

METRO TAC AGENDA (Technical Advisory Committee to Metro JPA/Commission)

TO: MetroTAC Representatives

CC: Metro JPA Directors (for information only)

DATE: August 21, 2024

TIME: 11:00 a.m. to 1:30 p.m.

LOCATION: Metro TAC is holding its August meeting via Zoom. An e-mail

containing information on how to participate in the meeting will be distributed to the Metro TAC members e-mail list consisting of the appointed Primary and Alternate for the Participating Agency and approved San Diego City Staff. Please remember, MetroTAC is NOT a

public meeting so please do not distribute the meeting link.

1. <u>ACTION</u>: Review and Approve MetroTAC Action Minutes for the Meeting of July 17, 2024 (Attachment)

- 2. <u>ACTION</u>: Consideration and Possible Action to Recommend to the Metro Wastewater JPA Approval of an Ocean Monitoring Boat by the City of San Diego (Ryan Kempster) (Attachment)
- 3. <u>ACTION:</u> Consideration and Possible Action to Recommend to the Metro Wastewater JPA Approval of the Pure Water Program Amendment No. 2 to the Agreement with CH2M Hill Engineers, Inc. for Engineering Services for the Design of the North City Metropolitan Biosolids Center (MBC) Improvements Project (Akram Bassyouni/Reyhaneh Martin) (Attachment)
- 4. **PRESENTATION**: SCCWRP Presentation on San Diego River Investigative Order Study Findings (Ken Schiff) (**Attachment**)
- 5. **DISCUSSION**: Discussion Item: Phase 2 Planning (Dexter Wilson) (Attachment)
- 6. <u>UPDATE</u>: FY 2024 2nd Quarter Metro Capital Improvements and Funding Sources (Melissa Faber) (Attachment)

- 7. **UPDATE**: Metro Wastewater (General) (Standing Item) (Lisa Celeya)
- 8. **UPDATE:** Pure Water Program Update (Standing Item) (Amy Dorman/Doug Owen)
- 9. **UPDATE**: Metro Wastewater Financial (Standing Item) (Adam Jones)
- 10. **UPDATE**: JPA Executive Director (Standing Item) (Karyn Keze) (Attachment)
- 11. <u>UPDATE</u>: Metro Commission/JPA Board Meeting Recap (Standing Item) (Alisa Nichols)
- 12. Review of Items to be Brought Forward to the Regular Metro Commission/Metro JPA Meeting (October 3, 2024)
- 13. Other Business of Metro TAC
- 14. Adjournment (To the next Regular Meeting **September 18, 2024**)

Metro TAC 2024 Meeting Schedule

January 17	May 15	September 18
February 21	June 19	October 16
March 20	July 17	November 20
April 17	August 21	December 18



MetroTAC

(Technical Advisory Committee to Metro JPA/Commission)

ACTION MINUTES

DATE OF MEETING: July 17, 2024

TIME: 11:00 AM

LOCATION: **ZOOM Electronic Meeting**

MEETING ATTENDANCE:

Members Present

Michael Benoza, Chula Vista Leon Firsht, Coronado (absent Joe Bride, Del Mar (absent) Blake Behringer, El Caion Yazmin Arellano, El Cajon Eric Minicilli, Imperial Beach (remote)

Joe Kuhn, La Mesa (remote)

Izzy Murguia, Lemon Grove (remote)

Carmen Kasner, National City

Beth Gentry, Otay WD

Peejay Tubongbanua, Padre Dam MWD

Paul Clarke, Padre DAM MWD

Alisa Nichols, Poway

Sumedh Bahl, County of San Diego

San Diego City Staff/Consultants

Lisa Celaya, City of San Diego (remote) Adam Jones, City of San Diego Doug Campbell, City of San Diego Andrea Demich, City of San Diego Craig Boyd, City of San Diego David Bryant, City of San Diego Tim Carroll, City of San Diego Nicole Roesler, City of San Diego Amy Dorman, City of San Diego Edger Patino, City of San Diego

San Diego Consultants

Doug Owen, Stantec Ben Stewart, Stantec

JPA Staff/Consultants Present

Karyn Keze, Executive Director, the Keze Group (remote) Dexter Wilson, Dexter Wilson Engineering Kathleen Heitt, Dexter Wilson Engineering Lee Ann Jones-Santos, Metro JPA Treasurer (remote) Lori Anne Peoples, Metro JPA Board Secretary

1. ACTION: Review and Approve MetroTAC Action Minutes for the Meeting of May 15, **2024**

ACTION: Motion by Carmen Kasner, seconded by Peejay Tubongbauna, the minutes be approved. Motion carried unanimously.

2. ACTION: Consideration and Possible Action to Recommend to the Metro JPA/Commission Approval of a Fifth Amendment to the As-Needed Engineering Technical Services Consultant Agreement with Stantec, Inc. for the Pure Water Program (H156303)

Andrea Demich, City of San Diego, provided a brief verbal overview of her PowerPoint presentation. Adam Jones, City of San Diego elaborated on her report that the City uses "Best Cost Allocation Principles" for a clear definition of who is benefitting. Additionally, all costs are caught in the audit and reconciliation based on all final cost allocations.

Dexter Wilson commended STANTEC for their diligence throughout the Pure Water processes. He then expressed concern that the conservative amounts might not be enough for the regulatory ramp up. Andrea stated that the amounts can be moved between tasks and a buffer had also been included and should be sufficient.

Doug Campbell, City of San Diego, noted that they hired an additional contractor "Tressel" to help with the regulatory overview and costs associated therewith.

Lisa Celaya, City of San Diego, stated that they City has also hired outside counsel to assist in any potential claims.

ACTION: Motion by Sumedh Bahl, seconded by Carmen Kasner, to recommend approval to the Metro JPA/Commission. Motion carried unanimously.

3. ACTION: Consideration and Possible Action to Recommend to the Metro Wastewater JPA Approval of the Second Amendment to the Contract with Patriot Environmental Services for Removal and Transport of Grit, Sludge, Scum, Vivianite, and Stormwater

Craig Boyd and David Bryant, City of San Diego, provided a brief overview of their PowerPoint presentation. Also present was Tim Carroll, City of San Diego's new Wastewater Chief Plant Operator who responded to questions of the PAs.

ACTION: Motion by Izzy Murguia, second by Sumedh Bahl, to recommend approval to the Metro Wastewater JPA. Motion carried unanimously.

4. ACTION: Consideration and Possible Action to Recommend to the Metro Wastewater JPA Approval of the Third Amendment to the Contract with Veolia WTS Services USA, Inc. to Provide Electrodialysis Reversal System Maintenance

Craig Boyd, David Bryant and Tim Carroll, City of San Diego, provided a brief overview of their PowerPoint Presentation

ACTION: Motion by Carmen Kasner, second by Izzy Murguia, to recommend approval to the Metro Wastewater JPA. Motion carried unanimously.

5. <u>DISCUSSION</u>: <u>EXHIBIT B, POOL CAPACITY, AND AUTOMATIC TRANSFERS</u>

Dexter Wilson gave an overview of his PowerPoint presentation, highlighting that the current Exhibit B in the Amended & Restated Agreement (ARA) dates back to the 1990s and was not updated during the most recent negotiations. This table has technically only been used to allocate the original 1990s debt service for Pt. Loma as a fixed charge (the ECC) when the original Regional Agreement was signed, and as a benchmark for each agency's contract capacity.

6. <u>UPDATE</u>: <u>Metro Wastewater</u> (General) (Standing Item)

Doug Campbell, City of San Diego provided the report on behalf of Lisa Celaya who had to leave the meeting.

- Pump 5 at PS2 is back online after many years of inactivity.
- The emergency declaration to repair PS2 is progressing.
- The conversion to 4-stage Bardenpho secondary treatment at NCRP will begin later this
 year, following the conversion of existing secondary settling basins to the second stage
 bioreactor.
- The CIP for PS1 has commenced, and the design/build contract for PS1 is currently being advertised with responses under review.
- The condition assessment at PLWTP identified several future CIPs, with the first being repairs to the influent channel. The BCE for this project has been completed.

7. <u>UPDATE</u>: <u>Pure Water Program Update</u> (Standing Item)

Doug Owen of Stantec provided a brief verbal update of his PowerPoint presentation for the quarterly contractors' report, included in the agenda package. He noted that the year-end would be in September and that they were close to 60% complete.

8. Metro Wastewater Financial (Standing Item)

Adam Jones had to leave the meeting, so this item was not heard.

