

Regular Meeting of the Metro Wastewater JPA/Metro Commission

AGENDA

Thursday, April 6, 2023 - 12:00 p.m.

PHYSICAL MEETING LOCATIONS:

9192 Topaz Way (PUD MOC II) Auditorium, San Diego, CA

3:00 Time Certain TRAVEL TO TOUR at:

North City Pure Water Facility 4949 Eastgate Mall, San Diego, CA

"The Metro JPA's mission is to create an equitable partnership with the San Diego City Council and Mayor on regional wastewater issues. Through stakeholder collaboration, open dialogue, and data analysis, the partnership seeks to ensure fair rates for participating agencies, concern for the environment, and regionally balanced decisions."

NOTE: ANY MEMBER OF THE PUBLIC MAY ADDRESS THE METRO WASTEWATER JPA/COMMISSION ON ANY AGENDA ITEM. PLEASE COMPLETE A SPEAKER SLIP AND SUBMIT IT TO THE BOARD SECRETARY PRIOR TO THE START OF THE MEETING, IF POSSIBLE, OR IN ADVANCE OF THE SPECIFIC ITEM BEING CALLED. COMMENTS ARE LIMITED TO THREE (3) MINUTES PER INDIVIDUAL

Documentation Included

12:00 P.M. 1. <u>ROLL CALL</u>

2. PLEDGE OF ALLEGIANCE TO THE FLAG

3. **PUBLIC COMMENT**:

Persons speaking during Public Comment may address the Metro Wastewater JPA/Metro Commission on any subject matter within the jurisdiction of the Metro Wastewater JPA/Metro Commission that is not listed as an agenda item. Comments are limited to three (3) minutes.

4. ACTION: APPROVAL OF AGENDA (Chair Jones)

X 5. <u>ACTION</u>: CONSIDERATION AND POSSIBLE ACTION TO APPROVE THE MINUTES OF THE REGULAR MEETING OF March 2, 2023 (Attachment)

Documentation Included

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- 6. <u>ACTION</u>: CONSIDERATION AND POSSIBLE ACTION TO APPROVE THE METRO JPA/COMMISSION TREASURER'S REPORT ENDING FEBURARY 28, 2023 (Lee Ann Jones-Santos/Karyn Keze) (Attachment)
 - 7. <u>UPDATE</u>: METRO SPILLS UPDATES (APRIL 2020 & JANUARY 2023) (Tom Rosales)
 - 8. <u>CLOSED SESSION</u>: SIGNIFICANT EXPOSURE TO LITIGATION (Govt. Code 54956.9(d)(2)) Two Potential Matters
- 1:00 1:10 <u>BREAK</u> P.M.
 - ~ TRANSITION TO WORKSHOP ~

1:10 P.M. 9. START OF WORKSHOP ON NORTH CITY PURE WATER FACILITY

X A. <u>HISTORY OF NORTH CITY AND SOUTH BAY WATER RECLAMATION</u> <u>PLANTS AND THE TRANSITION FROM RECLAMATION TO PURE</u> <u>WATER</u>

- i. Introduction/Background (Scott Tulloch) (Attachment Ai)
- ii. North City and South Bay Reclamation Plants (Dexter Wilson) (Attachment Aii)
- iii. Overview: Recycled Water Revenue (Karyn Keze) (Attachment Aiii Forthcoming)
- X B. <u>PHASE 2 METRO PURE WATER PROGRAM FACILITIES</u> (Dexter Wilson) (Attachments)
 - C. <u>PURE WATER PROGRAM VIDIO</u> (Tom Rosales/Doug Campbell)

X D. <u>SECOND AMENDED RESTATED AGREEMENT</u>

- i. Why is it needed (Dexter Wilson) (Attachment) a. Status (Dexter Wilson)
 - b. Alternative Billing Methodology (Dexter Wilson/Karyn Keze)
- ii. Re-Purified Water Revenues (Karyn Keze) (Attachment)

3:00 P.M. 10. <u>ADJOURNMENT</u> OF THE METRO JPA/COMMISSION TO THE NEXT REGULAR MEETING ON MAY 4, 2023

~ TRANSITION TO TOUR ~

Documentation Included Circa 2:30 11. LEAVE MOC II FOR TOUR OF NORTH CITY PURE WATER FACILITY P.M. (INFORMATION ONLY)

North City Pure Water Facility 4949 Eastgate Mall, San Diego, CA

Circa 4:30- 12. LEAVE NORTH CITY PURE WATER FACILITY 5:00 PM

NOTE: The Metro Wastewater JPA and/or Commission may take action on any item listed in this Agenda whether or not it is listed "For Action."

Materials provided to the Metro Wastewater JPA/Metro Commission related to any open-session item on this agenda are available for public review at our website: <u>https://www.metrojpa.org</u>

In compliance with the AMERICANS WITH DISABILITIES ACT

Persons with disabilities that require modifications or accommodations, please *contact General Counsel Adriana Ochoa at adriana.ochoa*@procopio.com by no later than two hours prior to the meeting to request reasonable modifications or accommodations consistent with the Americans with Disabilities Act and Metro Commission/Metro Wastewater JPA shall promptly work with you to resolve the matter in favor of accessibility.

Metro JPA 2023 Meeting Schedule

January 5, 2023	February 2, 2023	March 2, 2023
April 6, 2023	May 4, 2023	June 1, 2023
July 6, 2023	August 3, 2023	September 7, 2023
October 5, 2023	November 2, 2023	December 7, 2023

ATTACHMENT 5

Action Minutes from March 2, 2023 Meeting



Regular Meeting of the Metro Wastewater JPA

and Metro Commission

PHYSICAL MEETING LOCATION: 9192 Topaz Way (PUD MOC II) Auditorium, San Diego, CA

3:00 Time Certain Travel to Tour at:

Pt. Loma Wastewater Treatment Plant 1902 Gatchell Road, San Diego, CA

March 2, 2023

Minutes

Chairman Jones called the meeting to order at 12:04 p.m. A quorum of the Metro JP/Commission was declared, and the following representatives were present:

