeling existing MCCs, panelboards, transformers, and motors, and producing a protective device coordination study.

→ Lead electrical, instrumentation, and controls engineer for the Laughlin Water Reclamation Facility Aeration Piping Replacement & Sodium Hypochlorite Building Relocation Project in Laughlin, Nevada. Electrical design responsibilities included modifications to an existing load center, electrical distribution for a new motor control center, chemical building for sodium hypochlorite and sodium bisulfite, and standby generator with automatic transfer switch. Instrumentation and control design responsibilities included new instruments for the chemical building and an existing chlorine contact

basin, new PLC, interfacing the control system with vendor supplied packaged equipment, and existing network panels. Construction support responsibilities included reviewing shop drawing submittals and requests for information.

→ Electrical engineer for the Phase 2 South Secondary Treatment Facility expansion for the Clark County Water Reclamation District (CCWRD), Las Vegas, Nevada. The electrical design involved new medium- and low-voltage liquid filled transformers, 5-kV switchgear and motor control centers, 480-V switchgear, 480-V motor control centers, 480-V power distribution, lighting, and grounding.

→ Electrical engineer for the Albuquerque Bernalillo County Water Utility Authority Southside Water Reclamation Plant 2 MG Digested Sludge Storage Tanks and Solids Dewatering Facility Biofilter project in Albuquerque, New Mexico.

→ Electrical and instrumentation engineer for the Municipal Water District of Orange County South Orange Costal Desalination Project Pilot Plant Testing Facility in Dana Point, California. Responsibilities included coordinating with an RO system supplier and slant well driller, and providing power and controls for an experimental desalination process.

→ Performed electrical system studies including short circuit, protective device coordination and arc flash hazard analysis for the City of Oxnard Water Blending Stations, Oxnard, California. The project involved evaluating six blending stations, including existing low voltage switchboards, MCCs, panelboards, and standby generators. Tasks included coordinating with a sub-consultant to obtain information for the existing equipment. This information included electrical equipment ratings, protective device settings, motor information, and other required data.



Education

BS Mechanical Engineering, University of Texas at Tyler, 2015

Licenses

Professional Engineer, Colorado, Utah, Texas, Arizona

Professional Affiliations

American Society of Heating, Refrigeration, and Air-Conditioning Engineers (ASHRAE)

Water Environment Federation (WEF)

Tye C. Weber, PE

Tye Weber joined Carollo in 2015. His experience includes mechanical design, construction services, and code review in HVAC, plumbing, odor control, and fire protection. He is also versed in International Codes, NFPA Codes, ASHRAE standards, and ASPE standards.

Relevant Experience

→ Staff professional for the Water Pollution Control Facility Headworks Rehabilitation, City of Hayward, California. Performed and completed HVAC design, calculations, code reviews, drawings, specifications, and construction services related to the project. Scope included designing a new ventilation system for the headworks facility to resolve corrosion problems and meet NFPA 820 requirements.

→ Staff professional for the Water Pollution Control Plant Rehabilitation Electrical Improvements, West County Wastewater District, Richmond, California. Responsibilities included HVAC calculations, designs, demolition, NFPA and Title 24 code reviews, drawings, and construction services related to the plant. Scope included the existing south headworks building, EQ emergency pump station, primary sludge pump station no. 2, thickener building, and a new switchgear building.

→ Staff professional for the Coffee Creek Water Resources Recovery Facility Expansion, City of Edmond, Oklahoma. Provided HVAC/plumbing/odor control designs, calculations, code reviews, drawings, specifications, and construction services related to the project. Scope included a lift station, headworks, blower building, recycle pump station, disinfection building, digester thickening building, digester pumping building, digester blower building, dewatering building, and maintenance building. Geothermal ground source heat pumps were utilized on this project for all cooling and heating of facilities. Odor control was provided for the headworks building with a 60,000 cfm radial carbon adsorption system.

→ Mechanical engineer for final design and construction support services for the City of Hayward's Headworks Bar Screens Project. This project included replacement of two grinders with new fine screens, addition of a

new screenings conveyor and washer/compactor, addition of new motorized inlet and outlet gates for the screening channels, addition of new supply and exhaust fans and ducting, replacement of two biofilter scrubber beds, and addition of a new ferric chloride facility. During design, Tye performed mechanical and HVAC design of a new 3,300 scfm supply fan and a new 15,250 scfm exhaust fan and associated FRP ducting for the headworks facility. He also designed improvements to the relocated air scrubber and FRP ducting for an existing West Tricking Filter. During construction, Tye has reviewed various RFIs and submittals concerning the headworks exhaust fan, FRP ducting, and West Tricking Filter tower discharge pipe.

→ Staff professional for the Oak Harbor Wastewater Treatment Plant design, City of Oak Harbor, Washington. Assisted in providing HVAC calculations, designs, drawings, and construction services for the headworks, secondary treatment, aeration blowers, biosolids, and electrical/control rooms and areas within the plant.

→ Staff professional for the Riverbend Water Reclamation Plant Expansion, Upper Trinity Regional Water District, Aubrey, Texas. Provided Odor Control, HVAC, plumbing calculations designs, code reviews, drawings, and construction services for the newly constructed influent pump station, headworks, blower building, RAS/WAS, and magnetite building structures. The odor control design consisted of a new carbon adsorption system for the existing dewatering building and a new bio-tricking filter system pulling foul air from the influent pump station and headworks structures.

Tye C. Weber, PE

→ Staff professional for the Belton Wastewater Treatment Facility Improvements, City of Belton, Missouri. Provided HVAC/plumbing construction services related to the wastewater treatment facility. Scope included a headworks and influent pump station.

→ Mechanical engineer for Fargo Wastewater Treatment Facility Phase IIB Expansion Project, City of Fargo, Fargo, North Dakota. The project involved final design of solids treatment upgrades including a new primary digester, a new thickening facility, updates to the existing digester facility. It also included the design of a new influent pump station and headworks building, blower building, RAS/WAS pump station, and administration building. Performed mechanical, HVAC, and plumbing design for all buildings within the project scope with a main focus on the design of the hot water system for the plant. The hot water system consisted of a dual fuel boiler system, natural gas and digester gas fed, that provides 27 MMBtu/hr of hot water heating for the digesters and the plantwide HVAC systems.

→ Staff professional for the Coffee Creek Water Resources Recovery Facility Expansion, City of Edmond, Oklahoma. Provided HVAC/plumbing/odor control designs, calculations, code reviews, drawings, specifications, and construction services related to the project. Scope included a lift station, headworks, blower building, recycle pump station, disinfection building, digester thickening building, digester pumping building, digester blower building, dewatering building, and maintenance building. Geothermal ground source heat pumps were utilized on this project for all cooling and heating of facilities. Odor control was provided for the headworks building with a 60,000 cfm radial carbon adsorption system.

→ Staff professional for the 2018 Treatment Plant Improvements, Napa Sanitation District, California. Performed and completed HVAC calculations, code reviews, drawings, specifications, and construction services related to the project. Scope included a two story operations building. An initial condition assessment was performed to analyze

what improvements were needed. The design included replacing existing packaged air conditioning equipment and re-zoning the building for optimal temperature control. In addition, several dedicated mini-split air conditioning systems were installed in areas that required independent temperature control. The laboratory renovation included replacing the existing outside air and exhaust systems to comply with current code requirements. The existing fume hoods were replaced along with the dedicated exhaust systems serving the fume hoods.

→ Staff professional for the Valencia Water Reclamation Plant Advanced Water Treatment Facility, Los Angeles County Sanitation District, California. Performed and completed HVAC/plumbing designs, calculations, code reviews, drawings, specifications, and construction services related to the project. Scope included a membrane building consisting of an EMS RO system room, MF/NF system room, electrical room, and control room.

→ Staff professional for the Mel Leong Treatment Plant Industrial Wastewater and Recycled Water Upgrades, San Francisco International Airport, California. Performed and completed HVAC/plumbing designs, calculations, code reviews, drawings, specifications, and construction services related to the project. Scope included an ozone building and an 8,000 square foot administration and laboratory building. The laboratory included lab storage, bioassay, analysis, microbiology, sample receiving, solids, and instrumentation spaces. In addition, specialized fume and canopy hoods were designed for various lab spaces. The design included a new variable refrigerant flow system along with a building management system for optimized control of the HVAC system. The laboratory included a pre-conditioned outside air and exhaust system for optimal air quality control. The admin/lab building was designed to California Title 24 requirements as well as to local green building requirements. The building was also designed for LEED compliance.



Theresa L. Raasch, PE

Teri Raasch is a design engineer with experience leading detailed design of new or retrofit wastewater treatment facilities. She has provided planning, design, and construction services for numerous headworks projects and has expertise in complex hydraulic analysis. She has developed hydraulic models and cost-saving hydraulic solutions for complex treatment plants across the nation, including her work developing SOCWA's plant-wide hydraulics model for J.B. Latham.

Education

BS (Hons) Environmental Engineering, Florida Gulf Coast University, 2012

Licenses

Civil Engineer, California

Professional Affiliations

California Water Environment Association

Relevant Experience

→ Hydraulics engineering for the J.B.L. Hydraulic Modeling and Flow Management Study, South Orange County Wastewater Authority, California. Her duties included building the complete hydraulic model for SOCWA's Plant 1 and Plant 2, and developing a report for capacity analysis, hydraulic constraints, and recommendations.

→ Hydraulics engineer for the J.B. Latham Treatment Plant Facility Plan, South Orange County Wastewater Authority, California. The Facility Plan provided a 20-year planning window for liquid and solids treatment, flow analysis, odor control, energy management, site planning, and regulatory issues. Project duties included flow and plant capacity analysis, development and calibration of hydraulic profile, and report preparation.

→ Construction services engineer for the \$192 million replacement headworks at Plant No. 2 for the Orange County Sanitation District, California. The replacement headworks design has a capacity of 340 mgd and includes influent flow metering and diversion, bar screens, screenings handling, influent pumping, grit basins, grit handling, primary influent flow splitting and metering, odor control scrubbers, chemical facilities, and an electrical building. Her duties included hydraulics analyses associated with construction sequencing and optimization of the odor control/chemical facility.

→ Project Manager for the Headworks Conceptual Design Study and the Grit Rehabilitation Project for El Toro Water District, California. The headworks study developed and analyzed alternatives for the coarse screening and fine screening systems. Recommendations and costs were provided. The grit rehabilitation project implements the study's recommended improvements into an ongoing construction project at the grit facility. Close collaboration with District

staff and the contractor allows this expedited design to be consolidated with other grit improvements and streamline construction in this area.

→ Design manager for Hilo Wastewater Treatment Plant Rehabilitation and Replacement Project – Phase 1 for the County of Hawaii. This urgent project will address failing infrastructure and restore the plant to its original condition and capacity of 13 mgd in two phases. The project's expedited design includes new headworks facility, digesters, solids handling facilities, and improvements to the primary, secondary, and disinfection processes. The Phase 1 design team recently received individual certificates from the County of Hawaii's Mayor "for your outstanding professionalism, quality of service, and adherence to deadlines."

→ Hydraulics Engineer and Assistant Project Engineer for the Primary Treatment Facility Headworks for the City of Sunnyvale, California. This project replaces aging headworks and primary sedimentation tanks with 60 mgd capacity. She led the design of a new screening facility, grit removal basins, and a grit and screenings handling and loading facility. She also assisted with design of the new influent pump station, performed hydraulic profile calculations, and developed the engineer's construction cost estimate for those areas.

→ Hydraulics Engineer and Grit System Project Engineer for the Southeast Plant's New 250-mgd Headworks, San Francisco Public Utilities Commission (SFPUC), California. The project replaces two existing headworks facilities with a single new headworks to significantly increase screening and grit removal. Her responsibilities included design of new grit basins, grit handling, and primary influent distribution structures, hydraulic profile development and cost estimation. She also oversaw the computational

Awards

Florida Gulf Coast
University Alumni Soaring
Eagle Award, 2021

Kenneth J. Miller
Founders' Award 2018-
Water For People

Theresa L. Raasch, PE

fluid dynamic (CFD) and physical modeling of various hydraulic structures that confirms the innovative solutions which optimize process performance and hydraulics of the new facilities.

→ Hydraulics Engineer for 120-Inch Diameter Ocean Outfall Condition Assessment and Scoping Study (PS18-09). She led low flow hydraulics evaluation of the diffuser and identified mitigation measures for seawater intrusion and marine biofouling.

→ Hydraulics engineer for the PAR 1225 South Headworks and Grease Processing Facility Improvements Project, Metro Wastewater Reclamation District, Denver. This work involves extensive modifications to the existing screening, grit removal, and grease processing facilities for the 145-mgd South plant. She analyzed the hydraulics of the existing plant and developed a complete hydraulic profile for the preliminary design phase of the project.

→ Hydraulics Engineer for the RP-1 Solids and Liquids Capacity Improvements project. She was responsible for developing hydraulic profile of plant at increased capacity of 80 mgd. She was also responsible for identifying solutions for improving influent plant metering, improving screen capture, achieving primary splitting, and simplifying plant operation.

→ Hydraulics engineer for Roberto R. Bustamante Wastewater Treatment Plant Headworks Improvements, El Paso Water, Texas. She developed the hydraulic profile of the treatment plant at increased capacity of 120 mgd. She was also responsible for developing ideas to increase hydraulic flexibility for operations and identify hydraulic risks during construction.

→ Hydraulics engineer and design engineer for the Wastewater Treatment Plant Upgrade Project for the City of Palm Springs and Veolia Water West Operating Services, California. The project's tight budget incorporated necessary upgrades of the plant's headworks screenings and grit removal, primary clarifiers, primary sludge pump station, primary influent pump station, digester dome replacement, odor control, and sludge dewatering. During predesign, she

assisted in developing cost-saving alternatives and configurations for the primary influent pump station, digester dome replacement, odor control, and sludge dewatering facilities.

→ Hydraulics Engineer for Valencia Water Reclamation Plant ECM, Schneider Electric, CA. She developed plant wide hydraulic model for exploring feasibility to expand plant flow to 48 mgd and manage flow splits to meet process goals under various conditions. She identified hydraulic constraints and developed cost-saving solutions to junction boxes which simplified plant hydraulics and resulted in desired flow splits.

→ Hydraulics Engineer for San Jacinto Valley Water Reclamation Facility Plant 1 Rehabilitation, Eastern Municipal Water District, CA. Her duties included analyzing influent flow data and developing the 23 mgd plant-wide hydraulic model to evaluate various rehabilitation alternatives.

→ Hydraulics Engineer for Equipping of Plant 2B at Moreno Valley Regional Water Reclamation Facility, Eastern Municipal Water District, CA. Her duties included analyzing influent flow data and developing the 28 mgd plant-wide hydraulic model to evaluate new splitter box locations and option for upgraded secondary treatment processes.

**ATTACHMENT B
NON-COLLUSION AFFIDAVIT**

The undersigned declares:

I am the Vice President of Carollo Engineers, Inc., the party making the foregoing bid.

The bid is not made in the interest of, or on behalf of, any undisclosed person, partnership, company, association, organization, or corporation. The bid is genuine and not collusive or sham. The bidder has not directly or indirectly induced or solicited any other bidder to put in a false or sham bid. The bidder has not directly or indirectly colluded, conspired, connived, or agreed with any bidder or anyone else to put in a sham bid, or to refrain from bidding. The bidder has not in any manner, directly or indirectly, sought by agreement, communication, or conference with anyone to fix the bid price of the bidder or any other bidder, or to fix any overhead, profit, or cost element of the bid price, or of that of any other bidder. All statements contained in the bid are true. The bidder has not, directly or indirectly, submitted his or her bid price or any breakdown thereof, or the contents thereof, or divulged information or data relative thereto, to any corporation, partnership, company, association, organization, bid depository, or to any member or agent thereof, to effectuate a collusive or sham bid, and has not paid, and will not pay, any person or entity for such purpose.

Any person executing this declaration on behalf of a bidder that is a corporation, partnership, joint venture, limited liability company, limited liability partnership, or any other entity, hereby represents that he or she has full power to execute, and does execute, this declaration on behalf of the bidder.

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct and that this declaration is executed on 29 [date], at Orange County [city], CA [state].

Signature: 

Title: Vice President

carollo.com



South Orange County Wastewater Authority
J.B Latham Treatment Plant Plant 2 Headworks Rehab Final Design
Level of Effort and Fee Estimate



Tasks	Role:	Carollo Engineers Labor												Task Subtotals
		PIC/QC	PM	Odor Spcl.	Engr	El&C	Struc.	CAD	Clerical	Total Hours	Carollo Labor Cost	PECE @ \$/hr \$15.00	Carollo Total	
						Engr.	Engr.							
		Billing Rate (\$/hr):	\$310	\$310	\$274	\$180	\$242	\$204	\$172					
1	Project Management													
1.1	Project Management Plan		4		2				2	8	\$ 1,898.00	\$ 120.00	\$ 120.00	\$ 2,018
1.2	Progress Meetings (5)		10	4	10	4	4		5	37	\$ 8,525.00	\$ 555.00	\$ 555.00	\$ 9,080
1.3	Project Schedule		4		8					12	\$ 2,680.00	\$ 180.00	\$ 180.00	\$ 2,860
1.4	Progress Monitoring, Reporting & Invoicing		10						8	18	\$ 4,292.00	\$ 270.00	\$ 270.00	\$ 4,562
1.5	Quality Management	24	12						8	44	\$ 12,352.00	\$ 660.00	\$ 660.00	\$ 13,012
	Subtotal Task 1	24	40	4	20	4	4	0	23	119	\$ 29,747.00	\$ 1,785.00	\$ 1,785.00	\$ 31,532
2	Contract Document Preparation													
2.1	Record Drawing Review				8	4	4			16	\$ 3,224.00	\$ 240.00	\$ 240.00	\$ 3,464
#REF!	Submittals:													
	35% Plans & Specifications		6	20	40	24	40	130	16	276	\$ 53,252.00	\$ 4,140.00	\$ 4,140.00	\$ 57,392
	90% Plans & Specifications		6	8	40	40	30	136	12	272	\$ 52,232.00	\$ 4,080.00	\$ 4,080.00	\$ 56,312
	100% Plans & Specifications		4	2	24	24	12	80	8	154	\$ 29,316.00	\$ 2,310.00	\$ 2,310.00	\$ 31,626
	Bid Set Plans & Specifications		2	2	16	8	8	48	8	92	\$ 17,064.00	\$ 1,380.00	\$ 1,380.00	\$ 18,444
2.4	Construction Cost Estimate		4		20					24	\$ 4,840.00	\$ 360.00	\$ 360.00	\$ 5,200
	Subtotal Task 2	0	22	32	148	100	94	394	44	834	\$ 159,928.00	\$ 12,510.00	\$ 12,510.00	\$ 172,438
Totals:		24	62	36	168	104	98	394	67	953	189,675	14,295	14,295	203,970

South Orange County Wastewater Authority
J.B Latham Treatment Plant Plant 2 Headworks Rehab Final Design
Level of Effort and Fee Estimate



Tasks		Role:	Carollo Engineers Labor											Task Subtotals	
			PIC/QC	PM	Odor Spcl.	Engr	El&C	Struc.	CAD	Clerical	Total Hours	Carollo Labor Cost	PECE @ \$/hr \$15.00		Carollo Total
							Engr.	Engr.							
		Billing Rate (\$/hr):	\$310	\$310	\$274	\$180	\$242	\$204	\$172	\$149					
1	Project Management														
1.1	Project Management Plan			4		2				2	8	\$ 1,898.00	\$ 120.00	\$ 120.00 \$ 2,018	
1.2	Progress Meetings (5)			10	4	10	4	4		5	37	\$ 8,525.00	\$ 555.00	\$ 555.00 \$ 9,080	
1.3	Project Schedule			4		8					12	\$ 2,680.00	\$ 180.00	\$ 180.00 \$ 2,860	
1.4	Progress Monitoring, Reporting & Invoicing			10						8	18	\$ 4,292.00	\$ 270.00	\$ 270.00 \$ 4,562	
1.5	Quality Management		24	12						8	44	\$ 12,352.00	\$ 660.00	\$ 660.00 \$ 13,012	
	Subtotal Task 1		24	40	4	20	4	4	0	23	119	\$ 29,747.00	\$ 1,785.00	\$ 1,785.00 \$ 31,532	
2	Contract Document Preparation														
2.1	Record Drawing Review					8	4	4			16	\$ 3,224.00	\$ 240.00	\$ 240.00 \$ 3,464	
#REF!	Submittals:														
	35% Plans & Specifications			6	20	40	24	40	130	16	276	\$ 53,252.00	\$ 4,140.00	\$ 4,140.00 \$ 57,392	
	90% Plans & Specifications			6	8	40	40	30	136	12	272	\$ 52,232.00	\$ 4,080.00	\$ 4,080.00 \$ 56,312	
	100% Plans & Specifications			4	2	24	24	12	80	8	154	\$ 29,316.00	\$ 2,310.00	\$ 2,310.00 \$ 31,626	
	Bid Set Plans & Specifications			2	2	16	8	8	48	8	92	\$ 17,064.00	\$ 1,380.00	\$ 1,380.00 \$ 18,444	
2.4	Construction Cost Estimate			4		20					24	\$ 4,840.00	\$ 360.00	\$ 360.00 \$ 5,200	
	Subtotal Task 2		0	22	32	148	100	94	394	44	834	\$ 159,928.00	\$ 12,510.00	\$ 12,510.00 \$ 172,438	
Totals:			24	62	36	168	104	98	394	67	953	189,675	14,295	14,295 203,970	



PROPOSAL

J.B. LATHAM TREATMENT PLANT (JBL) PLANT 2 HEADWORKS REHABILITATION FINAL DESIGN

SOUTH ORANGE COUNTY WASTEWATER AUTHORITY

FEBRUARY 29, 2024

27271 Las Ramblas, Suite 340 / Mission Viejo, CA 92691 / 949.450.2525

372

DUDEK

Cover Letter

February 29, 2024

Jeanette Cotinola, CPCM
Procurement/Contracts Manager
South Orange County Wastewater Authority
34156 Del Obispo Street
Dana Point, CA 92629

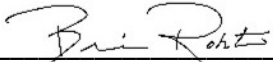
Subject: Proposal for J.B. Latham Treatment Plant (JBL) Plant 2 Headworks Rehabilitation Final Design

Dear Jeanette Cotinola:

Dudek is pleased to submit this proposal for the above-referenced project. Our proposal demonstrates our team's informed approach to the SOCWA JBL Plant 2 Headworks Rehabilitation Final Design project. Led by Michael Metts and Brian Robertson, with support from Phil Giori, internal staff, and subconsultant specialists, our team includes industry leaders with project-specific engineering knowledge related to headworks rehabilitation, structural improvements, plant operations, and more.