9. JPA Executive Director (Standing Item)

Executive Director Keze noted that her written report was included in the agenda package. She thanked all the PAs for getting Amendment 4 processed. Then she welcomed Lee Ann Jones-Santos as our new Treasurer under the contract with Rodney Greek, CPA. Lastly, Karyn noted that all major JPA consulting contracts had come in under budget for the end of the fiscal year and that next week would be the first I&I meeting on the 25th at 9 am via ZOOM and she hoped that everyone would be involved as this will be a very important project.

Lee Ann thanked everyone for their support and stated that she had emailed the FY 2025 invoices to all members. Additionally, she noted that all remittances should be sent to the JPA P.O. Box in National City from here on.

10. <u>Metro Commission/JPA Board Meeting Recap</u> (Standing Item)

MetroTAC Chair Alisa Nichols stated that all items forwarded to the JPA from TAC had all been approved.

11. Review of Items to be Brought Forward to the Regular Metro Commission/Metro JPA Meeting (August 1, 2024)

MetroTAC Chair Nichols noted that action items 2, 3, 4, and 5 would be moving forward to the JPA in August.

12. Other Business of Metro TAC

None.

13. Adjournment (To the next Regular MetroTAC Meeting August 21, 2024)

MetroTAC Chair Alisa Nichols adjourned the meeting at 1:40 p.m.

Public Utilities Department

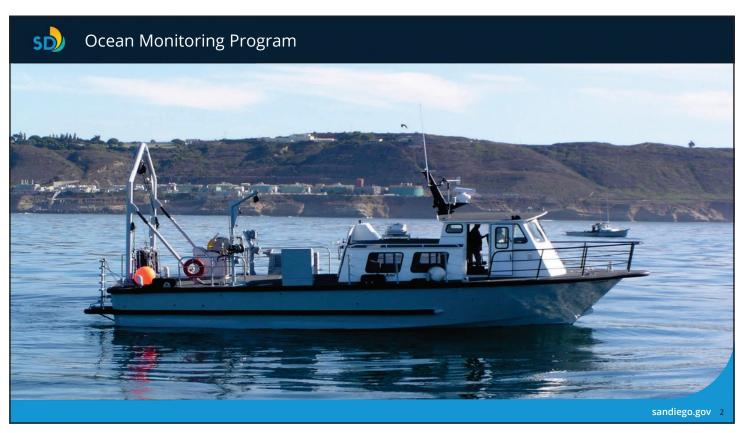
Replacement Sampling Vessel for the City's Ocean Monitoring Program

Metro TAC Aug 21, 2024

Ryan Kempster, Ph.D. (Ocean Monitoring Program Manager) Adriano Feit (Environmental Scientist III and Contract Coordinator) Violet Renick (Assistant Deputy Director)



1





M/V Oceanus

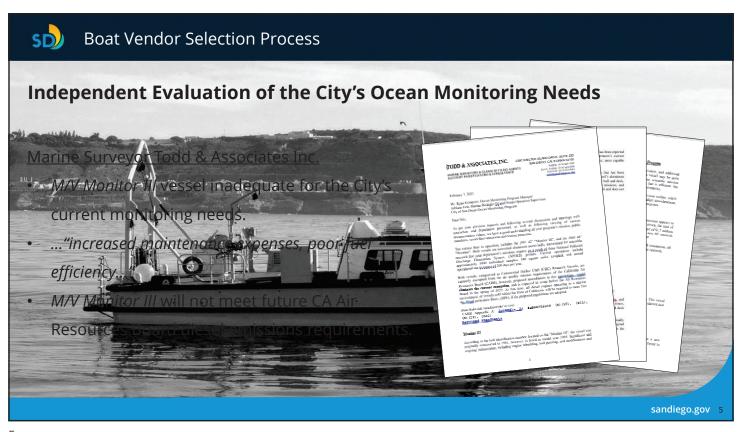
In service since 2004

Alft length

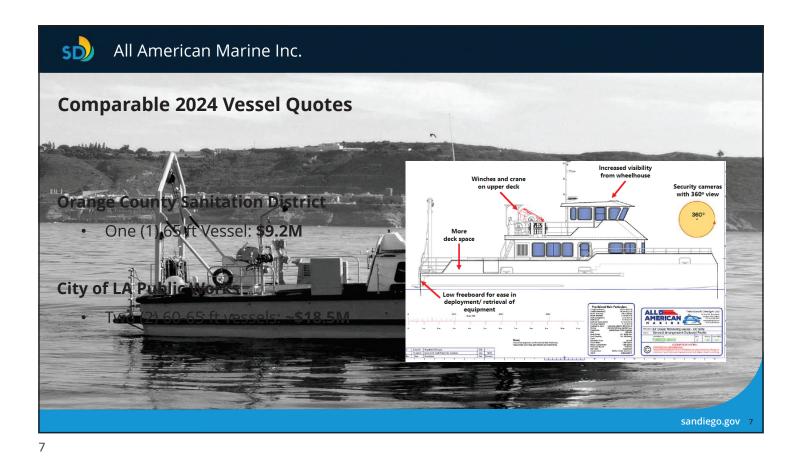
In service since 1984

Alft length

sandlego,gov 4





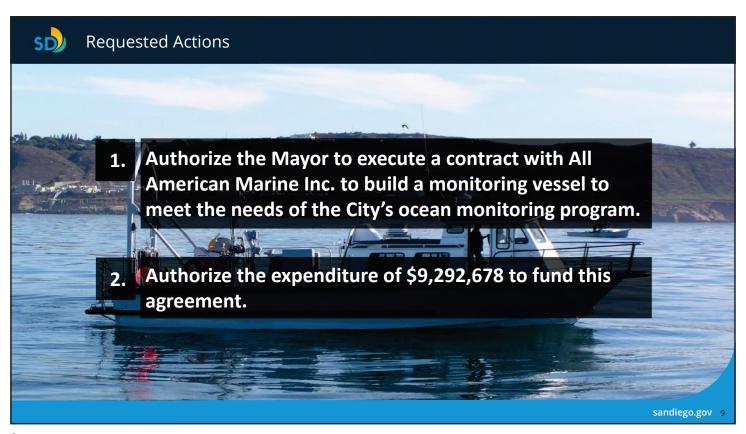


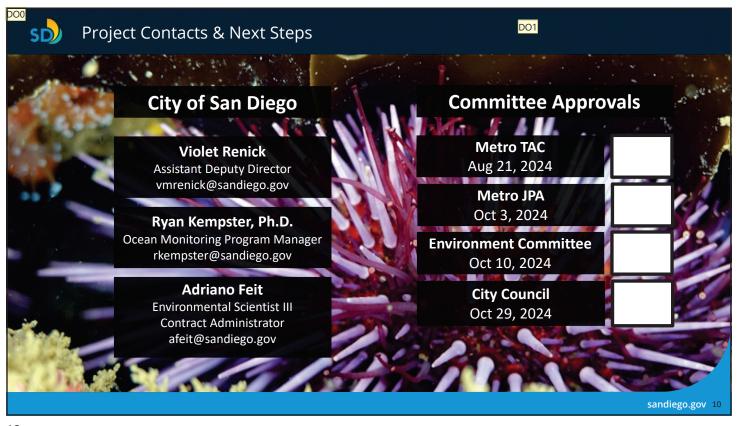
Contract Cost

73' Vessel w/Tier 4 compliant engines = \$9,292,678

Payment Schedule:
FY25: 7.5% upon contract execution
27.5% staged with completion targets
FY26: 45% staged with completion targets
10% upon launch of vessel
10% upon delivery

Metro JPA contribution (33%): Total = \$3,066,584





	METRO JPA/TAC Staff Report Date: 8/21/2024								
Project Title:									
Contract with All American Marine Inc. to Build a Replacement Ocean Monitoring Vessel.									
Presenter(s) Name(s):	Presenter(s) Name(s):								
Ryan Kempster, Adriano Feit,	Violet Renick								
Presenter(s) Title(s):									
Senior Environmental Scientis III (Contract Coordinator), Ass	et (Ocean Monitoring Program Manager), Environmental Scientist sistant Deputy Director								
Requested Action:									
build a replacement ocean mo	rization to spend \$9,292,678.10 over a two year contract period to onitoring vessel.								
Decempos detions									
Recommendations:									
Approve the Metro expenditur	e request and forward to the Metro JPA Commission.								
Metro TAC:	To be submitted for consideration.								
IROC:	N/A								
Prior Actions: (Committee/Commission, Date, Result)	N/A								
Fiscal Impact:									
Is this projected budgeted?	Yes <u>X</u> No								
Cost breakdown between Metro & Muni:	100% Metro								
Fiscal impact to the Metro	The total fiscal impact of this agreement is \$9,292,678.10 (over								
JPA: 2 years);									
• FY2025 = \$3,252,437.34 [35% of total cost]									
	• FY2026 = \$6,040,240.77 [65% of total cost]								
	33% of Metro costs is \$3,066,584								

		equ	uipment budge	et to support the purchase.							
C	apital Improvement Program:										
	New Project?	Yes X	No	N/A							
	Existing Project?	Yes	No <u>X</u>	Upgrade/addition	Change						

The Department has anticipated the need for this purchase over many fiscal years and expects that it will have sufficient funding through its ongoing operating budget, including its capital

Previous TAC/JPA Action:

N/A

Additional/Future Action:

N/A

City Council Action:

Expect to be heard by Environment Committee on October 10, 2024 and City Council on October 29, 2024.