1. ROLL CALL

<u>Agencies</u>	<u>Representatives</u>	<u>Alternate</u>
City of Chula Vista	Jose Preciado	
City of Coronado	John Duncan	
City of Del Mar	Dwight Worden (arrived 1	:56)Joe Bride
City of El Cajon	Gary Kendrick	
City of Imperial Beach	Mitch McKay (absent)	
City of La Mesa	Bill Baber (absent)	Jack Shu
Lemon Grove San District	Jerry Jones	
City of National City	Ditas Yamane	
City of Poway	Peter De Hoff	
County of San Diego	Joel Anderson	
Otay Water District	Mark Robak (Absent)	Tim Smith
Padre Dam MWD	Karen Jassoy	
Metro TAC Chair	Beth Gentry	

Others present: Metro JPA General Counsel Adriana Ochoa - Procopio; Metro JPA/Commission Board Secretary Lori Anne Peoples; Beth Gentry – City of Chula Vista, MetroTAC Chair; None – City of Coronado; Yazmin Arellano, MetroTAC Vice Chair - City of El Cajon; None – City of Imperial Beah; Hamed Hashemian, Joe Kuhn – City of La Mesa; None – Lemon Grove Sanitation District; Carmen Kasner – City of National City; Bob Kennedy – Otay Water District; None – Padre Dam Municipal Water District; Alisa Nichols, Troy DePriest – City of Poway; City of San Diego Staff and Consultants: Tom Rosales, Lisa Celaya , Adam Jones, Ryan Kempster, Ami Latker, Akram Bassyouni, Abi Palaseyed, Elizabeth Cason – City Attorneys Office; Peejay Tubongbanua, Greg Kazmer – County of San Diego; Metro JPA Staff: Adriana Ochoa – General Counsel Procopio; Scott Tulloch – NV5; Karyn Keze – The Keze Group, LLC.; Dexter Wilson and Kathleen Heitt - Dexter Wilson Engineering

Others present: Sanjay Gaur - EC AWP JPA

2. PLEDGE OF ALLEGIANCE TO THE FLAG

Joel Anderson, Supervisor, San Diego County, led the pledge

3. PUBLIC COMMENT

None

4. <u>ACTION</u>: APPROVAL OF AGENDA

ACTION: Motion by Director Anderson, seconded by Director Kendrick to approve the agenda as submitted. Motion carried as follows:

AYES: Preciado, Duncan, Kendrick, McKay, Shu, Jones, Yamane, Smith, Jassoy, De Hoff, Anderson NAYS: None ABSTAIN: None ABSENT: Worden

5. <u>ACTION</u>: CONSIDERATION AND POSSIBLE ACTION TO APPROVE THE MINUTES OF THE REGULAR MEETING OF February 2, 2023

<u>ACTION</u>: Motion Director Anderson, seconded by Director Kendrick, that the minutes be approved. Motion carried as follows:

AYES: Preciado, Duncan, Kendrick, McKay, Shu, Jones, Yamane, Smith, Jassoy, De Hoff, Anderson
NAYS: None
ABSTAIN: None
ABSENT: Worden

6. <u>ACTION</u>: CONSIDERATION AND POSSIBLE ACTION TO APPROVE THE SECOND AMENDMENT TO THE AGREEMENT WITH ATOLL VENTURES (DBA 'OCEAN IMAGING') FOR THE COASTAL REMOTE SENSING SPECIAL STUDY OF THE POINT LOMA OCEAN OUTFALL (PLOO) AND SOUTH BAY OCEAN OUTFALL (SBOO) REGIONS

Dr. Ryan Kempster provided a brief verbal overview of his PowerPoint presentation included in the agenda packet. Director McKay stated he served on the IBWC and inquired about the current technology updates in the last 5 years. Dr. Kempster responded they were now using specialized satellite imaging and updates are on going. The companies provide beyond what is asked of them and annual reports are also provided. Director De Hoff inquired as to the frequency of images. Dr. Kempster, responded some daily, some certain times of the year. Chair Jones noted that there probably were not any other areas in the world that monitors as much a San Diego to which Dr. Kempster responded in the affirmative.

<u>ACTION</u>: Motion Director Preciado, seconded by Director Kendrick, that the amendments to the agreement be approved. Motion carried as follows:

AYES: Preciado, Duncan, Kendrick, McKay, Shu, Jones, Yamane, Smith, Jassoy, De Hoff, Anderson NAYS: None ABSTAIN: None ABSENT: Worden

7. <u>ACTION:</u> CONSIDERATION AND POSSIBLE ACTION TO APPROVE THE PUMP STATION 1 AND 2 IMPROVEMENTS AND MODERNIZATION CAPITAL IMPROVEMENT PROJECT

Tom Rosales, City of San Diego introduced staff, Craig Boyd and David Bryant who provided a brief verbal overview of their PowerPoint presentation included in the agenda package.

Director De Hoff inquired whether with the decrease in flow, the pumps would be resized deducting for the water coming off from the East County project. Chair Jones explained that staff was looking into future safeguards so as not to over build. Tom Rosales stated he would bring more backup on how they work and the Power Reliability Project to the May meeting.

<u>ACTION</u>: Motion Director De Hoff, seconded by Director Duncan, the improvements and modernization capital improvement project be approved for Pump Station 1 and 2. Motion carried as follows:

AYES: Preciado, Duncan, Kendrick, McKay, Shu, Jones, Yamane, Smith, Jassoy, De Hoff, Anderson NAYS: None ABSTAIN: None ABSENT: Worden

At 12:40 p.m. General Counsel Ochoa noted that Director Smith had left the meeting prior to presentation of Items 8 & 9, due to an abundance of caution under the Political Reform Act as he owns a very small share of stock.

Items 8 and 9 were heard at the same time.

- 8. <u>ACTION:</u> CONSIDERATION AND POSSIBLE ACTION TO APPROVE THE SECOND AMENDMENT TO THE AS-NEEDED AGREEMENT WITH JACOBS CH2M HILL FOR PROFESSIONAL CONSTRUCTION MANAGEMENT SERVICES FOR PURE WATER PHASE 1 CONVEYANCE PROJECTS
- 9. <u>ACTION</u>: CONSIDERATION AND POSSIBLE ACTION TO APPROVE THE SECOND AMENDMENT TO THE AS-NEEDED AGREEMENT WITH PARSONS-BLACK & VEATCH PROFESSIONAL CONSTRUCTION MANAGEMENT SERVICES FOR PURE WATER PHASE 1 TREATMENT PLANT AND FACILITIES

Akram Bassyouni, City of San Diego provided a brief introduction to the items and turned the presentation over to Abi Palaseyed, City of San Diego. Abi presented a brief verbal overview of his combined PowerPoint presentation.