Should you have any questions or require additional information, please do not hesitate to contact Project Manager Brian Robertson at 760.479.4845 or brobertson@dudek.com. We value our relationship with SOCWA and look forward to assisting you with this project.

Sincerely,



Brian Robertson, P.E., QSD
Project Manager



Bob Ohlund, P.E.
Vice President

Bob Ohlund is authorized to sign on behalf of Dudek.

DUDEK AT A GLANCE



*Multidisciplinary design,
planning, engineering, and
environmental services*

800+
EMPLOYEES

Founded in
1980

Employee-owned
CALIFORNIA CORPORATION

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APPENDIX

A Resumes	
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1.2.1 Identification of Responder

Dudek

Table 1 presents the SOCWA-requested responder information.

Table 1. Dudek Information

Legal name, address and form (e.g., Corporation, LLP, etc.) of company	Dudek Main Office 605 Third Street, Encinitas, CA 92024 A proud California Corporation since 1980 C1210012
Identify any parent companies	Dudek has no parent company
Addresses of principal place of business and, if different, any local office	Main Office 605 Third Street, Encinitas, CA 92024 Orange County 27271 Las Ramblas, Suite 340, Mission Viejo, CA 92691
Name, title, phone, and email address of person to contact about the proposal	Contact Brian Robertson, PE, QSD, Project Manager Address 605 Third Street, Encinitas, CA 92024 Phone 760.479.4845 Email brobertson@dudek.com

DUDEK SERVICES

Agency Permitting
Biological Surveys and Monitoring
CEQA/NEPA Compliance
Climate Action/Adaptation Plans
Coastal Planning/Permitting
Cultural Resources
Civil Engineering
Construction Management

Environmental Planning
Grant Management and Writing
Habitat Restoration and Management
Hazardous Materials Testing
Hydrogeology
Hydrology
Mapping and Surveying

Public Outreach
Urban Design and Planning
Urban Forestry
Wildfire Protection Planning
Water Conservation Planning
Water Infrastructure Planning and Design
Visual Simulations

1.2.2 Approach to the Work

Project Understanding

We understand that the Plant 2 (4-side) headworks at the J.B. Latham Treatment Plant (JBL) need various improvements related to the facility's condition, odor conditions, and structural integrity. The existing Plant 2 Headworks Building was constructed in 1999 and is now in need of rehabilitation in several key areas:

1. **Building Roof.** The existing coated steel roof structure has experienced coating failures and corrosion to the structural I-beams and corrugated steel decking. The corrosion is caused by hydrogen sulfide gas released from the wastewater that condensates and forms sulfuric acid on the material, which, over time, can cause coating failures and degradation of the metal structural elements. This corrosion is visible within the building, and the roof structure is noticeably soft when walked on, indicating a loss of structural strength and integrity.
2. **Wastewater Channels.** The existing headworks channels are concrete with a protective liner for hydrogen sulfide / sulfuric acid corrosion protection. Where visible during Dudek's site visit, it appears that the existing protective liner is failing and in need of replacement. Where liner failure exists, the corrosion often affects the concrete structure. Therefore, concrete rehabilitation and the application of a new protective liner are required to convey the raw wastewater through the channels safely.
3. **Channel Covers.** The existing headworks channels are covered with steel diamond plate covers, which need replacement. New channel covers should consider corrosion protection, weight, and ease of removal.
4. **Bypassing During Construction.** We understand that the existing facility is plumbed such that the Plant 2 Headworks influent line can be plugged at the junction box, and flows will be bypassed passively to the Plant 1 Headworks without a spill until flows reach a certain threshold. That threshold will be confirmed with SOCWA during the preliminary design process. At a minimum, bypass pumps must be staged on-site to bypass the headworks while it is offline during construction and avoid a potential spill.
5. **Odor Control.** The existing building's odor control system is ineffective, and the corrosion in the building and channels demonstrates its relatively poor performance. We understand that as part of the project, SOCWA expects the project team to consider and provide for both construction phase odor control measures, if applicable, and provide a better permanent odor control system to slow the pace of corrosion within the building after the facility has been rehabilitated.
6. **Electrical.** Currently, numerous conduits and lighting fixtures are supported by the existing corroded roof structure inside the building. These conduits and their associated conductors will need to be replaced along with the roof. Once the new roof is complete, the existing lighting fixtures will be salvaged and reused in the headworks building. Conduits and conductors for equipment on the roof will also be removed and replaced as required.

APPROACH

The following sections summarize our approach to addressing the six key scope elements for the project.

Structural Improvements

Given the nature of the Headworks environment, a concrete roof would have been a more robust approach for the original building construction. However, retrofitting the existing building to implement a new concrete roof would likely require extensive gravity and seismic retrofits to the wall and foundation elements, which are costly and may adversely affect adjacent structures due to surcharge loading from the increased weight of the structure. Similarly, more corrosion-resistant materials such as fiber-reinforced polymer or aluminum are unsuitable for the roof span lengths and diaphragm requirements of the building roof. They are, therefore, not feasible for implementation as a roof replacement. Smaller pipe support structures with simple hot-dipped galvanized finishes appear to have performed better than the coated roof steel and metal deck, suggesting that the roof framing and metal deck were coated with a paint system not designed for the harsh sulfides environment of a headworks building and likely did not implement a galvanizing primer. Based on these observations, a structural steel and metal deck system similar to the existing roof construction is likely to be the most cost-effective approach to roof replacement, with a focus on proper coating systems designed for the harsh wastewater environment, selective detailing that minimizes or eliminates uncoated surfaces, precoating structural members prior to erection and increased member thicknesses for longevity. The weight of the new roof system will be kept at or below the existing weights to prevent triggering California Building Code gravity or seismic retrofit requirements to the existing building walls and foundation. These improvements, improved odor control, and continued structure monitoring and maintenance will increase the facility's remaining useful life.

The headworks channel rehabilitation will likely consist of various concrete surface repairs and may require equipment frame replacement or repairs and replacement of existing anchor bolts. The extent of channel deterioration and required repairs will be determined during a site investigation to the extent possible while the channels operate. Anticipated repairs include concrete resurfacing utilizing epoxy repair mortar, corrosion inhibitors on exposed and/or corroding reinforcement, replacement of nonstructural frames and supports with 316 stainless steel construction, an epoxy coating system on all concrete surfaces within the channels, and, if necessary, new 316 stainless steel anchor bolts for all equipment.

Channel Covers

Dudek will evaluate suitable replacements for the existing headworks channel covers. This process will consider factors such as safety, strength, durability, and costs. Our team has been reviewing contractor designs and recent installations of Fibergrate and EDGENG fiberglass reinforced plastic (FRP) covers for primary and secondary wastewater treatment channels. We believe FRP covers could be an effective alternative to the current diamond-plated steel covers.

The advantages of FRP covers include good resistance to corrosion, slip resistance due to friction factors and diamond plating options, and lightweight materials. These features could reduce safety risks and accommodate easier channel access. Our approach will include a conceptual design for FRP replacement that considers anchoring the grating flush with the finished floor to avoid tripping hazards, sealing for odor control, access features such as recessed handles, and identification of anticipated routine maintenance tasks and repair procedures.

Another option is to replace the current diamond-plated steel covers in kind. This approach is anticipated to minimize impacts to the existing concrete channels, provide flexibility due to the availability and workability of

materials, prevent tripping hazards due to low profile, and provide simplicity in maintaining existing maintenance schedules and utilizing existing equipment and skilled staff for repairs.

We will summarize the advantages and disadvantages of each option and facilitate a workshop with SOCWA staff to discuss options in detail and obtain consensus on the appropriate covers for the plant's needs.

Bypassing During Construction

Maintaining plant operations during construction is a key element of any project at a wastewater plant where 24/7 operation is required. In SOCWA's case, the JBL plant has two separate headworks facilities, which is advantageous for the proposed project. Our understanding is that if the Plant 2 headworks influent line is plugged at the junction box, flows will passively bypass to the Plant 1 headworks without the need to bypass pump. However, to avoid a spill, Dudek recommends that the contractor stage diesel-driven bypass pumps at the junction box on standby in the event that flows get high enough to risk a spill in the collection system. Staging of bypass pumping equipment, flow setpoints, suction, and discharge connection locations for the standby bypass pumping equipment will be workshopped with plant O&M staff during the preliminary design, and requirements, limitations, or constraints on the contractor will be written into the construction bid documents as a specification titled "Maintenance of Plant Operation." This spec will allow Dudek and SOCWA to outline specific work restrictions such as allowable shutdown limitations to certain facilities, requirements for bypassing, notification requirements, and more.



Temporary Bypass Pumps at SOCWA Regional Treatment Plant

Odor Control

Improvements in the odor control system provide SOCWA with a unique opportunity to address a poor-performing, inefficient system with a new optimized system to mitigate the potential for future corrosion within the building and improve the working environment for staff. Dudek is partnering with Don King, an industry expert in odor control at wastewater treatment plants who has previously worked with SOCWA at the facility to improve odor control systems, on the proposed project. Based on our review of the existing system, facility, and discussions with Don, we identified several deficiencies with the existing system.

- Configuration of the supply and exhaust registers. The existing odor control system has supply registers on one side of the building and exhaust registers on the other. As a result, the corrosion is noticeably better on the supply side of the building and worse toward the exhaust side of the building. This is due to the supplied air pushing the corrosive gases to the exhaust. The result is a higher potential for odors, corrosion, and short-circuiting of the ventilation system.
- Oversized Supply Fan. The existing system has an oversized supply fan based on the exhaust flow rates from the system. When the supply fan provides too much supply air to the building, it creates a positive pressure environment, pushing odors out of the building and potentially into neighboring properties. Due to the size of the supply fan, operation staff have justifiably shut the fan off to allow a negative pressure environment within the building.
- Register placement. Both the existing supply and exhaust registers are not strategically placed to provide fresh air ventilation and foul air exhaust for the areas with the highest potential for sulfide gases. As a

result, the system is not efficiently removing sulfide gases from the building, allowing them to sustain in the building for long periods and contributing to foul odors and corrosion.

Our proposed approach for odor control improvements of the Plant 2 headworks building includes the following to address the key needs of the facility:

- Optimize exhaust locations where sulfides are most present. The odor control system currently provides approximately 4,500 to 5,000 cfm of ventilation to the building, which is sufficient flow for odor control of a building and facility of this size. However, the ventilation locations should be strategically placed to mitigate odors and corrosion potential. Approximately 1/3 of the overall ventilation rate (approximately 1,600 cfm) will be provided to the headworks channels to pull exhaust from below the cover plates and aggressively ventilate this area, the primary source of sulfide gases within the building. Exhaust locations will be located at the screenings and bypass channel convergences upstream and downstream of the screens. The remaining 2/3 of the overall ventilation rate (approximately 3,400 cfm) will be provided above the screenings and grit dumpster, the secondary source of sulfide gases and odors within the building. Exhaust locations will be located directly above the dumpster to reduce the likelihood of odors and gases lingering in the building from this location.
- Optimize fresh air supply locations and considerations for supply fans vs. mixing. Fresh air supply sources can be provided through passive louvers or supply fans. In our experience, we prefer passive louvers as they are not maintenance items and eliminate the risk of positive pressure within the building. Supply fans provide an advantage relative to a passive louver system in that the fresh air supply provides a mixing of the air within the building, reducing the likelihood of dead zones and corrosion pockets where the ventilation is not active. We think that a design combination that includes passive louvers for fresh air supply paired with ceiling or wall fans for air mixing in the building provides the optimal design for managing odors and sulfide gases that have been a problem in the Plant 2 Headworks building for many years.

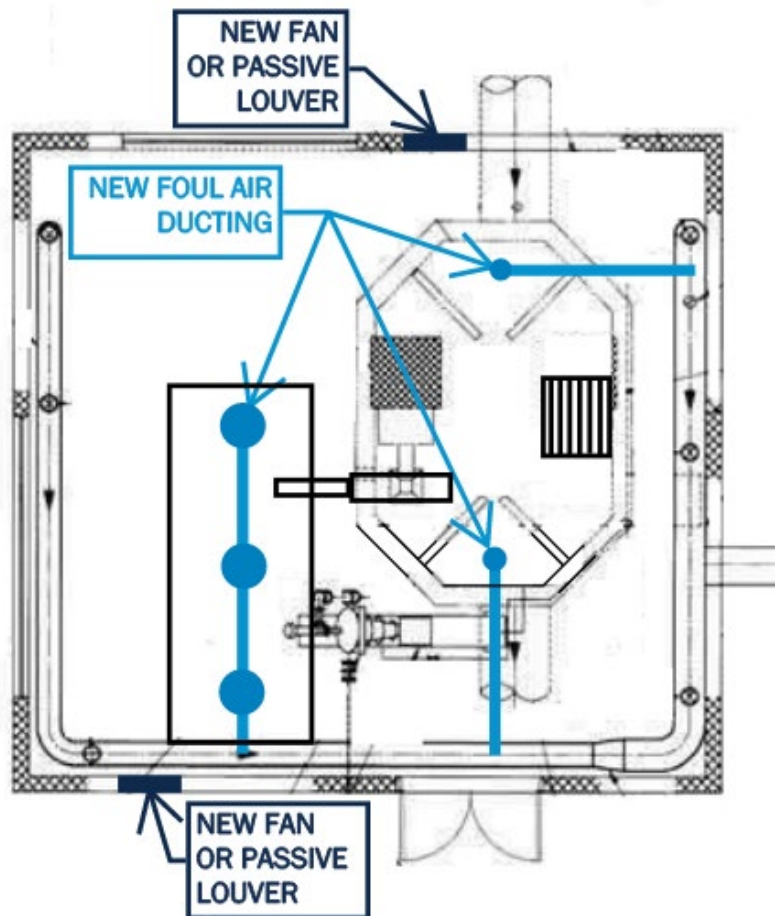


Figure 1. Odor Control Concept Design

Electrical

Currently, numerous conduits and lighting fixtures are supported by the existing corroded roof structure. These conduits will need to be replaced along with the roof. We propose replacing only the conduit along the roof, down to the nearest joint. For equipment, conductors in each removed conduit will be replaced altogether. For lighting, conductors will be replaced at the nearest junction box on the wall. The existing lighting fixtures will be salvaged and reused in the headworks building, as they appear to be hazardous area-rated Light Emitting Diode (LED) type and in good working order. The fixture type will be confirmed during the detailed design. Conductors, conduit, and motor controllers supporting the existing roof-mounted supply fan will be removed. The electrical design will include new PVC-coated galvanized rigid conduit, conductors, and motor controllers for the new wall-mounted supply fans.

SCOPE OF SERVICES

Tasks are to include the following per the RFP requirements. Dudek's assumptions, clarifications, and recommendations to enhance the scope of work are included below each scope item *In blue italics*:

- I. Progress Meetings. FIRM shall conduct monthly progress meetings at SOCWA's Dana Point Administration Building. FIRM shall prepare the agenda, the action item list and the decision log for each meeting. FIRM shall plan for a maximum of 9 progress meetings including one kickoff meeting.
- II. Document Review. FIRM shall review all planning documentations available.
- III. FIRM shall also review facility drawings and visit the field to determine the correctness of existing as-built drawings. FIRM shall review project needs with Operations and Maintenance staff. FIRM shall note that SOCWA does not have CAD drawings for any of the as-built drawings. SOCWA can provide CAD drawings for the following: (a) aerial topography and (b) field survey.
 - *Complete record drawings and associated documents (i.e., specifications; contractor submittals) for the Headworks Building Modifications (1999) and bar screen replacement and miscellaneous improvements (2012) will be provided, reviewed, and used as a basis of design.*
 - *Structural field investigation will include gathering information on the condition and dimensions of the headworks building. Field measurements and photographs of the facility's structural elements will be obtained for the rehabilitation design. Condition assessment will be conducted using nondestructive methods and tools such as a ball peen hammer for concrete sounding, a pit depth gauge to determine metallic and concrete cover loss, an ultrasonic thickness gauge, calipers, tape measure, and similar hand tools. All investigations will be performed in accordance with current California Building Code (CBC) recommendations for assessment work and will adhere to the suggested assessment approach and techniques as detailed in the following code and standard comments:*
 - *ACI 201.R-08 "Guide for Conducting a Visual Inspection of Concrete in Service"*
 - *ACI 364.1R-19 "Guide for Assessment of Concrete Structures Before Rehabilitation"*
 - *ACI 562-19 "Code Requirements for Assessment, Repair, and Rehabilitation of Existing Concrete"*

- *We assume previous geotechnical reports will be provided to Dudek for reference for structural design.*

IV. 35% Submittal. This submittal shall include plans, specifications, and cost estimate. SOCWA will take four weeks to review the submittal and return comments. FIRM shall prepare an implementation plan showing how work can be done while maintain the facility in service. The 35% submittal shall also include outage/construction plan. SOCWA will perform an asbestos survey and provide the result of the survey to the consultant.

- *A technical memorandum will be prepared to document the following:*
 - *Key findings from data review, field investigations, workshop discussions, and vendor coordination*
 - *Summary of basis of design criteria*
 - *Conceptual design and outage/construction plans*
 - *Preliminary construction cost estimate*
 - *Recommendations for the final design approach.*
- *We assume the Headworks building roof replacement includes demolition of the existing roof structure and structural design of a new structural steel roof system. The new roof structure will consist of structural steel framing, metal deck, and retrofit connections to the existing building walls. Wide-flange beams with an 18-gauge metal deck are anticipated. Where appropriate and deemed acceptable per site investigation findings, existing roof framing wall beam pockets and anchorage will be reused if deterioration is minimal. Otherwise, new beam and ledger connections will be constructed flush with the existing CMU walls with post-installed epoxy anchorage. A robust coating system consisting of galvanizing primer and compatible topcoats will be specified for corrosion protection in the wastewater environment.*
- *Ladder and hatch improvements include designing and detailing a new OSHA-compliant roof access ladder, roof hatch, and attachment to the building structure. Corrosion-resistant materials such as FRP will be specified where appropriate.*
- *Nonstructural support and anchorage include structural design and detailing for various piping/ducting/equipment supports suspended from the roof structure, such as pipe hangers, Unistrut systems, lateral bracing, and connections to the roof and walls. Consideration will be given to material finishes to minimize corrosion and will be coordinated with the structure design and specifications.*
- *Structural design for rehabilitation and retrofit of the existing Bar Screen Channels includes various concrete repairs, coating, covers, and screening equipment anchorage. Concrete repairs anticipated include epoxy injection crack repair, concrete spall mortar repair, concrete resurfacing, corroded rebar repair, epoxy dowels, corrosion inhibitors, and anchor bolt replacement. New covers may be steel diamond plate (replace-in-kind), or FRP covers with retrofit ledger supports and post-installed stainless steel anchorage to the existing channel walls.*

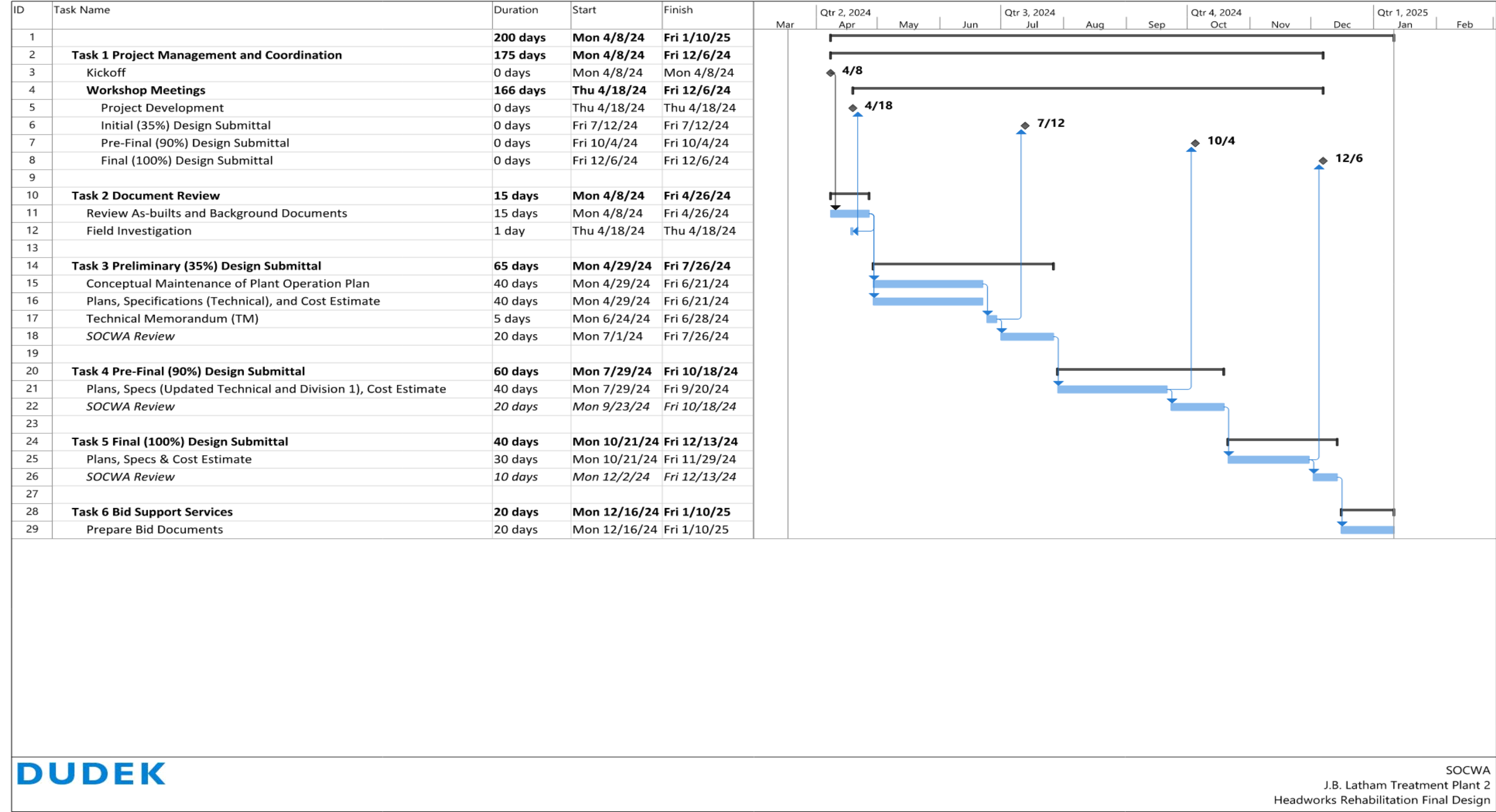
- *We assume modifications to controls and PLC programming are not required. Single-line diagrams and panel schedules are not required.*
- *Lighting design is included. Existing light fixtures will be reused.*
- *We assume only conduits impacted by the roof replacement will be replaced.*
- *We assume existing electrical facilities comply with applicable codes.*
- *The estimated drawing list is summarized in the table below. Some sheets or details that do not significantly impact the 90% and 100% submittals may be omitted from the 35% submittal.*