Background: Provide background information on the need for the project

This request is to authorize the execution of a Contract with All American Marine Inc. to build a new ocean monitoring vessel to replace the City's 40-year-old monitoring vessel, the *M/V Monitor III*. A larger, modern, and reliable vessel will ensure that the City can continue to meet ocean monitoring regulatory requirements associated with its National Pollutant Discharge Elimination System (NPDES) permits as well as new California air quality emissions standards. The contract value is not to exceed \$9,292,678.10 over a two-year period.

Discussion: Provide information on decisions made to advance the project

The City of San Diego Public Utilities Department (PUD) requests approval of a Contract with All American Marine, Inc. to provide the City with a new ocean monitoring vessel. The requested vessel is necessary to replace a monitoring vessel that has exceeded its planned working life to ensure we continue to meet the needs of the Ocean Monitoring Program required by the City of San Diego's (City) wastewater discharge permits.

The City's Ocean Monitoring Program evaluates the environmental impacts of treated wastewater discharged from the Point Loma and the South Bay Ocean Outfalls. Covering an expansive area of more than 340 square miles from San Diego to northern Baja California, Mexico, and extending from the coastline to 10 miles offshore, the program collects data on water quality and the health of marine organisms. These data are crucial for analyzing the impact of wastewater discharges on marine ecosystems and to determine compliance with the NPDES permit requirements for the Point Loma Wastewater Treatment Plant and South Bay Water Reclamation Plant. In addition, the City also provides contracted ocean monitoring services to the South Bay International Wastewater Treatment Plant, which is owned and operated by the U.S. Section of the International Boundary and Water Commission (USIBWC).

For four decades, the City's 42' boat, the *M/V Monitor III* has served as the primary monitoring vessel for the Ocean Monitoring Program. Prior to pursuing a contract for a replacement vessel, an independent assessment was conducted by the Marine Surveyors Todd and Associates Inc. to determine needs for the City's monitoring vessel. Their assessment recommended that a new vessel was the most cost-effective option due to reduced maintenance and increased fuel efficiencies. In addition, a new vessel would comply with the 2025 California Air Resource Board (CARB) requirements for fuel efficiency and air emissions.

In September 2023, PUD began the process of seeking competitive proposals for a two-year contract for boat design and building services. All American Marine (AAM) Inc. was the only

company that submitted a cost proposal. A selection committee in compliance with City guidelines was convened. AAM was interviewed and selected as the service provider for the contract. All American Marine, Inc. is an internationally recognized and award-winning boat builder with over 30 years of experience in the design and construction of ocean vessels. They specialize in 60' to 135' vessels for the passenger, patrol boat, workboat, and research and survey industries. Their success is evident by the number State and Federal agencies using their services including the National Oceanic and Atmospheric Administration (NOAA), University of Hawai'i, Humboldt Polytechnic State University, Duke University, Texas Parks and Wildlife Department, LA Port Police, US Army Corps of Engineers, and other wastewater agencies with ocean monitoring requirements in Southern California.

Due to the raw material costs involved in building the City's ocean monitoring vessel, All American Marine Inc. requires a series of payments to be made as they meet key production milestone before the vessel is in the City's possession. This method of payment is an industry standard due to the custom outfitting requirements and long purchasing lead times putting a large amount of risk on the vendor, which is partially mitigated by these payment terms. These terms do deviate from standard city contract terms of withholding payment until delivery but are similar to other large and expensive transportation equipment purchased by the City, such as the City's fire helicopters. Public Utilities has accounted for these payments terms in our capital asset allocation for our rate development and does not expect this purchase to materially impact sewer cash flows or rates. This contract has an amount not to exceed \$9,292,678.10 with a maximum duration of two years.

Bid Results: If bidding was done provide bidding format and results

A Request for Proposals (RFP) was released in September 2023. All American Marine Inc. (AAM) was the only vendor to submit a proposal by the November 2023 closing date, after which a selection committee in compliance with City guidelines was convened. AAM was interviewed and selected as the service provider for the contract. Contract negotiations continued in early 2024 and AAM provided a quote in May 2024. At that time, due to significantly increasing ship building and material costs, AAM could only provide a 60-day price guarantee. Upon request, AAM provided the City with a new quote in July 2024 that remains valid to December 31, 2024. This updated quote incorporates forecasted increases in materials to allow the City contract approval process to be completed with the most accurate pricing for the duration of the boat construction process.

Revised: 20140409

Public Utilities Department

Amendment #2 to the Agreement with CH2M Hill for Design Engineering Services

Metro TAC August 21, 2024



1



Public Utilities Department

Background

- Pure Water contract with CH2M Hill for professional engineering services to design Metropolitan Biosolids Center Improvements
- Current Contract Duration: 6/2017 -6/2027
- Current Funding: \$6,297,621 authorized

Public Utilities Department

Pure Water Phase 1 Map



sandiego.gov

3



Public Utilities Department

Amendment #1 Budget Impacts

- Obsolete Equipment
 - Additional design/design changes requiring substantial effort from CH2M Hill (e.g., biogas heat exchangers, grit separator control panels)
- Facility Commissioning Planning
 - Requiring workshops and design efforts from CH2M Hill to reevaluate and plan facility commissioning efforts with lower flow than anticipated during design

Amendment #1 Budget Impacts

- Distributed Control System (DCS) Deficiencies
 - Additional efforts to rectify DCS issues in support of unit process automation and equipment startup necessary for the functionality & completion of the project
- RFIs, Submittals, Meetings
 - All exceeded the budgeted amounts of Amendment 1

sandiego.gov

5



Public Utilities Department

Requested Action for Amendment #2

• Add \$3,157,130 to the contract:

Original authorization: \$5,051,090
Amendment 1 authorization: \$1,246,271
Requested amendment: \$3,157,130
Approximate cost to Metro TAC/JPA: \$1,041,853
New total amount: \$9,454,491

Scope for Amendment #2

- Provide the necessary funding for all construction related support services
 - · Additional review of submittals and RFI
 - Additional construction meetings
 - Additional facility commissioning support
 - Additional as-needed technical assistance and construction staffing support

sandiego.gov

/



Public Utilities Department

Questions?



METRO JPA/TAC Staff Report Date: 8/21/2024

Project Title: Pure Water Program – Amendment No. 2 to the Agreement with CH2M Hill Engineers, Inc. for Engineering Services for the Design of the North City Metropolitan Biosolids Center (MBC) Improvements Project. Presenter(s) Name: Akram Bassyouni/Reyhaneh Martin Presenter(s) Title:

Requested Action:

Deputy Director/Senior Civil Engineer

Approve Amendment No. 2 to the design engineering services agreement between the City of San Diego and CH2M Hill Engineers, Inc. for the North City Metropolitan Biosolids Center (MBC) Improvements Project and forward item to Metro JPA/ Metro Commission for approval. Amendment No. 2 is for a total not to exceed amount of \$3,157,130, which will be utilized for construction support services.