Director McKay inquired as to the additional services and why they were not required at the beginning. Also, did the city go out for request for proposals and thoroughly vet the responders up front? Director Shu noted the amount of the increases to the agreements being requested as substantially high.

San Diego staff responded that while the original contracts went through the City's formal bid process that these were amendments to the original contracts and thus are non-competing items. In addition the workload has doubled from the original scope of work advertized.

Director Preciado inquired as to who kept tabs on the amounts for the PAs side to which Karyn Keze provided information on how all costs Pure Water and otherwise are monitored in the annual Exhibit E Audit process that she leads with Dexter Wilson reviews all engineering and CIP projects. They start the Pure Water oversight process by reviewing all capital projects as they are bid and negotiating their cost allocation to wastewater with the PUD staff. Then during the annual audit, they review invoices, change orders, allocations etc. to insure that continued appropriate cost allocations are being used. This process has saved over \$100 million for wastewater customers since the start of the Pure Water Program. San Diego staff responded to additional questions and noted that this is a time and materials contract so the true cost is based on the actual work done.

<u>ACTION</u>: Motion Director Preciado, seconded by Director Kendrick, to approve the second amendment to as-needed agreement with Jacobs CH2M Hill. Motion carried as follows:

 AYES: Preciado, Duncan, Kendrick, McKay, Shu, Jones, Yamane, Jassoy, De Hoff, Anderson
 NAYS: None
 ABSTAIN: Smith (recused himself from meeting)
 ABSENT: Worden

<u>ACTION</u>: Motion Director Preciado, seconded by Director Kendrick, to approve the second amendment to the as-needed agreement with Parsons-Black & Veatch. Motion carried as follows:

AYES: Preciado, Duncan, Kendrick, McKay, Shu, Jones, Yamane, Jassoy, De Hoff, Anderson NAYS: None ABSTAIN: Smith (recused himself from meeting) ABSENT: Worden

At 1:12 p.m. Director Smith returned to the meeting

10. <u>INFORMATION</u>: PRESENTATION BY SAN DIEGO REGARDING TENTATIVE SETTLEMENT WITH REGIONAL BOARD REGARDING 2020 SANITARY SEWER OVERFLOW EVENT

Tom Rosales, City of San Diego provided a brief verbal overview of the City of San Diego's tentative settlement with the Regional Water Quality Control Board regarding the 2020 sewage spill.

Chair Jones requested that the JPA Executive Team work with San Diego to calculate the impacts on the PAs, send that to TAC and then bring it to the JPA.

TRANSITION TO WORKSHOP

11. START OF PT. LOMA WASTWATER TREATMENT PLANT OVERVIEW

A. Introductions of San Diego Staff

Chair Jones requested San Diego City Staff introduce themselves to the JPA Board.

Lisa Celaya, Executive Assistant Director for the Public Utilities Department provided an organization chart along with a brief overview of how the department functions. She noted that Juan Guerrero, who was not able to be present, functions as the CEO and then she oversees water delivery; water recovery is handled by Tom Rosales who introduced himself earlier; Pure Water is handled by Amy Dorman along with Technical Support and Business Support; Finance is handled by Adam Jones who introduced himself.

B. Overview of Workshop

Karyn Keze proved a brief overview including the past history and noted that this workshop will focus on the history of the Metro System and the "Clean Water" Program which was responsible for putting in place all of the current major facilities. The "Pure Water" Program will be discussed at the April Workshop.

C. Wastewater 101

Dexter Wilson provided a brief verbal overview of this topic which corresponded to the PowerPoint presentation included in the agenda package.

D. Metro Facilities

Dexter Wilson provided a brief verbal overview of the PowerPoint presentation included in the agenda package on the metro facilities.

At 1:56 p.m. Director Worden arrived.

E. Metro Wastewater System History

Scott Tulloch provided a brief verbal overview of the PowerPoint presentation included in the agenda package on the history of the Metro Wastewater System.

At 2:19 p.m. Director Jassoy left the meeting during the system history presentation.

14. ADJOURNMENT

Chair Jones declared the meeting adjourned at 2:47 pm.

TRANSITION TO TOUR OF PT. LOMA WASTEWATER PLANT

12. LEAVE MOC II FOR PT. LOMA WASTEWATER TREATMENT PLANT

Those wishing to tour the plant left at 3:00 p.m.

13. LEAVE POINT LOMA WASTEWATER TREATMENT PLANT AND RETURN TO MOC II

Those who rode in the PUD vans for the tour returned to the MOC II facility at approximately 5:00 p.m.

ATTACHMENT 6

METRO JPA/COMMISSION TREASURER'S REPORT ENDING FEBURARY 28, 2023



Metro Wastewater Joint Powers Authority Treasurer's Report ending February 2023

Metro Wastewater JPA Treasurer's Report ending February 2023

Beginning Cash Balance at July 1, 2022	\$ 297,413
Operating Results	·
Membership Dues & Interest Income	435,204
Expenses	 (305,238)
Change in Net Position	129,966
Net change in Receivables & Payables	 21,654
Cash used in Operations	 151,620
Ending Cash Balance at February 2023	\$ 449,032.64

Metro Wastewater JPA **Statement of Net Position**

As of July 1, 2022 and February 2023

Unaudited

	July 1, 2022		February 2023		\$ Change	
ASSETS						
Checking/Savings	\$	297,413	\$	449,032	\$	151,619
Accounts Receivable		11,412		<u>.</u>	3 	(11,412)
Total Assets	\$	308,825	\$	449,032	\$	140,207
LIABILITIES						
Accounts Payable	\$	2,044	\$	12,286	\$	10,242
Unearned Membership Billings						
Total Liabilities	\$	=	\$	12,286	\$	10,242
		71				
NET POSITION						
Net Position at Beginning of Period	\$	566,757	\$	306,782	\$	(259,975)
Change in Net Position		(259,975)		129,966		389,941
Net Position at End of Period	\$	306,782	\$	436,748	\$	129,966
TOTAL LIABILITIES & NET POSITION	\$	308,826	\$	449,034	\$	140,208
Net Position at 02/28/23			\$	436,748		
FY '23 Required Reserve (4 months of Op Ex	b)			209,485		