Table 2. Estimated Drawing List

No.	Sheet No.	Sheet Name
1	G-1	Title Sheet, Vicinity Map
2	G-2	General Notes and Drawing Index
3	G-3	Symbols, Abbreviations, and Schedules
4	G-4	Overall Site Plan and Contractor Staging Area
5	G-5	Construction Phasing and Bypassing
6	S-1	Structural General Notes - 1
7	S-2	Structural General Notes - 2
8	S-3	Structural General Notes - 3
9	S-4	Special Inspections and Notes
10	S-5	Headworks Building Structural Demolition Plan
11	S-6	Headworks Building Structural Demolition Sections
12	S-7	Headworks Building Foundation Plan
13	S-8	Headworks Building Roof Framing Plan
14	S-9	Headworks Building Sections
15	S-10	Structural Typical Details - 1
16	S-11	Structural Typical Details - 2
17	S-12	Structural Typical Details - 3
18	S-13	Structural Typical Details - 4
19	S-14	Structural Details - 1
20	S-15	Structural Details - 2
21	S-16	Structural Details - 3
22	M-1	Mechanical Symbols, Legend & Abbreviations
23	M-2	Mechanical Demolition Plan
24	M-3	Mechanical Demolition Details
25	M-4	Headworks Building Plan
26	M-5	Headworks Building Section
27	M-6	Mechanical Details
28	E-1	Electrical Symbols, Legend & Abbreviations
29	E-2	Headworks Building Demolition Plan & Photos
30	E-3	Headworks Building Roof Demolition & Roof Power Plans
31	E-4	Headworks Building Power Plan
32	E-5	Headworks Building Lighting Plan
33	E-6	Conduit Schedule
34	E-7	Electrical Details

- 90% Submittal. The 90% submittal shall address all SOCWA's comments from the 35% submittal. This submittal shall also include the same elements as the 35% submittal with the completed plans, specifications, and cost estimate. SOCWA will take four weeks to review the submittal and return comments.
 - *Refer to assumptions for 35% submittal.*
- 100% Submittal. The 100% submittal shall address all SOCWA's comments from the 90% submittal. This submittal shall also include the same elements as the 90% submittal with the completed plans, specifications, and cost estimate. SOCWA will take two weeks to review the submittal and return comments.
 - *Refer to assumptions for 35% submittal.*
- Bid Set. FIRM shall provide complete bid set with the completed plans, specifications, and cost estimate.
 - *A complete set of plans and specifications will be provided for bidding, along with an engineer's opinion of probable cost for reference. Bid support services and preparation of a conformed set of drawings and specifications will be provided separately if needed. Construction support services will be provided separately if needed.*
- Technical Specifications. SOCWA will provide the FIRM with the listing of standard specifications from Division 1 to be used for the project after the 35% submittals review. FIRM is responsible for preparing Section 01010, Summary of Work and Section 01014, Work Restrictions and Sequence. FIRM shall meet with SOCWA to discuss coordination of specifications sections referenced in the technical specifications. FIRM shall submit required information for review at the 90% submittal.

Figure 2. Proposed Project Schedule



Project Management and Quality Control

Regular Project Meetings. We utilize regularly scheduled meetings with the project team, SOCWA staff, and subconsultants to keep all parties apprised of the project's status. All meetings include an agenda prepared by the Dudek project manager and are documented through meeting minutes, with action items clearly identified.

In-Person Meetings, Collaboration, and Technology. The Dudek team offers many tools for efficient and productive in-person and virtual collaboration with the Authority. These include in-person and virtual meetings using Microsoft Teams or Zoom, file sharing/storage via ShareFile, document coauthoring through SharePoint, and client web portals.

Our project teams also utilize collaborative PM software tools that provide real-time task tracking, updates, and communication to reduce the risk of tasks slipping through the cracks, being overlooked, or falling behind schedule.

Scope Definition, Budget, and Schedule. We will work with the Authority to develop the appropriate scope of services to accomplish project goals and objectives, schedules, budgets, and work products. In particular, Dudek understands and appreciates the importance of managing project scope changes and the schedule. Where project changes may disrupt the scope and/or schedule, Dudek documents these changes in a change management log, which is shared with the Authority each month if changes materialize. The change management log includes a summary of the change, the driver for the change, documentation of the date and correspondence for the change, and an estimation of how the change will impact the project's scope, schedule and/or budget.

Proactively managing the project scope, budget, and schedule is critical to the success of any project. Dudek consistently evaluates our project manager's performance based on measurable criteria and provides training, coaching, and mentorship programs to support our project managers. Your success is our success, and our commitment to providing the best training, tools, and resources to our project managers is a key reason our projects outperform other firms in the industry.



Subconsultant Agreements. A well-managed project benefits from frequent, documented communication between all project team members, including subconsultants. We initiate this process with insurance certificates and detailed written scopes of services, schedules, and budgets.

Quality Assurance and Quality Control. Quality assurance is the responsibility of **ensuring the conduct of proper** quality control reviews. Quality assurance is a project management responsibility conducted **following** either the standard quality control practice or a specifically documented quality control plan. For major milestone deliverables, Dudek project managers assign the quality control review to a principal-level engineer who is familiar with the unique aspects or technology related to the project. For this project, the Dudek project manager will assign each deliverable for QC review with an appropriate principal-level engineer to perform review and comment to be incorporated **before** submittal to the Authority.



- COMMUNICATIONS**
 - » Single point of contact
 - » Kickoff meeting to set project course
 - » Responsive, consistent communication
- PROJECT WORKFLOW**
 - » Master deliverables list
 - » Schedule tracking
 - » Budget tracking
 - » Quality assurance process
- COLLABORATION TOOLS**
 - » Secure project portals
 - » Custom websites
 - » Virtual meetings
 - » Mobile data collection

1.2.3 Experience and Technical Competence

Dudek engineers are recognized experts in the design of wastewater treatment facilities. Our referenced engineering projects are chosen specifically for project similarities and team member involvement. Similarities to the Authority's project include:

- Design of treatment plant screenings removal and management
- Treatment headworks and plant hydraulics
- Bypass pumping and in-situ rehabilitation
- Concrete restoration and modifications
- Scheduling and sequencing of construction to avoid impacts on ongoing operations

SANTA MARIA WASTEWATER TREATMENT PLANT HEADWORKS UPGRADE PROJECT

Client: Ramona Municipal Water District

Client Reference: Erica Wolski, General Manager;
760.789.1330

Dudek Team Members: Michael Metts, Phil Giori,
Brian Robertson

Project Dates: 2020 - 2022

In 1981, the Ramona Municipal Water District (District) took ownership of the Santa Maria Wastewater Treatment Plant (SMWWTP) from the County of San Diego. In 1995, the Regional Water Quality Control Board approved the expansion of the SMWWTP to a capacity of 1.0 mgd. Since construction, the SMWWTP has not included

preliminary treatment. Influent flow is lifted into influent equalization basins before conveyance to the secondary treatment process. The influent pump station has experienced significant ragging challenges, and the equalization basins are regularly taken offline to remove grit accumulation. Dudek designed a new influent lift station utilizing Archimedes-style screw pumps to eliminate ragging concerns, a new headworks structure with channels, gates, mechanical screening with sluice and wash/press, a vortex grit chamber with grit pumps and classifier, and an influent flow meter. The design also included relocating the main influent trunk sewer and influent force main to the new headworks facility. Also, a standby generator was designed to provide critical backup power for reliability and uninterrupted operation.



4S RANCH WRF HEADWORKS SCREENING SYSTEM IMPROVEMENTS

Client: Olivenhain Municipal Water District

Client Reference: Lindsey Stephenson, Engineering Manager, 760.753.6466

Dudek Contact: Phil Giori, Michael Metts, Greg Guillen, Agata Bugala, Brian Robertson

Dates of Project: 2022 - Ongoing



OMWD contracted with Dudek to provide design services for the headworks screening system improvements project. The project will replace the aging mechanical band screen and bypass bar rack with two new Parkson AquaGuard mechanical screens, wash-presses, and associated instrumentation and control systems. The scope also includes rehabilitating influent channels and new epoxy liners, new slide gates, odor control improvements, building modifications and access improvements, a new grit classifier, and more. Key project challenges include the existing building's tight space and working conditions and the need for raw influent bypass pumping. During the design, the District also added scope for miscellaneous improvements in the WRF, such as high flow and off-spec diversion pumping and yard piping, to improve operational reliability and emergency contingency measures. The design is currently 90% complete and is scheduled for construction in FY 2024-2025.

FINAL DESIGN OF SAN ELIJO WRF HEADWORKS AND ODOR CONTROL IMPROVEMENTS

Client: San Elijo Joint Powers Authority

Client Reference: Chris Trees, Project Manager, 760.753.6203 Ext. 70, treesc@sejpa.org

Proposed Key Personnel: Michael Metts; Greg Guillen

Project Dates: 11/9/2015 – 6/30/2016



The Headworks at the San Elijo Water Reclamation Facility are over 50 years old with multiple deficiencies, including insufficient peak wet weather hydraulic capacity and an absence of backup equipment. Dudek was contracted by the San Elijo Joint Powers Authority (SEJPA) for the preliminary and final design of the headworks upgrade. The project consisted of constructing new Headworks screenings channels with higher hydraulic capacity just north of the existing Headworks; the existing Headworks channels remained in operation during construction to reduce bypassing costs. New screenings equipment with full redundancy was installed, and the existing concrete channels were rehabilitated and reused for overflow and bypass purposes. New odor control covers for the equipment and channels were installed, and the existing odor control system was balanced and optimized to eliminate odors. The project provided reliable headworks for SEJPA with backup equipment, the capability to handle future peak wet weather flows, and improved odor control while minimizing construction costs and risk.

LA SALINA WWTP DIGESTER IMPROVEMENTS

Client: City of Oceanside

Client Reference: Sarita Lemons, Project Manager; 760.435.5873; slemons@oceanside.org

Dudek Contact: Russ Bergholz, Brian Robertson; Phil Giori; Agata Bugala

Project Dates: 2021 - 2023

Dudek provided mechanical, structural, and other miscellaneous design services to facilitate rehabilitating and cleaning the primary and secondary digesters at the La Salina Wastewater Treatment Plant. Services comprised of design for new overhead heated sludge circulation and overflow piping, structural spot repairs and coating, manway cover replacements, and gas piping and safety equipment replacements on the tank domes. Dudek worked closely with City engineering and operations staff to establish parameters to maintain plant operations and manage odor and dust during construction activities. Dudek and Kelsey Structural also provided expedited design based on findings from structural condition assessment during the construction phase.



COASTAL TREATMENT PLANT TERTIARY SYSTEM UPGRADES ENGINEERING SERVICES

Client: SOCWA

Client Reference: Roni Young Grant, 949.234.5400, ryoung@socwa.com

Dudek Contact: Amanda Combs; Phil Giori

Project Dates: 1/2018 – 12/2018

SOCWA contracted Dudek for the design of upgrades to the 2.5 MGD Advanced Water Treatment facility, including repairs and recoating of the steel filter tanks and supports, replacement of filter media, pneumatic valves, and level transmitters for the Evoqua sand filters, a new horizontal centrifugal filter supply pump, the addition of an ultrasonic level sensor and VFDs for enhanced pumping control, replacement of chlorine contact tank vertical mixers, and replacement of the motor control center for the tertiary treatment system. The design phase was accelerated to meet a narrow plant shutdown window during the low water demand winter months.



1.2.4 Key Personnel and Sub-Consultants

Dudek will serve as the prime consultant providing overall management and engineering services. **Brian Robertson, PE, QSD**, will serve as your dedicated project manager and the main point of contact for SOCWA. He is a successful project manager with sixteen years of experience providing wastewater infrastructure design and rehabilitation to similar clients. Mr. Robertson will oversee the development and execution of the tasks / projects, tracking budgets and schedules. He understands the importance of good communication, being solution-oriented, and efficient multitasking. He will facilitate the flow of information among the team and with the District's project manager. Supporting Mr. Robertson will be **Michael Metts, PE**, serving as principal in charge. Mr. Metts has 40 years of experience managing, planning, and designing water infrastructure projects throughout California and serves as Dudek's Chief Engineer. **Phil Giori, PE**, will provide expert project quality control. He will thoroughly review all deliverables before delivery to the Authority, including those of our sub-consultants.

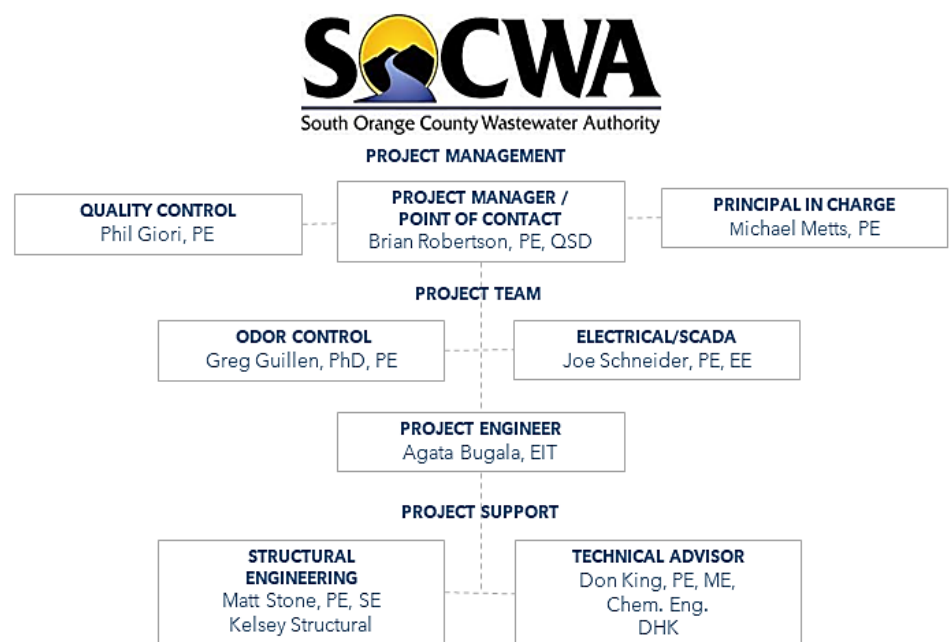
For this project, Dudek will supplement our team with the services of two sub-consultants - trusted firms with whom we have long-term relationships; they have significantly contributed to successful projects. Matt Stone, PE, SE, will provide structural engineering services, and Don King (DHK) will be a technical advisor. Mr. King is well known to SOCWA staff, and Matt Stone recently provided structural services for SOCWA's JBL Digester 1 and 2 Manway Access Improvements Design.

We understand that the Authority is considering the Dudek team in its entirety; therefore, we will not make changes in team composition, including the Project Manager, without prior consultation and written approval from the Authority.

Figure 3 illustrates the team organization and lines of communication. Brief biographies for key personnel follow. Focused resumes are provided in **Appendix A**.

Figure 3. Project Organization Chart

Current and Future Workload of Key Staff. We have reviewed the scope of work requirements and have carefully selected a talented, collaborative project team personnel with the capabilities and perseverance to satisfy the needs of the District's contract while meeting the performance schedule. Dudek routinely works on projects of similar scope and scale with public agencies, and we are experts in effectively balancing staff resources and workloads to service your contract. Michael Metts and Brian Robertson will ensure the availability and allocation of staff resources to this contract.





Michael Metts, PE
Principal in Charge

Qualifications

- 40 years of experience in water, wastewater, and recycled water engineering design, permitting, water resources planning, and construction management and assistance
- Project experience encompasses the evaluation and expansion of existing facilities as well as the design of new facilities
- 20+ years serving as District Engineer for various water/wastewater districts
- Strong skills and proven history of tracking, monitoring, team delegation, deliverable quality assurance, engineering guidance, accounting, and subconsultant coordination

Related Experience

- District Engineer, Ramona Santa Maria WRF Headworks
- Principal Engineer, SEJPA WRF Headworks Upgrade
- Principal Engineer, Corona WRF1 and WRF 2 Headworks Upgrades
- Principal, CIP Engineering Services, South Orange County Wastewater Authority

Education & License

BS Civil Engineering
Civil Engineer, CA No. 42586



Brian Robertson, PE, QSD
Project Manager

Qualifications

- Project manager with 16 years' extensive experience in water, wastewater and drainage conveyance systems for cities and districts throughout Southern California
- Received recognition for his work preparing detailed analysis, reports, and PS&E
- Seamless coordination with team members, utilities, and essential governmental agencies.

Related Experience

- Project Manager, Digester Tank Improvements for La Salina Wastewater Treatment Plant, Oceanside Water Department
- Project Manager, WRF 1 Aeration System Improvements, City of Corona
- Lead Engineer, Huston Creek WWTP Dewatering Building and Primary Clarifier, Crestline Sanitation District
- Lead Engineer, Santa Maria WRF Headworks, Ramona Municipal Water District
- Senior Engineer, 4S Ranch WRF Headworks Screening System Improvements, Olivenhain MWD

Education & License

BS Civil Engineering
CA PE C77990
Certified QSD



Phil Giori, PE
Quality Control

Qualifications

- Experienced project manager with a focus on water and wastewater treatment facilities throughout California
- Leader in improving planning and design mechanisms to construct more reliable facilities with integrated operations and maintenance support
- Experience in planning, design, and construction provides him with unique insight and knowledge, which he employs to drive projects toward successful completion

Related Experience

- Project Manager, Ramona Santa Maria WRF Headworks
- Project Manager, Huston Creek WWTP Dewatering Building and Primary Clarifier, Crestline Sanitation District
- Project Manager, OMWD Headworks Improvements
- Lead Engineer, SEJPA WRF Headworks Upgrade
- Project Manager, Separate Industrial Wastewater Reclamation Facility, City of Gonzales
- Project Engineer, Corona WRF1 and WRF 2 Headworks Upgrades

Education & License

BS Civil Engineering
Civil Engineer, CA No. 87516

Table 3. Project Team Overview

Name/Role	Education /License	Profile	Relevant Experience
Greg Guillen, PhD, PE Process Design and Odor Control	University of California, LA PhD, Civil Engineering MS, Civil Engineering University of California, Riverside BS, Environmental Engineering CA PE No. 83897	Gregory Guillen is a chemical and environmental engineer focused on water and wastewater treatment. Dr. Guillen has 11 years of experience designing water and wastewater treatment processes and odor control systems. He has lectured in the Department of Civil and Environmental Engineering at the University of California, Los Angeles.	<ul style="list-style-type: none"> ▪ Santa Maria WRF Headworks, Ramona Municipal Water District ▪ Final Design WRF Headworks, San Elijo Joint Powers Authority ▪ As Needed Process Design and Odor Control, Orange County Sanitation District
Joe Schneider, PE, EE Electrical/I&C Lead	Keller Graduate School of Management, DeVry University, MBA, Project Management Arizona State University, BSE, Electrical Engineering CA EE No. 19636	Mr. Schneider is a principal electrical engineer with 25 years' experience as an electrical, instrumentation, and controls engineer and 17 years' experience specializing in instrumentation and control system design and electrical distribution system design for wastewater treatment and wastewater collection facilities.	<ul style="list-style-type: none"> ▪ San Vicente WRP Headworks Rehabilitation Project, Ramona Municipal Water District ▪ Temporary Headworks Facility Design, City of Watsonville ▪ Centrifuge Gate Improvements at P1, OC San
Agata Bugala, EIT, ENV SP Project Engineer	The City College of New York BE, Environmental Engineering Engineer-in-Training No. 173501 Envision Sustainability Professional (ENV SP) No. 47181	Ms. Bugala has 3 years' professional experience as a water/wastewater engineer specializing in the design of water and wastewater treatment systems, including planning and process engineering.	<ul style="list-style-type: none"> ▪ 4S Ranch WRF Headworks Screening System Improvements, Olivenhain MWD ▪ Various Projects, Orange County Sanitation District ▪ Separate Industrial Wastewater Reclamation Facility, City of Gonzales
Matt Stone, PE, SE Structural Engineering Kelsey Structural Group	University of California San Diego MS & BS, Structural Engineering CA PE No. 78488 CA SE No. 6183	Matt Stone has over 13 years of project management and structural design work encompassing infrastructure, water, wastewater, and military projects. He specializes in assessing, designing, and retrofitting water and wastewater treatment, storage, and conveyance facilities.	<ul style="list-style-type: none"> ▪ Dudek_City of Gonzales Industrial Water Reclamation Facility ▪ Dudek_Westside Water Reclamation Plant; Victor Valley WRA ▪ Dudek_City of Corona WRF-1A Aeration Improvements
Don King, PE, ME, Chem. Eng. DHK Technical Advisor	University of Toledo BS, Chemical Engineering CA Mechanical Engineer, No. M 24995 CA Civil Engineer, No. C45875 CA Chemical Engineer, No. CH 4865	Mr. King's educational background is in chemical engineering with emphasis in odor control, air quality, environmental and regulatory issues, hazardous materials/waste, and chemical process. Mr. King has over 30 years of experience in odor control, systems certification and testing, air quality permitting, air dispersion modeling, and regulatory interface. Trusted SOCWA Advisor .	<ul style="list-style-type: none"> ▪ Dudek_4S Ranch WRF Headworks Screening System Improvements, Olivenhain MWD ▪ Dudek_Odor Control Improvement Program; San Elijo WPCF ▪ Dudek_Moonlight Pump Station Odor Control Study; San Elijo JPA

KELSEY STRUCTURAL FEE SCHEDULE

STRUCTURAL ENGINEERING SERVICE PROPOSAL

APPENDIX C

RATE SCHEDULE

SOCWA JBL Plant 2 Headworks Rehabilitation Final Design

February 2024

HOURLY RATES

Principal	\$235.00
Project Manager	\$210.00
Senior Engineer	\$190.00
Project Engineer	\$170.00
Assistant Engineer	\$150.00
CAD Technician	\$140.00
Administration	\$105.00

Hourly rates include provisions for normal overhead costs such as fringe benefits, office rental, utilities, insurance, clerical services, equipment, normal supplies and materials, and in-house reproduction services. Mileage shall be reimbursed at a rate equivalent to the current calendar year's IRS standard mileage rate. Rates shown are valid through December 31, 2024.