Recommendations:

Approve Amendment No. 2 to the design agreement

	Metro TAC:	Approve the subject item and forward to Metro JPA/ Metro Commission for approval
	IROC:	N/A
	Prior Actions: (Committee/Commission, Date, Result)	N/A
F	iscal Impact:	
	Is this projected budgeted?	Yes _X No
	Cost breakdown between	The funding will be allocated as follows: Wastewater: 100%
	Metro & Muni:	(\$3,157,130) (Metro: 100%, Muni: 0%).
	Fiscal impact to the Metro JPA:	33% of Metro cost (approximately \$1,041,852.90)
С	apital Improvement Progra	m:
	New Project? Yes	No <u>X</u> N/A
	Existing Project? Yes X	No Upgrade/addition Change
	revious TAC/JPA Action: one	
Δ	dditional/Future Action:	

Additional/Future Action

Present item to Metro JPA/ Metro Commission for approval in August 2024

City Council Action:

City Council approval is anticipated in September 2024

Background: Provide background information on the need for the project

San Diego's imported water supplies face increasing stresses from a variety of sources. As a result, the region's supplies are becoming less reliable and more expensive. These circumstances, and the threat of limitation on San Diego's water supplies, have intensified the need for new sources of water. Pure Water San Diego is the City of San Diego's 20-year program to provide a safe, secure and sustainable

local drinking water supply for San Diego. Recycled water will be turned into drinkable water through the use of water purification technology. Further, Pure Water's system-wide reuse will significantly reduce flows to the Point Loma Wastewater Treatment Plant and will make San Diego more water independent. On April 29, 2014, City Council adopted Resolution Number R-308906 supporting the Pure Water Program. Pure Water implementation includes design and construction of new treatment and conveyance facilities. To ensure quality design and construction of future Pure Water facilities, the Public Utilities Department has elected to obtain professional engineering and technical services for completing the design work.

Discussion: Provide information on decisions made to advance the project

One of the current projects that is being executed under the Pure Water Program is the upgrades to the existing North City Metropolitan Biosolids Center (MBC). MBC receives solids that are removed at both the Point Loma Wastewater Treatment Plant and North City Water Reclamation Plant (NCWRP). MBC thickens and dewaters the solids so they can be transported for disposal. As a part of the Pure Water Program, NCWRP is being expanded to produce sufficient recycled water to meet customer demands and to provide the feedwater to the new North City Pure Water Facility where it will undergo additional advanced treatment to produce purified water. The expanded NCWRP will generate more solids for MBC to process. In turn, the MBC upgrades are needed to ensure it has the capacity to handle the increased load.

In May 2017, the City awarded an agreement to CH2M Hill Engineers, Inc. to perform design and construction support services for the MBC Improvements project. The original Agreement is on file in the Office of the City Clerk as Document No. R-311146. The Agreement was issued for an amount not to exceed \$5,051,090 and for a duration of five years, expiring on June 2, 2022. Design and bid services are complete. Construction and construction support services at MBC began in September 2021. Note, the construction contract was awarded to PCL Construction, Inc. For \$40,086,690. As of the quarter ending March 31, 2024, \$2.6 million has been incurred in change orders, which brings the construction contract amount to \$42,673,159.

In June 2022, nine months after construction began, City Council approved Amendment 1 (O-21465) for an additional not-to-exceed amount of \$1,246,271 to continue with all related construction support services including additional review of submittals and shop drawings, additional responses to RFI's, record drawings, facility commissioning support, geotechnical and structural observations, preparation of operation and maintenance manuals, and as-needed technical support. Amendment 1 also extended the contract term for an additional five years so that construction support could continue until the end of the construction contract. Thus, the total contract amount was increased from \$5,051,090 to \$6,297,361. To date, approximately \$6,179,000 of the existing total contract amount of \$6,297,361 (or 98%) has been spent.

The original scope of work for the MBC design improvements primarily focused on ensuring the plant had sufficient capacity to handle the NCWRP's increased solids load. The largest and most essential treatment equipment were assessed for replacement and included the centrifuges (for solids thickening), various pumps, and gas compressors. It was envisioned that new equipment would be installed in their place and connected to existing mechanical, instrumentation, and control systems. As the upgrades proceeded since Amendment 1 was approved, it became evident that some of the existing ancillary equipment at MBC that were not expected to be replaced have in fact reached the end of their useful lives. These include chemical piping, electrical panels, instrumentation, and a pump motor. The designer has had to assess their condition and functionality to determine if they can operate effectively with the MBC upgrades already in construction. Some of these items have been added to the construction scope, thus requiring additional design/design modifications to ensure the project intent is met and in close coordination with the construction team & the contractor to avoid or minimize impacts to the project schedule.

The Morena Pump Station has been significantly delayed due to a dewatering change condition. To minimize the impact on the overall Phase 1 schedule to start producing purified water, the partial Phase 1 system that includes MBC, NCWRP, the North City Pure Water Facility, and the North City Pure Water Pipeline will be commissioned prior to Morena Pump Station's completion. However, without the wastewater from Morena, none of the facilities in the partial system will have their full design flows during start-up and commissioning. This will increase the complexity of the already complex commissioning exercise, but it can be managed. Additional designer effort will be required to reconfigure current commissioning plans to ensure equipment performance can still be verified without full facility flow.

Amendment 2 will add \$3,157,130 and increase the agreement amount to \$9,454,491. A portion of the amount is for additional services, \$500,000. And per the contract, CH2M Hill can request up to a 3% increase in hourly rates, annually. All requests are subject to City approval. The Amendment 2 amount includes an 8% hourly rate increase, the first such increase to be granted since the contract was awarded seven years ago. This increase accounts for \$194,000 of the \$3,157,130 proposed in this amendment.

Bid Results: If bidding was done provide bidding format and results

N/A

San Diego River Investigative Order:

Quantifying Sources of Human Fecal Pollution in the San Diego River Watershed

Ken Schiff
Southern California Coastal Water Research Project

www.SCCWRP.org

Metro TAC

August 21, 2024

1

Background and Rational for the IO

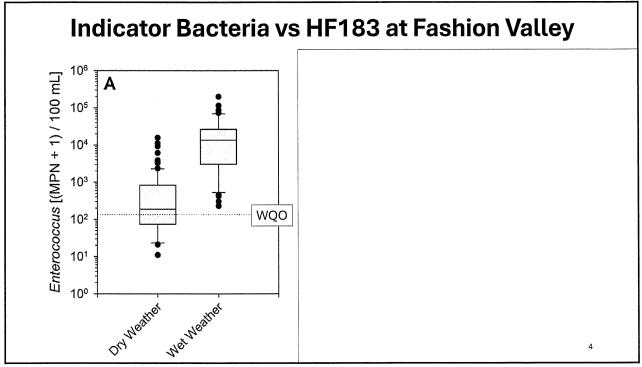
- · Fecal indicator bacteria frequently exceed water quality objectives
- Epidemiology study quantified an increased risk of illness in surfers during wet weather compared to not entering the ocean
- Quantified HF183 and human pathogens consistently in wet weather runoff from the SD River discharge to the ocean
 - Upstream sampling found HF183 in every site from every storm
- Cost Benefit Study identified that controlling human fecal sources was the most efficient way to reduce public health risk

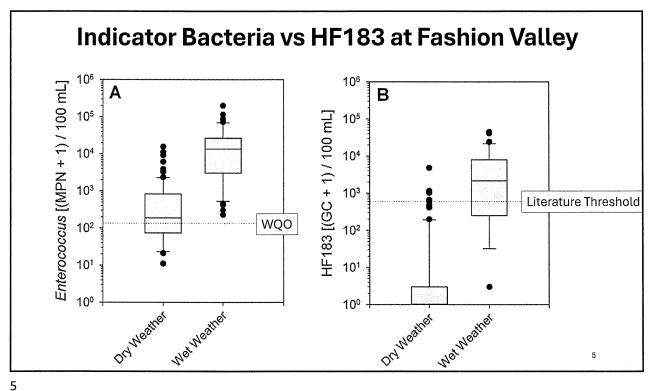
What Is HF183?