FY '23 Required Reserve (4 months of Op Exp)	11	209,485
Over (under) required reserve	\$	227,263

Metro Wastewater JPA **Statement of Operations** Budget vs. Actual ending February 2023 Unaudited

		-		Budget		er (Under) Budget	-	
Income								
Membership Dues	\$	435,204	\$	292,122.50	\$	143,082		
City of San Diego			\$	22,105.00		(22,105)		
Interest Income				L.		-		
Total Income	\$	435,204	\$	314,228	\$	120,977		
Expense								
Administrative Assistant-LP	\$	13,792	\$	18,550.00	\$	(4,758)	(1)	
Bank Charges		-		100.00		(100)		
Contingency		-		-		-		
Dues & Subscriptions		-		-		-		
Financial Services				-				
Audit Fees		-		7,250.00		(7,250)	(1)	
Financial - The Keze Group		59,600		50,000.00		9,600	(1)	
Treasurer - Padre Dam/El Cajon		3,435		15,000.00		(11,565)	(1)	
JPA/TAC meeting expenses		1,917		2,500.00		(583)		
Miscellaneous				125.00		(125)		
Per Diem - Board		10,650		9,000.00		1,650	{1}	
Printing, Postage, Supplies		-		430.00		(430)		
Professional Services				-				
Engineering - Dexter Wilson		89,548		70,850.00		18,698	(1)	
Engineering - NV5		15,225		15,000.00		225	(1)	
Legal - Procopio		99,536		105,000.00		(5,464)	(1) (1)	
Legal - BB&K		1,561		-		1,561	(1)	
Paul Redvers Brown, Inc.		6,888		12,450.00		(5,563)	(-)	
Strategic Planning		-		-		-	(1)	
Telephone, Software & Internet		-		1,070.00		(1,070)	(1)	
Website Architecture Update		-		5,250.00		(5,250)	.,,	
Website Maintenance & Hosting	-	3,087		1,652.50		1,435		
Total Expense	\$	305,238	\$	314,228	\$	(8,989)		
Net Income (Loss)	\$	129,966	\$	<u> </u>	\$	129,966		

(1) Invoices received through 12/31/22

Metro Wastewater JPA Statement of Cash Flows

ending February 2023 Unaudited

OPERATING ACTIVITIES	
Change in Net Position	\$ 129,966
Adjustments to Reconcile Change in Net Position to Net Cash Provided by Operations:	
Accounts Receivable	11,412
Accounts Payable	10,242
Deferred Revenue	
Year ended June 30, 2022	151,620
Net cash increase (decrease) for period	297,413
Cash at end of period	\$ 449,033

ATTACHMENT 9Ai North City Pure Water Facility

Introduction/Background

RECYCLED WATER SYSTEM

North City Water Reclamation Plant – 30 mgd South Bay Water Reclamation Plant – I 5 mgd NCWRP Optimized Recycled Water Distribution System – Approximately 66 miles

CHRONOLOGY OF EVENTS INFLUENCING THE CITY'S RECLAMATION PROGRAM

The incentive to develop water reuse projects is also driven by wastewater management issues. Since 1963, the City has treated its wastewater at the Point Loma Wastewater Treatment Plant, which provides treatment at the "advanced primary" level before disposal in an ocean outfall. In 1972, the Federal Clean Water Act was adopted, requiring that wastewater plants provide a more advanced form of wastewater treatment known as secondary treatment, but allowing certain ocean dischargers, such as the City, to apply for waivers. Over the course of the 33 years since the passage of the Clean Water Act, the City has applied for a waiver, withdrawn the waiver, been sued by the U.S. Environmental Protection Agency (EPA) and environmental organizations, reapplied for and been approved for a waiver, and settled the lawsuit. These events are summarized below.

CHRONOLOGY OF EVENTS INFLUENCING THE CITY'S RECLAMATION PROGRAM

- I 963: City begins treating wastewater at the new Point Loma Wastewater Treatment Plant.
- 1972: Congress passes the Federal Clean Water Act (CWA), requiring wastewater treatment plants to provide higher treatment levels known as secondary treatment, but allowing certain ocean dischargers, such as the City, to apply for waivers.
- 1987: Following the City's withdrawal of its waiver application, the EPA and environmental groups sue the City for non-compliance with the CWA.
- I 994: Congress passes the Ocean Pollution Reduction Act (OPRA), allowing the City to reapply for a waiver. City reapplies and waiver is granted. City settles lawsuit, and begins process to achieve 45 MGD in water reclamation capacity by 2010, as required by OPRA.
- I995: EPA funding grant for construction of the City's North City Water Reclamation Plant requires the City to attempt to meet a goal of reusing 25 percent of treated flows by 2003 and 50 percent of the plant's treated flow by 2010. Based on anticipated wastewater flows to the NCWRP, the City established reuse goals consistent with the above commitments of 6 MGD by the end of 2003, and 12 MGD by the end of 2010.

- **2002:** The City fulfills the 45 MGD treatment capacity requirement with the completion of the 30 MGD NCWRP in 1997, and the 15 MGD SBWRP in 2002. After allowances for treatment process losses and other on-site uses, these two reclamation plants have recycled water production capacities of approximately 24 MGD and 13.5 MGD, respectively.
- **2004:** City enters into Settlement agreement with environmental groups, committing among other things to conduct a comprehensive study of opportunities to make beneficial reuse of the City's recycled water. The Settlement Agreement commits the City to: (a) evaluate improved ocean monitoring; (b) pilot test biological aerated filters as a form of technology to increase solids removal; and (c) study increased water reuse. This Water Reuse Study is intended to fulfill part (c) of the City's commitment.