1.2.6 Conflicts of Interest

Dudek states that the firm has no financial or legal issues that would impede our ability to provide services to the South Orange County Wastewater Authority.

1.2.7 Non-Collusion Affidavit

ATTACHMENT B NON-COLLUSION AFFIDAVIT

The undersigned declares:

I am the Vice President____ of Dudek____, the party making the foregoing bid.

The bid is not made in the interest of, or on behalf of, any undisclosed person, partnership, company, association, organization, or corporation. The bid is genuine and not collusive or sham. The bidder has not directly or indirectly induced or solicited any other bidder to put in a false or sham bid. The bidder has not directly or indirectly colluded, conspired, connived, or agreed with any bidder or anyone else to put in a sham bid, or to refrain from bidding. The bidder has not in any manner, directly or indirectly, sought by agreement, communication, or conference with anyone to fix the bid price of the bidder or any other bidder, or to fix any overhead, profit, or cost element of the bid price, or of that of any other bidder. All statements contained in the bid are true. The bidder has not, directly or indirectly, submitted his or her bid price or any breakdown thereof, or the contents thereof, or divulged information or data relative thereto, to any corporation, partnership, company, association, organization, bid depository, or to any member or agent thereof, to effectuate a collusive or sham bid, and has not paid, and will not pay, any person or entity for such purpose.

Any person executing this declaration on behalf of a bidder that is a corporation, partnership, joint venture, limited liability company, limited liability partnership, or any other entity, hereby represents that he or she has full power to execute, and does execute, this declaration on behalf of the bidder.

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct and that this declaration is executed on February 21, 2024____[date], at _Encinitas__[city], California____[state].

Signature: _____

Bob Ohlund, P.E.

Title: Vice President_____

1.2.8 Certifications

Each respondent must include the following signed certifications with its proposal:

1. Respondent certifies that it is not aware of any actual or potential conflict of interest that exists or may arise by executing the contract or performing the work that is the subject of this RFP.
2. Respondent certifies that it is willing and able to obtain all insurance required by the form contract included as Attachment C.
3. Respondent certifies that it has conducted a reasonable and diligent inquiry concerning the minimum and/or prevailing wages required to be paid in connection with the performance of the work that is the subject of this RFP and certifies that the proposed pricing includes funds sufficient to allow respondent to comply with all applicable local, state, and federal laws or regulations governing the labor or services to be provided.
4. Respondent acknowledges and agrees with all terms and conditions stated in the RFP, except as expressly noted below.
5. Respondent certifies that all information provided in connection with its proposal is true, complete, and correct.

Dudek respectfully requests the Authority's consideration of the following *exceptions* to the SOCWA Agreement for Engineering Services.

Section 4.3: *Add a performance standard after the first sentence: "Consultant shall perform the services with the skill and care ordinarily exercised by members of the same profession operating under similar circumstances."*

Section 6.1: *Add the following after paragraph 6.1.3: "Notwithstanding the foregoing, with respect to any professional liability claim or lawsuit, this indemnity does not include providing the primary defense of SOCWA Indemnitees, provided, however, Engineer shall be responsible for SOCWA Indemnitees' defense costs to the extent such costs are incurred as a result of Engineer's negligence, recklessness or willful misconduct."*

Appendix A

Resumes

Brian Robertson, PE, QSD

PROJECT MANAGER

Brian Robertson has 16 years' project engineering experience in planning and design of infrastructure projects. Mr. Robertson has developed a reputation for delivering high-quality work on time and within budget. He has extensive experience in water, wastewater and drainage conveyance systems for cities and districts throughout Southern California and has received recognition for his work preparing detailed analysis, reports, drawings, specifications, and cost estimates. Mr. Robertson has developed an excellent rapport for seamless coordination with team members, various utilities, and essential governmental agencies. He brings a high level of professionalism while delivering project design packages with other services, including development review and staff augmentation.

Project Experience

Digester Tank Improvements for La Salina Wastewater Treatment Plant, Oceanside Water Department, Oceanside, California. Project Manager for improvements and rehabilitation of the primary and secondary digester tank. Design was prepared for new heater circulation lines from the heat exchangers to the digesters to address the clogging in the existing buried lines and resolve the leaking issues in the digester overflow lines. Design also included digester tank rehabilitation and upgrades the gas over-pressurization system to increase the system reliability and safety. Current responsibilities include engineering support during construction.

Huston Creek WWTP Dewatering Building and Primary Clarifier, Crestline Sanitation District, Crestline, California. Project Engineer for the final design of a new two-story biosolids dewatering building, sludge holding tank, and primary clarifier for the District's 1 MGD Huston Creek WWTP. Project includes new structures, pumps, polymer feed system, odor control system, channels, electrical systems, and new emergency generator. Project site conditions required careful structural, civil, and mechanical design to support new facilities in challenging topographic conditions and other requirements to maintain plant operation during construction. His services included preparation of final design packages and engineering services during bidding and construction.

Santa Maria WWTP Headworks Upgrade, Ramona Municipal Water District, Ramona, California. Lead engineer for the design of a new headworks facility at the Santa Maria WWTP. The plant's existing influent lift station and downstream processes have been affected by rags and grit due to a lack of headworks screening and grit removal for the plant. Project includes relocation of influent truck sewer, new headworks structure with influent screw pumps, mechanical screenings equipment, grit removal, and new emergency generator. Various project challenges include construction phasing, large equipment and structures, utility relocation, and connections to existing facilities.

Trickling Filter Valve Replacement at Plant No. 1, Orange County Sanitation District, Fountain, California. Project Manager for the design of a valve replacement for the piping system that connects the trickling filter clarifiers to the sludge and scum pump station. The valve is buried deep and surrounded by a net of utilities which required extensive alternatives development and evaluation, constructability reviews, and other design considerations to



Education

Cal Poly State University,
San Luis Obispo
BS, Civil Engineering,
2006

Certifications

California PE 77990
Certified QSD

protect existing structures from settlement due to deep excavation, shallow groundwater conditions, and minimize impacts to operations during construction.

WRF 1 Aeration System Improvements, City of Corona, California. Project Manager for a new air piping supply system and new diffuser grid in aeration basins 1, 2, and 3 at WRF-1A. The improvements include relocation of the existing air headers with a new overhead alignment, including a pipe bridge and other overhead structural support systems. Design plans and sequence of construction specifications were developed to minimize construction cost and maintain plant operation and performance during installation of the new diffusers.

Headworks Screening System Improvements, Olivenhain Municipal Water District, Encinitas, California. Serves as a project engineer for condition assessment and improvements of the existing headworks facility including installation of new mechanical bar screen units, grit classifiers, odor control system, slide gates and influent channel improvements and lining. He has guided bypassing approach and will support through completion of the project.

Edinger Pump Station Rehabilitation Study, Orange County Sanitation District, Huntington Beach, California. Project Engineer responsible for assessment and development of planning studies to determine feasible options for the rehabilitation, replacement, relocation, or abandonment of the Edinger Pump Station. Project elements included assessment of geotechnical, structural, hydraulic, and mechanical conditions. Multiple alternative pump station sites and configurations were developed and evaluated extensively with engineering and operations staff.

Highbury Pump Station Rehabilitation, Bureau of Engineering, Wastewater Conveyance Engineering Division, Los Angeles, California. Project Engineer for the rehabilitation design of the existing pump station. Tasks included utility research, site design, pump system hydraulics, evaluation of new pumping and equipment options, preparation of the preliminary design report, workshop presentations, and preparation of the Plans, Specifications, and Estimates (PS&E) package.

Final Effluent Sampler and Building Area Upgrades (J-110), Orange County Sanitation District, Huntington Beach, California. Project Engineer for a new final effluent water quality sampler facility; improvements to the ocean outfall system; and other miscellaneous mechanical, electrical, and instrumentation improvements for Plant No. 2. Responsibilities included development of a work plan to implement inspection of the 120-inch Short Ocean Outfall and other associated large diameter yard piping. Coordinated with subconsultants and operations staff, evaluated sampling and metering equipment options, evaluated pipeline rehabilitation alternatives, prepared civil site design, and prepared the preliminary design report, and PS&E.

Farmersville Wastewater Treatment Plant Design, City of Farmersville, California. Project Engineer for a new wastewater treatment plant, including the following elements: headworks, mixing chamber, aeration basins, clarifiers, holding tanks, return activated sludge pump station, digester tanks, and a solids handling building. Responsibilities included the design and preparation of drawings for the influent pump station, yard piping, and other conveyance design elements.

Planning Area 18 North Capital Improvement Facilities, Irvine Community Development Company (ICDC), Irvine, CA. Project engineer for the capital facilities associated with the ICDC Planning Area 18 North development project, in coordination with the Irvine Ranch Water District (IRWD). Facilities design included 12-inch domestic water pipelines; 6-inch, 8-inch, 24-inch, and 36-inch reclaimed water pipelines; and turnout improvements. This project included close coordination with IRWD and ICDC to accomplish the tight project schedule and maintain the budget.

Michael Metts, PE

PRINCIPAL IN CHARGE

Michael Metts is a principal engineer and manager of Dudek's engineering services with 40 years' experience in civil engineering and is a registered engineer in the State of California. Mr. Metts' engineering experience encompasses water, wastewater and recycled water engineering design, permitting, water resources planning, facility design, and construction management and assistance. He has provided project management and principal in charge services throughout the southwestern United States. Mr. Metts' project experience encompasses the evaluation and expansion of existing facilities as well as the design of new facilities, allowing him to anticipate project challenges, to the benefit of his clients. He is committed to maintaining clear and open communication with the client, while maintaining control of the project budget and schedule, as well as proactively delivering cost-effective and innovative project solutions.

Project Experience

Ramona Municipal Water District, Ramona, California. (14 years) Provides district engineering and engineering department management services under the direction of the general manager. Services include evaluating and recommending improvements to the District's Engineering Department operations to maximize efficiency and streamline daily functions; and providing day-to-day management of RMWD engineering operations, including capital budget, water resources planning, support facilities planning, environmental services, quality control, construction, developer designed and constructed facilities, negotiating developer funded improvements and agreements, managing Legislative Code revisions, coordination with other RMWD departments and outside agencies, rate and fee studies assistance, urban water and stormwater management plans, mitigation programs, assessment district formation, evaluation and assistance with grant and loan applications, and attendance at board meetings.

Wastewater Treatment

Coastal Treatment Plant Tertiary System Upgrades, South Orange County Wastewater Authority, Laguna Niguel, California. Principal engineer for design of upgrades to the 2.5 MGD Advanced Water Treatment facility, including repairs and recoating of the steel filter tanks and supports, replacement of filter media, pneumatic valves, and level transmitters for the Evoqua sand filters, a new horizontal centrifugal filter supply pump, the addition of an ultrasonic level sensor and VFDs for enhanced pumping control, replacement of chlorine contact tank vertical mixers, and replacement of the motor control center for the tertiary treatment system. The design phases was accelerated to meet a narrow plant shutdown window during the low water demand winter months.



Education

University of Kentucky
BS, Civil Engineering,
1983

Certifications

Professional Civil
Engineer (PE),
CA No. 42586

Professional Affiliations

American Public Works
Association (APWA)
American Society of Civil
Engineers
American Water Works
Association
California Water
Environment Association
National Society of
Professional Engineers
Water Environment
Federation

Influent Sewer Line Collapse – Emergency Services, South Orange County Wastewater Authority, Dana Point, California. Served as the project manager and Principal in Charge for an emergency project where two force mains, 20-inch and 16-inch, collapsed due to extensive corrosion damage. Dudek evaluated the situation and quickly developed innovative solutions for reinstatement of the force mains. We coordinated with SOCWA and MNWD to correlate pump station constraints with need to shut down the force mains for repair. The solution involved transferring all flow from one force main to the other during limited duration low flow conditions in the middle of the night. Each force main was repaired in consecutive night periods to reinstate the force mains without damage to other portions of the Techite force mains due to increased pressure. The project also involved coordination of excavating the plant roadway to maintain scheduled deliveries of biosolids to the plant, operations that required extremely heavy truck transport within the construction zone.

Design Services Emergency Replacement of Export Pipeline, South Orange County Wastewater Authority, Dana Point, California. Served as project manager and provided field evaluation of emergency conditions, provided engineered solution to emergency situation, coordinated closely with client and contractor to develop engineering solution in limited schedule, provided quality control review of deliverables and engineering efforts, assisted in field during construction, acted as primary contact for client. The project involved the emergency repair of two 4-inch sludge transport pipelines within an ecologically sensitive area of Orange County. Development of the engineering repair documents was required under a very short time schedule. Dudek developed the repair document and worked closely with the contractor to get the repair completed within time constraints to avoid trucking of sludge through the adjacent heavily used park.

Santa Maria WWTP Headworks Upgrade, Ramona Municipal Water District, California. Principal in Charge for the design of a new headworks facility at the Santa Maria WWTP. The plant's existing influent lift station and downstream processes have been affected by rags and grit due to a lack of headworks screening and grit removal for the plant. The project included relocation of the influent truck sewer, a new headworks structure with influent screw pumps, mechanical screenings equipment, grit removal, and a new emergency generator. Various project challenges included construction phasing, large equipment and structures, utility relocation, and connections to existing facilities.

4S Ranch WRF Digester Support and Oxidation Ditch Optimization, Olivenhain Municipal Water District, Encinitas, California. Served as project principal engineer for engineering and operational support services at the 4S Ranch WRF to support ongoing efforts to optimize the oxidation ditch biological treatment process and digester performance. The District faced process upset conditions after transitioning from aerobic to facultative digestion and turned to Dudek for process support. With the Dudek team performed microscopic examination of the activated sludge, analyzed water quality, operational, and process control data, and developed interim operational recommendations to improve biological and digester performance, reduce sulfide off-gassing during dewatering, and maintain plant operations during upset conditions. Currently, Dudek is assisting the District in implementing process instrumentation and control improvements to optimize the oxidation ditch performance in an effort to reduce operating costs while producing higher quality treated effluent.

Concept Level Facility and Process Review of 3A Wastewater Treatment Plant, Moulton Niguel Water District, Laguna Niguel, California. Served as project principal engineer for the preparation of a concept-level facility and process review report for the plant to define the current and future capacity and process capabilities for the facility after the District assumed operations of the facility. Scope of work includes the review and consolidation of previous reports and studies, review and comments on the waste discharge requirements, and treatment process evaluation and facility constraints analysis.

Phil Giori, PE

QUALITY CONTROL

Phil Giori (*FILL JOR-ee; he/him*) is a civil engineer and project manager with 9 years' experience specializing primarily in water and wastewater treatment facilities and in collection systems, pipelines, wells, pump stations, and other related facilities. Mr. Giori is an industry leader with demonstrated skills in improving engineering planning and design processes to improve reliability and reduce long-term life cycle cost for treatment facilities by leveraging operations and maintenance (O&M) input within a collaborative design approach. Mr. Giori's experience in planning, design, and construction provide him with unique insight and knowledge that he employs to drive projects toward successful completion.

Project Experience

Treatment Design

Huston Creek WWTP Dewatering Building and Primary Clarifier, Crestline Sanitation District, California. Project manager for the design of a new 2-story biosolids dewatering building and primary clarifier for the Crestline Sanitation District's 0.7-million-gallons-per-day (mgd) Huston Creek WWTP. The project included new structures, dewatering system equipment, clarifier equipment, mixing systems, pumps, channels, electrical systems, a new emergency generator, and more. Managed the preparation of a funding application for the Clean Water State Revolving Fund and successfully secured \$12 million in low-interest financing for the project. Project topography required careful structural design and retaining-wall construction to support new facilities, in addition to challenging maintenance of plant operation during construction.

Santa Maria WWTP Headworks Upgrade, Ramona Municipal Water District, California. Project manager for the design of a new headworks facility at the Santa Maria WWTP. The plant's existing influent lift station and downstream processes have been affected by rags and grit due to a lack of headworks screening and grit removal for the plant. The project included relocation of the influent truck sewer, a new headworks structure with influent screw pumps, mechanical screenings equipment, grit removal, and a new emergency generator. Various project challenges included construction phasing, large equipment and structures, utility relocation, and connections to existing facilities.

4S Ranch Water Reclamation Facility Headworks Screenings System Improvements, Olivenhain Municipal Water District, Encinitas, California. Project manager for the design of a new headworks improvements project, including replacement of mechanical screens, a grit classifier, odor control system improvements, channel rehabilitation, slide gate replacements, building structural modifications, and new instrumentation and controls. Key design considerations included working around a tight building and working space, which led to maintenance of plant operation and construction phasing challenges. The result is an improvement in screenings performance and reliability, as well as the replacement of corroded and obsolete process equipment.



Education

San Diego
State University
BS, Civil Engineering, 2014

Certifications

Professional Civil Engineer,
CA No. 87516

Professional Awards

California Water
Environment Association,
Outstanding Young
Professional of the
Year, 2017

Headworks Design, San Elijo Joint Powers Authority, Cardiff, California. Project engineer for the design of a headworks upgrade at the San Elijo water reclamation facility (WRF). Performed hydraulic calculations, condition assessments, and field measurements and designed the chemical feed system, which included sodium hypochlorite and sodium hydroxide storage and pumping systems, as well as odor control ventilation.

Industrial Wastewater Treatment Facility, City of Gonzales, California. Project manager for the design of a brand-new, \$27 million industrial wastewater collection system and treatment facility to convey and treat 1 mgd of fruit and vegetable processing industrial wastewater. The new plant includes an influent pump station, headworks with screenings and grit removal, aerated treatment ponds, and effluent infiltration basins. The collection system consists of approximately 2.5 miles of 24-inch to 27-inch gravity industrial wastewater trunk sewers. Managed the design and supported the project from start to finish, including preparing and securing low-interest funding through the Clean Water State Revolving Fund, coordinating approvals and permits from the Regional Water Quality Control Board (RWQCB), groundwater infiltration testing, and verifying that the appropriate environmental documentation (environmental impact report) was completed and approved.

Chemical System Upgrade, City of Petaluma, California. Project manager for the design of chemical system upgrades at their 6.7 MGD Ellis Creek Water Reclamation Facility (ECWRF) oxidation ponds site in a two phased approach. Phase 1 consists of a new sodium hypochlorite storage and dosing facility consisting of three 6,500 gallon storage tanks within a containment area along with associated metering pumps, piping, controls, and safety features. Phase 1 is being completed according to an accelerated project schedule with a requirement to complete design and construction within 19 months of notice to proceed. Phase 2 will consist of new sodium bisulfite and sulfuric acid storage and dosing facilities as well as new operations building at the oxidation ponds site, equipped with operations terminals, lab benches, a restroom, MCC/electrical room, and storage area.

ECWRF Oxidation Ponds Transfer Structure Rehab & Storage Expansion Feasibility, City of Petaluma, California. Project manager for the feasibility study and subsequent design of rehabilitation and upgrades to 17 oxidation ponds hydraulic transfer structures and piping which provide storage and operational control of 11 oxidation ponds at the WRF. The project initially evaluates the feasibility of expansion of storage capacity in the oxidation ponds and identifies the recommended improvements for the design portion. The second phase of the project is the design of recommended improvements to rehabilitate and improve the transfer structures and piping connecting the oxidation ponds.

La Salina WWTP Digester Rehabilitation, City of Oceanside, California. Project manager for the design of anaerobic digester cleaning and rehabilitation for both the primary and secondary digesters at the La Salina WWTP in Oceanside. The scope of work included digester cleaning specifications; replacement of blocked heat exchanger piping and valves; replacement of leaking overflow piping; replacement of corroded access manway, cover, bolts, and nuts on the digester roof; and replacement of gas protection equipment, including all piping, pressure safety valves, the flame arrestor, the flame trap, valves, and so on.

Water Reclamation Plant 7 Biosolids Upgrade Project, Coachella Valley Water District, Palm Desert, California. Senior engineer tasked with engineering services during construction for the WRP 7 Biosolids Upgrade Project that included new structures; a dewatering building; and dewatering equipment, including gravity belt thickeners and centrifuges, polymer feed systems, mixing systems, pumps, electrical systems, and more. The project included a life-cycle cost evaluation of dewatering equipment using pilot testing results from qualified equipment manufacturers, whose results were used to develop a performance specification for the selected equipment.

Gregory Guillen, PhD, PE

ODOR CONTROL

Gregory Guillen is a chemical and environmental engineer with 11 years' experience focusing on water and wastewater treatment. Dr. Guillen's education covered the fundamentals of chemical and environmental engineering, with an emphasis on water and wastewater treatment. His graduate work focused on advanced membrane materials and processes for separations, including those found in water and wastewater treatment. Dr. Guillen has authored several peer-reviewed papers in the field of desalination and membrane filtration, holds multiple patents for membrane formation, and has lectured in the Department of Civil and Environmental Engineering at University of California, Los Angeles.



Project Experience

Bay Bridge Pump Station Replacement Odor Control Facility, Orange County Sanitation District, Newport Beach, California. Dr. Guillen evaluated multiple gas- and liquid-phase hydrogen sulfide (odor) treatment technologies for implementation at the new Bay Bridge Pump Station. Calcium nitrate, magnesium hydroxide, and carbon scrubbers were selected for on-site and downstream odor control based on the results of a life-cycle model analysis. Dr. Guillen provided preliminary design of the odor control facility, including chemical demands, storage requirements, preliminary site layouts, and construction cost estimates.

Pressurization and Odor Control Study, Orange County Sanitation District, Newport Beach, California. Dr. Guillen investigated the causes of odor, pressurization events, and explosive gases in seven Orange County Sanitation District pump station wet wells in Newport Beach. Dr. Guillen developed protocols and performed field monitoring of hydrogen sulfide and differential pressure in these wet wells. A technical memorandum was developed that identified the causes of the observed issues and made recommendations on wet-well improvements.

Pump Station Pressurization Improvements, Orange County Sanitation District, Newport Beach, California. Dr. Guillen provided preliminary design of odor and pressurization mitigation improvements at six Newport Beach pump stations. The improvements included adding passive carbon scrubbers at each pump station. The scrubbers allowed treated air to exit and enter the wet wells without emitting odors or causing pressurization of the wet wells. A ferrous chloride storage and dosing facility was also designed at 15th Street Pump Station to provide downstream liquid phase hydrogen sulfide removal.