- HF183 is a gene sequence in the gut bacteria Bacteroides
 - Measure using DNA, not cultures like indicator bacteria
- HF183 is found almost exclusively in humans
 - Indicator bacteria can be shed by any warm-blooded organism
- Does not survive long outside of the human body
 - Indicator bacteria can survive long periods and even regrow in the environment
- Been in use for almost two decades
 - In the State's Microbial Source Tracking Manual

3

3





Study Questions from Investigative Order

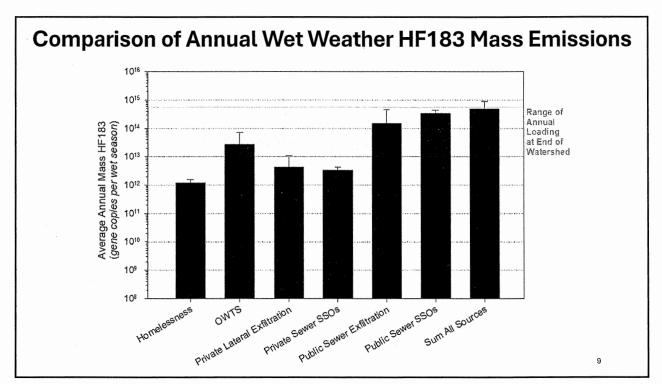
- 1. What is the watershed load of fecal pollution from each human source in the SDR watershed?
 - Illicit connections and Illegal discharges (IC/ID)
 - Public or Private Sanitary Sewer Overflows (SSOs)
 - Public or Private Sewer Exfiltration
 - Onsite Wastewater Treatment Systems (OWTS)
 - Direct or Indirect deposition from People Experiencing Homelessness
- 2. How does the watershed load of fecal pollution compare among the different human fecal sources in the SDR watershed?
 - What proportion of the total human fecal load at the end of the watershed

The Study Took 5 Years to Complete

- Quantified each source independently
 - Since this type of study had never done before, essentially 5+ different research projects
- HF183 was the "currency" for human fecal loading
- Focused on wet weather
- Estimated average annual human fecal loads
 - · Not designed as a "gotcha" source tracking study
- Separate study to measure HF183 loading at Fashion Valley

7

Comparison of Annual Wet Weather HF183 Mass Emissions 1016 10¹⁵ Average Annual Mass HF183 (gene copies per wet season) 1014 1013 10^{12} 1011 10¹⁰ 10^{9} Private Lateral Expiration 108 Private Sever 5505 Public Sewer Exfiltration Public Sewer 5505 Sum All Sources Homelessness



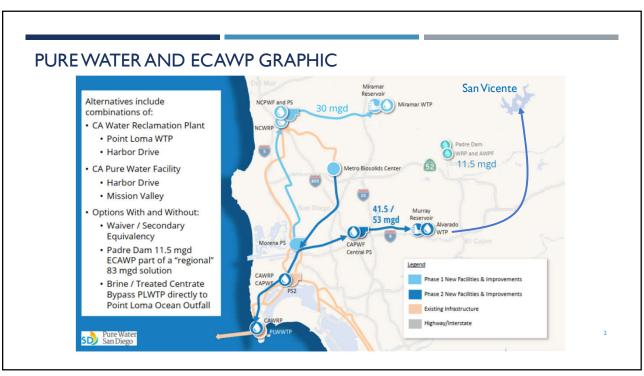
9

Where We're At Now

- Final Technical Report submitted to RWQCB
 - https://ftp.sccwrp.org/pub/download/DOCUMENTS/TechnicalReports/1380_Fec alPollutionSanDiegoRiver.pdf
- Final Management Report also submitted to RWQCB
 - SCCWRP did not participate in this document
- RWQCB has submitted a formal request for more information for both the Technical Report and the Management Report
- Presentation scheduled for the November RWQCB meeting
 - · Researcher conferences

LETTER TO THE CITY OF SAN DIEGO FOR SCOPE OF WORK ON STANTEC STUDY ON PHASE 2 PURE WATER

1





City of San Diego, Coastkeeper, Surfrider, Coastal Environmental Rights Foundation, and Audubon Society

COOPERATIVE AGREEMENT



83 MGD of Pure Water production by 2035



Support of OPRA II Federal Legislation so Point Loma can remain at Advanced Primary

3

PURPOSE

- Provide a JPA position on Pure Water Phase
 and ask for it to be studied
- 2. Reduce costs
- 3. Reduce size of Central Area WTP and PWF
- 4. Evaluate capacity reduction at Point Loma
 - a. Cost savings
 - b. Triggers
- 5. Evaluate full Point Loma secondary options

4

GOALS



Include ECAWP in 83 MGD requirement, so City of San Diego only needs to produce 71.5 MGD of Pure Water.

2

Expand production of Pure Water Phase I facilities to greatest extent practical. Goal 35 MGD from current design of 30 MGD.

3

Reduce production goal of CAPWF from original amount of 53 mgd to 36.5 MGD.

5

5

WHY IS STUDY NEEDED

- I. Conservation has decreased
 - a. Water demand on SDCWA
 - b. Sewage flow and further decreases are expected
- 2. Currently, available water supplies exceed demand and may continue to do so in the future.
- Water agencies are faced with large rate increases to fund existing costs especially with reduced revenue associated with reduced demand, so a cost sensitive approach to Phase 2 Pure Water is needed.
- 4. ECAWP is under construction and should be considered as a part of 83 mgd requirement.
- 5. It is the appropriate time to validate Pure Water Phase 2 program

6



Allowable under Cooperative Agreement

INCLUSION OF ECAWP IN 83 MGD



Project is under construction



Would reduce size of secondary sewage treatment plant and advanced water purification plant for Phase 2

7

MAXIMIZE PRODUCTION OF PURE WATER PHASE I FACILITIES

- Current production goal of Pure Water Phase I Facilities toward 83 mgd requirement is 30 mgd
- Reliable design of facilities is 32 mgd which was only planned for winter because summer use of purple pipe recycled water was so high it limited Pure Water production to about 28 mgd, so 32 mgd was needed in winter to have a yearly production of 30 mgd
- Current design of RO system has an 85% product stream (15% reject)

8

MAXIMIZE PRODUCTION OF PURE WATER PHASE I FACILITIES

The Delivery of Pure Water Phase I could be increased to 35 mgd if:

- It was re-permitted as a direct potable project similar to Phase 2
- Pure Water production was prioritized over increased purple pipe reclamation
- The reject stream was reduced to 7.5%

These changes could be made with no additional capital cost to sewer and minimal cost to water. An additional 5 mgd of Pure Water would be available.

9

REDUCE THE SIZE OF PURE WATER PHASE 2 FACILITIES

	Current Planning	Proposed
NCPWF	30 mgd	35 mgd
CAPWF	53 mgd	36.5 mgd
ECAWP	0 mgd	II.5 mgd
Total	83 mgd	83 mgd

ADVANTAGE OF 36.5 MGD PURE WATER PHASE 2

Reduced capital costs

Proposed treatment plant sites will not be spaced constrained

Murray Reservoir will be easier to manage

Pipe to San Vicente should not be needed

- 1

11

POINT LOMA

- Develop cost saving for I&I reductions of 50 mgd and I00 mgd
- Develop cost estimates for conversion to full secondary dry weather with provisions for advanced primary treatment for wet weather:
 - After Phase I Pure Water
 - After Phase 2 Pure Water

12



METRO WASTEWATER JPA



P. O. Box 1072, National City, CA 91950 619-548.2934

Jerry Jones, Chair

August xx, 2024

City of San Diego Public Utilities Department 9192 Topaz Way San Diego, CA 92123

Attention: Juan Guerreiro, Director of Public Utilities

As the City of San Diego (City) begins Stantec's review and verification of the implementation plan for the Pure Water Phase 2 Program, we would like to present to the City several alternatives and ideas we would like to be included in the review. We recognize that the City will implement the program that it deems best, but we would like to ensure a comprehensive range of alternatives are considered. Additionally, we acknowledge that there are agreements and NPDES conditions that require the Metro region to produce 83 MGD of potable reuse.

We agree with the City that Stantec should review and verify the current and future sewer flow and water demand for implementation of the Phase 2 Pure Water program. Some major changes related to water supply and cost have happened over the last 10 years and these may impact the best approach to implement Phase 2 Pure Water. These changes include:

- A current abundance of water supply in Southern California
- An extremely successful water conservation program that has greatly reduced water sales in San Diego County despite continued population growth
- Reduced sewage flows due to conservation and the likelihood of even greater reductions in sewage flows
- A fixed water revenue requirement due to the cost of ensuring water supply and maintaining infrastructure, which, due to reduced water sales, is putting an upward pressure on water retail rates.
- Needed expenditures to maintain existing water and sewer infrastructure
- The possibility of reduced sewage flows below needs to feed some Pure Water Phase 2 alternatives

With these concerns in mind, we feel alternatives for Phase 2 Pure Water that reduce capital and operations costs to the maximum extent possible should be considered. These alternatives should include maximizing water production beyond 32 MGD at the North City Pure Water Facility (NCPWF), utilizing East County Advanced Water Purification Facility (ECWPF) production of potable water to meet the 83 MGD regional goal, reducing

The Joint Powers Authority Proactively Addressing Regional Wastewater Issues

Pure Water Phase 2 Evaluation Alternative Request August xx, 2024 Page 2

the proposed sizing of the Central Area Pure Water Facility (CAPWF) to 37 MGD or below, eliminating the pipeline to San Vicente, and retaining the flexibility to expand the Pure Water production in the future beyond 83 MGD, if warranted.