ATTACHMENT 9Aii North City Pure Water Facility

North City & So. Bay Reclamation Plants

NORTH CITY AND SOUTH BAY RECLAMATION PLANTS

DEXTER WILSON ENGINEERING INC. Document Path: Varie/GIS\154001/2023.01 New Exhibit A 11x17 mxd Date Saved: 223/2023 8:57/41 AM



EXHIBIT A

DEXTER WILSON ENGINE ERING INC. Document Path: Vario(GIS)154001/2023 0.1 New Exhibit A 11x17 mad Date Seved: 2/23/2023 8:57:41 AM



North City Water Reclamation Plant and Pure Water Facility

3

NORTH CITY WRP (53 MGD) AND NCPWF (32 MGD)





South Bay Water **Reclamation Plant**

SOUTH BAY WRP (15 MGD)



ATTACHMENT 9Aiii North City Pure Water Facility FORTHCOMING Overview: Recycled Water Revenue

ATTACHMENT 9B

Phase 2 Metro Pure Water Program Facilities

METRO & PURE WATER PROGRAM FACILITIES PHASE 2

DEXTER WILSON ENGINEERING INC. Document Path: Vartic/GIS/154001/2023.01 New Exhibit A 11x17 mid Date Seved: 2/23/2023 8:57:41 AM



CENTRAL AREA WRP

- Capacity 69/53 mgd
- Will produce 53/41.5 mgd of Pure Water





CENTRAL AREA PWF

sb) Alternative 1 – Mission Valley CAPWF Site Plan

- Treatment processes include:
 - Ozone
 - BAC
 - *MF*
 - *RO*
 - UV/AOP
 - Post Treatment

53/41.5 mgd

10

(Old Aqua I Pilot Aquaculture Plant Site)





ATTACHMENT 9Di 2nd Amended Restated Agreement Why is it needed

APRIL 2023

SECOND AMENDED AND RESTATED AGREEMENT
WHY IS IT NEEDED

ARA # I – Primary goal to integrate Pure Water Program into existing Wastewater Disposal Agreement Due to schedule of Pure Water Program negotiations identified items that needed to be addressed in a second Amended and Restated Agreement

MAJOR ITEMS BEING ADDRESSED IN ARA #2

- Items form ARA #I (see right)
- Major New Item =
 Reorganization of document

2.9 Future Negotiations and Cooperation.

- 2.9.1 This Agreement and Exhibit F specifically contemplate Phase I of the Pure Water Program, which consists of new, expanded, or modified Metro System facilities and Water Repurification System facilities designed to produce only up to 30 million gallons per day of Repurified Water ("Phase I"). Within one year of the Effective Date of this Agreement, the Parties intend to meet and negotiate in good faith regarding one or more amendments to this Agreement or its Exhibits to address:
 - 2.9.1.1 The allocation of specific Pure Water Program costs between City's water utility and the Metro System for such later phases;
 - 2.9.1.2 Alternative billing methodologies for Metro System costs;
 - 2.9.1.3 The exclusion of costs related to the industrial discharges inspection and monitoring program within San Diego under Section 5.2.1.2.3 of the Agreement;
 - 2.9.1.4 The inclusion of costs for regional, non-Metro System potable reuse projects in calculating the Capital Expense Rate;
 - 2.9.1.5 A sample calculation of Repurified Water Revenue; and
 - 2.9.1.6 The conveyance and treatment of wastewater generated at United States military bases under this Agreement.

If such negotiations do not result in an amendment to this Agreement or its Exhibits concerning these subjects, this Agreement shall remain in full force and effect as set forth herein. Further, if the City proceeds with a later phase of the Pure Water Program as authorized under Section 2.1 of this Agreement, and the Parties have not yet amended this Agreement or Exhibit F to specifically address such costs by the time they are incurred, all costs listed in Section I of Exhibit F shall nonetheless be excluded as Metro System costs under this Agreement.

STATUS

Initial negotiations on all items have been completed Now draft language is being prepared and should be available in 3 months

ALTERNATE BILLING SYSTEM

Add fixed costs based on ownership rights for capital costs and a portion of O&M

Capital costs now billed on flow and strength Add billing categories for Brine and Peak Flow

ATTACHMENT 9Dii 2nd Amended Restated Agreement

Re-Purified Water Revenues

REPURIFIED WATER REVENUE

REVIEW OF ARA & EXHIBIT F PROVISIONS AND SAMPLE DRAFT CALCULATION



PURPOSE OF THIS PRESENTATION

Answers the questions:

- What are the Repurified Water Revenue provisions that exist in the current ARA?
- How is Repurified Water Revenue Calculated?
- What does the potential Repurified Water Revenue stream look like per PA at various project size levels?

Provide background on the purpose and calculation of the Repurified Water Revenue Provisions in the Amended Restated Agreement (ARA)

Show potential revenue streams between 71.5 and 83 MGD – Phase 2 still in planning stages.

- 71.5 MGD = 30 MGD Phase 1 + 41.5 MGD Phase 2
- 83 MGD = 30 MGD Phase I + 53 MGD Phase 2

DEFINITION: REPURIFIED WATER REVENUE (ARA)

Z. Repurified Water Revenue is the cost savings that will be realized when the City water utility's annual costs per-acre foot for Repurified Water are less than the purchase costs per-acre foot for comparable water from the San Diego County Water Authority, as further described in Exhibit F.

ARA IMPORTANT PROVISION FOR CALCULATIONS

ARA 3.4.2

Notwithstanding Section 3.4.1, or any other provision of this Agreement, a Participating Agency's share of **Pure Water Program Capital Improvement Costs, Repurified Water Revenue, and Capital Expense Rate** attributable to the Metro System under Exhibit F shall be assessed or credited based on the Parties' proportionate share of the **Pure Water Capital Melded Percentage stated in Column 12 of Exhibit G**. The City shall annually allocate the estimated and actual Pure Water Program Capital Improvement Costs and revenues which are attributable to the Metro System under Exhibit F in proportion to each Party's Pure Water Capital Melded Percentage when estimating quarterly payments and conducting year-end adjustments under Article V.