Odor Control Analysis, Olivenhain MWD, Encinitas, California. Dr. Guillen helped evaluate multiple liquid- and gas-phase hydrogen sulfide treatment systems for Olivenhain MWD's Del Dios force main. Recommendations were made to the District based on treatment efficacy and a life-cycle cost analysis.

Education

University of California,
Los Angeles

PhD, Civil Engineering
MS, Civil Engineering

University of California,
Riverside

BS, Environmental
Engineering

Certifications

Professional Civil
Engineer, CA No. 83897

Professional Affiliations

California Water
Environment Association
WateReuse Association

Santa Maria WWTP Headworks Upgrade, Ramona Municipal Water District, California. Lead process engineer for the design of a new headworks facility at the Santa Maria WWTP. The plant's existing influent lift station and downstream processes have been affected by rags and grit due to a lack of headworks screening and grit removal for the plant. The project included relocation of the influent truck sewer, a new headworks structure with influent screw pumps, mechanical screenings equipment, grit removal, and a new emergency generator. Various project challenges included construction phasing, large equipment and structures, utility relocation, and connections to existing facilities.

4S Ranch Water Reclamation Facility Headworks Screenings System Improvements, Olivenhain Municipal Water District, Encinitas, California. Lead process engineer for the design of a new headworks improvements project, including replacement of mechanical screens, a grit classifier, odor control system improvements, channel rehabilitation, slide gate replacements, building structural modifications, and new instrumentation and controls. Key design considerations included working around a tight building and working space, which led to maintenance of plant operation and construction phasing challenges. The result is an improvement in screenings performance and reliability, as well as the replacement of corroded and obsolete process equipment.

Woods Valley Ranch Water Reclamation Facility Phase 2, Valley Center MWD, California. Dr. Guillen designed secondary, tertiary, and disinfection processes for the Woods Valley Ranch Water Reclamation Facility Phase 2 expansion. Secondary wastewater treatment consists of an Aero-Mod extended aeration system capable of full nitrification and denitrification. Tertiary treatment consists of coagulation, flocculation, and cloth disk filters. Dr. Guillen developed a tracer study protocol in coordination with the California Department of Public Health that will be used to recertify the existing chlorine contact basins to determine their ultimate capacities. The water reclamation facility will continue to produce Title 22 quality effluent.

Separate Industrial Treatment Concept Alternatives Project, City of Gonzales, California. Dr. Guillen served as lead treatment engineer in the evaluation of industrial treatment alternatives. Projected industrial wastewater flow generation and water quality, water reuse opportunities, and effluent water quality requirements. Provided conceptual industrial WWTP locations, layouts, and cost estimates.

Wastewater Treatment and Collection System Master Plan, Crestline Sanitation District, California. Dr. Guillen served as lead treatment engineer for the Wastewater Master Plan for the Crestline Sanitation District. Utilized a series of workshops to facilitate a COFA to identify the most critical and high-risk failure scenarios at all three of the District's WWTPs and two lift stations, as well as the root cause of those failures. Additionally, Dr. Guillen performed a thorough process evaluation on each unit process of all three of the District's WWTPs to determine individual process capacity and performance in comparison to design criteria and industry standard ranges. The project culminated in a comprehensive list of capital improvement projects, prioritized by risk and paired with available funding opportunities.

Ventura Water Reclamation Facility Process Evaluation and Capital Improvement Plan, City of San Buenaventura, California. Dr. Guillen assisted in the Failure Mode and Effects Analysis workshops with Ventura Water Reclamation Facility staff. The workshops identified unit processes within the water reclamation facility, identified their modes of failure, and scored the criticality of those failures. The Failure Mode and Effects Analysis process, in conjunction with the water reclamation facility treatment process analysis, identified constraints within the facility and helped develop the City's Capital Improvement Plan.

Joseph A. Schneider, PE

ELECTRICAL ENGINEERING / I&C

Joseph (Joe) A. Schneider is a principal electrical engineer with 25 years' professional experience as an electrical, instrumentation, and controls engineer and 17 years' experience specializing in instrumentation and control system design and electrical distribution system design for water treatment, wastewater treatment, water distribution facilities, and wastewater collection facilities.

Mr. Schneider's instrumentation and control system design experience consists of the design of programmable logic controllers (PLC) based plant control systems and instrumentation, specification creation, and construction administration duties. His electrical design experience includes evaluation of site-wide electrical systems and medium and low-voltage electrical distribution system design up to 12.47 kilovolts (kV). These designs include redundant power options and emergency generators, lighting design, grounding system design, specification creation, construction administration duties, and start-up.

Mr. Schneider is experienced in managing multiple concurrent projects and meeting multiple deadlines. He utilizes his experience as an electrical system owner to understand client operations and concerns and provide design solutions to meet their needs.

Project Experience

Jomax Water Reclamation Facility Phase 3 Expansion (3 to 4.5 MGD), Vistancia Development LLC, Peoria, Arizona.

Served as the lead electrical and controls engineer in the design of electrical, instrumentation, and controls to expand the wastewater plant capacity from 3 MGD to 4.5 MGD. The existing 12 kV electrical distribution system and standby generator system was analyzed and modified to accommodate the expansion. Phase 3 design was completed through 60% to allow the city to modify their Arizona Department of Environmental Quality permit for Phase 2B and Phase 3 expansions at the same time. Electrical, LED lighting, ground, and controls design added the expanded plant processes to the existing electrical system at the 480 V and 12.47 kV levels, added a 12 kV diesel standby generator, and added PLCs and fiber network to the existing plant control system. Processes included modification of the existing influent pump station, new aeration basins, new secondary clarifiers, new scum pump station, new tank drain pump station, new UV disinfection system, new sludge holding tank, and replacing a dewatering centrifuge and conveyor. Design included drawings, specifications, and engineer's estimate of probable construction cost.

23rd Avenue WWTP JOC, City of Phoenix, Arizona. Served as the lead electrical and controls engineer managing and designing the electrical and controls for projects with an engineering fee up to \$100,000 per task. Experience includes approximately five JOC projects at the 63 MGD plant. JOC projects include solids handling facility centrifuges control panels and VFDs replacement, aeration basin tunnels and primary pump station tunnels lighting replacement projects, and a laboratory upgrade project.



Education

Keller Graduate School of Management of DeVry University, MBA, Project Management, 2005

Arizona State University, BSE, Electrical Engineering, 1999

Certifications

Registered Electrical Engineer, CA 19636

Registered Electrical Engineer, AZ No. 43868

Hyperion Treatment Plant Primary Sludge Thickening, Los Angeles Department of Public Works, Los Angeles, California. Served as an electrical project engineer assisting the project's lead electrical and control system engineer with the preliminary and detailed electrical design of solids conveyance and thickening facilities in existing buildings. Electrical design included 12 kV and low voltage power distribution additions and modifications including the addition of medium and low voltage motor controllers, medium and low voltage variable frequency drives, and a medium voltage motor control center.

SROG 91st Avenue WWTP Electrical Reliability Improvements, City of Phoenix, Tolleson, Arizona. Served as an electrical and controls project engineer assisting the project's lead electrical and control system engineer with the electrical design of upgrade of portions of the plant's existing medium and low voltage power distribution system, which provided redundant power feeders from the 5 kV distribution system down to the 480 V MCC level for plant processes, including solids and digester facilities. Design included site 5 kV distribution, 480 V substation replacements, 480 V main-tie-main draw-out switchgear, and redundant 480 V distribution throughout the site. Performed construction administration, including shop drawing review.

Jomax Water Reclamation Facility Phase 2B Expansion (2.25 to 3 MGD), Vistancia Development LLC, Peoria, Arizona. Served as the lead electrical and controls engineer in the design of electrical, instrumentation, and controls to expand the wastewater plant capacity from 2.25 MGD to 3 MGD. The existing 12 kV electrical distribution system and standby generator system was analyzed and modified to accommodate the expansion. The existing Modicon PLC control system was modified to accommodate the expansion. Phase 2B expansion design included the addition of new process facilities to increase plant capacity from 2.25 MGD to 3 MGD. Electrical, LED lighting, ground, and controls design added the expanded plant processes to the existing electrical system at the 480 V level and to the existing plant control system. Processes included modification of the existing influent pump station; replacement of existing bar screen; and addition of new bar screen, grit classifier, grit pump, aeration basin, sludge holding tank, and dewatering centrifuge and conveyors. Design included drawings, specifications, and engineer's estimate of probable construction cost.

Biosolids Pasteurization Project, City of Oxnard, California. Served as the electrical and controls project engineer assisting the project's lead electrical and control system engineer in the design of the instrumentation and control system for the pasteurization facility at the Oxnard WWTP. This project included new instrumentation, the addition of a new PLC into the existing PLC-based control system, design of a local control panel which allows local control of the entire pasteurization facility, and the addition of the pasteurization facility to the existing SCADA system graphics for monitoring purposes.

Festival Ranch Water Reclamation Facility Phase 2A Expansion, Pulte Homes, Buckeye, Arizona. Served as the lead electrical and controls engineer for the Phase 2A expansion EI&C detailed design and for planning for future Phase 2B expansion electrical capacity. The existing plant uses a sequencing batch reactor process, with a 480 V electrical service, standby diesel generator, automatic transfer switch, and PLC-based plant control system. The existing electrical service, electrical system, and standby generator were evaluated. The service entrance section (SES) was evaluated and determined to have the capacity for the expansion; however, the design required an additional automatic transfer switch (ATS), generator, generator paralleling gear, motor control center, and electrical equipment to power the expanded facilities. Additional network, PLCs, LED lighting, and grounding were also designed. The challenge in this design was the client's constraint that the existing plant and the expansion must share the same existing electrical service from the utility. Design, including drawings and specifications, was completed up to the agency review design submittal.

Agata Bugala, EIT, ENV SP

TREATMENT ENGINEER

Agata Bugala (*ah-GATA boo-GA-LA; she/her*) is a project engineer with 3 years' professional experience as a water/wastewater engineer specializing in the design of water and wastewater treatment systems, including planning and process engineering. Ms. Bugala's technical skills include aeration process modeling and energy optimization in BioWin, report and proposal preparation, drawing preparation in AutoCAD, and bench-scale and pilot-scale studies.

Relevant Previous Experience

Industrial Wastewater Treatment Facility, City of Gonzales, California. Project engineer for the design of a new 1-million-gallon-per-day industrial wastewater treatment facility. The new plant includes an influent pump station, headworks with screenings and grit removal, aerated treatment ponds, and effluent infiltration basins. Performed process calculations, wastewater treatment plant design (e.g., process flow diagrams), and cost estimates.

4S Ranch Water Reclamation Facility Headworks Screenings System Improvements, Olivenhain Municipal Water District, Encinitas, California. Project engineer for the design of a new headworks improvements project, including replacement of mechanical screens, grit classifier, odor control system improvements, channel rehabilitation, and slide gate replacements.

Consequence of Failure Analysis, Moulton Niguel Water District, Laguna Niguel, California. Project engineer for the preparation of a Consequence of Failure Analysis for the Moulton Niguel Water District. Assisted in site visits and workshops to identify the most critical and high-risk failure scenarios at the city's WWTP. Evaluated and prepared a report describing short-term and long-term WWTP upgrades, maintenance, and replacement components.

La Salina Wastewater Treatment Plant Digester Rehabilitation, City of Oceanside, California. Project engineer for the design of anaerobic digester cleaning and rehabilitation for both the primary and secondary digesters at the La Salina Wastewater Treatment Plant (WWTP) in Oceanside. The scope of work included digester cleaning specifications; replacement of blocked heat exchanger piping and valves; replacement of leaking overflow piping; replacement of corroded access manway, cover, bolts, and nuts on the digester roof; and replacement of gas protection equipment, including all piping, pressure safety valves, flame arrestor, flame trap, and valves.

City of Redlands Master Plan, Redlands, California. As project engineer, performed full-scale capacity assessment of the existing equipment of major unit operation processes. Evaluated the existing system to identify key performance parameters of the WWTP and recommend potential ways to increase operations efficiency while reducing electrical costs of the facility, including power costs associated with pumps, blowers, and cogeneration.



Education

The City College of New York
BE, Environmental Engineering, 2018

Certifications

Engineer-in-Training (EIT), No. 173501

Envision Sustainability Professional (ENV SP) No. 47181

Professional Affiliations

Santa Ana River Basin Section, Director

Water Environment Association, Active Member

Nano-Aeration Demonstration Testing, Municipal Wastewater Treatment Plant, City of Gonzales, California.

Assisted in the evaluation of nano-aeration technology (NanO2) at the City of Gonzales WWTP. Prepared a conceptual design for a NanO2 system on how to remove nitrogen in the efficient and cost-effective way rather than traditional biological treatment processes.

Consequence of Failure Analysis, South Orange County Wastewater Authority, Dana Point, California. Project engineer for the preparation of a Consequence of Failure Analysis for the South Orange County Wastewater 6.7-million-gallon-per-day coastal treatment plant. Assisted in site visits and workshops to identify the most critical and high-risk failure scenarios at the city's WWTP. Evaluated and prepared a report describing short-term and long-term WWTP upgrades, maintenance, and replacement components.

WWTP Capacity and Condition Assessment, City of Banning, California. Performed full-scale field condition and capacity assessment of the existing equipment of major unit operation processes (i.e., pumps) and pipes throughout the WWTP using a portable ultrasonic flow meter. Evaluated and prepared a report describing short-term and long-term WWTP upgrades, maintenance, and replacement components.

Nitrogen Removal Feasibility Study, City of Banning, California. Assisted with the design and evaluation of the wastewater treatment systems for nitrogen removal to achieve California Code of Regulations Title 22 requirements. Performed cost analysis for the secondary treatment including trickling filters, conventional activated sludge, MBR, moving bed biofilm reactor, and integrated fixed-film activated sludge.

Food and Beverage Facility, Wastewater Treatment Feasibility Study, Anaheim, California. Assisted with evaluation, design (process flow diagrams and site layouts), preparation of life cycle cost estimates, and recommendation of wastewater treatment systems to reduce surcharge fees. Evaluated liquid and solid treatment components such as sequencing batch reactor, upflow anaerobic sludge blanket, anaerobic membrane bioreactor, dissolved air floatation, centrifuge, screw press, and belt filter press.

Wastewater Treatment Feasibility Study, Manufacturing Wastewater Facility, Ohio. Assisted in improving performance of an existing dewatering system for high total dissolved solids and high pH. Evaluated the feasibility of various solid and liquid separation treatment alternatives. Assisted in performing process calculations, preliminary construction and annual operations and maintenance costs of equalization, and evaluating filtration, dewatering, and pH adjustment systems.

Wastewater Treatment Feasibility Study, Danone Facility, Virginia. Assisted with the evaluation of treatment alternatives and preliminary design to improve an on-site wastewater treatment system and reduce incoming high organic loading rates generated from a dairy production line. Drafted process flow diagrams and site layouts for dissolved air floatation system and upflow anaerobic sludge blanket system. Prepared sections of the final technical memorandum.

Plant Optimization, Water-Energy-Food Nexus Project, Germany and New York. Assessed the feasibility of implementing demand response strategies and integrating on-site renewable energy sources as an alternative to grid-supplied electricity for the operation of WWTP in Germany and New York. Modeled and optimized energy consumption at the Haldenmühle Water Resource Recovery Facility, Stuttgart, Germany.

Co-Digestion Evaluation, Newtown Creek Water Resource Recovery Facility, New York. Evaluated how including additional solid-waste streams impacted digester egg performance. Performed biomethane potential tests to evaluate production rates.



Matt Stone, PE, SE **Senior Project Manager**

Mr. Stone is a currently licensed California SE with over 13 years of project management and structural design work encompassing commercial, infrastructure, water, wastewater and military projects. He has performed many complex structural and seismic designs for new and existing buildings utilizing the latest design standards and philosophies. His work has included the preparation of structural drawings, specifications, and

calculation packages, project coordination and management, technical report writing, cost estimating and construction support services. He specializes in the assessment, design and retrofit of water and wastewater treatment, storage and conveyance facilities.

Education/Professional Registration

BS, Structural Engineering, 2008, UCSD
MS, Structural Engineering, 2009, UCSD
Civil Engineer in California, 2011, No. 78488
Structural Engineer in California, 2014, No. 6183

Relevant Project Experience

VVWRA Septage Receiving Stations – Victorville, CA – Project Manager – Kelsey Structural – 2023

Mr. Stone is currently providing the structural design of two new septage receiving stations to be constructed at the Victor Valley Wastewater Reclamation Authority's (VVWRA) Westside Water Reclamation Plant (WWRP). Due to long lead times in the procurement of precast concrete structures, VVWRA has requested the buried vault structures be constructed from cast-in-place concrete to accelerate the overall schedule. Structural design consists of two 50'L x 8'W x 8'H buried rectangular concrete vaults to be utilized for unloading of septic vehicles into the WWRP treatment system. The structures are designed to resist H-20 vehicular loading on the roof slab and associated wall surcharge pressures and include interior weir walls with debris screening to capture any large debris prior to conveyance to the existing Septic Equalization Tank. Engineering services being provided as part of the project include the development of structural drawings, specifications, calculations and opinion of probable construction cost.

WMWD Magnolia Avenue Interconnection – Riverside, CA – Project Manager – Kelsey Structural – 2023

Mr. Stone provided the structural design of the new Magnolia Avenue Interconnection Vault for Western Municipal Water District. The vault consisted of a below-grade, cast-in-place rectangular concrete vault with stairway and custom hatch access located in a roadway median along Magnolia Avenue. The structure was designed for H20 vehicular loading, lateral wall surcharge, high seismic forces and required precise reinforcing layout in the top slab to accommodate the oversized access hatch and pump hatch penetrations. The design required minimized foundation bearing pressures and small foundation slab footprint to prevent surcharge and disturbance of adjacent storm drain vaults and pipelines. Tight reinforcing spacing was utilized to minimize temperature, shrinkage and service loading cracking to help ensure the longevity of the vault structure.

CVWD Lift Station 55-11 Capacity Upgrade – Mecca, CA – Project Manager – Kelsey Structural – 2023

Mr. Stone provided the structural design for the Coachella Valley Water District Lift Station Capacity Upgrade project located in Mecca, CA. The project included preliminary and final design for the complete replacement and upgrade of the lift station's mechanical and electrical systems and utilized the existing wet well at the site for emergency storage. Structural design included a new 16' diameter x 35' deep precast concrete wet well, new premanufactured electrical building and foundation, odor reducing station with dry-media bed concrete basin, and an emergency generator with custom aluminum platform access. The precast wet well utilized the largest diameter precast sections available in the United States and require two semi-circular precast sections to be joined in-field with a grouted connection. Additional considerations for shallow groundwater and flood plain elevations required the design of a large cast-in-place mat foundation for the wet well to resist buoyancy and uplift forces.

City of Corona WRF-1A Aeration Improvements – Corona, CA – Project Manager – Kelsey Structural – 2023

Mr. Stone provided the structural design for a series of aeration pipe supports at the City of Corona's existing WRF-1A treatment plant. Design includes various custom pipe supports for 20" and 12" diameter stainless steel air piping including cantilever frames and kicker supports at the existing Aeration Basins and a 25' long pipe bridge spanning over an existing access road. Modifications at the existing Blower Building were required to accommodate the new piping penetrations through the CMU walls. Design considerations for expansion couplers, large thrust loads, existing structure loading and anchorage required detailed coordination with the client and design team to help ensure minimal impacts to the existing facility and operations.

USIBWC SBIWTP Assessment and Facility Planning – San Diego, CA – Structural Engineer – Kelsey Structural – 2023

Mr. Stone served as the Lead Structural Engineer for the condition assessment of over 120 structures at the USIBWC South Bay International Wastewater Treatment Plant (SBIWTP) located in San Diego, CA. The assessment involved fast-paced field investigations, which documented the structural conditions of various primary, secondary and support facilities throughout the plant.

Condition scores were assigned to each structural asset with associated improvement recommendations, prioritization and cost-estimate review documented in a structural technical memorandum. The assessment identified several key structures with severe deterioration requiring repairs in the immediate future to facilitate the future expansion of the plant.

EMWD Ellis Tank Assessment and Repair – Perris, CA – Project Manager – Kelsey Structural – 2022

Mr. Stone provided the structural assessment and repair design for Eastern Municipal Water District's (EMWD) existing 0.26 MG Ellis Tank. The reservoir is an AWWA D100 welded steel reservoir that was in the process of being recoated when Kelsey Structural was brought in to perform an assessment of the existing structure once old coatings were removed. Mr. Stone discovered severe deterioration of the roof framing system and column supports, which halted construction work and required an emergency repair design of a new roof framing system and strengthening of the existing structure. Expedited design work helped minimize construction delays and efficient detailing allowed for quick repair of the tank roof structure.

City of Poway Clearwell Bypass, Poway, CA – Project Manager – Kelsey Structural – 2022

Mr. Stone provided the structural design of a new pump station, pipe gallery retrofits and AWWA D103 bolted steel tank review for the City of Poway's Clearwell Bypass project. Recent failures of the existing clearwell have prompted replacement of the aging concrete storage basin, requiring temporary bypass of all treatment plant water while the new clearwells are constructed. To implement this bypass, Kelsey Structural has provided a new slab-on-grade pump station design and retrofits to an existing pipe gallery structure to facilitate bypass pumping and new piping to the temporary steel storage tanks. Structural design has included reinforced concrete slab-on-grade with deepened perimeter footings to accommodate the site slope, concrete pedestal pipe supports, and retrofit concrete wall construction requiring demo and replacement of an existing below-grade vault wall.

City of Gonzales Industrial Water Reclamation Facility – Gonzales, CA – Project Manager – Kelsey Structural – 2022

Mr. Stone is provided the structural design of a new Industrial Water Reclamation Facility for the City of Gonzales. Structural design is being provided for multiple treatment facilities including an 1,800 sqft. concrete-masonry unit Operations Building, below grade reinforced concrete Wet Well and Pump Station, Headworks facility, Grit Chamber, Blower Building and miscellaneous site structures and equipment foundations. Extremely poor soil conditions at the site coupled with high groundwater and flood plain required all structures to be supported on mat foundations capable of spanning voids beneath the structures and resisting large differential settlements that may occur due to liquefaction during seismic events.