The following provides a more detailed description of alternatives we would like Stantec to review:

- 1. Optimize NCPWF and reduce CAPWF.
 - 1a. Optimize and expand production of Pure Water at NCPWF. Production goal 35 mgd. To do this the following could be done:
 - i. Dedicate more sewage from purple pipe recycling to Pure Water. (This would allow NCPWF to run at 32 MGD of its design capacity year around)
 - ii. Increase production stream from RO to capture more water. (Goal 92.5% product stream)
 - iii. Re-permit as Direct Potable Reuse to deliver greater flows to Miramar Reservoir
 - 1b. Decrease CAPWF production goal to 36.5 mgd and deliver to Murray Reservoir (83 MGD 35 MGD NCPWF 11.5 ECWPF = 36.5 mgd)
 - 1c. Do not build pipe to San Vicente Reservoir
- 2. Develop costs for full secondary treatment at Point Loma Wastewater Treatment Plant (PLWWTP).
 - 2a. Evaluate the cost for secondary treatment at PLWWTP based on post-Pure Water Phase 1 flows.
 - 2b. Evaluate the cost for secondary treatment at PLWWTP of post-Pure Water Phase 2 flows.
 - 2c. Evaluate the cost of secondary treatment at PLWWTP assuming 50 MGD of I&I reduction for 2a and 2b.
 - 2d. Evaluate the cost of secondary treatment at PLWWTP assuming 100 MGD of I&I reduction for 2a and 2b.

We thank you for your consideration of these alternatives.

Sincerely,

Jerry Jones, Chair

The Joint Powers Authority Proactively Addressing Regional Wastewater Issues



MEMORANDUM

DATE: August 21, 2024

TO: Metro Technical Advisory Committee (Metro TAC)

FROM: Keli Balo, Deputy Director, Public Utilities Department

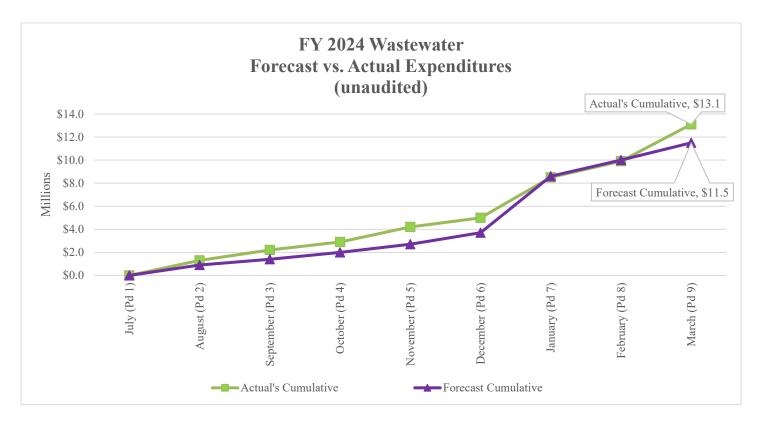
SUBJECT: FY2024 Capital Improvements Projects (CIP) Report – 3rd Quarter

The Public Utilities Department hereby submits the FY2024 CIP updates for the period of January 1, 2024 through March 31, 2024.

The report includes the following:

- Forecast Versus Actual Expenditures Figure
- Wastewater Projects Expenditure Table
- Project Highlight (MBC Gas Detection System Replacement Project)

FORECAST VERSUS ACTUAL EXPENDITURES UPDATE



The forecasted vs actual expenditure graph above shows an over-expenditure of about \$1.6M due to the ongoing construction of the MBC Gas Detection System Replacement project. The contractor is making good progress (no delays). Therefore, the actual expenditures (\$1.6M) exceeded the projected expenditures (\$130K).

FY 2024 - 3rd Quarter (January 1, 2024 to March 31, 2024)

	WASTEWATER PROJECTS									Design	Design Phase		struction Pha	ase
wbs	Project Name	Status	Estimated Total Project Cost	Project to Date Expenditures FY24, Pd 9	Encumbrance at FY24, Pd 9	Project Balance (Revised Proj Cost less Expenditures less Encumbrances)	% Spent (Expenditures /Revised Project Cost)	Actuals (FY 24 Pd 1-Pd 9)	Projected Expenditures (FY 24 Pd 1- Pd 9)	Design Start	Design Finish	Baseline BO/BU	Current BO/BU	BO/BU Variance
METRO														
	LARGE SEWER PUMP STATIONS													
B22032	PQPS VFD Replacement Project Existing four (4) Toshiba VFD's need to be removed and replaced with updated Schneider Altivar Active Front end 500hp VFD's to match the 2 new existing VFD's. This includes demolishing the old system, repulling new wires as necessary, installing the new VFD's, integrating the new VFD's into the DCS system and starting the new system up.	Design	\$1,352,744	\$205,817	\$11,930	\$1,134,997	15.21%	\$41,932	\$200,894	12/22/2021	5/31/2024	2/23/2024	7/28/2025	5 521
B22035	PQPS Gas Sensor Replacement Two (2) existing gas sensors need to be removed and replaced with updated gas sensors and controllers. This includes demolishing the old system, re-pulling new wires, installing the new sensors and controllers, integrating the new sensors into the DCS system and starting the new system up.	Design	\$594,679	\$300,479	\$14,496	\$279,705	50.53%	\$118,383	\$245,000	12/22/2021	5/31/2024	11/29/2023	7/28/2025	607
B23140	Pump Station 2 Sluice Gate 2 Emergency Scope of work includes the repair of failed sluice gate 2 at pump station 2.	Construction	\$1,200,000	\$79,304	\$850,000	\$270,696	6.61%	\$76,781	\$0	3/15/2023	3/15/2023	4/30/2024	5/1/2024	. 1
S00312	Pump Station 2 Power Reliability & Surge Protection Improve power reliability and provide standby power at the pump station, thus protecting against surges during outages and ultimately preventing sewage spills.	Construction	\$76,100,800	\$69,525,795	\$3,941,853	\$2,633,153	91.36%	\$1,750,205	\$2,203,800	2/1/2011	9/20/2016	10/20/2021	12/31/2024	. 1168
L24000.1	Pump Station 1 Improvement and Modenization Upgrade mechanical screens, rehab wet well #1 and #2, replacement of pumps, rotating assembly, and motors. Replacement of existing motors starters and Liquid Rheostats with Variable Frequency Drives (VFD), replacement of suction pipes, replacement of (6) 48-inch suction gate valves, replacement of (6) 36-inch discharge gate valves, replacement of 30-inch pump cone valve actuators, replacement of venturi flow meters with new modern flow meter and design and installation of new pump bypass system.	Design	\$16,323,000	\$346,523	\$381,919	\$15,594,558	2.12%	\$423,360	\$o	2/24/2022	6/4/2024	4/17/2026	12/15/2027	607
L24000.2	Pump Station 2 Improvement and Modenization Repair liner and concrete in influent channel, replace corroded top supports for mechanical screens 1 through 4, rehab wet well #1 and #2, repair cooling tower pads, pipes, and pipe supports. Rehab 7 of 8 pumps except #4 and upgrade pump packed seal to mechanical seal, replacement of liquid rheostat with variable frequency drives (VFD), refurbishment/replacement of all suction valves, refurbishment/replacement of all discharge valve, replacement of suction pipes for pump #2.	Design	\$13,736,000	\$47,184	\$o	\$13,688,816	0.34%	\$47,184	\$0	2/24/2022	12/31/2025	6/26/2026	12/31/2029	1284

FY 2024 - 3rd Quarter (January 1, 2024 to March 31, 2024)