EXHIBIT G: 2050 CAPACITIES

					Exhibit	G								
	Pure Water Capital Billing Table - November 1, 2018													
				-			-							
1	2	3	4	5	6	7	8	9	10	11	12			
	Estimated	Net Offload For	Projected Met	tro Flow 2050		COD Applied to	Percent COD		SS Applied to	Percent SS	Pure Water			
Agency	Average Daily	Padre Dam	(M0	GD)	COD Applied to	2050 Flows	Contributed	SS Applied to	2050 Flows	Contributed	Capital Melded			
	Flow (MGD)	Project (MGD)	Flow	%	2050 Flows (mg/l)	(lb/day)	Contributed	2050 Flows (mg/l)	(lb/day)	Contributed	Percentage ³			
Chula Vista	18.33	0	18.33	11.601%	701.947	107377.684	11.889%	250.011	38244.530	11.701%	11.699%			
Coronado	1.9	0	1.9	1.202%	587.457	9314.884	1.031%	241.493	3829.176	1.172%	1.152%			
Del Mar	0.031	0	0.031	0.020%	542.195	140.270	0.016%	305.112	78.935	0.024%	0.020%			
East Otay Mesa (County) ¹	1.788	0	1.788	1.132%	621.049	9267.041	1.026%	240.016	3581.421	1.096%	1.096%			
El Cajon	7.8	7.0	0.805	0.510%	650.914	4373.460	0.484%	236.265	1587.450	0.486%	0.497%			
Imperial Beach	2.473	0	2.473	1.565%	540.757	11160.249	1.236%	205.193	4234.820	1.296%	1.411%			
La Mesa	5.03	0	5.03	3.183%	523.099	21958.348	2.431%	197.537	8292.107	2.537%	2.823%			
Lakeside/Alpine (County) ¹	4.619	4.4	0.260	0.165%	638.686	1387.995	0.154%	197.667	429.570	0.131%	0.153%			
Lemon Grove	2.4	0	2.4	1.519%	593.836	11893.920	1.317%	203.567	4077.236	1.247%	1.395%			
National City	4.65	0	4.65	2.943%	685.192	26589.642	2.944%	219.881	8532.740	2.611%	2.852%			
Otay Water District	0.38	0	0.38	0.240%	1442.632	4574.952	0.507%	818.053	2594.253	0.794%	0.457%			
Padre Dam	2.486	1.8	0.696	0.441%	696.892	4049.236	0.448%	251.288	1460.088	0.447%	0.444%			
Poway	3.101	0	3.101	1.963%	563.551	14584.185	1.615%	243.460	6300.522	1.928%	1.869%			
Spring Valley (County) ²	6.231	0	6.231	3.944%	597.292	31059.332	3.439%	235.079	12224.151	3.740%	3.765%			
Wintergardens (County) ¹	0.979	0.9	0.074	0.047%	633.136	392.817	0.043%	208.768	129.526	0.040%	0.044%			
San Diego	109.855	0	109.855	69.526%	703.556	645009.168	71.419%	252.229	231239.253	70.751%	70.323%			
Total	172.053	14.048	158.005	100%	10722.190	903133.183	100%	4305.618	326835.778	100%	100%			
¹ Subareas of the San Diego C	ounty Sanitation Dist	rict												
² Includes Otay Ranch (0.87 m			from Otay Ranc	h that would flo	w to Metro through	Chula Vista pipelir	ies.				5			
³ These fractions used to calc					t subject to change									
FLOW	SS	COD		-										
0.482	0.275	0.243												

2ND ARA "PARKING LOT" ITEMS

2.9.1. This Agreement and Exhibit F specifically contemplate Phase I of the Pure Water Program, which consists of new, expanded, or modified Metro System facilities and Water Repurification System facilities designed to produce only up to 30 million gallons per day of Repurified Water ("Phase I"). Within one year of the Effective Date of this Agreement, the Parties intend to meet and negotiate in good faith regarding one or more amendments to this Agreement or its Exhibits to address:

2.9.1.5: A sample calculation of **Repurified Water Revenue**

Note: Exhibit F provides details of provisions and calculations for Pure Water Program Revenues and Expenses

EXHIBIT F: SECTION 4

• 4.1 Background

- 4.2 Calculation. Revenue sharing shall occur in each fiscal year during which the annual cost per acre foot associated with the production of Repurified Water is less than the cost of untreated water per acre foot from the San Diego County Water Authority ("CWA"). The annual cost difference shall be known as "Repurified Water Revenue."
- 4.3. Revenue Sharing. Repurified Water Revenue shall initially be shared based on the relative actual Capital Improvement Costs for the Pure Water Program contributed by City's Water Utility and the Metro System. Such Capital Improvement Cost contributions are currently estimated as (61% City Water Utility and 39% Metro System) until the debt attributable to the Metro System is fully paid.
- 4.4.Year-End Adjustment.

EXHIBIT F: 4.2: CALCULATION

4.2 Calculation. Repurified Water Revenue shall be determined as follows:

Annual cost per acre foot of CWA untreated water purchased by the City for delivery at Miramar Reservoir (which shall be determined based on the total of certain fixed and variable costs for water actually billed to the City by CWA for water delivered at Miramar Reservoir in a fiscal year, divided by the number of acre-feet of CWA water delivered at Miramar Reservoir that year)

less

Annual cost per acre foot of City Water Utility PW Costs (which shall be determined based on total annual city Water Utility PW Costs divided by the number of acre-feet of Repurified Water actually produced in that year)

multiplied by

The number of acre feet of Repurified Water produced by Pure Water Program facilities during the applicable fiscal year.