OMWD Neighborhood No.1 Sewer Pump Station – 4S Ranch, CA – Structural Engineer – Kelsey Structural – 2021

Mr. Stone provided structural engineering design services for a new pump station and electrical building to be constructed in the 4S Ranch neighborhood of San Diego, CA. The project included structural design of a below-grade, rectangular reinforced concrete pump station and an above grade CMU electrical building with steel framed roof structure. The pump station measured approximately 28'x27' and is buried approximately 25' below grade. Design challenges included HS-20 vehicular loading at the long-span roof slab which also supported one of the walls of the CMU electrical building. A heavily reinforced concrete beam was required to support the roof structure and required loads.

JBLTP Digester 1 And 2 Manway Improvement Project – Dana Point, CA – Project Manager – Kelsey Structural – 2021

Mr. Stone provided the structural design of four retrofit access manway doors and strengthening of existing Digesters at the existing SOCWA J.B. Latham Treatment Plant. The retrofit design required sawcutting the existing circular reinforced concrete Digester walls to provide new and enlarged access penetrations to improve ventilation and accessibility during maintenance. Fiber wrap strengthening of the existing structure was required to accommodate the new penetrations and resist hydrostatic and seismic hoop forces in the walls concentrated around the openings.

EVWD 18 Reservoir Structural and Seismic Analysis – San Bernardino, CA – Project Manager – Kelsey Structural – 2021

Mr. Stone performed the structural and seismic analysis of a total of 18 existing reservoirs including AWWA D110 prestressed concrete and AWWA D100 welded steel reservoirs for East Valley Water District. Analysis of the reservoirs' essential structural elements was performed to identify critical code deficiencies and vulnerabilities. Critical steel reservoir analysis included tank shell thickness, anchorage and stability, ringwall foundations and sloshing/freeboard requirements. Critical prestressed reservoir analysis included concrete core walls, vertical and horizontal prestressing, seismic cables, two-way concrete roof slab, columns and foundations. A summary report was developed for each of the reservoirs identifying notable deficiencies with recommendations for possible retrofits, strengthening and lowered operating water levels, which would mitigate the code deficiencies and improve structural performance and reliability.

EDUCATION

B.S., Chemical Engineering, University of Toledo, 1979

REGISTRATIONS

Registered Mechanical Engineer, California, 1987, #M 24995

Registered Civil Engineer, California, 1990, #C 45875

Registered Chemical Engineer, California, 1993, #CH 4865

SUMMARY OF EXPERIENCE

Mr. King's educational background is in chemical engineering with emphasis on odor control, air quality, environmental, wastewater, water and regulatory issues. Mr. King has over 40 years of experience in odor control, systems certification and testing, air quality permitting, air emission inventory, air dispersion modeling, and regulatory interface for municipal and industrial projects and is registered as a Civil, Mechanical and Chemical Engineer in the State of California.

DETAILED EXPERIENCE- AIR QUALITY/ ODOR CONTROL

- **South Orange County Wastewater Authority (SOCWA)- Odor Control Design, Certification, AQMD Permitting, HVAC Design, Compliance Plans, Greenhouse Gas Inventory, Ventilation and Special Projects;** DHK Engineers has and continues to provide a wide array of odor control, ventilation, design, HVAC, environmental, compliance and training services to all SOCWA facilities. Since 2005, DHK has provided foul air/odor control air balancing and certification services, design upgrades for RTP ORS#1 Headworks, team member for RTP, JBL cogeneration assessments and upgrades, facility planning, Health and Safety training, environmental compliance (Spill Prevention Control and Countermeasure Plans), all air permitting and annual AQMD reports. DHK has also been the go to firm for energy auditing and development and implementation of energy efficiency strategies as well as technical support with SDGE and SCE utility issues. Successful execution of design projects includes RTP Administration HVAC Upgrades, RTP Headworks ORS#1 upgrades, Emergency Fuel Storage Facility at JBL and Fire Hardening Upgrades at CTP.
- **City of Laguna Beach – Odor Control Upgrades and Improvement Program.** In 2014, DHK Engineers was selected as the City of Laguna Beach Odor Expert to assist the City in the development and implementation of a comprehensive odor control program. Several successful and on-going odor mitigation projects including the North Coast interceptor – Magnesium Hydroxide Pilot Program has greatly improved the difficult circumstances the City has to manage including long residence time in the collection and conveyance system, wastewater seasonal variations for flow and the density of residences and sensitive receptors. DHK was instrumental in quickly resolving a transient odor issue downtown and permanent odor control resources (scrubber technology and foul air ventilation) are in the implementation phase. As part of the comprehensive program, DHK was tasked with technology evaluation including treatment, ventilation methods, chemical addition, and source control. DHK was instrumental in working with the City's team as well as SOCWA Coastal Treatment Plant in determining the potential beneficial impacts of improvements made with the City and CTP.
- **Santa Margarita Water District- Odor Assessment and Control Program-Chiquita Water Reclamation Facility** Comprehensive odor control program for the Chiquita Water Reclamation Plant including all aspects of the process areas, process adjustments, point source evaluations, conveyance/ductwork configurations, air dispersion, chemical injection and bundling of types of odors and development of odor/ventilation monitoring program.

- **El Toro Water District- Northline Lift Station Odor Control Investigation and Implementation Program** Northline Lift Station Odor Assessment and Implementation Program; El Toro Water District and DHK developed a comprehensive odor/ collection system pressure monitoring program at the Northline LS to determine the reach of the existing odor control system into the collection system. Odor characterization and pressure profiles identified specific times of the day resulting in excessive odor issue. Using field information identified possible conditions which could result in transient odors. Long residence time in the collection system and one of the remote upstream LS contributed to the transient excursions. A comprehensive review of technologies and chemical alternative focused in on addition of a flow paced magnesium hydroxide. The program greatly improved the conditions and helped manage the Northline odor issue.
- **Orange County Sanitation District- Multiple Odor Control**
 - Santa Ana Trunkline Sewer Replacement Project (1-23). Technical odor consultant and testing company for sewer replacement project with OCSD. The projects included comprehensive testing vapor and liquid phase to determine baseline conditions and develop design criteria to ensure compliance with OCSD environmental requirements during construction.
 - Newhope-Placentia Trunkline Sewer Replacement Project (2-72A). Technical odor consultant and testing company for sewer replacement project with OCSD. The projects included comprehensive testing vapor and liquid phase to determine baseline conditions and develop design criteria to ensure compliance with OCSD environmental requirements during construction.
 - Dover Drive Sewer Rehabilitation Odor Control Assessment (5-63), OCSD, CA. Technical odor consultant for development of baseline odor/pressure profiles along of Dover Drive Sewer Line. Ventilation and safety strategies were developed, as well as specifications and drawings, to ensure the OCSD odor and nuisance requirements were met.
 - Coast Trunk Sewer Rehabilitation Odor Control Design (11-26), OCSD, CA. Technical odor consultant and design engineer for ventilation and treatment of Coast Trunk Sewer Line. Ventilation and safety strategies were developed, as well as specifications and drawings, to ensure the OCSD odor and nuisance requirements were met.
 - Westside (3/52), College (7-47) and MacArthur (7-49) Pump Stations Upgrade Projects Odor Control Assessments, OCSD, CA. Technical odor consultant and testing company for three pump stations with OCSD. The projects included comprehensive testing vapor and liquid phase to determine baseline conditions and develop design criteria to ensure compliance with OCSD environmental requirements.
- **SOCWA Pump Station, City of Laguna Beach, CA.** Principal Consultant for odor control retrofit alternatives for the SOCWA Pump Station in downtown setting. The assessment included consideration for pre-treatment, point source treatment, ventilation strategies and corrosion control with the downtown collection system.
- **County of San Diego Administration Building- The Waterfront Park Project, San Diego, CA.** Principal engineer for odor evaluation of City of San Diego PUD trunk sewer adjacent to new park. Conducted odor and sewer main pressure assessments, calculations and alternative analyses.



Matt Stone, PE, SE
Senior Project Manager

Education/Professional Registration

BS, Structural Engineering, 2008, UCSD
MS, Structural Engineering, 2009, UCSD
Civil Engineer in California, 2011, No. 78488
Structural Engineer in California, 2014, No. 6183

Mr. Stone is a currently licensed California Structural Engineer with over 14 years of project management and structural design work encompassing commercial, infrastructure, water, wastewater and military projects. He has performed many complex structural and seismic designs for new and existing buildings utilizing the latest design standards and philosophies. His work has included the preparation of structural drawings, specifications, and calculation packages, project coordination and management, technical report writing, cost estimating and construction support services. He specializes in the assessment, design and retrofit of water and wastewater treatment, storage and conveyance facilities.

Relevant Project Experience

SOCWA JBLTP Digester 1 And 2 Manway Improvements – Dana Point, CA – Project Manager – Kelsey Structural – 2021

Mr. Stone provided the structural design of four retrofit access manway doors and strengthening of existing Digesters at the existing SOCWA J.B. Latham Treatment Plant. The retrofit design required sawcutting the existing circular reinforced concrete Digester walls to provide new and enlarged access penetrations to improve ventilation and accessibility during maintenance. Fiber wrap strengthening of the existing structure was required to accommodate the new penetrations and resist hydrostatic and seismic hoop forces in the walls concentrated around the openings.

City of Petaluma ECWRF Sodium Hypochlorite Replacement and Relocation – Petaluma, CA – Project Manager – Kelsey Structural – Ongoing

Mr. Stone is currently providing the structural design of a new Sodium Hypochlorite Chemical Storage Area for the City of Petaluma, CA. The new facility consists of a concrete containment area supporting three new 6,600-gallon sodium hypochlorite storage tanks, constructed as part of the City's Ellis Creek Water Recycling Facility upgrades. The new containment area consists of a 1,200 square-foot basin with 2'-6" tall containment walls capable of providing emergency storage for all three tanks in case of leaks. The containment area has been designed with integral structural column pedestals, which are intended to be utilized in the future for a structural canopy cover and screening walls, which were part of the original design but were elected to be removed from the project by the City after the 90% submittal. Additionally, 18" diameter drilled pier foundations have been utilized per geotechnical recommendations to provide sufficient support for the structure due to the poor Bay Mud layers of soil below, which pose the risk of differential settlements of up to 12" across the structure if not mitigated.

City of Corona WRF-1A Aeration Improvements – Corona, CA – Project Manager – Kelsey Structural – 2023

Mr. Stone provided the structural design for a series of aeration pipe supports at the City of Corona's existing WRF-1A treatment plant. Design includes various custom pipe supports for 20" and 12" diameter stainless steel air piping including cantilever frames and kicker supports at the existing Aeration Basins and a 25' long pipe bridge spanning over an existing access road. Modifications at the existing Blower Building were required to accommodate the new piping penetrations through the CMU walls. Design considerations for expansion couplers, large thrust loads, existing structure loading and anchorage required detailed coordination with the client and design team to help ensure minimal impacts to the existing facility and operations.

City of Oxnard Chemical Storage Facility Roof Repairs – Oxnard, CA – Project Manager – Kelsey Structural – 2023

Mr. Stone performed a field investigation and structural repair of a deteriorated roof structure for the City of Oxnard's Chemical Storage Facility. The existing structure was constructed with a partially-open roof canopy structure with wood framing that had sustained significant dry-rot damage due to moisture exposure and the damp marine environment. As part of the investigation, Kelsey Structural identified the extents and severity of the roof damage and were able to salvage the majority of the roof structure, recommending and designed repairs and retrofit to the lower overhang of the structure where deterioration was most severe. New flashing and protective sealants were detailed to inhibit future deterioration of the structure.

City of San Diego Kearny Mesa Repair Facility – San Diego, CA – Project Manager – Kelsey Structural – 2023

Mr. Stone provided the structural design for the City of San Diego Kearny Mesa Repair Facility for Fleet Services maintenance. Design included the retrofit of an existing concrete building as well as new steel canopy structures and equipment foundations. The existing building is a single-story concrete tilt-up building with two interior wood-framed

mezzanine structures that will be removed as part of the project and replaced with new steel moment frame lateral force resisting systems. Additional work at the existing building included a new rollup-door at an existing concrete shear wall that required strengthening of the existing lateral system as well as new metal stud and wood-framed partitions and curtain wall systems.

City of Gonzales Industrial Water Reclamation Facility – Gonzales, CA – Project Manager – Kelsey Structural – 2022

Mr. Stone is provided the structural design of a new Industrial Water Reclamation Facility for the City of Gonzales. Structural design is being provided for multiple treatment facilities including an 1,800 sqft. concrete-masonry unit Operations Building, below grade reinforced concrete Wet Well and Pump Station, Headworks facility, Grit Chamber, Blower Building and miscellaneous site structures and equipment foundations. Extremely poor soil conditions at the site coupled with high groundwater and flood plain required all structures to be supported on mat foundations capable of spanning voids beneath the structures and resisting large differential settlements that may occur due to liquefaction during seismic events.

City of Glendora Bluebird Booster Station Upgrade – Glendora, CA – QA/QC – Kelsey Structural – 2021

Mr. Stone provided the structural QA/QC review for a booster pump station, equipment upgrades and modifications of two existing steel reservoirs at the Bluebird site for the City of Glendora. The project consisted of a new 1,500 sqft CMU building with a hip shaped steel framed roof that included sky lights for pump removal and a 1-ton monorail crane beam at the underside of the steel roof framing. Foundation designs were performed for a new emergency generator, transformer and switchboard, and vertical surge tank. Structural design was also provided for the strengthening around new penetrations at two existing steel tanks per AWWA D100 and AWWA D103.

City of Poway Clearwell Bypass, Poway, CA – Project Manager – Kelsey Structural – 2021

Mr. Stone provided the structural design of a new pump station, pipe gallery retrofits and AWWA D103 bolted steel tank review for the City of Poway's Clearwell Bypass project. Recent failures of the existing clearwell have prompted replacement of the aging concrete storage basin, requiring temporary bypass of all treatment plant water while the new clearwells are constructed. To implement this bypass, Kelsey Structural has provided a new slab-on-grade pump station design and retrofits to an existing pipe gallery structure to facilitate bypass pumping and new piping to the temporary steel storage tanks. Structural design has included reinforced concrete slab-on-grade with deepened perimeter footings to accommodate the site slope, concrete pedestal pipe supports, and retrofit concrete wall construction requiring demo and replacement of an existing below-grade vault wall.

LWD Encinitas Estates Pump Station – Encinitas, CA – Structural Engineer – Kelsey Structural – 2021

Mr. Stone provided structural engineering design services for the Leucadia Wastewater District (LWD) Encinitas Estates Pump Station project in Encinitas, CA. The project consisted of a new precast below grade pump station and various site structures. Structural design included a new CMU freestanding site wall, emergency generator foundation, and multiple electrical equipment foundations. The electrical MCC equipment foundation required a steel canopy for weather protection and consisted of metal deck over HSS tube steel beams supported by HSS columns and was connected to both the foundation and top of the CMU site wall due to limited space and site constraints. Mr. Stone also provided the design criteria and submittal review of the precast pump station structure.

RMWD Weese Filtration Plant Interconnect – Oceanside, CA – Project Manager – Kelsey Structural – 2021

Mr. Stone provided the structural design of a new single-story interconnect structure at the Weese Filtration Plant in Oceanside, CA for Rainbow Municipal Water District. Design includes a new partially-buried CMU building with steel framed roof and concrete foundations housing pumping and piping equipment. The structure is located in a sloped grade and retains approximately 8' of soil with roadways surrounding the structure and was designed to resist all soil and surcharge lateral loads. A large rollup door was required in the exposed front wall to allow for pump removal and maintenance.

FPUD Overland Trail Lift Station Rehabilitation – Fallbrook, CA – Project Manager – Kelsey Structural – 2020

Mr. Stone provided the structural design and retrofit for the Overland Trail Lift Station Rehabilitation Project for Fallbrook Public Utility District. Structural design services included retrofit of an existing below-grade lift station which consisted of widening the existing drywell in order to allow for larger pumps and new piping penetrations to accommodate increased flow through the station. Construction sequencing was critical to minimize system downtime and bypassing while also limiting damage to the existing portions of the lift station to remain as well as the adjacent clarifier structure. Concrete retrofit and repair details were provided and tailored to the project to allow for quick material cure times to help minimize the duration of system bypassing.



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415

		QA/QC Process Engineer	Project Manager	Electrical Engineer	Project Engineer	CAD Designer	Admin			Subconsultant		Subconsultant	
Project Team Role:		P. Giori	B. Robertson G. Guillen	J. Schneider	A. Bugala	N. Hunter	M. Kinney	TOTAL DUDEK HOURS	DUDEK LABOR COSTS	Kelsey Structural		DHK	
Team Member:										M. Stone	D. King	OTHER DIRECT COSTS	TOTAL FEE
Billable Rate :		\$280	\$255	\$290	\$210	\$200	\$150			Fee	Fee		
Task 1	Project Management and Coordination												
	Project Management								\$ -	\$3,200			\$ 3,200
	Monthly Progress Reports, Invoices, Administration		20				20	40	\$ 8,100				\$ 8,100
	Monthly Progress Meetings (3 In-Person)		24					24	\$ 6,120	\$1,400	\$2,000		\$ 7,520
	Meetings								\$ -				\$ -
	Kickoff Meeting		2	2	4			8	\$ 1,930				\$ 1,930
	Preliminary Design (35%) Submittal Review/Workshop Meeting		2	2	4			8	\$ 1,930				\$ 1,930
	Pre-Final Design (90%) Submittal Review/Workshop Meeting		2	2	4			8	\$ 1,930				\$ 1,930
	Final Design (100%) Submittal Review/Workshop Meeting	24	2	2	4			32	\$ 8,650				\$ 8,650
	Quality Assurance/Quality Control Activities								\$ -				\$ -
	Subtotal Task 1	24	52	8	16		20	120	\$ 28,660	\$ 4,600	\$ 2,000	\$ -	\$ 33,260
Task 2	Document Review												
	Review As-builts and Background Documents		2		8			10	\$ 2,190	\$2,000	\$500		\$ 4,190
	Field Investigation		4	8	8	8		28	\$ 6,620	\$3,000	\$3,000	\$ 800	\$ 10,420
	Subtotal Task 2		6	8	16	8		38	\$ 8,810	\$ 5,000	\$ 3,500	\$ 800	\$ 14,610
Task 3	Preliminary (35%) Design												
	Conceptual Maintenance of Plant Operation Plan		4		8			12	\$ 2,700		\$500		\$ 2,700
	Plans		4	16	40	72		132	\$ 28,460	\$7,500	\$250		\$ 35,960
	Specifications (Technical)		4	4	16			24	\$ 5,540	\$2,000	\$250		\$ 7,540
	Cost Estimate		2	2	4			8	\$ 1,930	\$200	\$100		\$ 2,130
	Preliminary Design Tech Memo		4	8	16			28	\$ 6,700	\$1,500	\$2,000		\$ 8,200
	Subtotal Task 3		18	30	84	72		204	\$ 45,330	\$ 11,200	\$ 3,100	\$ -	\$ 56,530
Task 4	Pre-Final (90%) Design												
	Plans		8	16	40	92		156	\$ 33,480	\$16,500			\$ 49,980
	Specifications (Updated Technical and Division 1)		4	8	16		2	30	\$ 7,000	\$6,000			\$ 13,000
	Cost Estimate		1	1	4			6	\$ 1,385	\$500			\$ 1,885
	Subtotal Task 4		13	25	60	92	2	192	\$ 41,865	\$ 23,000	\$ -	\$ -	\$ 64,865
Task 5	Final (100%) Design Submittal												
	Drawings		8	12	24	40		84	\$ 18,560	\$4,500			\$ 23,060
	Specifications		4	4	12		4	24	\$ 5,300	\$2,000			\$ 7,300
	Cost Estimate		1	1	2			4	\$ 965	\$200			\$ 1,165
	Subtotal Task 5		13	17	38	40	4	112	\$ 24,825	\$ 6,700	\$ -	\$ -	\$ 31,525
Task 6	Bid Support Services												
	Prepare Bid Package		2	2	2	8		14	\$ 3,110	\$4,000		\$ 200	\$ 7,310
	Subtotal Task 6		2	2	2	8		14	\$ 3,110	\$ 4,000	\$ -	\$ 200	\$ 7,310
	Total Hours and Fee	24	104	90	216	220	26	680	\$ 152,600	\$ 54,500	\$ 8,600	\$ 1,000	\$ 208,100
	Percent of Hours:	4%	15%	13%	32%	32%	4%	100%					

		QA/QC Process Engineer	Project Manager	Electrical Engineer	Project Engineer	CAD Designer	Admin			Subconsultant		Subconsultant	
Project Team Role:		P. Giori	B. Robertson G. Guillen	J. Schneider	A. Bugala	N. Hunter	M. Kinney	TOTAL DUDEK HOURS	DUDEK LABOR COSTS	Kelsey Structural		DHK	
Team Member:										M. Stone	D. King	OTHER DIRECT COSTS	TOTAL FEE
Billable Rate :		\$280	\$255	\$290	\$210	\$200	\$150			Fee	Fee		
Task 1	Project Management and Coordination												
	Project Management								\$ -	\$3,200			\$ 3,200
	Monthly Progress Reports, Invoices, Administration		20				20	40	\$ 8,100				\$ 8,100
	Monthly Progress Meetings (3 In-Person)		24					24	\$ 6,120	\$1,400	\$2,000		\$ 7,520
	Meetings								\$ -				\$ -
	Kickoff Meeting		2	2	4			8	\$ 1,930				\$ 1,930
	Preliminary Design (35%) Submittal Review/Workshop Meeting		2	2	4			8	\$ 1,930				\$ 1,930
	Pre-Final Design (90%) Submittal Review/Workshop Meeting		2	2	4			8	\$ 1,930				\$ 1,930
	Final Design (100%) Submittal Review/Workshop Meeting	24	2	2	4			32	\$ 8,650				\$ 8,650
	Quality Assurance/Quality Control Activities								\$ -				\$ -
	Subtotal Task 1	24	52	8	16		20	120	\$ 28,660	\$ 4,600	\$ 2,000	\$ -	\$ 33,260
Task 2	Document Review												
	Review As-builts and Background Documents		2		8			10	\$ 2,190	\$2,000	\$500		\$ 4,190
	Field Investigation		4	8	8	8		28	\$ 6,620	\$3,000	\$3,000	\$ 800	\$ 10,420
	Subtotal Task 2		6	8	16	8		38	\$ 8,810	\$ 5,000	\$ 3,500	\$ 800	\$ 14,610
Task 3	Preliminary (35%) Design												
	Conceptual Maintenance of Plant Operation Plan		4		8			12	\$ 2,700		\$500		\$ 2,700
	Plans		4	16	40	72		132	\$ 28,460	\$7,500	\$250		\$ 35,960
	Specifications (Technical)		4	4	16			24	\$ 5,540	\$2,000	\$250		\$ 7,540
	Cost Estimate		2	2	4			8	\$ 1,930	\$200	\$100		\$ 2,130
	Preliminary Design Tech Memo		4	8	16			28	\$ 6,700	\$1,500	\$2,000		\$ 8,200
	Subtotal Task 3		18	30	84	72		204	\$ 45,330	\$ 11,200	\$ 3,100	\$ -	\$ 56,530
Task 4	Pre-Final (90%) Design												
	Plans		8	16	40	92		156	\$ 33,480	\$16,500			\$ 49,980
	Specifications (Updated Technical and Division 1)		4	8	16		2	30	\$ 7,000	\$6,000			\$ 13,000
	Cost Estimate		1	1	4			6	\$ 1,385	\$500			\$ 1,885
	Subtotal Task 4		13	25	60	92	2	192	\$ 41,865	\$ 23,000	\$ -	\$ -	\$ 64,865
Task 5	Final (100%) Design Submittal												
	Drawings		8	12	24	40		84	\$ 18,560	\$4,500			\$ 23,060
	Specifications		4	4	12		4	24	\$ 5,300	\$2,000			\$ 7,300
	Cost Estimate		1	1	2			4	\$ 965	\$200			\$ 1,165
	Subtotal Task 5		13	17	38	40	4	112	\$ 24,825	\$ 6,700	\$ -	\$ -	\$ 31,525
Task 6	Bid Support Services												
	Prepare Bid Package		2	2	2	8		14	\$ 3,110	\$4,000		\$ 200	\$ 7,310
	Subtotal Task 6		2	2	2	8		14	\$ 3,110	\$ 4,000	\$ -	\$ 200	\$ 7,310
	Total Hours and Fee	24	104	90	216	220	26	680	\$ 152,600	\$ 54,500	\$ 8,600	\$ 1,000	\$ 208,100
	Percent of Hours:	4%	15%	13%	32%	32%	4%	100%					

Agenda Item

7.A.