	WASTEWATER PROJECTS									Design	Design Phase		Construction Phase		
WBS	Project Name	Status	Estimated Total Project Cost	Project to Date Expenditures FY24, Pd 9	Encumbrance at FY24, Pd 9	Project Balance (Revised Proj Cost less Expenditures less Encumbrances)	% Spent (Expenditures /Revised Project Cost)	Actuals (FY 24 Pd 1-Pd 9)	Projected Expenditures (FY 24 Pd 1- Pd 9)	Design Start	Design Finish	Baseline BO/BU	Current BO/BU	BO/BU Variance	
	SEWER TREATMENT PLANTS														
B20137	PLWTP Scum Injection Concentrators Improvements Remove existing scum concentrators and replace with scum screens, a decanter and associated piping so that the scum can be injected into the digesters.	Design	\$3,357,302	\$351,514	\$469,126	\$2,536,662	10.47%	\$47,396	\$32,837	8/13/2020	10/16/2024	4/19/2024	7/9/2026	811	
B20121	MBC Gas Detection System Replacement Replace the existing gas sensors with the most up-to-date gas sensors and ensure compatibility with the existing system.	Construction	\$5,691,771	\$2,379,451	\$2,774,940	\$537,380	41.81%	\$1,623,901	\$129,910	8/13/2020	3/28/2023	12/29/2023	8/9/2024	. 224	
B19066	SBWRP Variable Frequency Drive Repl Remove and replace two 600 HP Variable Frequency Drive and one 200 HP Variable Frequency Drive at the South Bay Wastewater Treatment Plant.	Post Construction	\$1,359,792	\$977,973	\$76,596	\$305,223	71.92%	\$61,599	\$283,655	1/29/2020	4/2/2020	8/31/2020	4/12/2023	954	
B20122	SBWRP Reverse Osmosis System Remove two existing trailer mounted Electrodialysis Reversal (EDR) units and replace the entire EDR system with a two new slab mounted Reverse Osmosis Units.	Design	\$10,700,000	\$1,591,735	\$333,991	\$8,774,275	14.88%	\$651,720	\$180,000	9/18/2020	10/30/2024	12/17/2024	8/28/2026	619	
B20148	NCWRP - Chiller Replacement Replace three (3) chillers and two (2) cooling towers, including the integration into the Distributed Controls System (DCS) at North City Water Reclamation Plant. This project also includes the installation of 65 Linear Feet (LF) of 12-inch Ductile Iron (DI) pipe and 35 LF of 16-inch DI pipe.	Design	\$3,705,121	\$490,316	\$39,193	\$3,175,612	13.23%	\$111,116	\$27,919	9/1/2020	7/30/2024	9/30/2022	9/29/2025	1095	
B24113	PLWTP Sludge Pump Replacement Remove and replace four (4) existing sludge pumps at the Point Loma Wastewater Treatment Plant. In addition, the existing pump foundation will be reinforced to support the new pumps within the basement of the sludge pump station building.	Pre-Design	\$6,400,000	\$23,761	\$0	\$6,376,239	0.37%	\$23,761	\$0	6/17/2024	3/24/2028	TBD	TBD	TBD	
B21148	MBC Gallery Pipeline Replacement Replace approximately 2,705 LF (0.51 mi) of existing recycled and process waterlines with epoxy-lined pipes and metallically similar fittings. Install new intake pressure-reducing manifolds and increase the number of isolation valves. No ADA curb ramps on this project.	Design	\$2,075,000	\$679,976	\$29,308	\$1,365,715	32.77%	\$274,559	\$0	9/23/2021	8/23/2024	9/30/2024	1/12/2026	469	
B23003	MBC 76 Transformer Replacement Emergency Scope of work includes but is not limited to the repair/replacement of electrical equipment identified as 76 USSA-B and 76 USSA-A. Scope of work includes the replacement of Busing and insulators, transformers, ground fault relays and associated current transformers.	Construction	\$2,832,313	\$1,173,498	\$51,868	\$1,606,947	41.43%	\$919,630	\$1,324,325	8/13/2021	8/13/2021	12/13/2023	5/1/2024	. 140	

FY 2024 - 3rd Quarter (January 1, 2024 to March 31, 2024)

	WASTEWATER PROJECTS									Design	Design Phase		truction Pha	ase
WBS	Project Name	Status	Estimated Total Project Cost	Project to Date Expenditures FY24, Pd 9	Encumbrance at FY24, Pd 9	Project Balance (Revised Proj Cost less Expenditures less Encumbrances)	% Spent (Expenditures /Revised Project Cost)	Actuals (FY 24 Pd 1-Pd 9)	Projected Expenditures (FY 24 Pd 1- Pd 9)	Design Start	Design Finish	Baseline BO/BU	Current BO/BU	BO/BU Variance
B23021	MBC Operations Blding Roof Repl This project is located approximately 20 miles north of downtown San Diego, off Convoy St via Fwy 52 west Miramar Kearny Mesa Community. MBC Operations Building is part of Council District 6 constructed in the mid 1990's under the Clean Water Program. The roof both 2 levels are leaking during rain events. Some of the leaks are in the maintenance side of the operations Building and roof above electrical boxes and conduits. The roof is about 24 years old, and some areas are in poor condition.	Design	\$2,852,804	\$156,631	\$o	\$2,696,173	5.49%	\$92,246	\$2,954,955	12/1/2022	7/10/2024	2/15/2024	3/26/2025	405
	TRUNK SEWERS													
B24090	North/South Metro Interceptor Manhole Rehab Repair and rehabilitation of 9 existing access structures of the North and South Metropolitan Interceptors. This includes wall restoration, concrete collar repair, break-in lateral spot repair, securing manhole bolt hole tap, manhole slab repair, manhole cover replacement at grade, trimming, repairing, and patching liner inside the manhole.	Design	\$1,160,000	\$45,624	\$o	\$1,114,376	3.93%	\$45,624	So	4/2/2024	4/9/2027	7/20/2028	7/20/2028	0
S22001	North/South Metro Interceptors Rehab Rehabilitation of the interceptor crown from 11 o'clock to 1 o'clock of 13 segments, approx. 12,154 LF (2.30 miles) of existing RCP and PLRCP, and liner repairs on 7 segments of existing RCP and PLRCP approx. 14,132 LF (2.68 miles) of the North and South Metro Interceptors. Rehab 9 existing access structures, spot repair 56 existing access structures including existing Diversion Structure II, rehab and spot repair existing Diversion Structure I, and assess 1 existing access structure.	Design	\$31,960,000	\$338,127	\$o	\$31,621,873	1.06%	\$145,950	\$973,408	6/23/2023	8/7/2025	8/2/2027	7/30/2027	-3
	OTHER													
S21003	EMTS Lab Remodel at NTC This project will renovate the current NTC facilities to comply with new requirements. The NTC lab facility will upgrade their structural systems to meet current seismic code. The lab will be modernized to meet future needs. The laboratory operations will be optimized.	Design	\$54,125,500	\$1,759,735	\$1,256,401	\$51,109,364	3.25%	\$693,337	\$45,000	3/1/2021	4/30/2025	12/29/2026	10/31/2028	672
B21070	Solar Implementation @ EMTS Lab Bldg Install approximately 430 kW AC carport solar photovoltaic system to provide energy for Environmental Monitoring and Technical Services Division's NTC Laboratory.	Design	\$4,125,740	\$204,839	\$132,324	\$3,788,576	4.96%	\$89,626	\$22,500	3/1/2021	4/30/2025	12/29/2026	10/31/2028	672
B20001	STORM WATER DIVERSION AT THE PLWTP Divert storm water discharge to comply with the Consent Decree to reduce pollutants in the storm water discharges at the Point Loma Wastewater Treatment Plant.	Design	\$12,922,725	\$2,067,182	\$282,089	\$10,573,453	16.00%	\$462,422	\$235,389	11/7/2019	10/1/2024	12/30/2022	6/17/2026	1265
B20002	STORM WATER DIVERSION AT THE SBWRP Divert storm water discharge to comply with the Consent Decree to reduce pollutants in the stormwater discharges at the South Bay Water Reclamation Plant.	Construction	\$5,796,442	\$2,464,136	\$2,457,576	\$874,730	42.51%	\$960,986	\$1,057,342	11/1/2019	4/15/2022	9/30/2022	6/3/2024	. 612

FY 2024 - 3rd Quarter (January 1, 2024 to March 31, 2024)