BASELINE EXAMPLE(S) CALCULATION ASSUMPTIONS

I. Pure Water Phase I, comes on-line partially in FY 2025, with full production being reached in FY 2026

2. Pure Water Phase 2, comes on-line in FY 2035, with Peak Production

3. Assumes both 71.5 MGD and 83 MGD for Phase 1 and 2. Phase 2 alternatives still in planning stage.

4. Uses Average of ECJPA Trending Plus and Trending Projection for CWA Costs, which is based on Helix Water Districts Rate. City Rate will differ based on allocation of Fixed cost each year, but the average is in line with City projections

5. Uses straight-lined high end average Pure Water cost (Phase I and Phase 2 costs) \$2280 /AF of Repurified Water for 83 MGD – Prepared by Stantec – Blended rate for Phase I & Phase 2

6. Ratio's to \$2,462/AF straight-lined cost for 71.5 MGD.

7. Analysis assumes 2.55% annual increase in Water production costs starting in FY 2036 based on 30-year Inflation Rate from Saint Louis Federal Reserve

POTENTIAL REPURIFIED WATER REVENUE CALCULATION EXHIBIT (BOOKENDS)

Repurified Water Revenue at 71.5 MGD	FY	2028	FY 2029	FY 2030	FY 2035	FY 2040	FY 2045	F١	2050	Total Revenue
Estimated CWA Water Costs (Average High/Low)	\$	2,382	\$ 2,514	\$ 2,640	\$ 3,276	\$ 3,987	\$ 4,688	\$	5,438	
City of San Diego PW Cost- Water(\$/AF)	\$	2,463	\$ 2,463	\$ 2,463	\$ 2,463	\$ 2,793	\$ 3,168	\$	3,593	
Repurified Water Production levels (AF)		33,600	33 <i>,</i> 600	33,600	80,080	80,080	80,080		80,080	
Repurified Water Revenue subject to Sharing	N/A		\$ 1,702,963	\$ 5,936,563	\$ 65,079,688	\$ 95,615,520	\$ 121,721,600	\$ 147	7,747,600	
Assume Waste Water Capital Split (38%):	\$	-	\$ 647,126	\$ 2,255,894	\$ 24,730,281	\$ 36,333,898	\$ 46,254,208	\$ 56	,144,088	\$684,646,922
City Share from Exhibit G 70.323%	\$	-	\$ 455,078	\$ 1,586,412	\$ 17,391,076	\$ 25,551,087	\$ 32,527,347	\$ 39	,482,207	\$ 481,464,255
PA's Share from Exhibit G 29.677%	\$	-	\$ 192,048	\$ 669,482	\$ 7,339,205	\$ 10,782,811	\$ 13,726,861	\$ 16	,661,881	\$203,182,667

Repurified Water Revenue at 83 MGD	FY 2028	FY 2029	FY 2030	FY 2035	FY 2040	FY 2045	FY 2050	Total
Estimated CWA Water Costs (Average High/Low)	\$ 2,382	\$ 2,514	\$ 2,640	\$ 3,276	\$ 3,987	\$ 4,688	\$ 5,438	
City of San Diego PW Cost- Water(\$/AF)	\$ 2,280	\$ 2,280	\$ 2,280	\$ 2,280	\$ 2,586	\$ 2,933	\$ 3,328	
Repurified Water Production levels (AF)	33,600	33,600	33,600	92,960	92,960	92,960	92,960	
Repurified Water Revenue subject to Sharing	\$ 3,427,200	\$ 7,862,400	\$ 12,096,000	\$ 92,588,160	\$ 130,236,960	\$ 163,144,800	\$ 196,145,600	
Assume Waste Water Capital Split (38%):	\$ 1,302,336	\$ 2,987,712	\$ 4,596,480	\$ 35,183,501	\$ 49,490,045	\$ 61,995,024	\$ 74,535,328	\$931,197,904
City Share from Exhibit G 70.323%	\$ 915,842	\$ 2,101,049	\$ 3,232,383	\$ 24,742,093	\$ 34,802,884	\$ 43,596,761	\$ 52,415,479	\$ 654,846,301
PA's Share from Exhibit G 29.677%	\$ 386,494	\$ 886,663	\$ 1,364,097	\$ 10,441,408	\$ 14,687,161	\$ 18,398,263	\$ 22,119,849	\$276,351,603

PA'S POTENTIAL REPURIFIED WATER REVENUE STREAM



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REPURIFIED WATER REVENUEVS. CAPITAL EXPENSE TOTAL PLANNING PERIOD THROUGH 2050

D	oifference:	Projected Phase 2 Cap	ita	l Costs
		Phase 2 @ 53 MGD	\$	3,290,000,000
		Phase 2 @ 41.5 MGD	\$	2,958,000,000
		Difference	\$	332,000,000
Wastew	ater Share	\$	126,160,000	
PA's	s Share from	\$	37,440,503	

Total Projected Revenue											
	Phase 2 @53 MGD	\$	276,351,603								
	Phase 2 @ 41.5 MGD	\$	203,182,667								
	Difference	\$	73,168,936								

Revenue Versus Capital Expense @ 53 MGD

			\sim	
	Additiona	ll Revenue @ 53 MGD	\$	73,168,936
А	dditional Ca	apital Cost @ 53 MGD	\$	37,440,503
		Difference	\$	35,728,433