Board of Directors Meeting

Meeting Date: May 2, 2024

TO: Board of Directors

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

SUBJECT: Selection of Officers for the Board of Directors –
Fiscal Year (FY) 2024-25

Background

The Election of Officers for SOCWA for FY 2024-25 is typically scheduled for the June Board meeting. The Chairman and Vice-Chairman are selected along with the Secretary/Treasurer and an Assistant Secretary of the Board of Directors. The General Manager is typically selected to serve as the Secretary/Treasurer, and the Executive Assistant as the Assistant Secretary.

Chairman Collings stated at the May Board Meeting that the selection of officers would commence at the next Regular Board meeting in June.

The table below specifies the positions to be filled for the election/appointment of officers to serve for FY 2024-25.

NOMINATING COMMITTEE RECOMMENDATIONS – FY 2024-25

<i>Officer</i>	<i>Nominee</i>
Chairman	To be announced
Vice-Chairman	To be announced
Secretary/Treasure	Jim Burror, Acting General Manager/ Director of Operations
Assistant Secretary	Danita Hirsh, Executive Assistant

Recommended Action: Staff recommends that the SOCWA Board of Directors elect/appoint Officers to service the Authority during FY 2024-25.

Agenda Item

7.C.

Board of Directors Meeting

Meeting Date: June 6, 2024

TO: Board of Directors

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

STAFF CONTACT: Mary Carey, Finance Controller

SUBJECT: FY 2023-24 Budget Update and Proposed Budget Amendments [Project Committees Nos. 15 and 17]

Summary/Discussion

The SOCWA staff has been monitoring the progression of spending for FY 2023-24. As noted by SOCWA staff during the FY2023-24 Budget's approval, the PC budgets were very tight, and SOCWA staff provided periodic updates on budget spending, unanticipated utility cost increases, and other impacts on budgets. SOCWA staff has also been working to mitigate increased inflation pressure on goods and services throughout the year.

The SOCWA staff has completed projected actuals for FY 2023-24. Budget amendments are needed for PC-15 (Coastal Treatment Plant) and PC-17 (Regional Treatment Plant).

Discussion/Analysis

The unanticipated expenses are associated with high projected power rate increases, an unusually high number of landfill closures due to rain, heat, and traffic due to the closure of the Brea landfill, and septicity impacts from aging sewage entering the plants. The following is a summary of the increases:

- SCE (electricity) – 14% (versus 5%)
- SDG&E (electricity) – 15% (versus 5%)
- Biosolids – Rain-caused landfill closures limited SOCWA deliveries to its lowest cost management option.
- Increased septicity of the sewage entering the plants is increasing chemical costs to control filaments, odors, and sulfides.
- Property Insurance – 17.3% (versus 8.3% assumed in the budget)
- Elevated permitting costs at RTP are due to SCAQMD delaying the issuance of lower cost permits for the engine.

SOCWA staff has been working to offset these cost increases within the PC budgets. This has lowered the overall request for these amendments. This includes no-price increases for the following chemicals: bleach, caustic, ferric, and polymer.

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PC-15 CTP Budget Amendment

A budget amendment of \$65,000 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
15-5002	Electricity	\$ 15,000
15-5003	Chlorine/Sodium Hypochlorite	\$ 15,000
15-5008	Ferric Chloride	\$ 15,000
15-5007	Odor Control	\$ 20,000
	Total	\$ 65,000

PC-17 RTP Budget Amendment

A budget amendment of \$290,000 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
17-5002	Electricity	\$ 60,000
17-5003	Chlorine/Sodium Hypochlorite	\$ 25,000
17-5007	Polymer	\$ 50,000
17-5008	Ferric Chloride	\$ 75,000
17-5009	Odor Control	\$ 25,000
17-5027	Insurance	\$ 10,000
17-5038	Permits	\$ 15,000
17-5049	Biosolids Disposal	\$ 30,000
	Total	\$ 290,000

These budget amendments will not require additional billing. The overall SOCWA O&M budget is projected to be under budget.

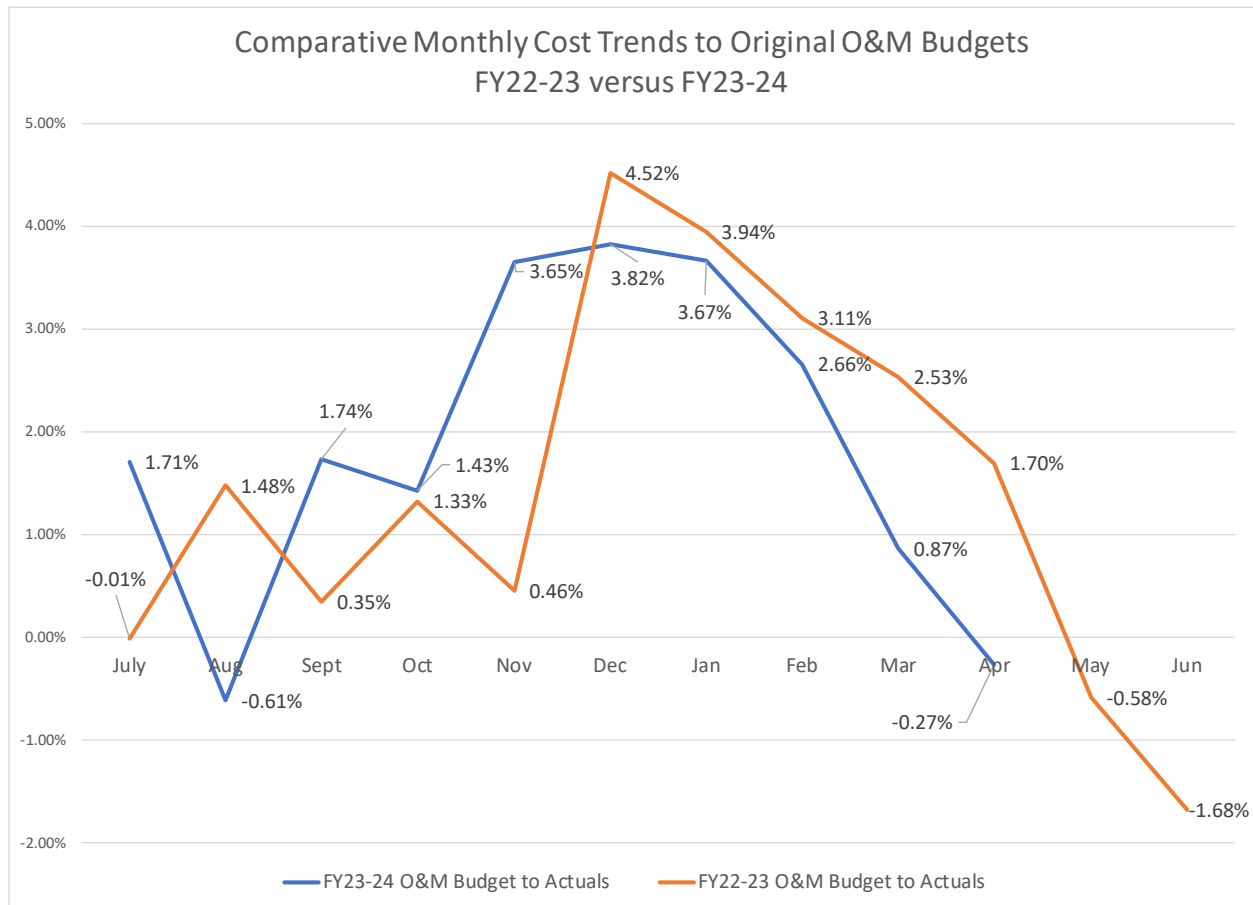
Budget Monitoring

The FY 2023-24 overall budget is estimated to be under budget from \$67,000 (-0.03%) to under the current budget by \$171,000 (-1.04%). The range is due to open purchase orders where vendors are unable to provide delivery/service dates due to supply chain disruptions and staffing limitations. However, the individual PC budgets for PC-15 and PC-17 are projected to be over budget.

A chart tracking the budget-to-actuals for the current FY O&M Budget compared to the last FY O&M Budget was presented at the April Finance Committee Meeting. This chart has been updated to include the actuals for April 2024. The chart shows this FY budget-to-actuals are below the last FY at this time in April.

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Prior Related Project Committee or Board Action(s)

The Board approved a budget amendment to PC12 in the amount of \$52,987 at the January 2024 meeting.

Fiscal Impact

None

Recommended Action: Staff recommends that the Finance Committee recommend that the Board of Directors i) approve a Budget amendment totaling \$65,000 for Project Committee 15 (CTP) for the following line items:

Budget line item	Budget line description	Requested budget increase
15-5002	Electricity	\$ 15,000
15-5003	Chlorine/Sodium Hypochlorite	\$ 15,000
15-5008	Ferric Chloride	\$ 15,000
15-5007	Odor Control	\$ 20,000
	Total	\$ 65,000

ii) approve a Budget amendment totaling \$290,000 for Project Committee 17 (RTP) for the following line items:

Budget line item	Budget line description	Requested budget increase
17-5002	Electricity	\$ 60,000
17-5003	Chlorine/Sodium Hypochlorite	\$ 25,000
17-5007	Polymer	\$ 50,000
17-5008	Ferric Chloride	\$ 75,000
17-5009	Odor Control	\$ 25,000
17-5027	Insurance	\$ 10,000
17-5038	Permits	\$ 15,000
17-5049	Biosolids Disposal	\$ 30,000
	Total	\$ 290,000

Agenda Item

7.E.

Board of Directors Meeting

Meeting Date: June 6, 2024

TO: Board of Directors

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

STAFF CONTACT: Mary Carey, Finance Controller

SUBJECT: FY 2023-24 Administration Budget Update for Legal Expenses to Review the Draft MNWD Exit Agreements

Summary/Discussion

SOCWA staff is requesting a budget amendment for FY 2023-24 for additional legal costs to review the draft MNWD Exit Agreements. The amendment is to add \$15,000 to the Administrative Budget.

Discussion/Analysis

The current Administration budget is projected to be exceeded with these additional expenses. SOCWA staff has been working to mitigate other elevated expenses due to contract staffing needs during an accounting vacancy for about 3 months.

Prior Related Project Committee or Board Action(s)

The consensus at the May 1, 2024, Joint Special PC17 Boards Meeting was for the agencies, including SOCWA, to review these draft agreements and provide comments back to MNWD.

Fiscal Impact

The total budget amendment to the General Fund Budget will increase the Administration Budget by \$15,000.

Administration expenses are automatically recorded to line items in the General Fund, where there are Board-approved allocations for those line items. For Legal expenses, 40% is charged to General Fund and 60% is charged to the Administration Budget.

Recommended Action: Staff recommends that the Board of Directors approve an amendment to the Administration Budget totaling \$15,000 for additional legal expenses to review the draft MNWD Exit Agreements.

Agenda Item

7.F.

Board of Directors Meeting

Meeting Date: June 6, 2024

TO: Board of Directors

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

STAFF CONTACT: Mary Carey, Finance Controller

SUBJECT: Establishment of PC 10 Budgets for Legal Expenses to Prepare Quitclaim Documents to Transfer PC 10 Assets to the City of San Clemente in FY2023-24 and FY2024-25 [Project Committee 10]

Summary/Discussion

SOCWA staff is requesting to establish budgets for FY2023-24 and FY2034-25 for PC10, which will cover legal costs associated with an Asset Transfer Agreement and any Quitclaim title documents to Transfer PC10 assets (the San Clemente Land Outfall) to the City of San Clemente. The budgets are proposed at \$5,000 for FY2023-24 and \$2,000 for FY2024-25.

The SOCWA Budget does not traditionally include funding for PC10. This is because the City of San Clemente operates and maintains the facilities. The City of San Clemente is also the sole member of PC10.

Discussion/Analysis

The City of San Clemente has requested SOCWA's General Counsel prepare the necessary documents to transfer the San Clemente Land Outfall to the City of San Clemente. The City of San Clemente has also requested that these expenses be included in the PC10 budget.

The City has been operating and maintaining the assets since the mid-1980's. The last recorded annual expense for PC10 by SERRA was in 1986 for \$697.27 for recording depreciation.

Prior Related Project Committee or Board Action(s)

None

Fiscal Impact

The budget will increase from \$0 to \$5,000 for FY2023-24 and establish a budget of \$2,000 for FY2024-24.

Recommended Action: Staff recommends that the PC10 Board establish budgets of \$5,000 for FY2023-24 and \$2,000 for FY2024-25 for legal expenses to prepare Asset Transfer Agreement documents to transfer PC10 assets to the City of San Clemente.

Agenda Item

7.G.

Legal Counsel Review: Yes

Meeting Date: June 6, 2024

TO: Board of Directors

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

SUBJECT: Adopting of Resolution 2024-06, A Resolution of the Board of Directors of the South Orange County Wastewater Authority Re-establishing Dates for the Regular Meetings of the Board of Directors July and December Board Meeting Dates

SUMMARY

The regularly scheduled Board Meeting in July 2024 falls on the July 4th Holiday and conflicts with the July 4 holiday almost every year. The regularly scheduled Board Meeting in December nearly always conflicts with the annual ACWA conference. The SOCWA Board plans to meet on July 11, 2024, and December 12, 2024. Certain matters of SOCWA business must be conducted only at Regular Meetings of the Board.

Further, because these two Board meetings will always fall on weeks that require the meetings to be moved each year, this Resolution 2024-06 will permanently make these changes for the July and December meetings.

Thus, Resolution 2024-06 re-establishes Board meetings as the first Thursday of the month but moves the Regular Meetings for July and December from the first Thursday to the second Thursday of those months. For 2024, these meetings would occur on July 11, 2024, and December 12, 2024.

Recommended Action: Staff recommends that the Board of Directors adopt Resolution 2024-06, A Resolution of the Board of Directors of the South Orange County Wastewater Authority Re-establishing Dates for the Regular Meetings of the Board of Directors, thereby changing the regular July and December Board Meeting Dates.

RESOLUTION NO. 2024-06

**RESOLUTION OF THE BOARD OF DIRECTORS OF THE
SOUTH ORANGE COUNTY WASTEWATER AUTHORITY
RE-ESTABLISHING DATES OF THE REGULAR MEETINGS OF THE BOARD OF
DIRECTORS**

WHEREAS, the “Joint Exercise of Powers Agreement Creating the South Orange County Wastewater Authority, Orange County, California (“SOCWA”)” states that the Board of Directors of SOCWA (the “Board”) shall specify by resolution the date, time and place of the regular meetings of the Board;

WHEREAS, the Board previously adopted Resolution No. 2011-05 on December 2, 2011, to change Board meetings from bi-monthly to monthly meetings, which occur on the first Thursdays of the month; and

WHEREAS, the Board is adopting this Resolution to change the July and December regular meetings of the Board from the first Thursday of the month to the second Thursday of the month respectively. This is due to the proximity of the July 4th national holiday, due to recurring conflicts with the December ACWA Conference, and due to the fact that certain matters of SOCWA business be conducted only at regular meetings of the Board.

NOW, THEREFORE, the Board of Directors of the South Orange County Wastewater Authority does hereby **RESOLVE, DETERMINE** and **ORDER** as follows:

Section 1. The regular meetings of the Board of Directors of SOCWA shall be held on the first Thursday of each month, except for July and December, which shall occur on the second Thursday of those months, at 8:30 a.m. at the Administrative Office Board Room located at 34156 Del Obispo Street, Dana Point, California 92629.

Section 2. Board Resolution No. 2011-05 entitled “Resolution of the Board of Directors of the South Orange County Wastewater Authority Re-Establishing Date, Time and Place of Regular Meetings of the Board of Directors” adopted on December 2, 2011, is hereby rescinded in its entirety.

Section 3. This Resolution shall be effective immediately upon adoption.

ADOPTED, SIGNED, and APPROVED this 6th day of June 2024.

SOUTH ORANGE COUNTY WASTEWATER AUTHORITY

Matt Collings, Chairman

Jim Burror, Board Secretary

(Seal)

STATE OF CALIFORNIA)
) ss.
COUNTY OF ORANGE)

I, JIM BURROR, Secretary of the Board of Directors of the SOUTH ORANGE COUNTY WASTEWATER AUTHORITY (“SOCWA”), do hereby certify that the foregoing is a full, true, and correct copy of **Resolution No. 2024-06** of said Board and that the same has not been amended or repealed.

Dated this 6th day of **June 2024**.

Jim Burror, Board Secretary
SOUTH ORANGE COUNTY WASTEWATER AUTHORITY

RESOLUTION NO. 2024-06

**RESOLUTION OF THE BOARD OF DIRECTORS OF THE
SOUTH ORANGE COUNTY WASTEWATER AUTHORITY
RE-ESTABLISHING DATES OF THE REGULAR MEETINGS OF
THE BOARD OF DIRECTORS**

WHEREAS, the “Joint Exercise of Powers Agreement Creating the South Orange County Wastewater Authority, Orange County, California (“SOCWA”)” states that the Board of Directors of SOCWA (the “Board”) shall specify by resolution the date, time and place of the regular meetings of the Board;

WHEREAS, the Board previously adopted Resolution No. 2011-05 on December 2, 2011, to change Board meetings from bi-monthly to monthly meetings, which occur on the first Thursdays of the month; and

WHEREAS, the Board is adopting this Resolution to change the July and December regular meetings of the Board from the first Thursday of the month to the second Thursday of the month respectively. This is due to the proximity of the July 4th national holiday, due to recurring conflicts with the December ACWA Conference, and due to the fact that certain matters of SOCWA business be conducted only at regular meetings of the Board.

NOW, THEREFORE, the Board of Directors of the South Orange County Wastewater Authority does hereby **RESOLVE, DETERMINE, and ORDER** as follows:

- Section 1. The regular meetings of the Board of Directors of SOCWA shall be held on the first Thursday of each month, except for July and December, which shall occur on the second Thursday of those months, at 8:30 a.m. at the Administrative Office Board Room located at 34156 Del Obispo Street, Dana Point, California 92629.
- Section 2. Board Resolution No. 2011-05 entitled “Resolution of the Board of Directors of the South Orange County Wastewater Authority Re-Establishing Date, Time and Place of Regular Meetings of the Board of Directors” adopted on December 2, 2011, is hereby rescinded in its entirety.
- Section 3. This Resolution shall be effective immediately upon adoption.

ADOPTED, SIGNED, and APPROVED this 6th day of June 2024.

SOUTH ORANGE COUNTY WASTEWATER AUTHORITY

Matt Collings, Chairman

(Seal)

James (Jim) Burror, Jr., Board Secretary

STATE OF CALIFORNIA)
) ss.
COUNTY OF ORANGE)

I, James L. Burror, Jr., Secretary of the Board of Directors of the SOUTH ORANGE COUNTY WASTEWATER AUTHORITY (“SOCWA”), do hereby certify that the foregoing is a full, true, and correct copy of **Resolution No. 2024-06** of said Board and that the same has not been amended or repealed.

Dated this 6th day of June 2024.

James (Jim) L. Burror, Jr., Board Secretary
SOUTH ORANGE COUNTY WASTEWATER AUTHORITY

Agenda Item

7.I.

Board of Directors Meeting

Meeting Date: June 6, 2024

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

- SCWD made several requests for data regarding Budget allocations.
- SCWD requested additional submittal documents related to the piles used to construct the San Juan Creek Ocean Outfall.
- SMWD requested several items during the PC2 JBL tour. Staff is still working on those requests.

ENVIRONMENTAL COMPLIANCE/ OPERATIONS/ENGINEERING

Ocean Acidification Engagement Letter

On May 15, 2024, SOCWA became a co-signatory of the engagement letter to the Newsom Administration, California Legislature, and the California State Agencies on the origins of ocean acidification and hypoxia and regulation of public wastewater facilities. SOCWA staff worked with the SOCWA Board Chair on developments related to the release of the letter, which is included in this GM Report. The letter was in response to an update from the NGO community on the [urging of State Legislators and regulators](#) to allocate \$2.8M for the development of an ocean acidification policy to advance a regulatory policy to set OAH water quality standards based solely on the ROMS-BEC findings. The engagement letter was also a follow-up to an article in the [LA Times](#) with the same line of evidence and sole findings on the output of the ROMS-BEC model from model runs completed in 1997 through 2000.

Wastewater SCAN Program End

SOCWA staff was notified by Verily that the WastewaterSCAN program would officially end on June 30, 2024. SOCWA will no longer receive data from wastewater surveillance from the three wastewater treatment facilities and the associated stipends from this project at the conclusion of the program.