	WASTEWATER PROJECTS									Design	Design Phase		Construction Phase	
WBS	Project Name	Status	Estimated Total Project Cost	Project to Date Expenditures FY24, Pd 9	Encumbrance at FY24, Pd 9	Project Balance (Revised Proj Cost less Expenditures less Encumbrances)	% Spent (Expenditures /Revised Project Cost)	Actuals (FY 24 Pd 1-Pd 9)	Projected Expenditures (FY 24 Pd 1- Pd 9)	Design Start	Design Finish	Baseline BO/BU	Current BO/BU	BO/BU Variance
B19197	STORM DRAIN DIVERSION AT THE MBC Divert storm water discharge to comply with the Consent Decree to reduce pollutants in the storm water discharges at the Metro Biosolids Center.	Construction	\$9,664,552	\$5,255,894	\$3,383,706	\$1,024,952	54.38%	\$3,623,446	\$106,166	10/1/2019	5/25/2022	12/23/2024	11/1/2024	-52
S00319	EMT&S Boat Dock Esplanade Construct one (1) acre esplanade between the existing EMTS building and channel.	Construction	\$3,400,851	\$954,103	\$1,626,836	\$819,912	28.05%	\$74,876	\$1,438,801	10/1/2018	11/3/2023	3/25/2022	1/22/2025	1034
MUNI/M	ETRO													
	OTHER													
L22000.1	Alvarado Lab Improvements Retrofit/reconstruction of existing lab building; New Construction of 15,000 sq. ft. 2-story, additional space to include a new lobby, adjacent to existing lab bldg. New Construction of 6,000 sq. ft. stand-alone office building adjacent to the existing Electrical Building for non-lab staff. The project proposes to remodel the existing Lab building, including additional new buildings with the following scope to meet Code Compliance, the LEED Silver Certification and the new Sustainability Policy 90.	Design	\$120,223,000	\$1,041,971	\$1,161,701	\$118,019,329	0.87%	\$461,329	\$o	9/12/2022	7/15/2025	10/23/2030	12/9/2030	47
L22000.3	Alvarado Lab Improvements Trailers Installation of new office trailers at the Alvarado Laboratory.	Design	\$2,102,000	\$252,421	\$57,139	\$1,792,440	12.01%	\$113,446	\$0	3/14/2023	6/28/2024	12/9/2024	4/28/2025	140
B21069	Solar Implementation @ ETDC Building Install approximately 190 kW AC rack/canopy solar photovoltaic (PV) system to provide energy to the ETDC building.	Construction	\$2,184,000	\$298,154	\$1,394,568	\$491,279	13.65%	\$202,578	\$o	6/29/2021	10/5/2022	6/27/2025	6/27/2025	o
	-			•			TOTAL	\$13,137,391	\$11,461,901					

MBC Gas Detection System Replacement

Project Overview	Total Project Cost	Status
This project will replace the existing gas sensors with newer sensors and the existing modules with the most up-to-date versions. This will enable the Metropolitan Biosolids Center facility to ensure the safe operation of the treatment plant.	\$5,991,800	Construction



Figure 1. New wall mounted gas sensor in the pipe gallery.



Figure 2. New outdoor wall mounted gas sensor.

Percent Complete Information

Duration % Complete (Apr 2024)	Cost % Complete (Apr 2024)
68.2%	42.1%

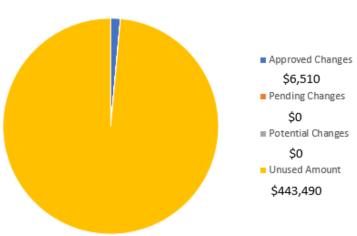


Figure 3. New pole mounted gas sensor.

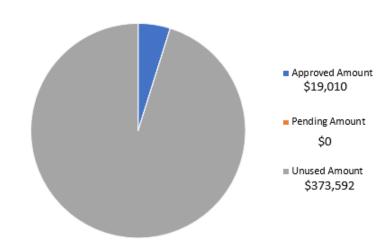
Performance Summary

Construction Cost	Amount
Original Construction Contract Amount	\$3,907,010
Total Executed Change Orders	\$19,010.25
Revised Contract Amount	\$3,926,020.25
Total Pending Change Orders (Routing for approval)	\$0.00
Total Potential Change Orders (Negotiated)	\$0.00
Total Project Exposure	\$3,926,020.25

Field Order Summary



Pooled Contingency





Monthly Executive Director's Report July 2024

As July marks the start of the JPA's 2025 fiscal year, new financial systems for the fiscal year were put in place. The transition of the Treasurer's role commenced, and preparations for upcoming strategic initiatives began. The following is a summary of key tasks currently being addressed by the Executive Team members:

Key Tasks and Updates:

1. Final Draft Second Amended and Restated Agreement (SARA) Language Review:

- City of San Diego management and legal staff continue their review of the Draft SARA language.
 - The goal is to complete this process in August, allowing the Draft SARA Agreement language to be released to the Metro TAC and Metro JPA members at that time.
- To provide sufficient time for staff and elected officials to review the draft document, SARA will not be agendized for a formal presentation and open discussion until the October Metro TAC and November JPA/Commission meetings.

2. FAB Implementation:

- Stantec and the FAB work group presented an additional virtual workshop to TAC members. Metro TAC held a hybrid meeting to discuss finalizing the draft Exhibit B capacities for FAB and SARA, as well as discussed, the pooled capacity and automatic transfer concepts and the related SARA language.
- A workshop presented by Stantec consultants for the JPA's Board of Directors is planned as the main item at the October JPA/Commission Meeting.

3. JPA Financial Policies and Systems:

- The Executive Team's legal and financial staff continue to draft several policies to provide management guidance for the JPA. These policies include:
 - o An investment policy for the JPA's reserve funds and operating capital.
 - An electronic fund transfer policy.
 - A purchasing policy.
- In addition, a draft Chart of Accounts system was created.
- It is anticipated that these will first be reviewed by the Finance Committee in September before moving forward to Metro TAC and the full JPA Board.

4. Strategic Planning:

- The JPA's Chair and Executive Director have been working closely with the Strategic Planning consultant, John Gavares, to create a survey that will be sent out to all JPA Board members, TAC representatives, and the Executive Team in early August.
- It is anticipated that the Strategic Planning AdHoc will be formed at the August JPA/Commission meeting and will start meeting in early September.

5. FY 2021 – FY 2023 Metro Contract Compliance Audit and Reconciliation

- Fieldwork Completion on O&M Sections: Fieldwork was three/quarters completed for the O&M sections of the multi-year audit. The Annual Metro Exhibit E Audit purpose is to review Metro O&M and CIP costs to ensure that Participating Agencies (PAs) are not allocated costs from other City of San Diego departments such as water or municipal sewer and only pay their fair share of allowable Metro costs. Once the total allowable costs are determined, the allocation to each PA is reviewed to ensure correct cost allocations based on each agency's actual sewage flows and strengths for the audited year. These costs and allocations are then reconciled with that year's budgeted amounts that had been billed to each PA.
- **O&M Audit Scope:** The O&M portion of the audit includes reviewing over 500 samples (invoices) spanning three fiscal years. This part of the audit covers operational costs such as personnel and chemicals, as well as large non-capitalized consulting contracts for engineering, IT, and financial services and minor capital projects. Emphasis was placed on reviewing each Pure Water Phase 1 contract, including the Stantec Program Management contract, and other general engineering and soft costs associated with the project. Specific emphasis was also placed on COMNET contracts for monitoring/metering and the environmental services division costs during this audit. During each audit specific areas of interest are determined and are focused on for more in-depth reviews.
- Upcoming Audit Reviews: In August and September, additional audit reviews will be conducted on major Metro CIP projects, including Pure Water Phase 1 and 2 capital project costs. These reviews will also cover Metro system revenues that offset the annual O&M and CIP costs, such as recycled water and utility income credits (nonoperating revenues).

6. Inflow and Infiltration (I&I) Study:

- The TAC Committee including 3 representatives for the City of San Diego had an initial meeting on July 25.
- The committee includes all TAC Representatives thus all agencies are represented.

• The goal of the first meeting was to collect all existing reports and all the agencies present agreed to share data pending approval of their superiors.

7. Review of Pure Water Phase 2 Alternatives:

- Stantec, the City of San Diego program manager, is conductivity a validation study of the proposed Phase 2 Pure Water Program.
- Due to the current surplus water supply, the effectiveness of water conservation and the decrease in sewage flows the City of San Diego is taking a critical look at sizing and costs for Phase 2 Pure Water.
- We are working with the City of San Diego to see if the JPA can provide a letter to them with alternatives the JPA would like included in the Stantec Review.

Upcoming Meetings:

Metro TAC Meeting:

o **Date**: August 21, 2024

o **Format**: Zoom

 Main Topics: Multiple San Diego contracts, Presentation on San Diego River Investigative Order Study Findings, and Phase 2 Planning alternatives.

Metro JPA/Commission Meeting:

o **Date**: October 3, 2024

 Note: The Metro JPA/Commission traditionally does not meet in September, so the following meeting will be on October 3, 2024.