Repurified Water Revenue at 83 MGD	FY 2028	FY 2029	FY 2030	FY 2035	FY 2040	FY 2045	FY 2050	Total	Average
Chula Vista	\$152,356	\$349,523	\$537,727	\$4,116,001	\$5,789,676	\$7,252,592	\$8,719,641	\$108,937,754	\$4,951,716
Coronado	\$15,008	\$34,431	\$52,971	\$405,461	\$570,332	\$714,442	\$858 <i>,</i> 959	\$10,731,294	\$487,786
El Cajon	\$6,471	\$14,844	\$22,837	\$174,807	\$245,888	\$308,018	\$370,323	\$4,626,590	\$210,300
Imperial Beach	\$18,376	\$42,157	\$64,856	\$496,438	\$698,303	\$874,748	\$1,051,691	\$13,139,172	\$597,235
Lemon Grove	\$18,170	\$41,685	\$64,131	\$490,883	\$690,490	\$864,960	\$1,039,924	\$12,992,158	\$590,553
Padre Dam	\$5,785	\$13,271	\$20,417	\$156,283	\$219,831	\$275,377	\$331,081	\$4,136,314	\$188,014
San Diego	\$915,841	\$2,101,048	\$3,232,381	\$24,742,084	\$34,802,871	\$43,596,744	\$52,415,459	\$654,846,054	\$29,765,730
Total	\$1,302,336	\$2,987,712	\$4,596,480	\$35,183,501	\$49,490,045	\$61,995,024	\$74,535,328	\$931,197,904	\$42,327,177
Repurified Water Revenue at 71.5 MGD	FY 2028	FY 2029	FY 2030	FY 2035	FY 2040	FY 2045	FY 2050	Total	Average
Chula Vista	\$0	\$75,705	\$263,910	\$2,893,114	\$4,250,582	\$5,411,126	\$6,568,111	\$80,094,572	\$3,640,662
Coronado	\$0	\$7,458	\$25,997	\$284,996	\$418,718	\$533,042	\$647,015	\$7,889,996	\$358,636
El Cajon	\$0	\$3,215	\$11,208	\$122,871	\$180,522	\$229,811	\$278,948	\$3,401,619	\$154,619
Imperial Beach	\$0	\$9,131	\$31,831	\$348,943	\$512,670	\$652,645	\$792,191	\$9,660,346	\$439,107
Lemon Grove	\$0	\$9,029	\$31,474	\$345,039	\$506,934	\$645,343	\$783,327	\$9,552,256	\$434,193
Padre Dam	\$0	\$2,874	\$10,021	\$109,850	\$161,393	\$205,458	\$249,388	\$3,041,153	\$138,234
San Diego	\$0	\$455,078	\$1,586,412	\$17,391,069	\$25,551,077	\$32,527,334	\$39,482,192	\$481,464,073	\$21,884,731
Total	\$0	\$647,126	\$2,255,894	\$24,730,281	\$36,333,898	\$46,254,208	\$56,144,088	\$684,646,922	\$31,120,315
Difference	FY 2028	FY 2029	FY 2030	FY 2035	FY 2040	FY 2045	FY 2050	Total	Average
Chula Vista	\$152,356	\$273,817	\$273,817	\$1,222,888	\$1,539,094	\$1,841,466	\$2,151,530	\$28,843,182	\$1,311,054
Coronado	\$15,008	\$26,973	\$26,973	\$120,465	\$151,614	\$181,400	\$211,944	\$2,841,298	\$129,150
El Cajon	\$6,471	\$11,629	\$11,629	\$51,936	\$65,365	\$78,207	\$91,376	\$1,224,971	\$55,680
Imperial Beach	\$18,376	\$33,026	\$33,026	\$147,495	\$185,633	\$222,102	\$259 <i>,</i> 500	\$3,478,826	\$158,128
Lemon Grove	\$18,170	\$32,656	\$32,656	\$145,844	\$183,556	\$219,617	\$256,596	\$3,439,902	\$156,359
Padre Dam	\$5 <i>,</i> 785	\$10,397	\$10,397	\$46,432	\$58,439	\$69,920	\$81,693	\$1,095,162	\$49,780
San Diego	\$915,841	\$1,645,970	\$1,645,970	\$7,351,015	\$9,251,794	\$11,069,410	\$12,933,267	\$173,381,982	\$7,88 <mark>0</mark> ,999
Total	\$1,302,336	\$2,340,586	\$2,340,586	\$10,453,220	\$13,156,147	\$15,740,816	\$18,391,240	\$246,550,982	\$11,206,863

APPENDICES

ORIGINAL VISION OF PURE WATER PROGRAM (ARA)

WHEREAS, the Pure Water Program will not only benefit the City by **producing repurified water**, but also the Participating Agencies and their wastewater customers, especially if secondary equivalency is recognized through federal legislation amending the Clean Water Act. Specifically, implementation of the Pure Water Program will reduce wastewater discharges to the Point Loma Wastewater Treatment Plant, part of the Metro System where a large portion of the Participating Agencies' wastewater is currently treated and disposed by discharging it into the Pacific Ocean. By diverting wastewater from the Point Loma Wastewater Treatment Plant and reducing the effluent discharged into the Pacific Ocean, the City and the Participating Agencies will potentially avoid billions of dollars in unnecessary capital, financing, energy, and operating costs to upgrade the Point Loma plant to secondary treatment at full capacity. Avoiding such costs would result in significant savings for regional wastewater customers; and

(Note: The PAs reason for being in this Program is to avoid spending billions of dollars on unnecessary Secondary Treatment and instead spend those funds on Pure Water.)

EXHIBIT F: 4.1 BACKGROUND & 4.2 CALCULATION (OVERVIEW)

4.1 Background. Initially, the parties anticipate that the cost per acre foot associated with the production of Repurified Water will be more expensive than the cost per acre foot of untreated imported water. However, it is anticipated that Repurified Water produced under the Pure Water Program will be less expensive than untreated imported water sometime in the future. Once Repurified Water produced under the Pure Water Program becomes less expensive than the cost of untreated imported water, the parties agree that there will be revenue from the Pure Water Program.

4.2 Calculation. Revenue sharing shall occur in each fiscal year during which the annual cost per acre foot associated with the production of Repurified Water is less than the cost of untreated water per acre foot from the San Diego County Water Authority ("CWA"). The annual cost difference shall be known as "**Repurified Water Revenue**."

..... The City shall estimate whether there will be Repurified Water Revenue in the upcoming fiscal year prior to January 15 of each year, and the estimated amount of Repurified Water Revenue shall be effective on July 1 of the upcoming fiscal year.

EXHIBIT F: 4.3: REVENUE SHARING

4.3. Revenue Sharing. Repurified Water Revenue shall initially be shared based on the relative actual Capital Improvement Costs for the Pure Water Program contributed by City's Water Utility and the Metro System. Such Capital Improvement Cost contributions are currently estimated as (61% City Water Utility and 39% Metro System) until the debt attributable to the Metro System is fully paid.

Following full payment of debt attributable to the Metro System, Repurified Water Revenue shall be shared based on the relative actual Operation and Maintenance Costs for Pure Water Program facilities contributed by City's Water Utility and the Metro System, calculated annually. Such Operation and Maintenance Costs are currently estimated as (76% City Water Utility and 24% Metro System) on an annual basis.

EXHIBIT F: 4.4: YEAR-END ADJUSTMENT

4.4. Year-End Adjustment. At the end of each fiscal year during which there is Repurified Water Revenue, the City shall determine the actual cost per acre foot of CWA untreated water purchased by the City, the actual cost per acre foot of City Water Utility PW costs, and the actual amount of Repurified Water produced at Pure Water Program facilities.

Based on the actual cost and production information, the City will recalculate the Repurified Water Revenue for the prior fiscal year. The City will credit any future charges or bill for any additional amounts due the quarter after the prior year costs have been audited.