Request for Information Flows

MWDOC has requested information on the flows from each SOCWA treatment facility and outfalls for their water supply planning.

Artificial Intelligence Workshop

SOCWA staff co-hosted an Artificial Intelligence Workshop with Orange County Water District and Clean Water SoCal to review the technologies emerging in the field of artificial intelligence in the water and wastewater sectors.

JBL Plant No.2 Primary Basin Inspections

The engineering work to inspect the Plant No. 2 basins was completed and staff are waiting for the inspection reports to review.

RWQCB Inspections

SOCWA staff accompanied the RWQCB staff during their recent inspections of all the facilities connected to the ocean outfall system. The inspections occurred over two days. Any findings will be brought to the Engineering Committee for further consideration.

Synagro Letter Regarding PFAS

A letter from Synagro is attached to this report. The letter is titled "EPA Designation of PFAS as Hazardous Substance Under CERCLA" and is dated April 23, 2024. The letter requests SOCWA provide information regarding PFAS in its Biosolids managed by Synagro. SOCWA is participating in ongoing national efforts to determine effective testing methods to test for PFAS and to report PFAS results. SOCWA's PFAS data is publicly available information as part of the State Water Resources Control Board's Section 13267 PFAS Investigative Order.



**LOS ANGELES COUNTY
SANITATION DISTRICTS**
Converting Waste Into Resources



CLEAN WATER SoCAL
CREATING SUSTAINABLE SOLUTIONS



GOLETA SANITARY
Water Resource Recovery District



BACWA
BAY AREA
CLEAN WATER
AGENCIES



May 15, 2024 [Draft]

SUBJECT: Origins of Ocean Acidification and Hypoxia & Regulation of Public Wastewater Facilities

Dear Governor Newsom, California State Agencies, and the California Legislature,

On behalf of the California Association of Sanitation Agencies (CASA) and undersigned agencies and organizations, we write to share our views regarding ocean acidification and hypoxia (OAH) and [recent correspondence from non-governmental environmental organizations](#) (NGO Letter).

CASA represents more than 135 public agencies and municipalities that engage in wastewater collection, treatment, recycling, and resource recovery. As organizations charged with protecting public health and the environment, we share the State's and NGOs' goal of protecting coastal water quality. For over a decade, our managers, engineers, and scientists have engaged in extensive research to understand the impact of nutrient inputs on water quality in California.

We are deeply concerned with the NGO Letter's call for urgent legislative and regulatory action on OAH and nutrients based on limited academic-focused modeling predictions. Unfortunately, it is both premature and unlikely to achieve the stated goals, as further detailed below and in the enclosure. We believe the most important factors for consideration as this work moves forward are:

- [Wastewater generally contributes less than 6% of the estimated nutrients \(in the form of nitrogen\) off the Southern California coast.](#) While nutrients drive algal blooms that can lead to exacerbations in OAH conditions, [more than 90% of the nutrient contributions are from naturally occurring oceanic upwelling.](#)¹
- The predicted "hot-spots" do not occur anywhere near municipal wastewater discharge points and are located 50 miles offshore. The presence of these predicted "hot spots" has not been correlated with biological data for the species that are present in this area. The predicted outcomes could vary substantially due to uncertainty in model predictions. As the research team has acknowledged, significantly more work is needed to understand how nutrients are transported through ocean currents and impact OAH conditions.
- The Legislature does not need to impose an artificial deadline on the State Water Resource Control Board's (SWRCB) important and ongoing work for which [their executive management are actively engaged in an independent review of the science scheduled to conclude this summer.](#)² Further, the SWRCB is [proposing updates regarding OAH to the California Ocean Plan this year and next](#)³, and then [will begin assessing the ocean for OAH indicators](#)⁴.
- Southern California wastewater agencies have extensive, longstanding ocean monitoring programs that consistently document healthy and diverse ecosystems and ocean waters within water quality objectives specified by the California Ocean Plan. While climate change poses daunting challenges, including threats of OAH, there is not a "crisis" in Southern California coastal waters because of wastewater effluent. Rather, the NGO Letter relies on preliminary research predictions of a complex model that has not been completely validated for regulatory purposes and for which there is much work left to do, including more realistic and relevant modeling scenarios and validation with appropriate and sufficient empirical data.

¹ <https://aslopubs.onlinelibrary.wiley.com/doi/epdf/10.4319/lo.2014.59.1.0285> (see Table 3)

² <https://www.nwri-usa.org/socal-coastal-model-review>

³ https://www.waterboards.ca.gov/board_info/exec_dir/rpts/pol_per_view.html

⁴ https://www.waterboards.ca.gov/water_issues/programs/tmdl/2024state_ir_reports/2024-integrated-report-final-staff-report.pdf#page=79

- While the SWRCB and the Southern California Coastal Waters Research Project (SCCWRP) are investigating the driving cause of OAH impacts to develop nutrient regulations, California is targeting an additional one million acre-feet of water recycling capacity by 2040 to align with the Governor's 2022 Water Supply Strategy. The costs of implementing the new OAH nutrient regulations at coastal southern California and San Francisco Bay wastewater facilities are likely to be of similar magnitude, resulting in as much as \$50 billion for new wastewater treatment and water recycling facilities that ratepayers will have to fund. Nutrient reduction projects already are being planned by some agencies as they re-engineer their facilities to support new water recycling projects. Regulations that override or force significant modifications to existing, planned, or future projects would be counter to the state's efforts to secure long-term climate resilient water supplies. This, along with new regulations such as PFAS and other issues like aging infrastructure, will exacerbate affordability challenges that already pose a major challenge for water and wastewater ratepayers in California.
- The Administration and Legislature must consider nutrient management policies holistically. Associated regulatory actions need to be based on sound science, a reasonable cost-benefit expectation, and a thorough assessment of potential adverse consequences. Nutrient treatment processes will require a significant increase in demand for electricity which likely will lead to increases in greenhouse gas (GHG) emissions. Thus, we need to strategically consider the tradeoffs between nutrient management and GHG emissions, which are primary drivers of OAH, when choosing nutrient management solutions to ensure that they are meaningful and will achieve the intended impact and benefits.

The POTW community is heavily regulated to safeguard public health and the environment. This objective drives our work and is the reason we work tirelessly to operate wastewater collection systems and treatment facilities that provide essential public services 24/7/365. Our respective systems' performance is proven through timely and comprehensive environmental monitoring in oceans, streams, lakes, and all other receiving waters. Our efforts reflect significant and ongoing public investment in critical infrastructure, and we strive to fulfill our duties through sound science, responsible fiscal policy, community engagement, and rigorous engineering.

In closing, we wholeheartedly support the good-faith effort among SCCWRP, state and regional regulators, environmental organizations, and wastewater agencies to proactively address impacts from nutrients and OAH. We anticipate the ongoing and planned OAH modeling efforts may produce critical information to support management decisions. We recognize the state's current fiscal constraints and believe legislation, regulation, and additional funding at this time is unnecessary since very important and relevant activities are underway at the SWRCB and due to conclude in the next couple of years, at which time the State will have adopted a statewide coastal nutrient policy. However, should the funding outlook improve, we recommend investment and support of further work to evaluate and improve the academic model's accuracy, precision, specificity, and applicability to regulatory management decisions. We look forward to receiving any questions you may have on this matter. To coordinate on these issues or if you have questions, please contact Jared Voskuhl, CASA's Director of Regulatory Affairs, at jvoskuhl@casaweb.org or (916) 694-9269.

Thank you,

Adam Link
CASA
Executive Director

Steve Jepsen
Clean Water SoCal
Executive Director

Lorien Fono
BACWA
Executive Director

Robert C. Ferrante
Chief Engineer & General Manager
LACSD General Manager

Rob C. Thompson
General Manager
Orange County Sanitation Districts

Juan Guerriero
Director Public Utilities Dept.
City of San Diego Director PUD

Barbara Romero Director & General Manager City of Los Angeles Sanitation	Steve Wagner General Manager Goleta Sanitary	Scott McClelland General Manager Encina Wastewater Authority	Craig Murray General Manager Carpinteria San
Jim Buror Acting General Manager SOCWA	Gina Dorrington General Manager Ventura Water	[name] Title Fallbrook	[name] Title Oxnard
[name] San Clemente Title	[name] San Elijo	[name] Santa Barbara	[name] Additional Sign-on

ENCLOSURE

The SCCWRP Science Team's Work to Date to Support the SWRCB and OPC

The SCCWRP research team that has been modeling how land-based nutrient discharges into California coastal waters influence OAH is now seeking to demonstrate that the Regional Ocean Modeling System and Biogeochemical Elemental Cycling model (known as ROMS-BEC) can reliably estimate how coastal OAH conditions would be affected if these discharges were reduced.

The modeling has predicted that nitrogen reductions would result in a reversal of subsurface oxygen and pH losses, an expansion of simulated habitat volume for shelled organisms that are sensitive to pH losses, and an expansion of aerobic habitat for fish. The findings, which are undergoing review by an independent panel of scientific experts convened to review the OAH modeling work, mark a key first step toward understanding the certainty in the modeling to date for answering management questions about the role of land-based nutrient discharges, if any, in exacerbating coastal OAH conditions.

The next step is to run modeling simulations with more realistic nutrient-reduction scenarios – scenarios informed by modern changes that managers at each outfall could realistically make to their water recycling and nutrient management practices. Researchers also need to weigh the potential benefits of taking short-term actions to reduce nutrients against the pace with which OAH is intensifying in Southern California coastal waters.

Status of OAH Modeling and Scientific Review Process

The NGO Letter is based on the results of a developing oceanographic model created for academic research purposes that has not been verified with field studies. ROMS-BEC is an impressive endeavor, and its purpose is to simulate physical, geochemical, and biological conditions in the Southern California Bight. This work by a scientific team at SCCWRP focuses on determining how land-based nutrient discharges into Southern California coastal waters influence OAH and predicting how coastal OAH conditions would be affected if these discharges were reduced. However, it is important to understand that its outputs to date involve screening-level predictions based on past conditions, and the modeled impacted areas have either not been observed through actual monitoring data or verification efforts are still ongoing. The process of comparing model results with actual monitoring is important to "ground-truth" to assess the accuracy of the model. Numerous efforts are underway to determine the degree of accuracy and certainty in these predictions. The NGO Letter claims that there is an urgent need to implement OAH regulatory requirements, and they are urging the Newsom Administration and Legislature to expedite development of these regulations. However, the model results to which their letter refers are currently undergoing independent review by a panel of international oceanographers and experts.

The National Water Research Institute (NWRI) is administering the independent panel review, which is led by a Project Steering Committee (PSC) consisting of multiple State agency representatives, the Executive Director of the Southern California Coastal Waters Research Project (SCCWRP), the Executive Director of California Coastkeeper Alliance, and several wastewater agency representatives. The independent review panel was convened, in part, to address questions regarding the accuracy and readiness of the model for use in setting regulatory standards for OAH. This consensus-based independent expert review of the research model was asked by the PSC to address three primary questions:

1. Are the model formulation, domain, set up and forcing, and predictions appropriate for the water quality management applications that are being considered?
2. What is the uncertainty in the predictions the model is producing that are relevant for water quality applications?
3. What investments would most enhance model performance and improve model certainty?

For context, some of the experts charged with developing and refining the model have expressed significant concerns about its use now for making regulatory management decisions without further calibration and analysis and have not endorsed such use at this time. They have acknowledged there is much work left to do on this topic, including running more relevant model scenarios coupled with field studies to empirically measure the rate of ocean acidification and its effects. In addition, the SCCWRP scientific team have clearly expressed to the independent review panel the need to work with stakeholders to determine remaining questions that must be answered before management actions and regulations can be determined.

More specifically, the experts responsible for developing this model are not prepared to endorse it for regulatory management actions before critical steps are taken to advance it from a research-based model to a regulatory tool. Thus, to claim as the NGO Letter asserts, that “[t]he best science in the world has concluded that land-based nutrients from wastewater facilities are harming the California coast and making our ocean uninhabitable for California’s economically-critical marine life” is, at best, premature, and, at worst, simply untrue. While there is a shared concern regarding OAH in coastal waters, more work must be done to verify the results they cite and determine the path forward.

The Proposed Action Targets Less Than 6% of the Nitrogen Loadings to the Southern California Bight

To understand the practical ability of the SWRCB to manage ocean acidification through standard setting and regulatory action, it is important to highlight the relationship between the levels of nutrients, specifically nitrogen, occurring naturally in the ocean from processes such as natural upwelling, and the nutrients contributed from wastewater discharges. Nitrogen is often a limiting nutrient for phytoplankton blooms in the coastal ocean which, in excess, can lead to lower oxygen conditions as the bloom decays. As shown in Figure 1, the scientific team at SCCWRP has previously documented that wastewater effluent contributed less than 6% of the estimated nitrogen loading in the Southern California Bight. In other words, more than 90% of the nitrogen contributions were from natural oceanic upwelling, which is unrelated to activities of wastewater dischargers. Moreover, as the NGO Letter acknowledges, the vast majority of impacts to ocean organisms comes from increasing carbon dioxide (CO₂) in the atmosphere and the resulting impacts on ocean acidification. Simply put, reducing ocean acidification impacts that are primarily occurring due to atmospheric concentrations of CO₂ cannot be accomplished by setting water quality standards that only target ocean wastewater dischargers in the state. Furthermore, the largest wastewater agencies are actively operating, constructing, or designing the most economically feasible treatment upgrades in the next decade that will continue reducing nutrients, even prior to the adoption of new OAH water quality standards. Given these realities, it would be more beneficial to incentivize early actions such as these, rather than rushing to finalize new -- potentially draconian -- state regulations that may actually result in delays in reductions.

Finally, the NGO Letter demanded actions within this fiscal year, not only without consideration of the dire state budget fiscal projections for FY2025, but also without any consideration of the independent expert panel review that will be concluded this summer. This report will expressly address the degree of accuracy and certainty of the current model predictions, what investments are needed to improve the model, and which model scenarios are needed to determine whether additional reductions of nutrients from wastewater will avert adverse ocean water quality impacts. These are essential questions to answer before pursuing water quality regulations, as all parties involved in the review panel acknowledge. In addition, the SWRCB is already intimately involved in the project (serving as a member

Sources of Nitrogen Loadings to Southern California Bight
SCCWRP et al (2014)

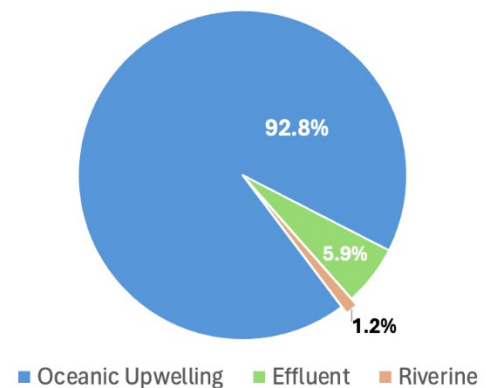


Figure 1: [SCCWRP et al 2014, Table 3](#)

of the PSC). Additionally, a recent update to the SWRCB's [Significant Statewide Policies calendar](#)⁵ indicates they are initiating the multi-year review and amendment of the Ocean Plan later this year in parallel with the scientific advancement of the modeling research. During the short interim, the SWRCB's [2024 staff report on impaired water bodies acknowledges and explains how ocean acidification and hypoxia \(OAH\) currently are being assessed across the state and the role of the ROMS-BEC model in the future](#)⁶.

The San Francisco Bay Region Serves as an Example of a Collaborative Model, and the Potential Costs/Benefits of Requiring Wide-Spread Upgrades at Wastewater Facilities

When considering regulatory tools and management options, it is important to consider lessons available from other similar efforts to maximize outcomes. [In 2022, the United States Environmental Protection Agency \(US EPA\) guided states to pursue watershed approaches for managing nutrients](#)⁷. The SF Bay Area has been a key forerunner in this regard, evaluating the impacts of nutrients on the San Francisco Bay. The Bay Area Clean Water Agencies (BACWA), an organization whose members include the 37 wastewater agencies permitted to discharge to the San Francisco Bay, have built and fostered partnerships to invest in science-based data-driven solutions to support innovation and implementation by successfully collaborating over a decade with regulators, environmental organizations, and researchers—including US EPA, Baykeeper, San Francisco Estuary Institute, and the San Francisco Regional Water Quality Control Board.

To comply with nutrient limits proposed in the new draft regional watershed permit issued by the San Francisco Regional Water Quality Control Board, [BACWA has estimated it will cost \\$11 billion dollars](#)⁸ to comply with the limits. Much of the Bay Area's progress and understanding around the issue of nutrients has been informed by [the 2018 assessment BACWA initiated in collaboration with the engineering firm HDR](#)^{9,10}, which served as the basis for developing a long-term watershed nutrient strategy, including estimating costs for achieving various levels of nutrient removal through various treatment approaches.

The Bay Area's estimates from 2018 can help policymakers better understand the prospective range of costs in southern California for implementing different management strategies. Notably, CASA and southern California coastal agencies are working with HDR, an engineering firm, to initiate a comparable evaluation in collaboration with the SWRCB and SCCWRP. The data gathered from this study will also be an essential resource to the SCCWRP scientific team to accurately quantify municipal wastewater nutrient inputs as they are updating the model and to understand cost estimates for further potential wastewater treatment facility upgrades to achieve nutrient reductions. These efforts are important so that policymakers can make informed decisions about the potential costs of the impending OAH and nutrient regulations and how these costs may impact the affordability of wastewater services for millions of ratepayers, particularly in light of other major cost drivers such as aging infrastructure, PFAS, and water recycling.

Technology-Based Limits Will Impose Massive Financial Burdens on Communities Without Corresponding Environmental Benefits

The NGO Letter recommends implementing technology-based standards in order to uniformly eliminate nutrients from wastewater effluent. However, requiring technology-based standards in this instance is a one-size-fits-all strategy that may not make sense, and could result in massive investments in infrastructure by local communities. A technology-based approach to regulatory limits for OAH would almost certainly require local wastewater agencies to steeply raise rates in order to achieve very low nutrient levels. This may turn out to be necessary in some places but not necessarily

⁵ https://www.waterboards.ca.gov/board_info/exec_dir/rpts/pol_per_view.html

⁶ https://www.waterboards.ca.gov/water_issues/programs/tmdl/2023_2024state_ir_reports/2024-integrated-report-final-staff-report.pdf#page=79

⁷ <https://www.epa.gov/system/files/documents/2022-04/accelerating-nutrient-reductions-4-2022.pdf>

⁸ <https://bacwa.org/wp-content/uploads/2024/03/BACWA-Algal-Blooms-Infographic-March-2024.pdf>

⁹ https://bacwa.org/wp-content/uploads/2018/06/BACWA_Final_Nutrient_Reduction_Report.pdf

¹⁰ https://bacwa.org/wp-content/uploads/2024/05/BACWA_CostEstimation_Memo_20240507.pdf

everywhere. The San Francisco Regional Water Quality Control Board has recognized that such an approach forces local wastewater agencies to shift resources away from other priorities. Moreover, mandating a uniform technology-based approach would preclude more creative and potentially more cost-effective approaches. This approach would also stall voluntary efforts underway within the region because mandated nutrient reductions would draw resources away from other important projects.

Additionally, the NGO Letter recommends requiring wastewater denitrification treatment as a prerequisite for a project to receive future bond funding. Denitrification is complex, costly, and energy-intensive per unit of flow treated. Many agencies are already struggling to pay for the large-scale water recycling projects under development, and adding an across-the-board denitrification requirement would significantly increase costs, increase carbon dioxide emissions, and may delay or stop progress on these important water recycling efforts. Moreover, until the science shows that the denitrification treatment option is the most appropriate approach, we strongly recommend against this requirement for project funding. This would deny local wastewater agencies a necessary source of infrastructure financing by shifting existing resources away from other priorities.

The OAH Independent Expert Panel Needs to Complete its Review so Policymakers and Stakeholders May Evaluate Alternative Options

In closing, we would like to take this opportunity to highlight the current collaborative approach underway in southern California as part of the NWRI independent expert review of the ROMS-BEC model. As this process concludes in the coming months, its recommendations should guide and inform the next steps. The independent expert review panel will be wrapping up its work this summer and is expected to advise the next phase of work that should be done. If the State is able to provide funding toward OAH-related items as requested in the NGO Letter, investment in improving the model to ensure that the SWRCB can use it to conduct their upcoming regulatory process would be appropriate and the most beneficial investment that the State could make. This investment would also result in enhancing the results from the funding (\$560,000) that [the OPC allocated in February to SCCWRP](#)¹¹ for the SCCWRP scientific team to do model scenarios with ROMS-BEC along the central coast region of California up to the Russian River north of San Francisco. Before those new model runs and analyses are performed, the existing research model needs to be improved and refined so that a statewide coastal nutrient strategy has the confidence of regulators and stakeholders alike and that the desired benefits will indeed be achieved.

¹¹ <https://opc.ca.gov/wp-content/uploads/2024/02/Item-5-OAH-Modeling-Central-Coast-508.pdf>

RECEIVED

MAY 03 2024

S.O.C.W.A.

TO: Synagro and EPIC Customers
RE: EPA Designation of PFAS as Hazardous Substance Under CERCLA
DATE: April 23, 2024

As you may be aware, on Friday, April 19, 2024, the U.S. Environmental Protection Agency (EPA), released a final rule designating two PFAS chemicals (PFOA and PFOS) as hazardous substances under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA).

The rule, and subsequent compliance obligations will become effective in June, 2024. At this time, Synagro and its affiliates are evaluating what impact, if any, this rule may have on the services we provide under our current contract. Synagro may request contractual modifications to our current agreement to comply with the new EPA standards and CERCLA requirements. In the event that our services can no longer be performed, require substantial changes or become subject to increased costs as a result of this rule, Synagro may be entitled to relief under our contract with you.

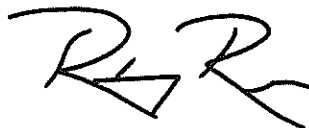
No relief is being sought by this notice. Any relief to which Synagro is entitled will be the subject of follow-on communications. However, to the extent you are aware that the material you provide to us contains detectable levels of PFOA or PFOS, it is imperative that you provide that information to us as soon as possible to avoid potential noncompliance.

Please feel free to reach out to us to discuss this matter further.

Sincerely,



Alan Slepian, Esq.
General Counsel
Synagro / EPIC
aslepian@synagro.com



Rodney G. Rose, Esq.
Senior Counsel
Synagro / EPIC
rrose@synagro.com